



Ensuring Global and Regional Commitments  
Translate into Local Level Action and Impact

# Case Studies: Red Cross Red Crescent Disaster Risk Reduction in Action – What Works at Local Level June 2018

## How we work

[www.ifrc.org](http://www.ifrc.org)

**Saving lives, changing minds.**



.....

*Strategy 2020* voices the collective determination of the IFRC to move forward in tackling the major challenges that confront humanity in the next decade. Informed by the needs and vulnerabilities of the diverse communities with whom we work, as well as the basic rights and freedoms to which all are entitled, this strategy seeks to benefit all who look to Red Cross Red Crescent to help to build a more humane, dignified, and peaceful world.

Over the next ten years, the collective focus of the IFRC will be on achieving the following strategic aims:

1. Save lives, protect livelihoods, and strengthen recovery from disasters and crises
  2. Enable healthy and safe living
  3. Promote social inclusion and a culture of non-violence and peace
- .....

© **International Federation  
of Red Cross and Red Crescent Societies,  
Geneva, 2018**

Any part of this publication may be cited, copied, translated into other languages or adapted to meet local needs without prior permission from the International Federation of Red Cross and Red Crescent Societies, provided that the source is clearly stated. Requests for commercial reproduction should be directed to the IFRC at [secretariat@ifrc.org](mailto:secretariat@ifrc.org).

All photos used in this publication are copyright of the IFRC unless otherwise indicated.

Cover photo: MRCS

.....

**International Federation  
of Red Cross and Red Crescent Societies**  
Route de Pré-Bois, 1  
CH – 1214 Vernier  
Switzerland

Tel. +41 (0)22 730 4836  
Fax. + 41 22 730 4929  
Web site: <http://www.ifrc.org>

## Contents

<b>Foreword</b>	<b>3</b>
<b>Summary</b>	<b>4</b>
<b>Case Studies:</b>	
<b>People power! Individuals and communities building their own resilience</b>	<b>9</b>
● <b>Community/local action for resilience:</b>	
1. Building the disaster resilience of asylum seekers	11
2. Integrated Coastal Community Resilience and Disaster Risk Reduction in Demak, Central Java	15
3. Winter shelters for rural herder communities	19
4. Youth-led actions for more resilient schools and communities: Mapping of School Safety approaches and Youth in School Safety training for youth facilitators	23
<b>Get behind local action – Ensure global and national commitments have local impact</b>	<b>27</b>
● <b>Private Sector Interventions:</b>	
5. Australian Business Roundtable for Disaster Resilience and Safer Communities	29
● <b>Disaster Risk Governance:</b>	
6. A seat at the table: inclusive decision-making to strengthen local resilience	33
<b>Disasters don't discriminate – do you? Disasters have different impact based on gender, age or disability</b>	<b>39</b>
● <b>Gender and Inclusiveness:</b>	
7. Participatory Campaign Planning for Inclusive DRR Knowledge and Messaging in Nepal	41
8. Community participatory action research on sexual and gender-based violence prevention and response during disasters	45
<b>Early Warning – Early Action – Anticipate, reduce impact and avert disasters!</b>	<b>51</b>
● <b>Early Warning and Early Action</b>	
9. Forecast-based Financing: Effective early actions to reduce flood impacts	53
10. CPP Early Warning: Saving Thousands in Cyclone Mora	57
11. Flood Early Warning and Early Action System (FEWEAS)	61
12. Forecast-based Financing for the vulnerable herders in Mongolia	65
13. More than response: Building partnerships to engage communities in preparedness and early warning systems in the Pacific	69

<b>Disaster Displacement. The New Normal?</b>	<b>75</b>
● Displacement and DRR:	
14. Preparing and reducing risks of disasters to displaced communities	77
<b>Unsettled Cities – Mega Challenges!</b>	<b>83</b>
● Urban Community/local action for resilience:	
15. What is an Urban ‘Community’? – New ways for local DRR actions in cities	85
<b>Red Goes Green!</b>	<b>91</b>
● Green Response/ Enhancing Preparedness for Effective Response:	
16. Greening the IFRC Supply Chains; mapping of our GHG emissions	93
17. Environmental Field Advisor deployment in an emergency response	97

## Foreword

The Sendai Framework for Disaster Risk Reduction 2015-2030 provides a focus on risk-sensitive development of communities. This is about mitigating disaster impacts and reducing underlying drivers of risk, building back better after a disaster, and strengthening community and environmental resilience.

Building on the Sendai Guiding Principles, it is the primary responsibility of states to prevent new risks and reduce existing risks with the engagement of all-of society and all-state institutions. The Asia Regional Plan provides a broad policy direction to guide the implementation of the Sendai Framework and a two-year Action Plan with specific activities to be implemented by the Governments and Stakeholder Groups.

The following case studies demonstrate the Red Cross Red Crescent contribution to climate-smart disaster risk reduction action in Asia Pacific.

Vulnerable individuals and communities are hardest hit by climate change and disasters. We are focusing our efforts on accompanying communities during their own journey towards resilience. Crises are rarely the result of one driver of risk – it is the combination of hazards, the exposure and the vulnerability of people that will determine how severe and protracted the consequences may be. Climate change exacerbates this situation. We seek to work holistically at reducing vulnerability and exposure, working closely with communities to understand the hazards and vulnerabilities which are most threatening to them, and supporting local action.

Reaching communities is often seen as the “last mile” of national and regional engagement, yet for us in the Red Cross Red Crescent, communities all over the world are the “first mile” for effective climate risk management, early action and preparedness.

## Summary

### Community/local action for resilience:

#### 1. Building the disaster resilience of asylum seekers

The Australian Red Cross in Queensland adapted a generic preparedness tool to support high-risk marginalised communities of asylum seekers to build their own resilience to disaster. Specific and relevant messaging was developed within a community education programme co-designed with members of the asylum seekers community, who became educators and facilitators to deliver the programme. The programme reached 900 people in a successful pilot, measured through positive shifts in knowledge of key actions to take in preparedness of disaster. The underlying achievement is the acceptance and trust of the communities, reflecting the respect for cultural and language diversity, and recognizing the capacity of asylum seekers communities to contribute and participate in their host country.

#### 2. Integrated Coastal Community Resilience and Disaster Risk Reduction in Demak, Central Java

Exacerbated erosion affected the ecology and increased vulnerability of coastal communities in Demak. The Indonesian Red Cross mobilized communities through Community-Based Action Teams to restore the ecosystem through mangrove plantation and implement livelihood generation to improve community resilience. Under an integrated approach, the community is connected with village authorities and scientists from the Bogor Agricultural Institute to implement sustainable local action. The programme has shown concrete results in reducing the risks of tidal disasters, while eco-tourism and crab cultivation farming have increased the income of the communities, along with their heightened awareness and preparedness for disaster.

#### 3. Winter shelters for rural herder communities

Rural herders in Mongolia must keep their livestock alive through extreme temperatures and exposure of harsh winters that follow after drought. In efforts to reduce livestock loss, the Red Cross supported herder communities to design and construct winter shelters for livestock in a participatory approach garnering the collective capacity of community, local government and the Red Cross. A strong community focus ensures that the herders drive the activities towards preserving their livelihoods and the traditional nomadic way of life under threat by climatic challenges.

#### 4. Youth-led actions for more resilient schools and communities: Mapping of School Safety approaches and Youth in School Safety training for youth facilitators

Over the last two years the Red Cross Red Crescent Southeast Asia Youth Network has improved Youth programming and networks on youth-led initiatives and solutions for DRR. A pilot Youth in School Safety Programme rolled out in six countries, training 150 youth volunteers who in turn conducted countless school safety actions. A comprehensive mapping of school safety actions in all 11 countries of South Asia is underway to showcase activities of RCRC Youth volunteers on the ground.

## Private Sector Interventions:

### **5. Australian Business Roundtable for Disaster Resilience and Safer Communities**

Leaders of leading commercial organizations jointly commit resources to work constructively with government to make Australian communities safer and more resilient to natural disasters, by shifting national investment from recovery and response to preparedness and mitigation. The Australian Red Cross joins this Roundtable - contributing on emergency management and humanitarian aspects - to collectively deliver on community education, risk information, adaptation research, mitigation infrastructure and strategic alliances.

## Disaster Risk Governance:

### **6. A seat at the table: inclusive decision-making to strengthen local resilience**

Disaster related laws and policies need to better include and protect those most at risk of disasters. This case study outlines the steps taken by the IFRC Disaster Law Programme - from global research undertaken jointly by IFRC and UNDP, to the provision of technical advice in supporting Asia Pacific National Societies, as the community-based actor and auxiliary to government, to ensure inclusive community empowerment and protection, gender and inclusion in national disaster laws and policies.

## Gender and Inclusiveness:

### **7. Participatory Campaign Planning for Inclusive DRR Knowledge and Messaging in Nepal**

An innovative approach that embraces the essence of inclusiveness, the Participatory Campaign Planning methodology is applied to develop hazard messages and the means of communicating them that are tailored to different target groups, with the aim of making them more effective in creating behaviour change. This case study focuses on urban communities in Nepal and various elements to be considered within different target groups and their geographic environments.

### **8. Community participatory action research on sexual and gender-based violence prevention and response during disasters**

This collaborative research by the IFRC and the ASEAN Committee for Disaster Management was undertaken in recognizing that there are few SGBV studies that focus on low-income developing countries and fewer that go beyond the gendered effects on women and girls, overlooking men and boys and sexual minority groups. Key findings illustrate that the risks to SGBV are exacerbated during natural disaster situations in Indonesia, Lao PDR and the Philippines, and that “disaster responders” and actors addressing needs of SGBV survivors are not working together adequately to reduce these risks.

## Early Warning and Early Action:

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

When four pilot communities in the district of Bogura were affected by severe flood events in July and August of 2017, the Early Action Protocol of the Forecast-based Financing (FbF) approach was activated, and 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. This case study outlines the steps taken by Bangladesh Red Crescent Society and German Red Cross to implement FbF in Bangladesh. It analyses not only the effectiveness of the activation in Bogura, but the longer term impacts of this early action development.

### 10. CPP Early Warning: Saving Thousands in Cyclone Mora

Through the Bangladesh Cyclone Preparedness Programme (CPP) interventions, a programme jointly run by the Government of Bangladesh and the Bangladesh Red Crescent Society (BDRCS), the communities of the coastal areas in Bangladesh have become more aware of the need to go to safe shelters during emergencies, have understood the significance of early warning and learned to pay heed to advice from CPP and youth volunteers. On 28 May 2017 - the eve of Cyclone Mora, more than 55,260 CPP volunteers and BDRCS youth volunteers were deployed to pass early warning message door to door in the coastal region, and announcing the danger of the approaching cyclone in the local language. Cyclone early warning messages were disseminated across a population area covering 11 million people, and almost half a million people were reached in this process and taken to safe places in less than 24 hours. The CPP has substantially reduce death tolls due to cyclones in Bangladesh.

### 11. Flood Early Warning and Early Action System (FEWEAS)

The Flood Early Warning Early Action System (FEWEAS) was developed through a collaboration between the Indonesian Red Cross (PMI) and Institute Teknologi Bandung (ITB) to provide effective solutions for reducing disaster risk through a shared platform for community and government to address issues upstream and downstream in formulating appropriate strategy, planning and ground action for floods. FEWEAS is an internet-based application to predict and monitor rainfall and flooding. PMI Provincial and District staff and volunteers are using the FEWEAS to monitor floods along the Bengawan Solo River in East Java, and along the Citarum River in West Java. While the application provides flood alerts and updates to the community through smartphones, the communities and Community Based Action Teams can update their response, upload photos, videos and relevant information to further inform response actions.

### 12. Forecast-based Financing for the vulnerable herders in Mongolia

The Mongolian Red Cross Society (MRCS) assisted 2,000 herder households in most-at-risk areas (40 soums in 12 provinces) with unrestricted cash grants in December 2017 and with animal care kits in January 2018, before the peak of the winter season. The MRCS used the Dzud Risk Map released by the Government in November 2017 to decide which soums to target for early action with the aim to reach the herders well before the loss of their livestock to reduce the impact of Dzud on the livelihoods of the herders. The Dzud Risk Map highlighted the risk of livestock death throughout the whole of Mongolia. A cost-benefit analysis is being conducted to further inform FbF in Mongolia.

### **13. More than response: Building partnerships to engage communities in preparedness and early warning systems in the Pacific**

A community early warning system (CEWS) model was developed in partnership by the Red Cross, government agencies and regional organizations in the Pacific to better link CEWS with national and sub-national systems. Taking these pilots to scale requires i) national mechanisms such as SOPs and action plans that systematically link warnings and climate information provided by National Meteorological Services to early preparedness actions at multiple scales, and; ii) available funding (at multiple scales) to support early actions. Recently a Roadmap for Forecast-based Financing for Drought Preparedness has been developed in the Solomon Islands. Through continued partnership approach, the Roadmap and outcomes from the regional 'FINPAC' CEWS project will be used to support the Government of the Solomon Islands and Solomon Islands Red Cross to implement a programme for communities, provincial and national authorities to apply forecast information for early action at scale. The drought thresholds developed in collaboration will form the basis of an FbF trigger system in the Solomon Islands.

### **Displacement and DRR:**

#### **14. Preparing and reducing risks of disasters to displaced communities**

Cox's Bazar became the world's most densely populated refugee settlement following the massive influx of people from Myanmar that started in August 2017. Being a coastal district prone to disaster, existing infrastructure and services cannot cope to cover the host population and incoming refugees, and preparedness interventions became critical. This case study follows actions taken to extend the coverage of the Cyclone Preparedness Programme, successfully integrating displaced people in camp settlements as temporary CPP camp volunteers, to support in establishing early warning system and ensure relevant preparedness and response action.

### **Urban Community/local action for resilience:**

#### **15. What is an Urban 'Community'? – New ways for local DRR actions in cities.**

Lessons learned from the 2015 Nepal earthquake response show that vulnerable populations in urban context do not often engage with or rely on local disaster management committees in the event of a disaster. Instead they organize themselves around their own networks, both informal and formal, such as family, temples, markets, service-providers, employment. A meaningful DRR intervention in urban communities must first recognize what defines an urban community and how they are organized to guide specific engagement and participatory-led approaches. The target group and network-based approach by Nepal Red Cross are innovations in organizing effective community-owned urban disaster resilience.

## Green Response/ Enhancing Preparedness for Effective Response:

### **16. Greening the IFRC Supply Chains; mapping of our GHG emissions**

Under the Green Response initiative to improve environmental outcomes of life-saving operations, the IFRC in reviewing practices and policies is mapping the present level of greenhouse gas (GHG) emissions generated by relief operations and to implement GHG reduction activities to lower the environmental impact of emergency operations. The mapping contributes to the global emission baseline for IFRC supply chain monitoring, to design the reduction roadmap and build internal capacity.

### **17. Environmental Field Advisor deployment in an emergency response**

To improve the environmental outcomes and reduce negative impacts of operations and programmes, the IFRC deployed an Environmental Field Advisor (EFA) to the Population Movement Operation in Cox's Bazar, Bangladesh. The EFA conducted an environmental impact assessment and worked with project leads to identify and implement improvements. A significant achievement to date is the IFRC joining the UNHCR/IOM/WFP/FAO to provide LPG as cooking fuel to camp community households to combat massive deforestation cause by firewood collection.



## People power!

Individuals and communities building their own resilience

Reducing risks and strengthening resilience at every level is a participatory journey led by individuals and communities: it requires a new mind-set that focuses more sharply on accompanying, enabling and connecting communities as they grapple with complex challenges. Individuals and communities must be supported to understand their own risks, to take action and participate in official decision-making processes. Organisations like Red Cross and Red Crescent National Societies – with over 11 million volunteers to accompany those most at-risk to disaster and climate change and ensure locally owned actions are informed by global best practice.

- **What Needs to Be Done?** The Red Cross Red Crescent calls on states and local authorities to invest in supporting communities to develop their own understanding of their risks, to take their own action to make themselves safer, and to participate in official decision-making about prevention and response to risks. This can be further supported through strengthening local actors and systems, including RCRC branches, which have direct reach to communities.
- **How Can We Help?** Red Cross and Red Crescent with its long experience and recognised leadership in support of community resilience together with its unique outreach makes it the best placed partner to provide support to individuals and communities. Partners can join us in these efforts and become part of the 1 Billion Coalition for Resilience – an alliance that IFRC is building with partners in Asia Pacific and across the world to help build the culture of engagement for resilience-building activities.





**DRR IN ACTION  
CASE STUDY**

## Building the disaster resilience of asylum seekers

### **Theme of the Case Study**

Community/local action for resilience

### **Country**

Australia

### **Case location**

Queensland

## Background

Disaster preparedness, and in particular, efforts to reduce risks for migrant communities, is a key area of programming for the Australian Red Cross. The organization supports people to prepare for disasters through its RediPlan – the all-hazard household preparedness tool of the Red Cross<sup>(1)</sup>.

The tool takes an individual's strengths as a starting point to build his or her resilience through a four-step process:

- *Get informed* (about risks);
- *Get connected* (to sources of support);
- *Get organized* (make a plan);
- *Get packing* (bring everything together in a kit).

In understanding migrant communities, staff in the Brisbane office in 2013 recognized that Red Cross migration support clients living in the community had reduced disaster resilience capacity, often due to:

- having poor health status, particularly mental health,
- not being well-connected into their local communities,
- limited understanding of the Australian disaster risk landscape, or
- limited support networks, and
- limited financial resources to help them prepare for emergencies.

A programme of community education was devised, and the content was developed in conjunction with volunteers drawn from the client base and focused upon key basics; hazards awareness, sources of warnings (the role of uniformed emergency services in evacuations), household planning, and building emergency kits. Australian Red Cross

conducted volunteer training based on existing Rediplan content and public speaking skills. The volunteers then conducted a range of sessions within their own communities, which were a mix of formal sessions or informal sessions at kitchen tables. Over 900 people participated in the pilot, and success was measured through positive shifts in knowledge.

## What did the action seek to change?

Reduce the risks and build capacity (knowledge, skills and connection) of a high risk group.

## What were the key actions taken to achieve this change?

Build a capable volunteer base, then deliver adapted messages to asylum seeker clients of the Red Cross

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

Step 1	Identification of need, and recruitment of volunteers from client group
Step 2	Co-design the programme with Red Cross volunteers from the client base and adaptation of preparedness messaging
Step 3	Delivery of messaging

## What SFDRR principles<sup>1</sup> were applicable to this change process?

Principle 1 **Shared responsibility:** working with a high risk group, and empowering them through knowledge and skills to work within their own communities.

Principle 2 **Multi-hazard approach and inclusive risk-informed decision-making:** generic Rediplan messaging adapted for a high risk and marginalised group.

## What were the Achievements and the Impacts?

Over 900 people participated in the pilot, and success was measured through positive shifts in knowledge in the following areas:

- knowing who to call in an emergency (pre-session 51%, post session 89%),
- knowing what hazards might affect them (pre-session 35%, post session, 89%),
- knowing which radio service to turn to for information (3.5% pre-session, 91% post session), and
- knowing how to develop a household plan and kit (pre-session 3.5%, post session 80%).

<sup>1</sup> 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.

## What were the key Lessons Learnt?

- Spend time finding out what people's strengths are and build on them
- Use a range of delivery methods, but always in a non-technical or informal way
- Recognize that some participants may not have the financial capacity to undertake preparedness activities
- It is important use a two-prong approach; 1) to work with cultural leaders and get buy in; 2) to work directly with community members
- The positive wellbeing effects of asylum seekers has bearing on being able to contribute and participate in their host/haven country.

## What were the Good Practices arising from this action?

Good Practice 1	<p><i>Co-design of the programme with volunteers drawn from client base.</i></p> <p>The project took a community-centred approach, in which a Red Cross staff member acted as a facilitator, and volunteers drawn from the asylum-seeker community determined the best approaches to reach their respective communities. Asylum-seekers were invited to attend a volunteering information session. Of the 12 initial attendees, eight people became volunteers, and Migration Support Programs staff worked with authorities to ensure their engagement did not breach the requirements of their visas, which at the time held restrictions around working.</p> <p>It was agreed by the volunteers to use a conversational approach to engagement, rather than formal presentations, to deliver preparedness messaging. This approach allows flexibility in delivery through discussions with individuals or within household or group settings. Two hours were allocated for education sessions, and participants used RediPlan in "Easy English" (a pictorial version, originally developed for people with cognitive disabilities which can be used to communicate with people with low levels of literacy). This was recognized as a more culturally appropriate way of communicating information to many of the communities of non-native speakers. It was also recognized that formal presentations might not work, as people's command of the English language was basic, and the presentations relied upon laptops and projectors and would therefore be difficult to deliver in community or household settings.</p>
Good Practice 2	<p><i>Use community leaders to gain access to communities.</i></p> <p>Gaining the trust and blessing of cultural leaders and elders is important, and using them to help deliver information or welcome people at meetings or informal events help when engaging and communicating with all community members.</p>
Good Practice 3	<p><i>Draw upon community members to act as educators and facilitators.</i></p> <p>The programme was well-received in culturally and linguistically diverse communities because it was delivered by community members sharing the same cultural background. Community networks in migrant communities are important channels for reaching out to people. It was necessary to be mindful of the role of children and young people in some cultures. It is also important to be conscious of gender and age, as well as the confidence and skill levels of the volunteers and their capacity to translate to and from English, when pairing volunteers together to deliver conversations or sessions.</p>

## Policy Relevance to DRR in Action

This case study contributes to Priority 3, investing in disaster risk reduction; through a relatively small scale investment of time and effort, had significant reach within a highly vulnerable community. It also recognizes that this group has capacity and agency when it is harnessed and supported.

### Key Messages from this Case Study

- Specific needs of at-risk groups are often ignored and poorly prepared for in disaster risk management policy and practice – asylum seekers are at high risk of being heavily impacted by disasters due to reduced financial capacity, health and wellbeing, connections into the community, and a low understanding of hazard profiles.
- Red Cross supported a high-risk group to develop their own understanding of their risks, to take their own action to make themselves safer, and to participate in official decision-making about prevention and response to risks.
- There were positive wellbeing effects of asylum seekers being able to contribute and participate in their host/haven country – this is an excellent example of how a high risk group can be empowered to build resilience within their community.

The case study was included in the International Organisation of Migration's publication, *Migrants in Disaster Risk; Practices for inclusion (2017)*. It highlights programming that contribute to reduction of losses in lives, livelihoods and health of communities in displacement.

### References for this Case Study

1. Australian Red Cross' RediPlan: [www.redcross.org.au/prepare](http://www.redcross.org.au/prepare)
2. Richardson, JF., Sivalingum, C., Mau, V., Van Son, J. *Land of Flooding Rains: Building the Disaster Resilience of Asylum Seekers at High Risk*. International Organisation of Migration, 2017.

#### Contact Person for this Case Study:

John Richardson  
National Resilience Advisor, Emergency Services,  
Australian Red Cross  
Email: [jfrichardson@redcross.org.au](mailto:jfrichardson@redcross.org.au)



DRR IN  
ACTION  
CASE  
STUDY

## Integrated Coastal Community Resilience and Disaster Risk Reduction in Demak, Central Java

**Theme of the  
Case Study**  
Community/Local  
Action For Resilience

**Country**  
Indonesia

**Case location**  
Demak, Central Java

### Background

Coastline changes induced by erosion are processes that take place over a long period of time. Changes also occur in response to shorter-term events such as storms, regular wave action, tides and winds that may significantly alter sea levels (rise/fall) and that cause coastal land subsidence or emergence. Hence, most coastlines are naturally dynamic. However, human activities along the coastline, such as the cultivation of salt ponds, in combination with these natural forces result in escalated changes in the position of the coastline due to rapid abrasion and threaten communities living in the nearby area.

This is what happened in Demak, Central Java. Exacerbated coastal erosion has adversely affected the ecological role of its coasts and jeopardized opportunities to provide the community with sustainable socio-economic activities. The growing number of salt ponds, shrimp and milkfish ponds within coastal areas in Demak have increased erosion problems.

To strengthen the community resilience and mitigate the impact of coastal hazards, the Indonesian Red Cross/Palang Merah Indonesia (PMI) implemented the Coastal Community Resilience and Disaster Risk Reduction Project in Indonesia with the support of USAID, American Red Cross, and Bogor Agriculture Institute Centre for Coastal and Marine Resource Study (PKSPL-IPB). Demak district is in Central Java, one of the three provinces under this project. PMI recruits and trains village volunteers under SIBAT / CBAT (Community Based Action Team). The CBAT conducted vulnerability and capacity assessments (VCA) with each of the village communities in Demak.

The interventions primarily revolved around alternative livelihood-generation activities such as crab cultivation. The community members participating in these livelihood initiatives agreed that a portion of their income generated would be contributed to a community-revolving fund which would be used for risks reduction measures identified by the community.

*Photo: Launching of mangrove plantation together with the Head of District and other local government/institution/agency leaders and community members in Desa Kedungmutih, Berahan Wetan and Babalan – 24 November 2016. | PMI Demak District*

CBAT and the communities have also conducted small-scale mitigation by planting coastal vegetation (mangroves). Village regulations for coastal protection have been developed. Apart from contributing to alternative livelihoods, the trees would add to the greenery and eco-tourism activity and improve living conditions in the future.

## What did the action seek to change?

To reduce the vulnerability of Demak communities to the impacts of coastal erosion through their relationship with the ecology and respect for the environment. The action sought to:

- Increase **capacity, knowledge and skills** of community members to prepare for and reduce disaster risks
- Strengthen communication, **collaboration and coordination** to connect community with authorities and technical institutions
- Improve environmental condition, security and **community resilience** through livelihood generation and mitigation activities

## What were the key actions taken to achieve this change?

- Restore the ecosystem through mangrove plantation to hinder abrasion and reduce the impact of coastal erosion
- Implement livelihood programme to ensure the sustainability of the DRR efforts
- Adapt integrated approach by connecting the community with village authority and scientists from the university for successful and sustainable local action.

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

Step 1	Recruit CBAT (Community Based Action Team)
Step 2	Conduct VCA and analyse the results to find options for action
Step 3	Provide training for CBAT members on Disaster Response Preparedness, Early Warning Early Action, and mangrove plantation and cultivation.
Step 4	Coordinate recognition to CBAT by the Village authority
Step 5	Implement mitigation activities through coastal mangrove planting
Step 6	Implement livelihood generation activities; providing juvenile crabs

## What SFDRR principles<sup>1</sup> were applicable to this change process?

- Principle 1 Empowerment of local authorities and communities through resources, incentives and decision-making responsibilities as appropriate.
- Principle 2 Coherence of disaster risk reduction and sustainable development policies, plans, practices and mechanisms, across different sectors
- Principle 3 Engagement from all of society

<sup>1</sup> 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.

Dr. Singgih Setiyono, MMR  
– Demak Local Government  
Secretary and current  
Chairman of PMI Demak  
District:

*“Local Government Demak gives very high appreciation to SIBAT members and society. The Demak government together with the community will continue all coastal restoration efforts with mangrove planting combined with eco-tourism, mangrove education and alternative livelihoods using village funds and local government funds.”*



*Mangroves Education Center and Eco-Tourism in Desa Kedung Mutih, Demak district, is a learning tool for mangrove planting and also used as a breeding place for crab, shrimp and shellfish to support community livelihood. | PMI of Demak District*

## What were the Achievements and the Impacts?

Based on the results of focus group discussions undertaken for the final evaluation of the Coastal Community Resilience and Disaster Risk Reduction (CCR-DRR) project, the following changes felt by the community due to the project were noted:

- Improved knowledge and capacity related to disaster preparedness, early warning and early action in the communities.
- Improved community preparedness through active participation in preparing community action plans and contingency plans, in which the active involvement of CBAT teams would continue after the project is completed.
- PMI SIBAT volunteers and communities have been continuing to plant trees independently.
- Several institutions were interested in implementing a replication project; these include the Fishery Agency and Toyota.
- Ecotourism has been developed and contributed better knowledge on DRR, climate change adaptation and livelihoods.
- Institutionally, PMI in implementing the CCR-DRR project, is recognized by local governments and private companies as a reputable institution and is considered successful in conducting the project.

Eco-tourism and crab cultivation farming have increased the income of the communities.

Pak Muhalim - PMI CBAT  
Member of Kedung Mutih  
Village:

*"We advocate the village government to provide a regulation on mangrove protection to protect mangroves from being cut down by the community. All of communities hand in hand, planting mangrove to protect their environment and livelihood. Everybody has to struggle first, work first, and not only expecting the rewards. So first we must work and work harder, eventually, I believe we will achieve our resilience."*

## What were the key Lessons Learnt?

The integrated approach by implementing DRR-CCA action, restoring the ecosystem, and connecting the community with village authorities and scientists from the university has proved successful for a sustainable local action.

In order to have sustainable DRR measures and motivated volunteers, the project needed to pay special attention to the livelihood aspect of the community.

Within the communities, some people were found to have better skills in mangrove and pine nursery than others, and, have been identified as potential champions to continue coastal vegetation rehabilitation after the project is completed.

### Challenges:

- a. Extreme weather: During seedling and planting process, many of the seeds planted were destroyed due to high tides/storm and floods.
- b. Time planning: Integrating DRR and environmental components require significant time for capacity building and knowledge transfer. More time was needed for implementing and monitoring green belt rehabilitation.
- c. Land status issue: Since most of the land used for planting mangroves and casuarina is private land and not under public ownership (Desa Tanah), if at any time the land is used for settlement, then some of the crops grown would be cut down.
- d. Lack of enforcement: Institutions that had been established to implement and operationalize the coastal protection policy have not enforced regulations effectively. As an example, for offences against mangrove/casuarina cutting, bird shooting and destruction of protected areas, the most frequent punishment is a harsh warning from the Village Authority.



PMI Community-Based Action Team (CBAT) together with community members conduct mangroves monitoring and maintenance in Berahan Wetan village, Demak district – 2 September 2017. | PMI Demak District

## What were the Good Practices arising from this action?

Good Practice 1	Combining mangrove plantation with crab cultivation as a livelihood opportunity
Good Practice 2	From the mangroves planted, ecotourism was developed to increase the interest of the wider community as well as to generate income for the volunteers, for the maintenance and further development.
Good Practice 3	Village Authority supports CBAT by circulating Village letter to recognize CBAT and endorse Village Regulations to protect the mangroves being planted.

Ahmad Rois – PMI CBAT  
Coordinator for Berahan  
Wetan Village, Demak  
District:

*“Being PMI CBAT for restoring coastal with Mangroves Plantation is voluntary-based. We have to take care of our families and environment to be safer and resilient”.*

## Policy Relevance to DRR in Action

This programme has shown concrete results in reducing the risks of abrasion and tidal disasters. This was done through promoting livelihood improvement and disaster preparedness response capacity and community-based early warning and early action. The implementation of this programme is very relevant to the expected results and to the four priorities for action of the Sendai Framework for DRR. It also contributes to the achievement of Sustainable Development Goals 1, 5, 11, 13 and 15.

## Key Messages from this Case Study

Local Knowledge and Innovation for Integrated Disaster Risk Management

The programme has been implemented and evaluated, and found to be replicable and sustainable, having a direct impact on disaster risk reduction, and on economic and social improvements.

## References for this Case Study

1. Base-line and End-line Survey
2. Vulnerability and Capacity Assessment (VCA) Report
3. Final Evaluation Report of Integrated Coastal Community Resilience and Disaster Risk Reduction Program.
4. Video on Alternative Livelihoods in Demak: <https://youtu.be/3hx5ZLPByFO>

### Collaborators for this Case Study:

Indonesian Red Cross,  
American Red Cross,  
Bogor Agricultural Institute,  
United States Agency for International Aid (USAID),  
International Federation of  
Red Cross and Red Crescent Societies

### Contact Person for this Case Study:

Arifin Mohammad Hadi  
Head of Disaster Management Division,  
Indonesian Red Cross (Palang Merah Indonesia/PMI)  
Email: arifinmhd\_dm\_pmi@yahoo.com



**DRR IN  
ACTION  
CASE  
STUDY**

## Winter shelters for rural herder communities

**Theme of the  
Case Study**

Community/local action  
for resilience

**Country**

Mongolia

**Case location**

21 provinces across  
the country

### Background

Mongolian Red Cross Society (MRCS) has been implementing a community-based disaster risk reduction project since 2014, with support from the International Federation of Red Cross and Red Crescent Societies (IFRC) and the Australian Red Cross. This project was based on a nationwide Vulnerability and Capacity Assessment (VCA), one of the first nationwide VCAs in Asia.

The harsh winter climate in Mongolia, where temperatures can reach as low as -40 degrees Celsius in winter, has potentially massive effects for rural herder communities who rely on the survival of their livestock for their income. In the winter of 2009-2010, Mongolia lost 20 per cent of its livestock due to extreme temperatures and exposure. Mongolia is affected by a unique climactic phenomenon called Dzud, where a severe drought is followed by an extreme winter. The loss of livestock has significant effects on the socio-economic security of rural herder communities. It can have adverse impacts on the psycho-social health of herder communities, and challenges the maintenance of a traditional, nomadic lifestyle.

### What did the action seek to change?

The project aims to reduce the impact of disasters on vulnerable communities in Mongolia through sustainable risk reduction and resilience building interventions. Its purpose is to strengthen the collective capacity of MRCS, government authorities and communities, in localized disaster preparation and response across each province in Mongolia.

### What were the key actions taken to achieve this change?

The project supported herder community groups to construct winter shelters for their livestock, in order to provide protection from the harsh temperatures. With reinforced winter shelters, the herder communities were able to decrease livestock loss

*Photo: Elderly herder family who benefited from winter shelter activity, Darkhan-Uul province. March 2018. | MRCS*

significantly and reduce vulnerability. A participatory, community-based approach contributed greatly in the successful construction and maintenance of winter shelters. Building on learnings around the survival of younger livestock, herders began constructing sub-shelters for smaller and younger livestock.

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

Step 1	The first step was the participatory, nationwide Vulnerability and Capacity Assessment (VCA). The process was conducted in 18 khoroos of nine districts, and 44 soums across 21 provinces of Mongolia between October 2012 and March 2013, to determine disaster risks in rural areas and the local capacity to reduce them with the involvement of the community.
Step 2	The VCA revealed that a key disaster risk facing communities throughout Mongolia, with particular threats to the resilience of rural, nomadic herder communities, was Dzud and extreme winter. Winter shelters were then discussed as a potential option for the project.
Step 3	Participatory scoping and development of contextually relevant winter shelters were conducted with herder groups.
Step 4	Herder beneficiary groups for winter shelter were selected from all 21 provinces. Based on community participatory meeting, herder community members selected who should benefit from winter shelter assistance based on their vulnerability.
Step 5	Based on community recommendation, mid-level branches together with herder beneficiary groups developed their winter shelter design, and procurement of the shelter material commenced. Herder group members themselves were involved in the process including building of the shelters, therefore raising empowerment to the herders.

During monitoring, a herder community leader was asked how the winter shelters would affect his situation:

*“We will be able to provide storage for offspring. It will be bigger, and we can have more offspring. Now we can only have 30 – 40. We hope for more livestock in two years’ time. We hope to double our livestock. All families now lose about 50 per cent of their livestock. So, it will help to maintain the current level of income.”*

## What SFDRR principles<sup>1</sup> were applicable to this change process?

- Principle 1 Empowerment of local authorities and communities through resources, incentives and decision making responsibilities as appropriate.
- Principle 2 Accounting of local and specific characteristics of disaster risks when determining measures to reduce risk.
- Principle 3 Addressing underlying risk factors cost-effectiveness through investment versus relying primarily on post disaster response and recovery.

## What were the Achievements and the Impacts?

Herder community groups constructed winter shelters for protection of livestock from the harsh temperatures. With reinforced winter shelters, the herder communities were able to decrease livestock loss significantly, protect their livelihoods and reduce vulnerability.

A participatory, community-based approach contributed greatly in the successful design, construction and maintenance of winter shelters, as well as local ownership and sustainability of efforts.



*Elderly herder family who benefited from winter shelter activity, Darkhan-Uul province. March 2018. | MRCS*

<sup>1</sup> 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.

As main drivers of the activities, the herders were best-placed to use learnings around the survival of younger livestock. They constructed sub-shelters for off-springs and younger livestock, contributing to increasing their livestock to overcome earlier losses.

Although it is not yet evidenced due to the project being in its early stages, it is anticipated that the winter shelters will have significant effect on the long term ability of herder families to continue their lifestyles and remain economically secure. This will also have effects on the livelihoods of their children.

The project brought together relevant partners and stakeholders, to strengthen the collective capacity of MRCs, government authorities and communities in localized disaster preparation and response across each province in Mongolia.

Comments from governor of local soum:

*“When they (herder communities) lose their livestock, they lose their livelihood and I can’t supply them with a job. The winter shelter is like a working place for the herders. The more families who build shelters, the more it will help the soum economy. In the past many herders have left the area to move to the city. These people who move to the city don’t have an education and they add to the unemployment in the city and they can’t afford to come back to this area. In the future, herders won’t have a need to move to the city.*

*Not all herder communities can afford a shelter. But this shelter will encourage others to have a winter shelter. Local government can at least provide the labour to help build the shelters.”*

### What were the key Lessons Learnt?

Mongolia was experiencing a severe Dzud; 120 Soums were considered to be in “white dzud” phase, meaning that high snowfall is preventing livestock from reaching the grass to graze. When monitoring was conducted, the herder groups and collectives that had received support to build shelters, reported that they had lost little to no livestock. This underlines the effectiveness of the shelters in preventing livestock loss. Herder families have reported that they are able to pay for basic education, food and transport costs due to the fact that their livestock survived the harsh Dzud.

Programmatically, the winter shelter approach is regarded as successful by a number of actors, including the National Emergency Management Agency and Red Cross Red Crescent Movement members, who have replicated the approach in programmes they support.

### What were the Good Practices arising from this action?

Good Practice 1	Participation of herder groups throughout leads to local ownership of the project. Herder groups were responsible for the management and upkeep of the winter shelters, increasing local ownership.
Good Practice 2	Utilizing local suppliers means that designs are contextually relevant, and further strengthened local markets.
Good Practice 3	Building contextually relevant designs improves the sustainability and local ownership of the winter shelters.
Good Practice 4	Working in partnership with local emergency actors from inception, implementation and evaluation means that community action can be integrated with existing systems.
Good Practice 5	Investment in community/local action for disaster preparedness can lead to stronger livelihoods outcomes for local communities.

### Policy Relevance to DRR in Action

The project contributes to the Sendai Framework priority 3: investing in DRR for resilience; and the Asia Regional Plan – for local risk assessments and strengthen capacity of local communities. The initiative also supports strong development outcomes in health and education, which leads to increased community resilience. By supporting herder communities to maintain their livestock and livelihoods, they will have more resources to dedicate to health and education outcomes

The project and interventions are aligned with SDG Goal 1. “End poverty in all its forms everywhere”, specifically with 1.5: “By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters”. The project is supporting herder communities to be more resilient to the climactic phenomenon of extreme winter and Dzud, through protecting their livelihoods and livestock.

### Key Messages from this Case Study

- Risk resilient development approaches are more effective when local communities are involved in developing solutions.
- Specific needs of at-risk groups need to be analysed as part of an effective DRR initiative.
- A participatory, community-based approach contributed greatly in a successful construction and maintenance of locally relevant winter shelters.
- The Red Cross is well placed to drive community and local action for resilience through the network of Red Cross branches and volunteers working on the ground with communities and local authorities, connecting national level linkages with the government and other development actors through MRCS and Movement Partners.

The case study is an excellent example of a locally-led, sustainable and contextually relevant intervention developed and supported by the Mongolian Red Cross, the Red Cross National Society that is supporting the 2018 Asian Ministerial Conference on Disaster Risk Reduction. The case study also highlights a specifically Mongolian climatic phenomenon, an extreme winter, and the localized preparedness initiatives that are undertaken by local actors and communities.

### References for this Case Study

1. The Vulnerability and Capacity Assessment Study 2014 – Mongolia
2. Australian Red Cross Internal Evaluation: Reducing vulnerability and building resilience in response to hazards and risks in Mongolia, September 2015
3. Community-Based Disaster Risk Reduction project design documentation

*Various types of winter shelters that were designed and built by herder beneficiaries together with assistance from Red Cross mid-level branches. | MRCS*



**Collaborators for this Case Study:**  
Mongolian Red Cross Society,  
Australian Red Cross,  
International Federation of  
Red Cross and Red Crescent Societies

**Contact Person for this Case Study:**  
Munguntuya Sharavnyambuu  
Disaster Management Programme Manager,  
Mongolian Red Cross Society  
Email: munguntuya.sh@redcross.mn



**DRR IN  
ACTION  
CASE  
STUDY**

## Youth-led actions for more resilient schools and communities: Mapping of School Safety approaches and Youth in School Safety training for youth facilitators

### Theme of the Case Study

Community/local action for resilience

### Country

11 countries in Southeast Asia

### Case location

Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Vietnam

### Background

Children and youth are always among those most affected by disasters. As there are up to 400,000 schools in Southeast Asia, making schools safer will protect millions of children and youth who are otherwise vulnerable during disasters.

Investing in comprehensive school safety has been a priority in Asia since 2006, and the ASEAN Safe Schools Initiative was endorsed in 2013 aiming to make schools safer by applying common standards to school facilities, conducting training, and planning for disasters.

In the Red Cross and Red Crescent (RCRC) Movement, National Societies (NS) have been implementing a wide range of school-based activities led by youth volunteers that cover disaster risk reduction (DRR), first aid, hygiene and health promotion, road safety, water and sanitation and youth empowerment. In 2015, a consultation was conducted among ASEAN Member States and key partners, where various stakeholders recognized the added values of NSs, such as their network of youth and volunteers and their specific relationship with National Disaster Management Offices (NDMO) and Ministries of Education (MoE). The consultation highlighted the potential role of RCRC to scale up school safety initiatives, with the need to capture the existing NSs' interventions in schools to further promote best practices.

With the long and rich experiences in schools, the expectations and the recognition by school safety partners, the NSs and the IFRC have made a commitment in 2016, under the IFRC Stakeholder Action Statement at the Asian Ministerial Conference for Disaster Risk Reduction (AMCDRR) in India, to ensure youth engagement by investing in the development of youth leadership in DRR and foster an enabling environment to facilitate youth-led initiatives to build resilient communities. The priority actions are:

1. Enhance the capacity of national and regional RCRC Youth Networks to foster information and knowledge sharing on youth-led initiatives for DRR, in order to capitalize innovative solutions; and,

*Photo: Students having discussions on risks at school during Youth in School Safety Programme in Kampong Chhnang, Cambodia, August 2017. | Cambodian Red Cross*

**DRR in Action Case Study**

Youth-led actions for more resilient schools and communities:  
Mapping of School Safety approaches and Youth in School Safety training for youth facilitators

2. Develop and test mechanisms and a youth-friendly toolkit to formalize volunteer and youth roles in DRR programmes as well as in comprehensive school safety programmes by 2018.

Parent from Hlaing Thar Yar township, Myanmar:

*“When I was invited to participate in the school safety training, I didn’t really know what kind of training it would be. But after participating in all the activities, I found that it was very useful for our children. All the parents had to observe and participate in developing an ‘Action Plan’ for school safety. At first, some parents refused to participate because they thought they could not contribute to school safety, but the Red Cross Youth were really patient. They explained to us how important our role as a parent is.”*

With this commitment, the RCRC Southeast Asia Youth Network (SEAYN) has been taking the lead in piloting the Youth in School Safety programme based on the guide developed by IFRC, conducting facilitators’ training in six countries which trained more than 150 youth volunteers over a period of 18 months. Subsequently, these facilitators have conducted countless school safety actions, and capturing various approaches in the form of School Safety mapping in all 11 countries in Southeast Asia.

**What did the action seek to change?**

A shift from the traditional perception that “children and youth should be protected by parents, teachers and adults as they are vulnerable to disasters and risks in schools” to the new recognition that **“empowered youth can bring real and positive changes to schools and communities through their peer-to-peer approach”** and, showcasing the activities of RCRC volunteers on the ground by mapping out the comprehensive school safety actions.

**What were the key actions taken to achieve this change?**

The initiative of implementing Youth in School Safety programme and the mapping was proactively taken by SEAYN youth members.

The Youth in School Safety programme was developed and enhanced by the expertise of RCRC not only in DRR, but also in youth leadership, social inclusion and community engagement, building on its rich experience in school-based activities.

The engagement with multi-stakeholders within NSs (governance, disaster management, health, water and sanitation, First Aid, Social Welfare etc.) and also with external partners such as NDMO and MoE has contributed to strengthening the initiative.

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



School DRR Committee explaining risks at school in Angthong, Thailand, 2017. | Thai Red Cross

Mapping of School Safety approaches	
Step 1	Development of data collection tools and guidance note for NSs
Step 2	Discussion among youth network members with feedback from technical staff, and endorsement by NSs leadership
Step 3	Data collection and analysis within NSs and with stakeholders
Step 4	Compilation of the mapping of 11 countries as an advocacy tool, and dissemination to key stakeholders at both national and regional levels (ASEAN, AMCDRR, technical meetings, etc.)
Youth in School Safety training for youth facilitators	
Step 1	Coordination within NSs involving related technical departments (Youth, DM, Health) and Branches, with schools and education authorities (Ministry of Education)
Step 2	Pre-risk assessment by lead facilitators and preparation of training with school teachers and RCRC youth volunteers
Step 3	Training of youth facilitators (two days for preparation, one day for demonstration at schools, and one day for Action Plan development)
Step 4	Implementation of Action Plan by each trained youth facilitator in communities and schools

### DRR in Action Case Study

Youth-led actions for more resilient schools and communities:  
Mapping of School Safety approaches and Youth in School Safety training for youth facilitators

## What SFDRR principles<sup>1</sup> were applicable to this change process?

- Principle 1 Engagement from all of society
- Principle 2 Empowerment of local authorities and communities through resources, incentives and decision-making responsibilities as appropriate
- Principle 3 Addressing underlying risk factors cost-effectively through investment versus relying primarily on post-disaster response and recovery

## What were the Achievements and the Impacts?

The school safety mapping showcases the collective RCRC school safety approaches in the entire Southeast Asia region which clearly and successfully captured the comprehensive strength and potential of RCRC NSs in the area of school safety.

The youth facilitators trained in the Youth in School Safety programme are promoting school safety actions in schools and communities involving teachers, parents and adults, further widening the circle of peers who follow the good examples promoted by the programme.

The youth-led initiative is recognized and appreciated not only within NSs but also by local authorities and external partners.

Red Cross Youth from Vientiane-Ho Chi Minh Friendship High School, Lao PDR:

*“During the Youth in School Safety facilitators’ training, I was one of the youth facilitators and conducted a school safety activity in my school. I shared my knowledge about disasters, risks and vulnerabilities and also the three pillars of the comprehensive school safety framework. In a group, we discussed how to make our school safe. All of us decided to learn more about school safety and agreed that one factor for the school safety is to have the clean surroundings.”*

## What were the key Lessons Learnt?

### Key factors:

- The engagement of multi-stakeholders provided various aspects (leadership endorsement, technical advice, external partners’ support) to make the initiative successful.
- Youth-led, youth-owned programme and initiative keeps them motivated to further expand the activities and complete the mapping.
- The commitment and support from the leadership made it easier for youth to work on the mapping and implement school safety programmes.

### Challenges:

- Collecting information and data from different sources took time.
- Updating the map country by country needs to be done annually by NSs.
- Monitoring and evaluation of youth facilitators’ action plans after School Safety training needs to be ensured for implementation as planned.
- Sustainability of the RCRC school-based activities requires a strong commitment from education authorities at every level.

### Replication:

- With the established process to carry out the mapping exercise, and the developed pilot guideline to conduct training for youth facilitators, it is easy for other NSs and other regions to replicate.



Youth presenting Action Plan based on discussion among students, teachers and parents during Youth in School Safety Training of Facilitators in Vientiane, Lao PDR, July 2017. | Lao Red Cross

<sup>1</sup> 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.

**DRR in Action Case Study**

Youth-led actions for more resilient schools and communities:  
Mapping of School Safety approaches and Youth in School Safety training for youth facilitators

## What were the Good Practices arising from this action?

Good Practice 1	Youth-led, youth-owned initiative/approach leveraging the youth network
Good Practice 2	Engagement of multi-stakeholders in planning, programme-designing, data-collection, and implementation

## Policy Relevance to DRR in Action

By engaging children and youth in DRR through school safety actions, it meets the action of Priority 3, and contributes to the Sendai Framework overall goal to “Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive educational measures which strengthen resilience”.

By ensuring youth engagement on DRR and promoting comprehensive school safety which also includes social inclusion and community engagement components, it contributes to the Sustainable Development Goals 3 (good health and well-being), 4 (quality education), 5 (gender equality), and 11 (sustainable cities and communities).

## Key Messages from this Case Study

- When children and youth have an opportunity to learn about disasters and risks at schools, they take the lead and initiate actions to make their school safer; their peers will follow their good actions, awareness will be raised, and the collective action will make a difference in bringing positive changes in schools and in communities.
- School safety can be realized and sustainable only when all stakeholders, children and youth, teachers, parents, communities and governments plan and work together.

With the mapping and training module (facilitators’ guide) developed in Southeast Asia, other regions can easily learn how to apply these to their own region, as school safety is important everywhere, not only in Southeast Asia.

School safety activities could also provide opportunities for RCRC to further engage with and strengthen relationships with governments, local authorities, other partners, and schools; thus this initiative should be shared and further considered how best to scale up.

## References for this Case Study

1. *Red Cross Red Crescent Youth in School Safety programme Facilitators Guide*, 2016, IFRC.
2. *Comprehensive School Safety*, 2017, UNISDR.
3. *National Red Cross Red Crescent Societies Working Toward School Safety – Mapping Initiative*, 2018, IFRC CCST Bangkok.

**Collaborators for this Case Study:**

National Red Cross Red Crescent Societies  
in Southeast Asia,  
International Federation of  
Red Cross and Red Crescent Societies

**Contact Person for this Case Study:**

Miu Kimura  
OD Delegate for Youth  
Asia Pacific Regional Office  
International Federation of  
Red Cross and Red Crescent Societies  
Email: miu.kimura@ifrc.org



## Get behind local action

Ensure global and national commitments have local impact

Let's work to ensure that climate-smart disaster risk reduction initiatives and investment reach the right actors and strengthen local systems. Global and national resources must be targeted towards where they are needed most. This will allow local authorities and communities to tailor locally-managed solutions, ultimately making best use of available resources.

- **What needs to be done?** National policies and investment in Climate Change and DRR are necessary to reach local communities and strengthen local systems. This includes strengthening an enabling regulatory environment (laws, policies and plans) for local action and inclusive community empowerment.
- **How can we help?** Work with local actors, including National Societies that as both a community-based actor and an auxiliary to government, are well positioned to work with authorities to ensure national investments, law and policies that consider local needs and provide an enabling environment to build resilience.





## DRR IN ACTION CASE STUDY

# Australian Business Roundtable for Disaster Resilience and Safer Communities

### Theme of the Case Study

Private sector interventions

### Country

Australia

### Case location

Nationwide

## Background

The costs of disasters borne by society is rising, with increasing disasters, greater urbanization, and a greater value of what is at risk. Formed in 2012, the Australian Business Roundtable for Disaster Resilience & Safer Communities is a collaboration of businesses and the Australian Red Cross working to make Australian communities safer and more resilient to natural disasters.

The Roundtable members are the Chief Executive Officers of the Australian Red Cross, IAG, Investa Office, Munich Re, Optus (Chairman) and Westpac.

The cornerstone of this work is to influence public policy via evidence-based reporting on the unsustainable cost of disasters on life, property and the economy. Each member organization of the Roundtable plays a crucial role in community planning or disaster recovery and all have supported customers and communities affected by floods, storms and bushfires.

Australian Red Cross accepted the invitation to join the Roundtable to ensure that the humanitarian dimension was represented in this work, as well as providing insights into how emergency management operated in the Australian context.

The Roundtable has commissioned numerous reports since its inception, most recently:

- *The economic cost of the social impact of natural disasters, March 2016*
- *Building resilience to natural disasters in our states and territories, November 2017*

The Roundtable members are jointly committing resources to work constructively with governments to deliver in five critical areas; community education, risk information, adaptation research, mitigation infrastructure and strategic alliances.

*Photo: Australian Business Roundtable for Disaster Resilience and Safer Communities. | Australian Red Cross*

## What did the action seek to change?

Shifting the national investment in disaster funding from recovery and response costs, to greater funding in preparedness and mitigation.

## What were the key actions taken to achieve this change?

Identify the scope of the issue (i.e. the costs), determine solutions and run cost benefit analyses to demonstrate the savings that can be made.

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

Step 1	Formation of the roundtable, at a senior level, with significant reach into the Australian community.
Step 2	Commissioning of research.
Step 3	Development and implementation of a communications and advocacy strategy.

## What SFDRR principles<sup>1</sup> were applicable to this change process?

- Principle 1 Shared responsibility between central Government and national authorities, sectors and stakeholders as appropriate to national circumstances.
- Principle 2 Decision-making to be inclusive and risk-informed while using a multi-hazard approach.

## What were the Achievements and the Impacts?

Through high level and public advocacy by the roundtable members, we have seen the announcement of the Productivity Commission's inquiry in Disaster Funding, which recommended changes to the way disasters are funded, including increased investment in disaster risk reduction. The reports produced by the Roundtable have also been drawn upon by State governments to inform strategies such as the Queensland Disaster Resilience Strategy and the Victorian government's Resilient Recovery Project.

The Federal government has also commenced the development of a National Disaster Mitigation Framework, which will prioritize areas of high risk, examine how to better share data to enable risk informed decision-making, and determine best ways to more effectively fund mitigation activities.

Most recently, the Government of Australian has announced the formation of the National Resilience Taskforce, which is charged with the development of a five-year National Disaster Mitigation Framework. Australian Red Cross will provide input into this framework, through its membership of the Roundtable, and independently.

<sup>1</sup> 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.

### What were the key Lessons Learnt?

- Ensure that there is executive level commitment to objectives of the roundtable, and this is supported by programme expertise.
- Ensure that consultants engaged are well versed in the nuances of the disaster resilience issues.

### What were the Good Practices arising from this action?

Good Practice 1	<i>Engagement of the Roundtable members at the highest level, supported by experienced content experts.</i> Having the CEOs of the various organizations at the table and taking personal interest in the issues and driving the outcomes, meant that the work had significant internal impetus. In addition, having the CEOs, many of whom were public figures, also lent credibility to the endeavour and enabled access to the Australian government at a senior level, through the relevant Minister, and the Director General Emergency Management Australia. Having experienced content experts, in emergency management and sustainability, enabled the roundtable to be well informed of relevant issues, and the current state of the policy environment.
Good Practice 2	<i>Engagement of a respected economics research firm to quickly distil the issues and report.</i> Deloitte Access Economics has strong reputation within Australian government policy circles to deliver quality reports on diverse topics. DAE showed an excellent grasp of the complexity of the issues, particularly those on social impacts. They were able to quickly research and distil the issues, and working closely with Red Cross content experts, to shape a compelling narrative that has gained significant traction within the emergency management policy space. The benefit of using such consultants was the speed at which they worked, providing a quality report, which maintained momentum in advocating for increased investment in disaster resilience.

### Policy Relevance to DRR in Action

This case study contributes to Priority 3, investing in disaster risk reduction, through demonstrating Red Cross engagement with the private sector as a thought leader in the area of disaster risk reduction.

### Key Messages from this Case Study

- Roundtable members bring diversity of perspectives to a common goal of making communities safer and more resilient to natural disasters – this creates a stronger voice in advocating evidence-based action.
- Evidence-based policy making is important and the Roundtable model engages respected economists to quickly distil the issues and report.
- It is in the long term interests of government, not-for-profit and the corporate sector to work together to build national resilience to disasters.
- We need to embed resilience across all aspects of policy and decision-making
- We need to prioritize resilience investments by considering the broader economic and social benefits that result from the efforts.

The Australian Business Roundtable for Disaster Resilience and Safer Communities is an excellent demonstration of engaging leaders in the corporate sector and making them champions for disaster risk reduction.

## References for this Case Study

Research reports of the Australian Business Roundtable for Disaster Resilience and Safer Communities: <http://australianbusinessroundtable.com.au/our-research>

- *Building our Nation's Resilience to Natural Disasters*, 2013
- *Building an Open Platform for Natural Disaster Resilience Decisions*, 2014
- *Building Resilient Infrastructure*, 2016
- *The Economic Cost of the Social Impact of Natural Disasters*, 2016
- *Building the resilience of our nation in states and territories*, 2017

**Contact Person for this Case Study:**

John Richardson  
National Resilience Advisor,  
Emergency Services,  
Australian Red Cross  
Email: [jfrichardson@redcross.org.au](mailto:jfrichardson@redcross.org.au)



**DRR IN  
ACTION  
CASE  
STUDY**

## A seat at the table: inclusive decision-making to strengthen local resilience

**Theme of the  
Case Study**

Disaster Risk  
Governance

**Country**

Multiple countries  
in Asia Pacific

**Case location**  
National

### Background

The strengthening of law and policy, including its decentralisation, and the role of women and marginalised groups in disaster risk management (DRM) to have clear roles in decision-making has been emphasised in the Sendai Framework for Disaster Risk Reduction 2015-2030 as key priorities to strengthen disaster resilience, from local to national level.

Disasters are not gender, age or disability blind; women and marginalised groups are disproportionately affected by disasters due to greater vulnerability arising from individual capacity levels, social exclusion, or lack of public awareness or discrimination. As such, disaster related laws and policies need to better include and protect those most at risk of disasters. Legislation should guarantee the meaningful engagement of communities, women and marginalised groups by assigning clear roles, responsibilities, and participation in decision-making processes.

### What did the action seek to change?

Enabling inclusive community empowerment and protection, gender and inclusion approaches in disaster related laws and policies to strengthen local resilience.

### What were the key actions taken to achieve this change?

Guided by global research findings, the IFRC supports National Societies, who as both a community-based actor and an auxiliary to government, are well positioned to work with authorities to ensure national law and policies consider local needs and provide an enabling environment for local action and inclusive community empowerment.

*Photo: Mainstreaming Gender and Inclusion in our Community DRM programme. | Samoa Red Cross*

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

Step 1	<p>In 2012, IFRC and UNDP embarked on a joint initiative to better understand how legal frameworks affect disaster risk reduction, in view of both legislative provisions and implementation, in order to better assist legislators, practitioners, and policy makers engaged in reviewing or drafting DRM laws and selected sectoral laws. The research sought to respond to a clear gap identified in numerous reports relating to the Hyogo Framework for Action (HFA) implementation, which have indicated a lack of readily available information and analysis on the role of legislation, and a slow pace of change in reducing disaster risk at the community level.</p>
Step 2	<p>In 2014, the IFRC-UNDP launched the <i>Effective Law and Regulation for Disaster Risk Reduction: A Multi-Country Report</i> <sup>(1)</sup>, which looks at countries' disaster-related legislation and how effectively they address and integrate disaster risk reduction. The report draws on research from a sample group of 31 countries, undertaken in the form of desk surveys, as well as case studies in 14 of these countries for a more comprehensive analysis of the laws and their implementation. The report found that in order to support a whole-of-society approach, legal frameworks for DRR should include institutional mandates, allocate dedicated resources, facilitate the participation of communities, civil society and vulnerable groups, and establish the responsibility and accountability of relevant actors. The input of civil society organizations, communities, women and vulnerable groups is a key part of DRR strategies because it recognizes communities' rights to be involved in their own risk management and takes special account of the needs of vulnerable groups.</p>
Step 3	<p>In 2015, the IFRC-UNDP launched the Checklist on Law and Disaster Risk Reduction<sup>(2)</sup>, and its accompanying Handbook, provides a practical assessment tool, with a list of ten key questions, to guide a review process of national and local level laws and regulations that can enhance DRR and provide guidance on how to bring national legal frameworks in line with existing international standards, in particular the Sendai Framework for Disaster Risk Reduction 2015-2030. Specifically, questions 8-9 of the Checklist and Handbook<sup>(3)</sup> provides guidance on how to ensure the engagement of communities, including women and marginalised groups in disaster risk reduction decisions and activities</p>
Step 4	<p>Between 2014 and 2018 the Checklist has been used as an assessment tool in research and legal and assessment in a number of Asia Pacific countries. Twelve AP countries have undertaken in-depth national level research which examines legal and policy frameworks on DRR and makes recommendations on how to strengthen frameworks or address gaps. In addition, the Checklist has been used as an assessment tool in 10 Asia Pacific legal review processes over this period.</p>
Step 5	<p>Over 2017–2018, in close collaboration with Protection, Gender and Inclusion colleagues, further research into the effectiveness of national laws, policies and institutional frameworks in supporting gender equality and the right to assistance, security and protection of vulnerable groups in disaster risk management and in preventing and responding to sexual and gender-based violence in disasters has enabled evidence-informed advocacy and technical assistance to strengthen inclusive decision-making in local disaster resilience frameworks. This includes the launch of the global report on <i>Effective Law and Policy on Gender Equality and Protection from Sexual and Gender-Based Violence in Disasters</i><sup>(4)</sup>, which draws upon case studies from Nepal<sup>(4a)</sup>, Zimbabwe<sup>(4b)</sup> and Ecuador<sup>(4c)</sup>, and <i>the Responsibility to Prevent and Respond to Sexual and Gender-Based Violence in Disasters and Crises</i>, which draws upon case studies from Philippines, Lao PDR and Indonesia.</p>

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

Step 6	Operating on an international mandate provided by all state parties to the Geneva Conventions, the IFRC provides technical advice based on over a dozen years of global research and consultations, working closely with National Societies as they support their public authorities to strengthen disaster risk management law and policy.
--------	---

## What SFDRR principles<sup>1</sup> were applicable to this change process?

- Principle 1 Empowerment of local authorities and communities through resources, incentives and decision-making responsibilities.
- Principle 2 Full engagement of all State institutions of an executive and legislative nature at national and local levels.
- Principle 3 Primary responsibility of States to prevent and reduce disaster risk, including through cooperation.

## What were the Achievements and the Impacts?

By harnessing their unique auxiliary role, National Societies, working with the IFRC Disaster Law Programme, have successfully strengthened new disaster laws and policies in 30 countries since 2007, including establishing modern legal frameworks that have integrated disaster risk reduction and climate change adaptation and implementing governance structures and decision-making processes and mechanisms for inclusive community empowerment and local action. Operating on an international mandate provided by all state parties to the Geneva Conventions, the IFRC Disaster Law Programme provides technical advice based on over a dozen years of global research and consultations. A few illustrative examples from the Asia Pacific region include:

- The National Disaster Management Plan (NDMP) 2016-2019 for **Samoa**, prepared under section 9 of the 2007 Disaster and Emergency Management Act, which establishes village Disaster and Climate Committees (DCC) that are responsible for co-ordinating disaster mitigation and preparedness programmes and activities at the community level, and for co-ordinating the various village response teams for specific threats. It is the role of the Ministry of Women, Community & Social Development to support, monitor and liaise with Village Councils and organizations through the “Sui o le Nuu” and “Sui Tamaitai o le Nuu” as they implement disaster management activities. The Plan recognized that women are still largely excluded from formal planning and decision-making processes, and that entry points for amplifying women’s voice in disaster risk reduction should be constantly explored. The Law and Justice Sector is tasked to assign clear roles and tasks to community representatives within disaster risk management institutions and processes and decision-making through relevant legal frameworks, to undertake comprehensive public and community consultations during the development of such laws and regulations, and to ensure women, children and youth, persons with disabilities, poor people, indigenous peoples, and older persons are meaningfully engaged.

<sup>1</sup> 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.

- **Philippines'** Disaster Risk Reduction and Management Act of 2010 (RA 10121), which establishes the Local Disaster Risk Reduction and Management Office, mandates the participation of the Philippine Commission for Women in the National Disaster Risk Reduction and Management Council and requires gender sensitive provisions.
- **Vietnam's** Law on Natural Disaster Prevention and Control of 2013, recognizes that local organizations, households and individuals are first responders ('on-the-spot forces') and shall carry out natural disaster prevention and control activities. It establishes Commune-level People's Committees and makes explicit provisions for communities to participate in the elaboration of local plans on natural disaster prevention and control, which are integrated into local socio-economic development plans.
- The 2017 Law on Disaster Protection of **Mongolia**, provides for multi-stakeholder national and local platforms to be embedded into the new institutional structure, including establishing local disaster risk reduction and disaster protection councils. This Law illustrates a more inclusive and participatory approach to DRM Decision making.
- The Bill for the Disaster Risk Management Act for **Vanuatu**, currently awaiting official parliamentary processes, will establish and assign clear roles and responsibilities to Municipal and Community Disaster and Climate Change Committees. The membership of these committees will include a women representative at both municipal and community level, and representation for youth, persons with disabilities, and elected community members at community level.

NB. There has not been any impact studies done at the time of writing.

Mr. Dickinson Tevi,  
Organizational Development  
Coordinator of Vanuatu Red  
Cross:

*"Working together on Disaster Law has really helped to strengthen our relationship with the government, particularly their understanding of the work we do as Red Cross. This has certainly helped to cement our role as auxiliary to the government in disaster risk management through the institutionalization of the role of Vanuatu Red on the National Disaster Management Committee."*

### What were the key Lessons Learnt?

- Most DRR-related laws, policies and plans do not lay the necessary foundation required for inclusive community empowerment and local action. Equally, local systems for DRM with decentralised governance structures are not effective if they are not delegated the adequate authority and allocated the resources required to build their own resilience.
- Although most countries have reflected international commitments on equality and equity in National Constitutions or Bills of Rights, these obligations are often not translated into DRM systems. Research has found that national DRM laws and policies which do contain provisions on marginalised groups and women are often aspirational statements without specific implementation mechanisms. DRM frameworks often tend to focus on the importance of addressing the needs of these groups, but without ensuring their active participation in decision-making processes. When inclusive decision-making processes are established, it is seldom accompanied by eligibility criteria or procedural and/or practical solutions (for instance, the provision of financial incentives to address loss of livelihood when time is dedicated to partake in decision-making processes; the organization of safe and accessible transport; and, ensuring that cultural barriers to participation are addressed).

## What were the Good Practices arising from this action?

Good Practice 1	Non-government actors like National Societies have actively engaged and influenced DRM law making. This helps to ensure that voices and needs of communities and at risk groups are heard and considered in decision-making processes.
Good Practice 2	Many Asia Pacific countries are moving from a narrow view of law which established roles and responsibilities, and institutional mechanisms to legal frameworks that are people-centred and rights-based and include protection and inclusion issues related to disasters.
Good Practice 3	Many recent laws have established and formalized mechanisms for community engagement and involvement in decision-making.

Cecilia Alpira, Regional Adviser for Asia Pacific, UN Women:

“I can see a distinct change in Disaster Laws with an emerging gender dimension. I suspect that the IFRC has a lot to do with this”.

## Policy Relevance to DRR in Action

The strengthening of law and policy, including its decentralisation and the role of women and marginalised groups in DRM decision-making has been emphasised in the Sendai Framework for Disaster Risk Reduction 2015-2030 as key priorities to strengthen disaster resilience, from local to national level.

The Sendai Framework calls for inclusive, accessible and non-discriminatory all-of-society engagement and partnership in disaster risk reduction, including applying an integrated gender, age, disability and cultural perspective in all policies and practices, and that women and youth leadership should be promoted. It further emphasizes that ‘empowering women and persons with disabilities to publicly lead and promote gender equitable and universally accessible response, recovery, rehabilitation and reconstruction approaches is key’ and that women and their participation are critical to effectively managing disaster risk and designing, resourcing and implementing gender-sensitive disaster risk reduction policies, plans and programmes; and adequate capacity building measures need to be taken to empower women for preparedness as well as to build their capacity to secure alternate means of livelihood in post-disaster situations. (19(d)(g),27(f), 32, 36(a(i))).

The Sendai Framework and the 2030 Agenda for Sustainable Development are intrinsically linked. States need to integrate their commitments from both to ensure a holistic approach to sustainable development and disaster risk reduction. The SDGs contain five specific targets regarding disaster risk reduction and management. In particular, Goal 11.5 commits States to ‘significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.’ Climate change adaptation is stressed in Goal 2.4, while Goal 1.5 requires States to ‘build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.’ Goal 5 stressed the importance of women and girls in political and economic decision-making processes to fuel sustainable economies and benefit societies and humanity at large. Targets also call for the elimination of discrimination, violence and other harmful practices against women and girls.

Moreover, the Sendai Framework for Disaster Risk Reduction is expressly cited in Goal 11b, and the first target of Goal 13 is to ‘strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries’. Likewise, the Sendai Framework (adopted before the SDGs) clearly highlighted that ‘effective disaster risk management contributes to sustainable development’.

Nola Fa'asau, Legislative Drafter, Pacific Island Forum Secretariat (PIFS) at the Asia Pacific Disaster Law Field School:

*“Ultimately it is about the people, who we collectively work to protect. PIFS is accountable to leaders, who in turn are accountable to the people of their countries. Unfortunately, during times of disasters everyone’s rights are affected; the only way to ensure that all rights are protected is to have those rights protected in laws. Without laws in place the disaster becomes two-fold; the impact of the disaster and then the legality issues of so many things. If we don’t have laws in place, we are so much more vulnerable to the human impact of a disaster.”*

## Key Messages from this Case Study

- Scale-up **Local Voices and Leadership**, particularly amongst women and marginalised groups, in climate smart DRM decision-making, including in the development and implementation of laws, strategies and plans.

This case study illustrates how DRM Governance frameworks can be made more inclusive and ensure involvement of people whom they serve to protect - local communities. In Asia Pacific, Red Cross and Red Crescent National Societies have been working alongside governments, partners and communities to bridge the gaps and utilizing their auxiliary role to ensure decision making firmly includes the voice and needs of those most at risk of disaster.

## References for this Case Study

1. IFRC, UNDP *Effective Law and Regulation for Disaster Risk Reduction: A Multi-Country Report, 2014*
2. IFRC, UNDP, *The Checklist on Law and Disaster Risk Reduction, 2015*
3. IFRC, UNDP, *The Handbook on Law and Disaster Risk Reduction, 2015*
4. IFRC, *Effective Law and Policy on Gender Equality and Protection from Sexual and Gender-Based Violence in Disasters*, and country case studies from *Nepal*<sup>(4a)</sup>, *Zimbabwe*<sup>(4b)</sup> and *Ecuador*<sup>(4c)</sup>, 2017
5. IFRC, *The Responsibility to Prevent and Respond to Sexual and Gender- Based Violence in Disasters and Crises, 2018* (awaiting finalization)
6. IFRC, *Disaster Law in South East Asia – Case Studies 2017*
7. Government of the Independent State of Samoa, *National Disaster Management Plan 2016-2019*
8. IFRC, *Samoa: Strengthening PGI in Disaster Law – Snapshot 2018*
9. Socialist Republic of Vietnam, *Law on Natural Disaster Prevention and Control* (No. 33/2013/QH13)
10. Republic of the Philippines, *Disaster Risk Reduction and Management Act of 2010* (RA 10121)
11. Republic of Mongolia, *Law on Disaster Protection, 2017*
12. Republic of Vanuatu, *Bill for the Disaster Risk Management Act*

### Collaborators for this Case Study:

Asia Pacific National Red Cross Red Crescent Societies,  
Asia Pacific Governments,  
United Nations Development Programme (UNDP)

### Contact Person for this Case Study:

Gabrielle Emery  
Disaster Law Programme Coordinator,  
Asia Pacific Regional Office,  
International Federation  
of Red Cross and Red Crescent Societies  
Email: [gabrielle.emery@ifrc.org](mailto:gabrielle.emery@ifrc.org)



## Disasters don't discriminate – do you?

Disasters have different impact based on gender, age or disability

If we are serious about assisting the most vulnerable people, we need to collectively get better at collecting and using data. This data must be SADD – sex, age and disability disaggregated - so we can better understand the needs and vulnerabilities of the affected population before and after disasters. This will reduce the impact on women and girls and those whose risk of sexual, and gender based violence spikes in disasters.

- **What needs to be done?** We must collectively do more to ensure that at each assessment stage sex, age and disability disaggregated (SADD) data is collected to better understand the needs and vulnerabilities of the affected population before and after disasters. In addition, disaster-related laws and policies need to better include and protect those most at risk of disasters, and consider the needs of SGBV survivors during disasters and crisis in national and local frameworks and referral systems.
- **How can we help?** IFRC has global expertise in integrating protection, gender and inclusion (PGI) concerns in disaster law frameworks and is available to work with relevant authorities to ensure that these concerns are well integrated in policy and practice. In addition, our volunteer base consists of front-line workers during disasters and crises. Many of these volunteers have already been trained in giving referral pathway information and understanding how to ensure affected women, girls, men and boys are safe, respected and not discriminated against. We have developed coalitions with IPPF, CARE and UNFPA, understanding that an effective response for at-risk groups can only be implemented with other technical leads in the area.





**DRR IN ACTION CASE STUDY**

# Participatory Campaign Planning for Inclusive DRR Knowledge and Messaging in Nepal

**Theme of the Case Study**  
Gender & Inclusiveness

**Country**  
Nepal

**Case location**  
7 municipalities in Nepal:  
Kathmandu,  
Bhaktapur,  
Mhadhapur-Thimi,  
Godavari,  
Bhudhnilkantha,  
Dhangadhi,  
Pokhara–Leknath

## Background

The Strengthening Urban Resilience and Engagement (SURE) programme is implemented by the Nepal Red Cross Society (NRCS) in partnership with the British Red Cross (BRC), in seven municipalities, targeting four groups vulnerable to disasters in each of the municipalities to increase their awareness of their risks to different disasters and mitigation measures they can take.

Learning from the previous Earthquake Preparedness for Safer Communities (EPS) programme reflected that disseminating general messages to entire populations was ineffective in creating behaviour change. The SURE programme therefore developed the Participatory Campaign Planning (PCP) process to understand which messages and means of communication would be most effective with the different target groups of the programme.

## What did the action seek to change?

To move away from a blanket approach in communicating messages, to adopt an approach where messages and the means of communicating them are tailored to different target groups, with the aim of making them more effective in creating behaviour change.

## What were the key actions taken to achieve this change?

The PCP methodology was developed by the BRC and NRCS headquarters SURE team and rolled out by the programme team in each municipality. A separate one-day workshop was held with each of the programmes’ target groups, 28 in total.

The workshops were participatory-and activity-based and sought to establish:

- Hazards that target groups felt they were at the biggest risk of
- Test existing key messages to understand if target groups think each message is effective in changing behaviour, and if not, why not

*Photo: PCP workshop participants in Kailali discuss messages that could be effective in addressing identified issues. | NRCS*

- Map the barriers to behaviour change
- Understand participants' social networks and understand the best opportunities to share information
- Understand the most effective means of communication
- Understand how different target groups prefer to give feedback

Following the workshop, detailed analysis was done by the programme team and specific key messages for the target groups were developed for the target groups based on the findings.

A dissemination workshop was held with external actors and the findings have fed into the revision of government messages.

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

Step 1	Development of the methodology
Step 2	Facilitation of the workshops with SURE programme target groups
Step 3	Analysis of the findings
Step 4	Revision and development of hazard messages for different target groups, based on the findings

### What SFDRR principles<sup>1</sup> were applicable to this change process?

Principle 1 **Engagement from all of society.** The SURE programme specifically engages the most vulnerable people in urban areas and works with them to build their resilience to disasters. SURE's urban engagement strategy focuses on behavioural change models and working with these vulnerable populations to understand better their risks, and, build their knowledge and skills as agents of change within their own networks. This network approach relies on target vulnerable groups to co-design their own disaster risk reduction and resilience communication materials, as well as mitigation activities and advocacy campaigns. The PCP process is the catalyst for co-design of the communication materials and messages; it is critical to include citizen voice in order to make the message relevant and more impactful to those vulnerable populations.



A NRCS social mobilizer reading messages to an elderly group (as they cannot read) so they can then vote for the ones they like and those that they do not. Kaski, 15 June 2017. | NRCS

Principle 2 **Empowerment of local authorities and communities through resources, incentives and decision-making responsibilities as appropriate.** The PCP process engages target vulnerable groups in discussions and decision-making on the type of messages that are aimed at them and their communities.

Principle 3 **Decision-making to be inclusive and risk-informed while using a multi-hazard approach.** The PCP process examines messages from multiple hazards that have previously been identified as being risks to those populations – both man-made and natural hazards. The PCP process is able to be conducted with illiterate groups, people with disability groups and is aimed at those groups who are often excluded or marginalised from decision-making processes within Nepali society such as single women (widows) and the landless.

<sup>1</sup> 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.

## What were the Achievements and the Impacts?

While it is too soon for impact level change to materialize, the immediate results reflected that target groups became engaged in the programme through the PCP process and felt valued through the consultation. Feedback from target groups indicated they previously did not have the opportunity to engage.

Hazard messages were changed based on the findings, both within and outside of the programme; tailoring them to different target groups with the aim of increasing the effectiveness of messages for the purpose of promoting behaviour change.

A street vendor in  
Kathmandu:

*"We never expected this kind of respect, we've never had this chance with any other organization."*

## What were the key Lessons Learnt?

The overall learning was the confirmation that in order to lead to behaviour change, hazard messages need to be adapted based on the target group and the geographic environment.

From the PCP workshops we learnt that the following elements need to be considered when developing hazard messages:

- Resources: the income of the target group, the availability of human resources, equipment and materials
- The existing knowledge of the target group
- The availability of physical infrastructure
- The availability of natural resources
- The existence of laws and their enforcement
- The social status of target group
- The literacy status of target group
- The physical and mental well-being of target group

Many PCP participants highlighted that they are poor and lack resources that are required to be resilient against disasters including property and equipment. As such, messages that promote the use of resources, for example, prepositioning rescue materials and constructing a house following the building code, will not lead to behaviour change.

The participants also suggested a need to account for available physical infrastructures while formulating messages. In the case of messages related to road accidents, People with Disabilities objected that it will be hard to follow messages that request them to walk on footpaths because footpaths are not disabled-friendly. Similarly, people who are living on river banks said the messages suggesting that people move to temporary shelters during flooding are ineffective because they do not have access to shelters.

Another factor to be considered while designing messages is environmental setting. In Godawari municipality, unemployed youths suggested adapting messages that promote the use of rafts during flooding as there are big stones in the river in their area that would obstruct rafts, making rescue operations difficult.

The participants also raised concerns over messages that require the proper enforcement of laws. There was a message requesting pedestrians to use footpaths, but the participants informed that it is difficult to walk on footpaths because of street shops. According to them, such messages require an effective law enforcement which is beyond their capacity.

Social status was also found to be an important factor. Dalit target groups said that they cannot follow the message that asks them to go to safe shelters during disasters because they are socially excluded and not allowed to access them with other so-called higher castes.

It is also important to consider people with disabilities. For example, flood warnings disseminated through sirens and radio are ineffective for people with hearing loss.

### What were the Good Practices arising from this action?

Good Practice 1	Effectively engaging vulnerable groups in the development of hazard messages, through participatory methodologies
Good Practice 2	Tailoring hazard messages to the different needs of different vulnerable groups
Good Practice 3	Applying learning from the process to revise the programme strategy

### Policy Relevance to DRR in Action

Importance of moving from information dissemination model of DRR, to behavioural change models for longer term impact and ownership of risk reduction behaviours.

### Key Messages from this Case Study

- SURE focuses on multiple hazards (natural and man-made), heavily developing and using participatory approaches to engage different target groups in urban areas; tailoring approaches to be appropriate to different target groups, rather than using a blanket approach.
- SURE uses six types of urban community<sup>(3)</sup> to help identify and engage with vulnerable populations and subsequently testing a new model of working in urban communities that identifies and works with target vulnerable groups, looking at how they organize themselves and capitalizing on the networks which they use, instead relying on artificial geographic groupings.

The target group approach is innovative in an urban disaster resilience programme. This is a new way of working that provides a depth in terms of focusing on behaviour change and breadth of coverage.

### References for this Case Study

1. PCP Process for workshops
2. Draft Report on Participatory Campaign Planning
3. Hamdi, 2004, 'Small Change: About the Art of Practice and the limits of Planning in Cities' (published by Earthscan) and Kupp, 2016, cited in ALNAP, 2016, 'Stepping back: understand cities and their systems' (Campbell)

#### Collaborators for this Case Study:

Nepal Red Cross Society,  
British Red Cross

#### Contact Person for this Case Study:

Gita Pandey  
Community Engagement, Accountability  
and Learning-lead, SURE Programme,  
Nepal Red Cross Society  
Email: gita.pandey@nrccs.org



**DRR IN  
ACTION  
CASE  
STUDY**

# Community participatory action research on sexual and gender-based violence prevention and response during disasters

**Theme of the Case Study**  
Gender and Inclusiveness

---

**Country**  
3 countries in Southeast Asia

---

**Case location**  
Leyte and Aklan in the Philippines, Bima and Aceh in Indonesia, Oudomxay and Sekong in Lao PDR

---

## Background

Sexual and gender-based violence (SGBV) is an issue faced by all the communities. It is often life threatening and impacts a survivor's daily life, dignity, rights, livelihood and health. SGBV during and after disaster situations and other emergencies is under-researched and largely ignored in policy circles<sup>(1)</sup>. Studies conducted in Australia<sup>(2)</sup>, Canada<sup>(3)</sup>, Japan<sup>(4)</sup>, New Zealand<sup>(5)</sup> and the United States<sup>(6)</sup> have found that the risks to SGBV increase during disasters.

However, few studies have focused on low-income, developing countries. Few go beyond researching the gendered effects of SGBV on women and girls.

Consequently, many humanitarian agencies not only overlook needs of women and girls, but also completely overlook men and boys and sexual minority groups as survivors of SGBV in their needs assessment, discussions with communities, during data collection and, follow-up community-based programming and humanitarian response programming.

Key findings in this collaborative research project between the International Federation of Red Cross and Red Crescent Societies (IFRC) and the ASEAN Committee for Disaster Management (ACDM) illustrate that the risks to SGBV are exacerbated during natural disaster situations in Indonesia, Lao PDR and the Philippines, and that "disaster responders" and actors addressing needs of SGBV survivors are not working together adequately to reduce these risks. This research shows that this is a trend applicable to other disaster contexts.

## What did the action seek to change?

- How data on SGBV is collected at the community level (make it more ethical and survivor-centred)

*Photo: Anonymity of respondents is observed during data collection and focus groups discussion on SGBV. | Majja Tammi, Finnish Red Cross*

**DRR in Action Case Study**

Community participatory action research on sexual and gender-based violence prevention and response during disasters

- How communities prepare for SGBV prevention and response before a recurrent disaster strikes
- How community voices on this issue are shared with the national level government and ASEAN disaster response actors

**What were the key actions taken to achieve this change?**

- Conduct research in Philippines, Indonesia and Laos on SGBV prevention and response during disasters
- Increase data literacy and SGBV awareness among Red Cross Red Crescent (RCRC) volunteers who were the data collectors
- Interview adult women, adult men, adolescent boys and girls on the changes they want to see within their communities to better prevent and respond to SGBV during disasters
- Design multi-sectoral, community-based programmes for select villages in data collection sites in order to improve service provision for survivors

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

Step 1	Training of RCRC volunteers to collect data on SGBV during disasters in an ethical and survivor-centred way
Step 2	Partnership with ASEAN Committee on Disaster Management Working Group on Prevention and Mitigation, relevant in-country governmental and non-governmental organizations
Step 3	Awareness raising at the community level on SGBV prevention and response, referral information and future follow-up in select data collection sites with multi-sectoral community-based programmes

**What SFDRR principles<sup>1</sup> were applicable to this change process?**

- Principle 1 Protection of persons and their assets while promoting and protecting all human rights including the right to development
- Principle 2 Empowerment of local authorities and communities through resources, incentives and decision-making responsibilities as appropriate
- Principle 3 Addressing underlying risk factors cost effectively through investment versus relying primarily on post-disaster response and recovery

**What were the Achievements and the Impacts?**

- **Increased awareness** on SGBV prevention and response among RCRC actors who are first responders during disasters
- **Advocacy based evidence** for the community, province, national and regional level
- Impetus for **increased coordination** among “disaster responders” and “SGBV prevention and response” actors in the participating countries



Focus Group Discussion with disaster-affected women in Bima, Indonesia. | Evi Susanti, IFRC.

<sup>1</sup> 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.

IFRC SGBV research project report 2018:

Key findings in this research illustrate that the risks of SGBV are exacerbated during disaster situations in Indonesia, Lao PDR and the Philippines.

In all three countries, household survey respondents expressed that child marriage<sup>(a)</sup> and domestic violence<sup>(b)</sup> are “harmful incidents for women and girls” that occur in the immediate aftermath of the disasters.

- In the Philippines, 30 per cent of respondents reported women and girls felt distressed by the rise in child marriage after the disaster
- In Indonesia, 18 per cent of respondents reported that women and girls felt distressed by the rise in child marriage after the disaster.
- In Lao PDR, 47 per cent of respondents reported that women and girls felt distressed by the rise in child marriage after the disaster.

a) Child marriage is defined as “any legal or customary union between two people where at least one of the parties is below the age of 18. A child marriage is interpreted by the CEDAW and CRC Committees as a form of forced marriage, since children – given their age – inherently lack the ability to give their full, free and informed consent to their marriage or its timing”. (IASC Guidelines for Gender-based Violence Interventions in Humanitarian Settings)

b) Domestic Violence is defined as “violence that takes place within the home or family between intimate partners as well as between other family members” Intimate partner violence, however, applies specifically to violence occurring between intimate partners (married, cohabiting, boyfriend/girlfriend or other close relationships) and is defined by the WHO as behaviour by an intimate partner or ex-partner that causes physical, sexual or psychological harm, including physical aggression, sexual coercion.

## What were the key Lessons Learnt?

- SGBV prevention and response during disasters is an often overlooked subject
- Disaster responders are failing to coordinate and adequately prepare on this issue
- It is difficult to collect data on such a sensitive issue
- As community-based services do not exist it is important to build capacity both for disaster responders and SGBV prevention and response actors
- There are missing links between disaster law frameworks and protection frameworks. If the linkages were strengthened, it would be a key intervention for SGBV prevention and response during disasters.

## What were the Good Practices arising from this action?

Good Practice 1	Involving disaster-affected communities in the data collection and design of future community-based programmes
Good Practice 2	Linking disaster responders with SGBV prevention and response actors
Good Practice 3	Understanding the connections better between disaster law frameworks and SGBV prevention and response laws
Good Practice 4	Building capacity on how SGBV data should be collected in a safe and survivor-centred way.

## Policy Relevance to DRR in Action

The research illustrating the risks to SGBV in natural disaster situations and the gaps to be addressed by disaster responders to ensure the needs of SGBV survivors is directly relevant to the priorities of the Sendai Framework, specifically: Priority 1: Understanding disaster risk; and Priority 4: Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

## Key Messages from this Case Study

- Advocate with national disaster management departments and ministries working on SGBV prevention and response for stronger legal frameworks which address needs of SGBV survivors during disasters and crisis.
- Ensure that at each assessment stage, sex, age and disability dis-aggregated data is collected to better understand the needs and vulnerabilities of the affected population.
- Prepare logistics stocks for dignity kits, clinical management of rape kits and post-exposure prophylaxis kits.
- In coordination with the Protection Cluster, relevant government ministries and UN and INGO stakeholders, create a referral services pathway for SGBV survivors.
- Follow the SPHERE standards for constructing safe shelters, which have separate spaces for women and men, separate toilets which can be locked and adequate lighting throughout the camp areas.
- Train front-line volunteers to give referral pathway information and on handling disclosures from SGBV survivors
- Create sustainable partnerships with external organizations who have technical expertise in SGBV prevention and response during disasters and crisis.

**Globally**, this research project and its results are a contribution to the “Call to Action on Protection from Gender-based Violence in Emergencies.” Since the 2013 inception of this Call to Action, humanitarian stakeholders have implemented the roadmap and are advocating for more field level implementation.<sup>(7)</sup>

IFRC SGBV research project report 2018:

The executive summary of this research concludes with a call to **Bridge DRM and SGBV prevention response frameworks** through recommendations that include:

- Ensure that human rights obligations, constitutional provisions and gender and diversity sensitive mainstreaming are embedded in the development and implementation of disaster-and social protection-related legislation policies and procedures.

**Regionally**, the results of this research are seeking a more effective partnership with the ASEAN Committee on Disaster Management (ACDM) and other relevant ASEAN bodies, further involvement in the development and implementation of the ASEAN Regional Guidelines on Social Protection in times of disasters and contribution towards the revised standing operating procedures of regional level disaster preparedness, response and recovery.

At the **national** level, this research project aims to advocate:

1. the strengthening of domestic disaster-related legislation, policies and procedures, including implementation and contingency planning to ensure continued function of existing legislation, institutions and services in times of disaster with regards to SGBV prevention and response;
2. coordination among governmental and non-governmental humanitarian actors on SGBV prevention and response during disasters; and,
3. stronger partnerships among humanitarian actors to better address the needs of survivors during disasters. In addition to its national advocacy asks, the case studies will be utilized for the same purposes globally, contributing to the body of research and corresponding advocacy on protection, gender and inclusion in disaster law.

At the **province** level of each country, this research project aims to strengthen capacities of the health, legal, psychosocial and security sectors to be able to respond to the needs of survivors, recognizing that both Indonesia and the Philippines already have strong legal frameworks both for disaster response and for addressing SGBV prevention and response.

Within the communities selected for data collection, the research results will contribute to stronger referral pathways and multi-sectoral programme services for survivors.

## References for this Case Study

The IFRC SGBV Research Project Report: *The Responsibility to Prevent and Respond to Sexual and Gender-Based Violence in Disasters and Crises*, 2018 is pending finalization at the time of writing this case study.

1. IFRC, *Unseen, unheard: Gender-based violence in disasters*, Global Study 2015.
2. Parkinson, Debra. “Women’s experience of violence in the aftermath of the Black Saturday bushfires” Doctor of Philosophy Thesis. Monash University, School of Social Sciences, Faculty of the Arts, November 2014.
3. Grant, Karen and Higgitt, Nancy. “The stories that women tell about ‘the Flood of the Century’” National Network on Environment and Women’s Health, 2001.
4. Yunomae, T., Tsuge, A., & Yoshihama, M. “Violence against women and children after the Great East Japan Disasters.” *Japanese Journal of International Society for Gender Studies*, 12, 21-39. 2014.



Data collection team training in Jakarta, July 2017. | Ahmad Husein, IFRC

5. Houghton, R., *Domestic violence reporting and disasters in New Zealand*. Regional Development Dialogue, 30(1), pp79-90. 2009; Houghton, R., 'Everything became a struggle, absolute struggle': post-flood increases in domestic violence in New Zealand, In E. Enarson and P. Chakrabarti (Eds.), *Women, gender and disaster: global issues and initiatives* (pp99-111). New Delhi: Sage, 2009; Houghton, R., 28.9.2010 [Christchurch Earthquake and Domestic Violence].-See more at: <https://ajem.info-services.com.au/items/AJEM-28-02-09#sthash.7QlHXuBe.dpuf>.
6. Anastario, Lawry and Shehab. "Increased Gender-based Violence Among Women Internally Displaced in Mississippi Two Years Post-Hurricane Katrina" in *Disaster Medicine and Public Health Preparedness*, 3(1): 18-26. April 2009.
7. *Call to Action on Protection from Gender-Based Violence in Emergencies* website: <https://www.calltoactionGBV.com/>

Data collection team training in  
Vientiane, Lao PDR, May 2017.  
| Warongron Tatrakom, IFRC.



**Collaborators for this Case Study:**

Philippine Red Cross,  
Indonesian Red Cross (Palang Merah Indonesia),  
Lao Red Cross,  
ASEAN Committee on Disaster Management  
Working Group on Prevention and Mitigation,  
International Federation of  
Red Cross and Red Crescent Societies

**Contact Person for this Case Study:**

Priyanka Bhalla  
Sexual and Gender-Based Violence Adviser,  
Asia Pacific Regional Office,  
International Federation of  
Red Cross and Red Crescent Societies  
Email: [priyanka.bhalla@ifrc.org](mailto:priyanka.bhalla@ifrc.org)





## Early Warning – Early Action

Anticipate, reduce impact  
and avert disasters!

Let's support at-risk communities to take early action before a disaster strikes based on specific weather and climate forecast thresholds and risk analysis. Together with our partners, we are working to put in place policies, partnerships and action at local level to lessen the impact and cost on communities and authorities. Forecast-based action and financing needs to be institutionalised at all levels and taken to scale across the region.

- **What needs to be done?** Governments are urged to place the communities at the centre of the development and enhancement of Early Warning Early Action and Preparedness for Response systems to ensure that 'actionable' early warning information reaches communities first, to ensure people-centred comprehensive procedures are in place and to make resources available for actions in anticipation of potential disaster events. All stakeholders need to support national and local governments and communities in their responsibility to develop long-term strategies, forecast-based action and financing mechanisms and multi-year operational plans for preparedness that are embedded within disaster risk reduction strategies.
- **How can we help?** Red Cross Red Crescent through its local to global structure has developed specific expertise in early warning early action and is well positioned to continue to raise awareness, operationalise and advocate for innovative approaches, such as Forecast-based Financing, and its institutionalisation into laws, policies and plans, supported by adequate budget allocations for anticipatory actions across the DRM continuum. Red Cross Red Crescent will continue to enhance our EWEA work together with communities and governments, including strengthened partnerships with national hydrometeorological services and national disaster management agencies. National Societies, through their branch and volunteer networks are well placed to work together with other national and local actors through multi-stakeholder and multi-sectoral approaches, ensuring that coordination structures, roles and responsibilities within government and other actors are functional in the EWEA and preparedness phase.





**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 principles<sup>1</sup> 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.

<sup>1</sup> 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

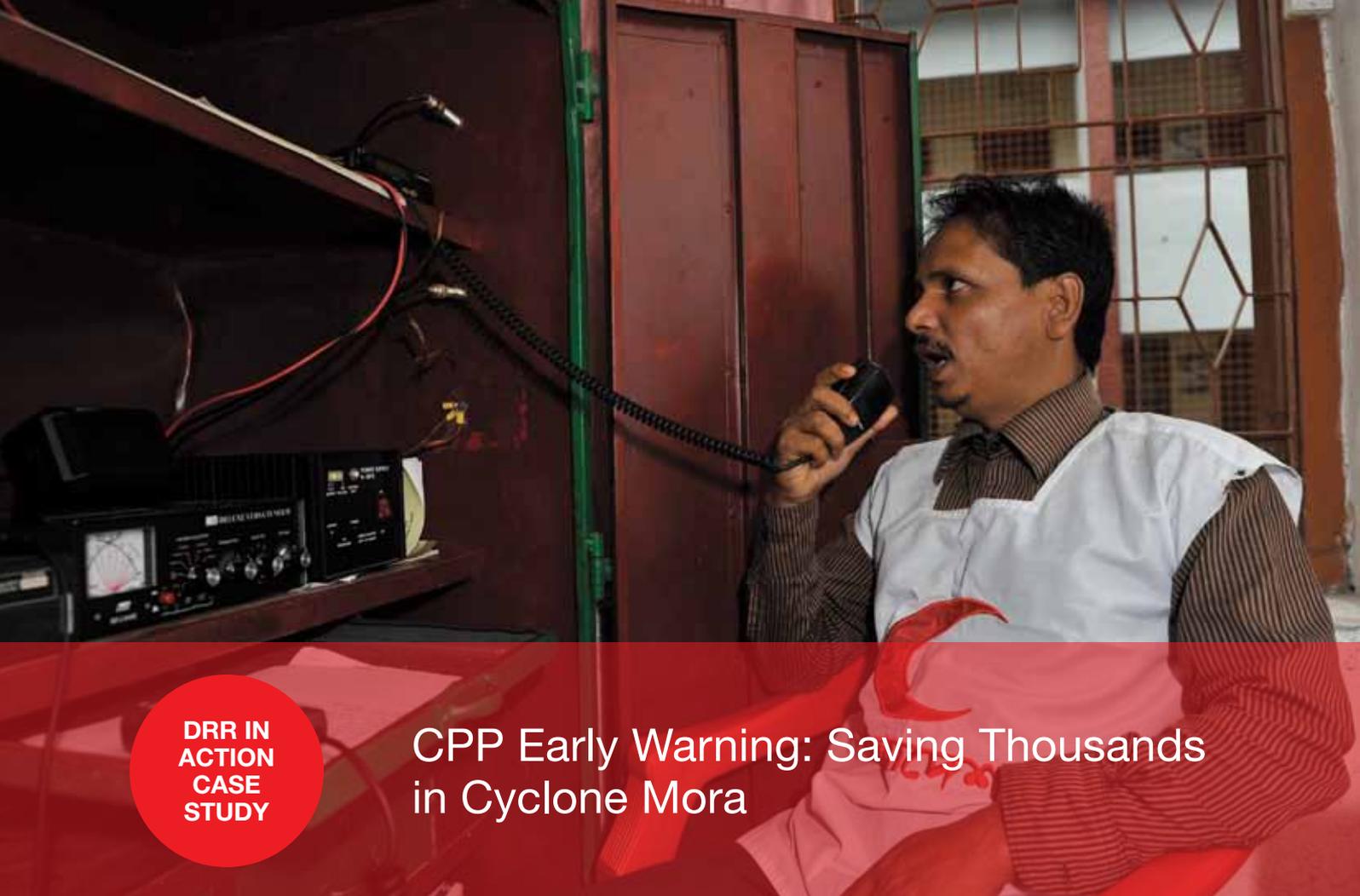
1. FbF project overview
2. RCCC/GRC post-distribution survey analysis
3. Forecast-based cash report (AmCross/GRC)
4. GRC report on cash distribution with recommendations
5. Photo stories: FbF activation 2017

### Collaborators for this Case Study:

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

### Contact Person for this Case Study:

Md Belal Hossain  
DRM Director,  
Bangladesh Red Crescent Society  
Email: belal.hossain@bdrcs.org



**DRR IN ACTION  
CASE STUDY**

## CPP Early Warning: Saving Thousands in Cyclone Mora

### Theme of the Case Study

Early Warning  
Early Action

### Country

Bangladesh

### Case location

Coastal districts  
of Bangladesh

### Background

Cyclone Preparedness Programme (CPP) is a unique institutional arrangement for community preparedness to face and mitigate the challenges of cyclones that frequently hit the coasts of Bangladesh. CPP is a flagship programme for Bangladesh to showcase the country's success in saving lives from cyclones. The programme is jointly run by the Government of Bangladesh and the Bangladesh Red Crescent Society (BDRCS) since 1972.

Over the course of time, CPP has evolved with a true spirit of volunteerism for dissemination of warning signals from the BDRCS National Headquarters to Union level, operating through high frequency (HF) and very high frequency (VHF) radio networks and by moving within their catchment areas on foot, bicycles or motorbikes hoarding signal flags. Since its establishment, CPP has played a vital role in preparing and protecting vulnerable people in their own community from cyclone disasters, by frequently disseminating early warning messages which inform the community members within their wide coverage about what they should do during emergency and other preparedness activities. Orientation and training are regularly provided to the CPP volunteers and BDRCS youth volunteers on understanding the signal system and as well as their roles and responsibilities. To date, CPP volunteers along with the Red Crescent youth volunteers have saved thousands of lives from the devastation of deadly cyclones through effective and timely dissemination of early warning messages among the coastal population of the 13 districts under CPP's coverage.

### What did the action seek to change?

The programme seeks to reduce vulnerability of the remote and disaster-prone communities from regular cyclones in the coastal region of Bangladesh. Through CPP's interventions, the communities of the coastal areas have become more aware of the need to go to safe shelters during emergencies. The vulnerable population have understood the significance of early warning and learned to pay heed to advice from CPP and youth volunteers.

*Photo: A CPP wireless radio operator receives information through HF/VHF radio network regarding signals from the zonal and headquarter level offices. CPP has such operators in each CPP district/sub-district/union level offices. After receiving the information, the operators disseminate the message to their volunteers. | BDRCS*

Golam Rashid Bacchu (63),  
CPP Upzila team leader,  
Kutubdia, Cox's Bazar:

*"We came to know on 28th May first. Immediately we deployed our volunteers with megaphones to disseminate the message among the people. We did the same thing on 29th as well.*

*More than two-thirds of the whole population went to the shelter centres as soon as we disseminated the early warning message. The total number would be more than a 100K. No one died. But, those who were in the boats had some serious trouble.*

*In 1991, more than a thousand people died just because of ignorance. It was a lesson learned for the people though. Now when we disseminate the message, they immediately respond, and go the shelter centres.*

*To be honest, it is difficult to disseminate the message because of the difficult road condition here in my area. We need to walk miles after miles for this as there is no vehicle. We use mobile phones to communicate with the volunteers. Sometimes, we are caught by the storm when we are on road or outside."*



*Community Disaster Response Team (CDRT) and CPP volunteers work in close coordination with BDRCS branch staff during emergencies to disseminate early warning and evacuation through door-to-door visits, using sirens and megaphones and other necessary means. CDRT members are trained in basic disaster management, first aid and light search and rescue. | BDRCS*

## What were the key actions taken to achieve this change?

On 28 May 2017 (the eve of cyclone Mora) more than 55,260 CPP volunteers and BDRCS youth volunteers have been deployed to pass the early warning message door to door in the coastal region. The volunteers rushed to the people with microphones/hand mike, megaphones, etc, along with hoisting signal flag and announcing the danger of the approaching cyclone in the local language. They also helped people in evacuating to safe shelters. Cyclone early warning messages were disseminated across a population area covering 11 million people, and almost half a million people were reached in this process and were taken to safe places in less than 24 hours.

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

Step 1	Raising community awareness on preparedness activities such as preserving dry food, protecting important documents, going to cyclone shelters and meaning of signal flags through conducting mock drills
Step 2	Disseminating early warning messages through radio stations
Step 3	Deploying CPP volunteers to carry the messages door to door
Step 4	Disseminating the warning messages in local languages
Step 5	Helping people to evacuate to safe shelters

## What SFDRR principles<sup>1</sup> were applicable to this change process?

- Principle 1 All-of-society-engagement.
- Principle 2 Shared responsibility between central Government and national authorities, sectors and stakeholders as appropriate to national circumstances.
- Principle 3 Primary responsibility of the State to prevent and reduce disaster risk, including through cooperation.

## What were the Achievements and the Impacts?

The biggest contribution of the Cyclone Preparedness Programme (CPP) is to substantially reduce death tolls due to cyclones in Bangladesh. Before the formation of CPP, a devastating cyclone in 1970 killed about 500,000 people. During the recent two mega cyclones, Cyclone Sidr in 2007 and Cyclone Aila in 2009, more than 4,000 and 190 people died respectively. Since then, CPP has been working relentlessly, and has been gradually helping to reduce the number of deaths caused by cyclones. More than 50,000 CPP volunteers are mobilized to support evacuation and early warning efforts. This action — which was essential to saving lives — was buttressed by the Bangladesh Red Crescent Society and their Red Cross partners' investment in the country's short-wave radio and community warning system.

<sup>1</sup> 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.

## What were the key Lessons Learnt?

- One of the major challenges is the traditional flag system to convey cyclone signals. The flags are not visible during night, and are easily adrift during high wind speed. It is recommended by the volunteers that, if flash lights can be used instead of flags, it will be very useful for everyone, in land or at sea. The Red Cross partners are coordinating with the Ministry of Disaster Management and Relief and Cyclone Preparedness Programme in order to improve the early warning system as per recommendations.
- Moreover, sometimes it is difficult to reach the people because of rough weather and lack of transportation system. In a study, “Unseen, Unheard”, conducted by the IFRC Asia Pacific regional office, it was found that women and adolescent girls in cyclone shelters are concerned about the lack of lighting and locks in the toilets. Pregnant women avoid coming to shelters due to difficulties in climbing stairs and absence of clean birthing facilities.

## What were the Good Practices arising from this action?

Good Practice 1	During regular times CPP volunteers and youth volunteers take part in other events of governments and other organizations. The CPP volunteers are recognized by the government and are mobilized in national events, rallies, etc.
Good Practice 2	The CPP conducts simulation exercises for external parties, with support from the Government of Bangladesh, Red Cross Red Crescent partners and other NGOs and INGOs.
Good Practice 3	CPP’s strength is its pool of volunteers who are members of communities they serve with dedication and with inclusiveness and trust of the community. CPP volunteers disseminate messages and conduct visits or discussion in their local dialect.

## Policy Relevance to DRR in Action

### Sendai Framework – Priority 4: Invest in disaster preparedness to enhance response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

Investing in disaster preparedness helps to mobilize the existing resources and support using new technologies and equipment. In disaster phase, this can be a life changing factor, which has been proven in the case of CPP. The Bangladesh government and BDRCS have always placed great importance in implementing CPP and volunteer development to ensure adequate capacity building support. With the continuous and significant investment for CPP, this programme has trained and equipped more than 50,000 volunteers. Whenever a cyclone hits the coast, these volunteers promptly respond to the affected area and in most cases, they can provide first aid, do search and rescue, relief distribution, needs assessment, etc. One of the reasons behind this is the investment into developing CPP. Now, CPP has become a global standard in disaster response having contributed to significant drop in the death rate in Bangladesh. Other types of damages such as property damage, crop damage, livestock damage etc. have also reduced as early warning gives affected people sufficient time to evacuate and take their necessary, valuable belongings. CPP has significantly contributed to the response phase of disaster management.

**SDG Goal 17: Partnerships for the Goals.** CPP is one example of long term and sustained partnership between the government and BDRCS. Since the establishment of CPP in 1972, it has been working as a joint venture programme coordinated by the government. To keep the programme functional, the government and BDRCS provided human resource, training, funding towards CPP.



CPP volunteers in flood affected areas disseminate early warning messages, conduct evacuation, provide first aid, etc. They are assisted by Unit Disaster Response Team (UDRT) members who are trained in disaster management, first aid, and search and rescue. CPP signal flags are red, as in the picture. Signal 1-3 = hoist 1 flag; Signal 4-7 (Danger) = hoist 2 flags; Signal 8-10 (Great Danger) = hoist 3 flags.

Nurul Afsar (60), CPP  
Volunteer, Chakaria, Cox's  
Bazar:

*"Since the beginning of the formation of the depression, we were regularly receiving early warning messages through wireless radio and were disseminating them among the community people. On 29 May (2017), when the signal rose to no. 10, immediately we passed it to the volunteers through mobile phones. At first, we passed the message to the 11 union team leaders. The union team leaders then passed it to the unit leaders. I myself moved along the whole area with my motor-bike for monitoring.*

*The community people know who we are, they have great faith in CPP. Whenever we disseminate a message, they trust us and act accordingly. We have acceptance and reliability among most of the people. When we speak in Chatgaiya (local language) they listen to us and respond. If anybody does not go to the shelter centre, we try to convince and take them with us. Last time (during Mora) we had only 10 hours to evacuate the whole area. Still, we could manage to evacuate thousands of people.*

*No one died, but lots of houses and crops were damaged.*

*I think it is time we need to think about the digital signal system rather than the traditional flag. During the night and heavy wind, the flags are not visible most of the time. As well, the shelter centres should be more developed, especially the bathrooms.*

*We stay prepared and wait for when there will be a cyclone and we will dive in to perform our duty."*

## Key Messages from this Case Study

- CPP is the unique disaster risk reduction mechanism in Bangladesh which has been working well for a significant period of time, in preparing and protecting vulnerable people in coastal regions from cyclone disasters by effectively disseminating early warning messages and undertaking other preparedness activities.
- CPP has wide acceptance among the community people in coastal regions, who depend highly on radio and CPP volunteers for cyclone early warning messages as no other communication source works effectively in case of a disaster.
- At the global level, CPP can be considered as an ideal example of effective early warning message dissemination and evacuation system for disaster preparedness and risk reduction.

This study highlights the DRR action that evidently helped thousands of people in saving lives and reducing vulnerability from natural hazards. Others can take inspiration and incorporate elements of the CPP in reducing disaster risk in their own countries/regions.

## References for this Case Study

1. IFRC Revised Emergency Plan of Action, Bangladesh: Cyclone Mora ([MDRBD019\\_Emergency Appeal revision](#))
2. [Wazed, S. 'Cyclone Mora: Bangladesh's natural disaster warning system saved thousands', The Diplomat, 24 July 2017.](#)
3. [Reliefweb. Tropical Cyclone Mora – May 2017](#)

### Collaborators for this Case Study:

Cyclone Preparedness Programme,  
Bangladesh Red Crescent Society,  
Ministry of Disaster Management and Relief,  
International Federation of  
Red Cross and Red Crescent Societies

### Contact Person for this Case Study:

Md. Belal Hossain  
Director DRM,  
Bangladesh Red Crescent Society  
Email: [belal.hossain@bdracs.org](mailto:belal.hossain@bdracs.org)



**DRR IN  
ACTION  
CASE  
STUDY**

## Flood Early Warning Early Action System (FEWEAS)

### Theme of the Case Study

Early Warning  
Early Action;  
Technology  
and innovations

### Country

Indonesia

### Case location

Citarum and Bengawan  
Solo River Basins

### Background

Java is one of the most populous islands in the world and home to a number of river systems. Of significance, Citarum – one of West Java’s largest rivers and 297 kilometers long, serves 44.5 million people in its surrounding provinces including the capital Jakarta. The Bengawan Solo River, which runs through Central and East Java, is even longer at 600 km. These rivers provide water and support the daily lives of millions of people, through irrigation for agriculture and fisheries, hydraulics for industry and for electricity plants that supply power for Java and Bali.

Every year Java experiences at least one significant flood, typically between October and March. The river basins are prone to flooding, but due to changing climate and environmental conditions, floods have become more extreme, with huge implications for the people who live along the rivers.

To assist communities in protecting themselves against floods, the Indonesian Red Cross (Palang Merah Indonesia, PMI) with the International Federation of Red Cross and Red Crescent Societies (IFRC) and support of Zurich Insurance Indonesia, implemented the Community Floods Resilience (CFR) programme in the areas surrounding the rivers of Citarum, Bengawan Solo and Ciliwung. The CFR programme is aimed to develop effective solutions for reducing disaster risk and building community resilience, working through Community Based Action Teams (CBAT) with focus on: disaster, environmental rehabilitation, waste management, and innovation through technology.

PMI collaborated with Institute Teknologi Bandung (ITB), a local academic institution, to develop an internet-based application to predict and monitor rainfall and flooding – the Flood Early Warning Early Action System (FEWEAS). The application was first developed for the Bengawan Solo River in 2015, taking nine months to develop and launch, followed by dissemination and promotion to communities and stakeholders. The second FEWEAS was developed for Citarum River and launched in December 2017.

*Photo: Every year flooding in Java displaces people and destroys assets and livelihoods. | IFRC Jakarta*

The application features information data related to weather forecast, climate prediction, rainy season forecast, climate change adaptation and river water levels; triggering appropriate early actions needed at specific levels. FEWEAS operates on a Common Alert Protocol (CAP) used by the local government authority. The other partners supporting this initiative are BNPB (National Disaster Management Agency), BPBD (Local Disaster Management Agency), PT. Jasa Tirta, Ministry of Public Work and River Basin Area Authority.

Surendra Kumar Regni, the IFRC Disaster Risk Reduction delegate in Indonesia:

*“These Community Based Action Team members come from various backgrounds and also include youth and women. They will receive various trainings, such as how to perform assessments after a disaster and how to create a contingency plan, followed by disaster simulations with the Red Cross.”*

## What did the action seek to change?

- PMI community volunteers through CBAT, together with local government, disaster response agencies and weather agencies, are able to utilize the information provided by FEWEAS for flood preparedness and mitigation activities, to trigger early action such as early warning and evacuation.
- With the basic information provided through their mobile phones, the community can monitor the weather and prepare for action to protect themselves against floods, as well as report on floods.
- Community members can use information on medium term weather patterns and predictions can be used for to plan livelihood activities, farming and planting.
- Longer term prediction capacities enable policy makers to make informed decisions about land allocation and climate change.

## What were the key actions taken to achieve this change?

The key action for this goal is collaboration among researchers, local government, stakeholders, NGOs, and society (the community) to integrate data and information from the forecast system and information from the communities to develop one system that is the FEWEAS.

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

Step 1	Approach relevant stakeholders including government counterparts, policy makers, weather agencies, communities and CBAT to collaborate, outline roles, exchange data and information, develop common protocols and processes for a community-focused system for flood EWEA that incorporates a web-based application.
Step 2	Establish partnership with ITB to contribute technical knowledge for development of the application, data models and website interface as a relevant, useful and user-friendly system.
Step 3	Establish a coordination centre, training of staff and volunteers to monitor and interpret weather data produced by FEWEAS, and transfer of knowledge for operationalising the system developed.
Step 4	Promote and disseminate information on FEWEAS to stakeholders, users and communities. Flood-prone communities have access to FEWEAS and can report floods locally.
Step 5	Monitoring and using information for flood early warning early action, in parallel with CFR strategies and provisions for safe evacuation routes, sites and equipment.



*Members of the Community Based Action Team learn how to access and utilize the Flood Early Warning Early Action System application in their smartphones.  
| Indonesian Red Cross/PMI*

## What SFDRR principles<sup>1</sup> were applicable to this change process?

- Principle 1 Enhancing disaster preparedness for effective response.
- Principle 2 Strengthening disaster risk governance to manage disaster risk.
- Principle 3 Investing in disaster risk reduction for resilience.

## What were the Achievements and the Impacts?

PMI Provincial and District staff and volunteers are using the FEWEAS to monitor floods along the Bengawan S olo River in East Java, and along the Citarum River in West Java. These communities are being assisted to protect themselves against floods.

The FEWEAS enable d a shared platform for community and government to address issues upstream and downstream in formulating appropriate strategy, planning and ground action for floods. Within a collaborative multi-stakeholder partnership that brought together community networks and coordination (PMI and IFRC), corporate support (Zurich Insurance and private companies), the government and technical agencies, and a local academic institution (ITB) to develop a local system deploying technology and innovation driven by community.

While the application provides flood alerts and updates to the community through smartphones, the communities and CBAT can update their response, upload photos, videos and relevant information to further inform response actions.

FEWEAS and the web-based application will continue to exist and serve the communities after the completion of the Community Flood Resilience programme.

Suparno, a 62-year-old member of the Community Based Action Team from Gedhong Village, said that the worst flooding to happen in Central Java struck in 1966 and 2007, when the water of Keduang river overflowed.

*“People fled for three days,” he said. “That is why I wanted to be part of this team and help my community prepare for disasters, especially floods.”*

### What were the key Lessons Learnt?

- Discussion among the partners creates solutions to maintain the sustainability of FEWEAS. This a key learning where the system could be sustained by engagement of academia, government, NGO, and communities.
- Efforts are required to increase the accuracy of flood forecast through post event analysis and comparison between forecast data and real data from actual flood.
- PMI and ITB are jointly conducting advocacy with local government authorities and local partners to maintain the running of the application.
- ITB commits to maintain the data in their server, PT Jasa Tirta commits to allocate funds for operational costs, while BPBD as local government authority at Provincial level also commits to utilize the FEWEAS as a point of reference to receive information in addition to the official meteorological agency.

### What were the Good Practices arising from this action?

Good Practice 1	FEWEAS increased communities' awareness of flood disasters, the need for early warning and action, and their roles in protecting themselves ahead of and during floods.
Good Practice 2	Improve the communities' adaptive capacity for flood disaster.
Good Practice 3	CBAT and PMI Volunteers at village level are the main actors in operationalising Flood Early Warning and Early Action as a community-focused action.
Good Practice 4	FEWEAS addresses flood risks in regional long- to-medium-term development plan.



Interface of FEWEAS in website version and mobile app. | Armi Susandi and Mamad Tamamadin

<sup>1</sup> 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.

## Policy Relevance to DRR in Action

In relevance to the implementation of the Sendai Framework for Disaster Risk Reduction, this case study:

- Increased the communities and stakeholders **understanding of flood disaster risk** and its management through utilization of the application;
- Contributed to **strengthening disaster risk governance** and **addressing disaster risk management** in the National Development Plan;
- Provided a platform for public and private sector to collaborate for **investing in disaster risk reduction for resilience** in the form of flood protection system; and will
- Sustainably continue **enhancing disaster preparedness for effective response and to “build back better” in recovery, rehabilitation, and reconstruction.**

### Key Messages from this Case Study

Collaboration and innovation were key elements joining the four priorities of action from the Sendai Framework in the design, development and implementation of a technology-integrated, community-centred Floods Early Warning and Early Action System to benefit the communities who live in the Citarum and Bengawan Solo river basins.

The FEWEAS is a successful innovative local application to help predict flood risks and provide early warning early action alerts, used by all levels of society affected – the community, volunteers, the Red Cross, weather technicians, policy makers and government. It complements a larger set of community-based preparedness and mitigation systems under the Community Flood Resilience programme. This case study may inspire other community and research efforts.

### References for this Case Study

1. IFRC Jakarta, *The Flood Early Warning Early Action System (FEWEAS)*, 2017
2. FEWEAS website for Bengawan Solo River Basin: <http://feweas.jasatirta1.co.id/en>
3. FEWEAS website for Citarum River Basin: <http://smartclim.info/citarum>
4. *Red Cross helps flood-prone communities through traditional and modern approaches*, 2016: IFRC web article
5. A. Susandi and M. Tamamadin, “*Toward a dynamic disaster decision support system in Citarum river basin: FEWEAS Citarum*,” 2017. International Conference on Smart Cities, Automation & Intelligent Computing Systems (ICON-SONICS), Yogyakarta, 2017, pp. 6-10. doi: 10.1109/ICON-SONICS.2017.8267813

#### Collaborators for this Case Study:

Indonesian Red Cross,  
Bandung Institute of Technology,  
BNPB (National Disaster Management Agency),  
BPBD (Local Disaster Management Agency),  
Ministry of Public Work and River Basin Area Authority,  
PT. Jasa Tirta,  
Zurich Insurance Indonesia,  
International Federation of  
Red Cross and Red Crescent Societies

#### Contact Persons for this Case Study:

Arifin Mohammd Hadi  
Head of Disaster Management Division,  
Indonesian Red Cross  
(Palang Merah Indonesia/PMI)  
Email: arifinmhd\_dm\_pmi@yahoo.com  
  
Dr. Armi Susandi  
Head of Meteorology Department,  
Bandung Institute of Technology  
Email: armisusandi@yahoo.com



a.

**DRR IN  
ACTION  
CASE  
STUDY**

## Forecast-based Financing for vulnerable herders in Mongolia

### Theme of the Case Study

Early Warning  
Early Action

### Country

Mongolia

### Case location

40 soums<sup>1</sup> across 12 provinces

## Background

Dzud is a Mongolian term for a unique climatic phenomenon where severe drought is followed by an extreme winter. Over 70 per cent of the country was experiencing severe drought in the summer of 2017. This left herders without reserve fodder and hay. Continuous harsh conditions put at risk millions of livestock, which are the only source of food, transport and income for almost half the population of Mongolia.

A Dzud risk map developed by the National Agency for Meteorology and Environmental Monitoring (NAMEM), Information and Research Institute of Meteorology, Hydrology and Environment (IRIMHE) and Nagoya University of Japan, is the basis to trigger Forecast-based Financing (FbF) action for Mongolia. Dzud risk is developed around 14 scientific indicators such as rainfall deviation, risk of drought, regional temperature, etc. By implementing the FbF programme, early action could be taken to reach the herders well before the loss of their livestock and not after. The best time to support herders is before their animals become weak, giving any action the chance to avert livestock loss and to reduce the impact of Dzud on the livelihoods of vulnerable herders.

## What did the action seek to change?

- Reduce livestock loss by taking timely action to support herders based on reliable early warning of Dzud impacts
- Prevent the herders from losing their livelihoods
- Reduce the negative impact of Dzud on the herders, and to prevent large-scale losses of herds that have significant humanitarian implications

*Photo: MRCS staff working to load the animal care kit contents into a truck – January 2018. | MRCS*

<sup>1</sup> A Soum is the second level administrative sub-division below the Aimags (provinces). There are 331 soums in Mongolia.

## What were the key actions taken to achieve this change?

On 26 November 2017, NAMEM released the “Dzud risk map” which triggered the Forecast-based Financing programme implemented by Mongolian Red Cross Society (MRCS) and supported by British Red Cross (BRC). MRCS started the implementation of the programme with technical support from the Red Cross Red Crescent Climate Centre and targeted 40 most-at-risk soums in 12 provinces based on the map. MRCS assisted 2,000 herder households in most-at-risk areas with unrestricted cash grants in December 2017 and with animal care kits in January 2018.

*“I’m so glad that the humanitarian aid from the Mongolian Red Cross Society was provided in a timely manner.”*

– Dolgorsuren Ch., Bornuur soum, Tuv province

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

Step 1	Implement Forecast-based Financing for Dzud early action - outlining processes and roles
Step 2	Dzud risk map - the FbF trigger for Dzud, developed by National Agency for Meteorology and Environment Monitoring
Step 3	Analyse the Dzud risk map and coordinate with Red Cross mid-level branches to select the beneficiaries
Step 4	Identify and confirm bank information of the beneficiaries
Step 5	Transfer the unconditional cash assistance to the beneficiaries
Step 6	Procure and transport animal care kits to the targeted provinces
Step 7	Distribute animal care kits to selected beneficiaries

## What SFDRR principles<sup>2</sup> were applicable to this change process?

Principle 1 **Primary responsibility of States to prevent and reduce disaster risk, including through cooperation:** Early action taken to reduce the disaster risk based on risk map through cooperation with NAMEM, National Emergency Management Agency (NEMA), Khan Bank and local governments.

Principle 2 **The quality of global partnership and international cooperation to be effective, meaningful and strong:** The programme was funded by British Red Cross and we received technical support from the RCRC Climate Centre.

Principle 2 **Shared responsibility between central Government and national authorities, sectors and stakeholders as appropriate to national circumstances:** NAMEM publishes the Dzud risk map which triggered the action. The data of the beneficiaries was provided by the local (soum) government and the unconditional cash was transferred through Khan Bank which has branches all across the country, even in soums.



*A herder feeds her weak cattle with a mineral block in Bornuur soum, Tuv province – 26 January 2018. | MRCS.*

<sup>2</sup> 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.

## What were the Achievements and the Impacts?

- 2,000 vulnerable herder households are provided with unconditional cash and animal care kits to prevent the herders from losing their livestock and livelihoods
- The cooperation between the government sectors (local government, NEMA) and other entities is strengthened
- FbF module for Dzud is developed
- Cost-benefit analysis is being conducted to further inform FbF in Mongolia

*“240,000 MNT (100 USD) given by the Mongolian Red Cross Society has been a great help for my household.”*

Battulga B., Bornuur soum,  
Tuv province.

## What were the key Lessons Learnt?

As this is the first Forecast-based Financing action piloted for Dzud, the experience will be analysed and documented in a case study to further inform the development of a national system for FbF in Mongolia. This will include recommendations for:

- standardization of standard operating procedures for the Early Action Protocol; and,
- defining clear intervention areas based on triggers

## What were the Good Practices arising from this action?

Good Practice 1	Longer-term contract with financial service provider was established for transfer of cash grants
Good Practice 2	MRCS has trained 315 volunteers to operate during disaster in all provinces in Mongolia; having trained volunteers made the procedure much faster and easier
Good Practice 3	Use of mobile data collection for timely information
Good Practice 4	Good coordination and information sharing among Humanitarian Country Team members
Good Practice 5	Utilization of complaints hot-line number for feedback and community engagement
Good Practice 6	Cost Benefit Analysis is being conducted to find how FbF affected the beneficiaries and the results will be used for further development of the project.



*The herders wait in line outside the local Khan Bank to receive their cash assistance in Bayankhangai soum, Tuv province – 23 January 2018. | MRCS.*

## Policy Relevance to DRR in Action

An objective for the priorities in the Sendai Framework is to promote cooperation between academic, scientific and research entities networks and the private sector to develop new products and services to help reduce disaster risk, in particular those that would assist developing countries and their specific challenges. Forecast-based financing was the first in Mongolia and in Asia that successfully implemented early action based on the risk map developed by the National Agency for Meteorology and Environment Monitoring. MRCS has established and strengthened the cooperation between government (NEMA), technical agency (NAMEM) scientific experts (animal care product providers) and commercial entity (Khan bank), in the process of FbF implementation.

*“I received 240,000 MNT from the Mongolian Red Cross Society when I had nothing to feed my livestock with. It really helped me, thank you.”*

Shurentsetseg D., Bornuur soum, Tuv province.

## Key Messages from this Case Study

- The incidence of natural disasters is steadily increasing worldwide causing immeasurable human suffering and loss of resources. Humanitarian organizations are aiming to reduce the impacts of natural and man-made disasters on the livelihoods of people. While FbF is a relatively recent addition to humanitarian programme approaches, it provides the opportunity to act ahead of a disaster, to respond based on scientific evidence to reduce the impacts of disaster on lives and livelihoods.
- With its unique local, national and global networks, the Red Cross is well-placed to lead on the development of country-specific FbF mechanisms. The National Society’s volunteer base connects communities to local actions to ensure preparedness and timely response.

As mentioned, FbF is a relatively new approach and only a few countries have tested FbF projects. It is most important for countries to share their good practices and lessons learnt in order to develop FbF as an effective approach.

## References for this Case Study

*A herder receiving animal care kit from MRCS volunteer – 24 January 2018. | MRCS.*

1. FbF in Mongolia introduction by MRCS (PowerPoint presentation)
2. Mongolian Red Cross FbF video: [https://www.youtube.com/watch?v=IKVdn6765\\_Y](https://www.youtube.com/watch?v=IKVdn6765_Y)



### Collaborators for this Case Study:

Mongolian Red Cross,  
British Red Cross,  
Red Cross Red Crescent Climate Centre,  
International Federation of  
Red Cross and Red Crescent Societies

### Contact Person for this Case Study:

Munguntuya Sharavnyambuu,  
Disaster Management Programme Manager,  
Mongolian Red Cross Society  
Email: munguntuya.sh@redcross.mn



**DRR IN ACTION CASE STUDY**

**More than response: Building partnerships to engage communities in preparedness and early warning systems in the Pacific**

**Theme of the Case Study**

Early Warning and Early Action

**Country**

8 countries in the Pacific

**Case location**

Cook Islands, Kiribati, Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu

**Background**

This case study outlines a community-centred early warning early action regional project in the Pacific, successfully implemented using an inclusive multi-level partnership model. The project has catalysed further collaborative community centred early warning systems and climate services work. As part of this, an institutionalized approach to forecast-based financing is being analyzed.

Between 2014 and 2016, Red Cross National Societies, communities, governments and regional organizations worked together on a meteorological project to improve the livelihoods of Pacific Island communities by delivering effective weather, climate and early warning services through an ‘early warning early action’ approach. Under the co-ordination of the Secretariat of the Pacific Regional Environment Programme (SPREP), working together regionally with the International Federation of Red Cross and Red Crescent Societies (IFRC), the Finnish-Pacific (FINPAC) project took an all-inclusive approach by partnering with stakeholders at regional, national, island, community and household levels to develop community early warning systems (CEWS) that were specific to the context and mechanism of each community thus ensuring that the system and the warning/response information produced were people-centred and well understood. Project partners included the World Meteorological Organisation (WMO), National Meteorological Services (NMS) and National Disaster Management Offices (NDMO). CEWS were established in eight Pacific countries.

Because of the partnerships approach taken, the FINPAC project has successfully brought together the relevant stakeholders at regional, national, island, community and household levels to develop community early warning systems (CEWS), thus having readied a springboard for continued collaborative work on community-centred climate services and early warning systems in the Pacific. It has become clear that early disaster preparedness action to support communities prior to disasters saves lives and livelihoods and reduce the economic impact on governments.

However, most current financing mechanisms available to governments for disasters are activated and accessed once certain disaster impact thresholds have been realized, which means financing is not readily available to support disaster preparedness action prior to disasters. While governments, with support from development partners, have made investments in climate information services and strengthened EWS with improved forecast communication to end users, a gap remains in the systematic update and use of available forecast information at scale for concrete early action at different levels of authority, including community level.

One aspect of furthering the successful implementation of CEWS under the FINPAC project is a feasibility analysis undertaken around forecast-based financing (FbF) in the Pacific. FbF is a method for funding and enabling earlier action in advance of a disaster, based on forecast-based triggers. FbF involves developing Early Action Protocols (EAP) agreed between multiple national stakeholders. These EAPs outline roles and responsibilities and allow access to dedicated disaster preparedness resources when a forecast is issued. FbF potentially provides a means to support community actions in preparedness for extreme events, as part of CEWS.

## What did the action seek to change?

A community early warning system is a community-led initiative to use climate and weather information to disseminate warning messages to alert the community of a disaster before it happens and take actions to prepare. However, it is often that work to support CEWS is done in isolation of national and sub-national early warning systems and disaster management arrangements. The FINPAC pilots aimed to develop a model to better link CEWS national and provincial early warning systems. By delivering effective weather, climate and early warning services, particularly due to changing effects of climate change, the project sought to improve livelihoods of Pacific Island communities.

Feasibility work on FbF seeks ultimately to make funding available to governments and the Red Cross to support anticipatory action as well as response. With a view on very extreme events on the horizon, institutions as well as communities need to take action over large areas. An integrated national-to-community EWS requires i) national mechanisms such as SOPs and action plans that systematically link warnings and climate information provided by NMS to early preparedness actions at multiple scales, and, ii) available funding (at multiple scales) to support early actions in the window of time between a credible warning and a potential disaster.

## What were the key actions taken to achieve this change?

In the eight countries, partnerships for project oversight and implementation were formed between NMSs, NDMOs, Red Cross National Societies, provincial authorities and communities. These multi-organization teams worked together to design, conduct and review participatory workshops, training and exercises to identify community priorities and knowledge related to disasters. Information was then used to develop a community early warning system unique to the respective community.

In 2016, a scoping study was undertaken to assess feasibility of FbF in three Pacific countries (Solomon Islands, Papua New Guinea and Fiji). Based on findings of the study, in 2017 a Roadmap for FbF for drought preparedness was undertaken in the Solomon Islands. The Roadmap includes suggestions for embedding an FbF approach in national disaster management arrangements.

For one community champion in Kiribati the most significant change from the FINPAC project process was bringing people together to share their thoughts and worries about the changing weather pattern.

*“[It gave the] community a chance to talk about their past experiences on impact of climate change. It is a time for sharing different views, experience and possible responses for multi hazards,” he said.*

Marshall Island community member

*“Developing CEWS was never talked about before and actually nobody did anything until we meet with FINPAC (SPREP, Red Cross), their approach was very inclusive (government, chiefs, youths, women, elderly, people with disabilities). It has helped them to speak their mind for a safer Jenrok and Marshall Island. WHY, now people in my town really get more active and not being shy to explain their CEWS”*

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

A representative from the Solomon Islands Meteorological Services said that the implementation process strengthened relationships within the organization as well as with various stakeholders:

*“Now we are keen to have more insight into community that would improve our engagement,” the representative said.*

Step 1	<p><b>Identify, organise and train implementation teams under collaborative partnership approach with roles and responsibilities identified at various levels:</b></p> <ul style="list-style-type: none"> <li>■ Regional Oversight Committee and regional implementation team were formed (SPREP and IFRC)</li> <li>■ National Oversight Committee (led by NMS, supported by SPREP) and National Implementation Teams (led by Red Cross National Society with support from IFRC and Red Cross Climate Centre)</li> <li>■ Community Oversight Committee and Community Implementation Team or their cultural and contextually appropriate equivalents, many of which comprised existing formal community disaster/climate change committees that were strengthened</li> </ul> <p>Training of trainers of National Implementation Team and Community Implementation Team was undertaken to build capacity in participatory community consultations and developing community disaster preparedness and response plans.</p>
Step 2	<p><b>Community consultation, design and implementation of Community Early Warning Systems in eight countries</b></p> <ul style="list-style-type: none"> <li>■ National and Community Implementation Teams undertook community consultation and design of CEWS initiatives aimed at strengthening all four components of EWS: risk knowledge, monitoring, response capability, warning communication.</li> <li>■ A Community Disaster Preparedness and Response Plan was developed in each community. Activities identified in the action plan were then carried out.</li> <li>■ Simulation exercises and handover to test and practice carrying out key actions in community disaster preparedness and response plans.</li> </ul>
Step 3	<p>A scoping study for FbF in the Pacific was undertaken in 2016 and determined that this method for a ‘forecast-based’ activation of financing for early actions was feasible in some Pacific Island countries.</p>
Step 4	<p>Drought thresholds established under the Solomon Islands National Drought Plan were developed by Solomon Islands Meteorological Service (SIMS), supported by SPREP and WMO, in collaboration with Red Cross work on FbF triggers. Drought thresholds form the basis of an FbF trigger system.</p>
Step 5	<p>A Roadmap for an FbF pilot in the Solomon Islands for drought hazard was developed to support the Government of the Solomon Islands and Solomon Islands Red Cross to implement a pilot programme for communities, provincial authorities and national authorities to apply forecast information for early action at scale.</p>

## What SFDRR principles<sup>1</sup> were applicable to this change process?

- Principle 1 Empowerment of local authorities and communities through resources, incentives and decision-making responsibilities as appropriate
- Principle 2 Decision-making to be inclusive and risk-informed while using a multi-hazard approach
- Principle 3 Support from developed countries and partners to developing countries to be tailored according to needs and priorities as identified by them

Participant from Vanuatu Red Cross Society at FINPAC Practitioners workshop, 2016 in Fiji:

*“The most significant change that took place for my organization through being part of the project was the expansion and increased visibility of Vanuatu Red Cross Society in communities and islands, strengthened partnership with partners at national, provincial and community level, support capacity building for VRCS staffs and volunteers, identifying focal points and contact in the community. I choose this story because it reflects on the VRCS strategy and operation plan strengthened VRCS partnership across the country.”*

## What were the Achievements and the Impacts?

**Community:** The community pilots themselves increased preparedness and response capacity of communities. For example, in the Solomon Islands, over an eight-month period, Solomon Islands Meteorological Service (SIMS), Solomon Islands Red Cross Society (SIRCS), the Solomon Islands National Disaster Management Office (SINDMO) and local media worked together to develop a low-cost, low-tech community early warning system for floods. The resulting community early warning system uses a truck horn as a siren and a solar-powered three-colour emergency light (red, yellow and blue) based on the colour coding used by SINDMO for national alerts. This is linked to a low cost low technology solar powered flood siren system. While the light system is designed to monitor and warn the community of flood events, it can also be used for other hazards such as tropical cyclones and tsunamis. A simulation exercise was conducted to test the community early warning system and the community's response procedures. In the week following, a real tsunami warning was activated for Solomon Islands and all community members were evacuated following their community response and evacuation plan.

**Partnerships:** FINPAC created awareness in technical institutions on the importance of investing in community early warning and demonstrated that partnership with 'last mile' institutions (such as Red Cross) ensures that technical information is being understood by communities. With the partnerships approach taken, the FINPAC project has successfully brought together the relevant stakeholders at regional, national, island, community and household levels to develop community early warning systems (CEWS), thus having readied a springboard for continued collaborative work on community-centred climate services and early warning systems in the Pacific.

**Sustainability:** Forward looking efforts have resulted in the Roadmap for a Forecast-based Financing pilot in the Solomon Islands for drought hazard, developed to support the Government of the Solomon Islands and Solomon Islands Red Cross to implement a pilot programme for communities, provincial and national authorities to apply forecast information for early action at scale.

Solomon Islands Meteorological Service is now the first Met Service in the Pacific to be producing a national version of the Early Action Rainfall Watch (EARW) for the Solomon Islands Red Cross and other national humanitarian organizations. The Solomon Islands national EARW was made possible through a partnership between the Australian Bureau of Meteorology, SPREP and the Red Cross Climate Centre. Similar consultations are underway in Vanuatu, Fiji and Papua New Guinea.

---

<sup>1</sup> 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.

**DRR in Action Case Study**

More than response: Building partnerships to engage communities in preparedness and early warning systems in the Pacific

The IFRC and SPREP have formalized the collaboration and partnership on EWEA support work, including forecast-based financing, climate risk management and accessing climate finance. A similar arrangement is currently discussed with the Geosciences, Energy and Maritime (GEM) Division of the Secretariat of the Pacific Community.

**Red Cross in the Pacific:** IFRC is formally represented as a member of the Pacific Resilience Partnership Taskforce, which oversees the implementation of the Framework for Resilient Development in the Pacific (FRDP). Red Cross Red Crescent Climate Centre is now a member of the Pacific Islands Climate Services Panel tasked with advising the Pacific Meteorological Council.

FINPAC has raised the profile of the Red Cross as key DRR actors in the Pacific, whose strength is the global-to-local network of staff and volunteers reaching thousands of island communities. Red Cross National Societies and the IFRC (supported by the Climate Centre) are increasingly being viewed as partners of choice to technical institutions at national and regional level. As a result, the community voice is elevated in DRR policy and practice.

**What were the key Lessons Learnt?**

- Collaboration within existing partners in the Pacific is crucial to ensure sustainability and ownership of respective partners.
- For CEWS and FbF to be sustainable, systems must be institutionalized into national disaster management arrangements.
- Work within the resources and mechanisms that exist – do not reinvent the wheel.
- CEWS that are designed and developed with communities strengthen their coping capacity to effectively prepare for and respond to disasters.

**What were the Good Practices arising from this action?**

Good Practice 1	<i>Effective and efficient use of resources:</i> Through the close collaboration and coordination between the implementing partners, resources were made available in an efficient way and of most benefit to the communities, where duplication of efforts was reduced to a minimum. In addition, each party would add value to the project respective of their knowledge, expertise, and experience.
Good Practice 2	<i>Ownership and involvement:</i> The early and continuous involvement of implementing partners gave each partner the opportunity to influence the design of the project. Ownership was further strengthened throughout the project cycle in the implementation of various workshops, meetings and communication, allowing for peer exchange and learning as well as reconfirming needs.
Good Practice 3	<i>Full engagement of communities:</i> Working through and strengthening of the existing network of volunteers and relationships with the communities in an inclusive approach ensured that communities were involved in the decision-making. Actions were identified by and based on the needs of the communities, which further strengthened ownership and sustainability. As such, the communities felt empowered to understand and act upon the receiving of the weather forecasts and warnings.

**DRR in Action Case Study**

More than response: Building partnerships to engage communities in preparedness and early warning systems in the Pacific

**Policy Relevance to DRR in Action**

The FINPAC project and the proposed FbF approach contributes to the four Priorities of Action in the Sendai Framework for DRR: 1. Understanding disaster risk, 2. Strengthening disaster risk governance to manage disaster risk, 3. Investing in disaster risk reduction for resilience, 4. Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

The project promotes preparedness for extreme climate events, contributing directly to SDG 13 on Climate Action.

**Key Messages from this Case Study**

- There is significant value and efficiency in national and regional technical institutions forming formal partnerships with intermediary organizations which have the networks and expertise to ensure that information is effectively communicated to the most vulnerable people, especially communities in remote locations.
- FbF is not separate to but complements ongoing and pipeline investments in climate information services, impact-based forecasting and early warning systems in the Pacific, by making the link to action on the ground.
- The Red Cross has niche expertise in supporting community early action components of an FbF system. The expansive branch and volunteer network offer sustainability in early action. The Red Cross provides community and local level linkages to national level climate services. The Red Cross is auxiliary to public authorities in the humanitarian field, endorsed through a Red Cross Law or Act in each country, and positioned to influence policy through work in International Disaster Law.

The FINPAC project successfully implemented community early warning system pilots in eight Pacific countries through an inclusive partnership approach with relevant stakeholders that worked well to ensure the interests of the communities. Taking this into the second stage for sustainability and scaling up, Forecast-based Financing approach is being piloted in the Solomon Islands. A third stage envisages recommendations to include FbF in Pacific governments legislation and policy.

**References for this Case Study**



FbA Discussion Paper



Forecast-based Financing in the Pacific



FINPAC project brochure



White paper: FbF Roadmap for the Solomon Islands



EARWatch brochure

**Collaborators for this Case Study:**

Solomon Islands Red Cross,  
Government of Solomon Islands,  
Secretariat of Pacific Community GEM,  
Secretariat of the Pacific Regional Environment Programme,  
Red Cross Red Crescent Climate Centre,  
International Federation of  
Red Cross and Red Crescent Societies

**Contact Person for this Case Study:**

Stephanie Zoll  
Disaster Risk Management Coordinator,  
Country Cluster Support Team – Pacific,  
International Federation of  
Red Cross and Red Crescent Societies  
Email: Stephanie.ZOLL@ifrc.org



## Disaster Displacement

### The New Normal?

This year, disasters will force millions of people in Asia Pacific to flee their homes. This number is expected to increase as the effects of climate change intensify. We must do more to prevent and reduce displacement, and protect those most at risk, including through community-led climate-smart disaster risk reduction initiatives. As local organisations, National Red Cross and Red Crescent Societies are well placed to support governments to better prevent and prepare for displacement.

- **What needs to be done?** We collectively must take collective take action to better understand the risk of displacement in the context of disasters and climate change, and the impacts on individuals and communities, including communities that receive and host displaced people. Better understanding displacement risk and impacts will require community level climate smart risk and vulnerability assessments and mapping of displacement hot spots. Building on a better understanding of displacement, we must take collective action to prevent displacement through DRR initiatives and to prepare to address displacement through effective response and recovery initiatives where it does occur. This will require integrated actions across the disaster risk management continuum, including incorporating displacement into; relevant laws, policies and plans,
- **How can we help?** Red Cross Red Crescent National Societies are well placed to work with authorities to better understand displacement risk, through identifying and mapping communities at risk of displacement. National Societies can support the coordination of efforts to improve data collection and analysis on disaster displacement. Drawing on our expertise in disaster law, Red Cross and Red Crescent can support integration of displacement into relevant -legislation and policy. Based on this better understanding and analysis, National Societies can support local, community based, targeted DRR measures that build resilience and reduce the risk of displacement for the most vulnerable, including through forecast-based early actions. Where displacement does occur, National Societies are well placed to ensure early and effective responses to disaster displacement, including access to safe shelter, essential food and non-food relief, safe water and sanitation and assistance and protection for those most at risk. When prolonged displacement occurs, National Societies can support the realisation of durable solutions and the end to displacement.





**DRR IN  
ACTION  
CASE  
STUDY**

## Preparing and reducing risks of disasters to displaced communities

**Theme of the  
Case Study**

Displacement and DRR

**Country**

Bangladesh

**Case location**

Cox's Bazar

### Background

The widespread violence during August 2017 in Rakhine state (Myanmar) led to a massive influx of people from Myanmar into Cox's Bazar. As of March 2018, approximately one million people from Myanmar are estimated to be living in Bangladesh<sup>(1)</sup>. The speed and scale of their arrival has led to a critical and complex humanitarian emergency and created the world's most densely populated refugee settlement. The new arrivals from Myanmar are concentrated in two sub-districts (upazilas) of the district of Cox's Bazar: Ukhia and Teknaf, putting an immense strain on local infrastructure and services, which was originally only designed to serve the present host population<sup>(2)</sup>.

The coastal district of Cox's Bazar is prone to disasters, which have been hit by more than three cyclones (with winds speeds of more than 85 km/h) in the past three years<sup>(3)</sup>. Upon arrival to Cox's Bazar, refugees have sheltered under tarpaulins and bamboo structures on steep slopes and in low, flood-prone areas. The difficult terrain of the hills, combined with the clearing of forest cover has increased the likelihood of erosion, landslides and floods which are likely to bury or wash away the flimsy makeshift shelters and their inhabitants when monsoon and cyclone seasons arrive. It is estimated that over 700,000 people are living in the mega camp settlement, which is administered as 24 camps by the Government of Bangladesh and the humanitarian community. Evacuation for the refugees is currently not an option due to scarcity of land, difficulty to move a large population and lack of strong structures to serve as cyclone shelters. Therefore, disaster readiness and emergency preparedness interventions need to be considered as life-saving assistance in this context.

*Photo: Temporary CPP Camp volunteers participating in the mock drill of Camp 4 in Cox's Bazar – 22 June 2018. | Brad Zerivitz, American Red Cross*

## What did the action seek to change?

To increase the preparedness levels of the at-risk vulnerable communities to disasters.

## What were the key actions taken to achieve this change?

Actions to prepare the refugee and host communities were taken across various levels:

1. At the macro level: Engaging the Cyclone Preparedness Programme (CPP) of Bangladesh, a joint programme of the Government of Bangladesh and Bangladesh Red Crescent Society (BDRCS), to expand the current existing preparedness systems to the camp settlements. CPP is a world-renowned disaster preparedness programme established in 1972, covering 13 coastal districts of Bangladesh through an Early Warning System (EWS) built on a central control room and early warning radio system that mobilizes over 55,000 CPP volunteers to provide early warning messages to communities to take early action.
2. At the government level – working closely with CPP, the Ministry of Disaster Management and Relief (MoDMR), Refugee Resettlement and Repatriation Commissioner (RRRC) office, local government officials such as the Upazila Nirbahi Officer (UNO), to establish and expand the CPP system within the camp settlements and recognizing the camp residents as temporary CPP Camp Volunteers. Through these efforts ensuring CPP coverage in the camps as well and coordination with the National Disaster Management Systems in adjacent host communities.
3. At the humanitarian coordination level – working with the Inter Sector Coordination Group (ISCG) and working closely with the various Sectors and Camp Coordination agencies in setting coordination systems for temporary CPP camp volunteer units, within the overall humanitarian and camp coordination structures; ensuring a standard preparedness model across all camps; government-approved and contextualized preparedness messaging to the displaced community.
4. At the camp level – working closely with CPP and camp management agencies in identification of camp volunteers and training them on basic disaster preparedness and community risk assessment; early warning system protocols within the camps, preparedness actions and role of CPP camp volunteers in disaster preparedness efforts in the camps. Mock drills were and are being conducted to ensure that the CPP camp volunteers are part of the larger camp coordination system working within the ‘Camp-in-Charge’ (CiC) – the government focal point being representative from MoDMR and site management agency for the camp.

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

Step 1	The IFRC together with many partner Red Cross and Red Crescent National Societies, have since the 1970s supported the CPP with BDRCS. The American Red Cross (AmCross), took initial steps to engage government stakeholders (MoDMR and CPP) for the establishment of the CPP system within the camps. The CPP system exists already in the host communities. This was done with the leadership of the BDRCS in the CPP.
Step 2	Working closely with the humanitarian agencies involved in camp coordination (UNHCR and IOM) and camp management (INGO/NGOs) system and relevant government partners, to identify and select temporary CPP camp volunteers covering all settlements in both sub-districts of Ukhia and Teknaf (30 camps).
Step 3	Focusing on training and capacity building of temporary CPP camp volunteers by utilizing expertise of the CPP offices, BDRCS and, other UN agencies and INGOs (UNHCR, IOM and camp management agencies). 30 CPP units set up in the 30 established camps.

Mr. Ruhul Amin, Deputy  
Director of CPP Chittagong  
Region:

*“Having these trainings done at the community level is very important to the success of CPP because it takes into account the context of the environment they live in and what needs to be done to reduce these risks and prepare better.”*



*The Refugee Relief and Repatriation Commissioner (RRRC), Mohammad Abdul Kalam, in discussion during training session on the need for better preparedness and early warning of disaster risks – 23 June 2018 | Din Mohammed, American Red Cross*

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

Step 4	Establishing the EWS and existing CPP Flag System within each of the camps, ensuring the relevant preparedness and response actions could be completed as per the flag system. Establish coordination mechanisms in the camps relating to early warning system with CICs, military and humanitarian actors.
Step 5	Engaging with the Communicating with Communities (CwC) Working Group to inform the communities of the EWS; who will provide it, what is the messaging, what to expect, and how to take early action at each stage. Working with BBC Media Action, Translators Without Borders and CwC partners to send mass communications on the subject.
Step 6	Coordinating agreements with MoDMR and CPP for expansion of volunteers to reach a total of 3,000 with 100 temporary CPP camp volunteers in each camp.

Ms. Diloara (resident of Camp 18):

*“I am so lucky to have attended this training and learned so many new things about disasters. I feel that we as participants should go back to our camps and educate others on what we have learnt and also help our community members be better prepared for the upcoming monsoon season. I am so thankful for being part of this training.”*

## What SFDRR principles<sup>1</sup> were applicable to this change process?

- Principle 1 Disaster risk reduction requires an all-of-society engagement and partnership
- Principle 2 Disaster risk reduction and management depends on coordination mechanisms within and across sectors and with relevant stakeholders at all levels
- Principle 2 Managing the risk of disasters is aimed at protecting persons and their property, health, livelihoods and productive assets, as well as cultural and environmental assets, while promoting and protecting all human rights, including the right to development

## What were the Achievements and the Impacts?

- The recognition of the displaced people as temporary CPP Camp Volunteers has been an important achievement in this process. This also signifies the Government of Bangladesh’s approach to the camp settlements and ensuring that one of their largest and renowned disaster preparedness programme – the CPP, is also extended to the camp settlements and guest population.
- Bringing together the host community and the displaced communities, and, in understanding the interconnected disaster risks – the need to facilitate better coordination between these two groups by the government.

## What were the key Lessons Learnt?

- Understanding and working within the existing disaster management systems and institutions is the foundation for strong, acceptable, appropriate and locally-owned initiatives.
- Better understanding the nuanced contexts of the displaced communities and aspects of culture, language and experience is critical for building an effective programme design and improved implementation. Existing interventions or approaches used elsewhere in Bangladesh had to be adapted for the displaced community based on such context.

<sup>1</sup> 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.

- The role of host community and its related governance systems is important and must be considered in the planning stage to ensure their participation throughout implementation.
- In the context of the size of the camps as well as the cultural aspects of the displaced community, the number of CPP volunteers were increased from 15 (the approved size) to 20 with equal representation of men and women. This was found to be more appropriate and effective in relation to the camps. Given this success, the number of temporary CPP Camp Volunteers will be increased to meet the growing disaster risks needs of the camps.

Ms. Lima Dhar, a Site Monitoring Officer from IOM:

*“I was able to learn about hazards and risks and how important it was to ensure that we make communities aware of their risks and be prepared for any hazard. I was excited to teach the refugee community and feel that there is potential in everyone to contribute towards making their environment safe.”*

### What were the Good Practices arising from this action?

Good Practice 1	Understanding the existing disaster management framework, mechanisms and institutions, and working within these to ensure greater acceptance and ownership by the local and national government.
Good Practice 2	Bringing a range of stakeholders to the table (affected displaced and host communities, government, humanitarian community and military) for better coordination and understanding of the issues and the identification of solutions
Good Practice 3	Putting the displaced and the host communities at the centre of the programme design and implementation, resulted in greater empowerment, engagement and voices of these communities.
Good Practice 4	Supporting ongoing disaster preparedness efforts in the camps by providing a formal government-engaged early warning system.

### Policy Relevance to DRR in Action

Migrants and displacement have been recognized as key issues in the Sendai Framework for Disaster Risk Reduction – both as a driver of disaster risk as well as migrants contributing their skills, knowledge and experience for the better design and implementation of DRR programming. Still, this does not translate down to the Asia Regional Action Plan with no adequate recognition of this issue.

Effective DRR initiatives need to be based on enhanced understanding of trends and consequences of disaster displacement, including displacement linked to slow-onset events. Community level understanding must play a critical role in informing our collective understanding.

### Key Messages from this Case Study

- There needs to be collective action to better understand the risk of displacement in the context of disasters and climate change, and the impacts on individuals and communities, including communities that receive and host displaced people.
- Better understanding of displacement risk and impacts will require community level climate smart risk and vulnerability assessments and mapping of displacement hot spots.
- The RCRC network should enhance its focus on displacement and shift towards a more holistic, integrated, and conflict-sensitive disaster risk reduction programming (as well as response and recovery programming). RCRC strategies should aim to ensure that assistance to households is informed, inclusive, conflict-sensitive and resilient to disasters. This will require integrated actions/processes across the disaster risk management, humanitarian, and conflict resolution continuum, incorporating displacement as a key issue within relevant laws, policies, and plans.



Temporary CPP Camp Volunteer setting up the Early Warning CPP Flag System which is now established across all camps in Cox's Bazar – 21 June 2018 | Brad Zerivitz, American Red Cross

- Red Cross Red Crescent National Societies, with their mandate as auxiliaries to the Government are well placed to work with authorities, institutions, and experts to better understand displacement risk, through identifying and mapping communities at risk of displacement.

The case study aims to highlight the issue of disaster and displacement and bring it to the forefront by sharing experiences and relevant work being done. This will also help in advocating for better inclusion of disaster and displacement into the Regional Action Plan for Asia.

## References for this Case Study

1. Bangladesh Refugee Relief and Repatriation Commissioner (RRRC) Family Counting Exercise, supported by UNHCR
2. Humanitarian Response Plan 2017
3. Rohingya Crisis: Cyclones Background – Thematic Report, March 2018; NPM-ACAPS Analysis Hub
4. Standing Orders of Disasters (SOD) for Bangladesh, which highlight the CPP systems and EWS

*Camp community in discussion between RRRC, CPP and other stakeholders on the learnings from mock drills conducted – 21 June 2018. | Brad Zerivitz, American Red Cross*



### Collaborators for this Case Study:

Cyclone Preparedness Programme,  
Bangladesh Red Crescent Society,  
Ministry of Disaster Management and Relief,  
Refugee Resettlement and Repatriation Commissioner,  
Inter Sector Coordination Group,  
United Nations High Commissioner for Refugees,  
International Organization for Migration,  
American Red Cross,  
International Federation of  
Red Cross and Red Crescent Societies

### Contact Persons for this Case Study:

Mr. Ekram Elahi Chowdhury,  
Project Director,  
Population Movement Operations at Cox Bazar,  
Bangladesh Red Crescent Society  
Email: ekram.elahi@bdrcs.org

Mr. Achala Navaratne,  
Country Representative,  
Bangladesh Country Programme,  
American Red Cross  
Email: achala.navaratne@redcross.org





## Unsettled Cities Mega Challenges!

By 2025, the majority of Asia Pacific's population will be living in urban areas – forcing hundreds of millions of people to settle in disaster-prone areas and creating new risks. We must adapt to this new reality and ensure our policies, plans and programmes are fit for purpose, and cover the whole spectrum of early action, emergency response and recovery. We need to learn and share lessons from successful urban disaster risk reduction actions globally to sharpen our focus on this growing challenge. The Red Cross and Red Crescent stands ready to work with partners through our extensive network of city-based volunteers in all urban areas across Asia Pacific.

- **What needs to be done?** We call for increased national investment in DRR, including in preparedness for response, climate change adaptation and sustainable urban recovery throughout relevant national and municipal authorities. As part of this we call for more explicit and separate budget allocations to ensure funds support local efforts. In addition, public authorities should increase development financing for urban disaster risk reduction and resilience in advance of shocks and stresses, including support for the efforts of civil society. Lastly, governments, donors and agencies must place stronger emphasis on reducing future risks by collaborating at all levels on risk-informed pre-disaster planning covering the whole spectrum of early action, emergency response and recovery.
- **How can we help?** As auxiliaries to the public authorities (including local authorities) in the humanitarian field and with volunteers present in many at-risk communities, National Societies can support the authorities to develop and implement inclusive and sustainable urban disaster risk reduction practices, encompassing from early action to emergency response making use of the institutional coordination and operations support structures, their operational capacities, as well as from post-disaster recovery to reconstruction utilizing settlement/neighbourhood-based approaches.





**DRR IN  
ACTION  
CASE  
STUDY**

# What is an Urban ‘Community’? – New ways for local DRR actions in cities

## Theme of the Case Study

Community/local action for resilience

## Country

Nepal

## Case location

7 municipalities in Nepal:  
Kathmandu,  
Bhaktapur,  
Mhadhapur-Thimi,  
Godavari,  
Bhudhnilkantha,  
Dhangadhi,  
Pokhara-Leknath

## Background

The SURE (Strengthen Urban Resilience and Engagement) programme is implemented by the Nepal Red Cross Society (NRCS) in partnership with the British Red Cross (BRC) focused on multiple hazards, natural and man-made. Heavily emphasising participatory-led approaches to engage urban populations, the programme uses citizen voices of the 840 target vulnerable group ‘champions’ to create bottom-up demand to local governments for improved disaster resilience. SURE moves away from geospatially-defined programme interventions and uses a network-based approach. SURE also works with the ‘missing middle’ or local government (municipalities) to provide technical disaster management support and create linkages between government and ‘hard to reach’ and vulnerable populations who are most affected by disasters.

### How did SURE define ‘community’ in an urban context?

Former urban and rural disaster risk management interventions both in Nepal and regionally have highlighted that the geographical classification of communities is deeply challenging<sup>(1)</sup>. In an urban context this only becomes more complicated by large heterogeneity populations, lack of social cohesion and difficulties in engaging with ‘community’ members.

**SURE uses six types of urban community<sup>(2)</sup> to help identify and engage with vulnerable populations and subsequently testing a new model of working in urban communities that identifies and works with target vulnerable groups, looking at how they organize themselves and capitalizing on the networks which they use, instead of relying on artificial geographic groupings.** The six types of urban community used are: communities of places, communities of interest, communities of culture, communities of practice, communities of resistance, and, virtual/digitized communities.

*Photo: Target vulnerable urban groups; People living on the river bank in Kailali. | NRCS*

## What did the action seek to change?

Municipal governments are disaster risk management (DRM)-responsive to active and engaged citizens and a strengthened and better-positioned NRCS to engage with communities means that municipalities are better able to respond to multi-hazard risks.

## What were the key actions taken to achieve this change?

SURE has developed an urban citizen engagement framework to reach and better engage 'hard to reach' populations in the urban area. This approach separates the population into three categories: general urban populations, schools and, specific groups who are vulnerable to disasters (known as target vulnerable groups – based on the six types of communities) to achieve depth by reaching the most vulnerable and breadth by supporting urban populations to raise their voices to the local and municipal government levels.

SURE works with four target vulnerable groups in each of the seven municipalities (listed on page 4 of the SURE programme overview). Each of these target vulnerable groups have nominated 30 champions who NRCS will work with over the five years of the programme, to build their confidence and ability to advocate for their disaster priorities for years to come. SURE has created new innovative processes such as Participatory Campaign Planning that engages citizen voices, working with target vulnerable groups to tailor disaster messages for each group, based on their own concerns and recommendations to ensure actions being advised are both relevant and achievable.

Learning from the previous Earthquake Preparedness for Safer Communities programme, experience from the 2015 earthquake response and the SURE Urban Assessment, it is clear that **vulnerable populations in urban context do not often engage with or rely on local disaster management committees in the event of a disaster**. Instead they organize themselves around their own networks, both informal and formal, such as family, temples, markets, service-providers, employment. As information, knowledge and goods often flow across these networks, affecting communities' ability to access resources and processes, and to take action to prepare and respond to disasters<sup>(3)</sup>. The SURE programme is using these networks to share information through the 30 champions from each target group.

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

Step 1	Identify, through BRC / NRCS Urban Assessment (VCA), vulnerable groups to disasters
Step 2	Narrow down target vulnerable group selection through identifying skills and capacity of the National Society, interest from target vulnerable group in being involved in urban disaster resilience building.
Step 3	Identify 30 champions of each target vulnerable group to work with over the course of the five year programme, who have wide networks and are interested and able to influence those networks with new / improved behaviours on disaster resilience.
Step 4	Extensive engagement and capacity building of champions through advocacy training, identify advocacy asks, skills building such as first aid training, and partnership identification of who can support them such as government and other local actors.



Target vulnerable urban groups;  
Single-women's group in Kailali.  
| NRCS

## What SFDRR principles<sup>1</sup> were applicable to this change process?

- Principle 1 Empowerment of local authorities and communities through resources, incentives and decision making responsibilities as appropriate.
- Principle 2 Decision-making to be inclusive and risk-informed while using a multi-hazard approach.
- Principle 3 Accounting of local and specific characteristics of disaster risks when determining measures to reduce risk.

## What were the Achievements and the Impacts?

Urban populations and targeted vulnerable groups in the seven municipal areas:

- have increased awareness of disaster risk management and are able to advocate to municipal government for actions to increase resilience
- are more resilient to disasters

## What were the key Lessons Learnt?

- New approaches such as working with target vulnerable groups has taken longer than expected to be implemented as the National Society needed time to become confident in new working modalities, and identifying 'champions' from target vulnerable groups has required many discussions with communities.
- Adapting rural-based community-based disaster risk management tools and processes to an urban context has taken a lot of time and energy but resulted in a better understanding and more participatory approaches being included in the programme implementation. Advocacy strategy has been specifically designed that targets both the vertical and horizontal stakeholders that is needed for inter-connectedness of the programme across multiple scales.
- In order to use a network approach, an in-depth understanding is needed of people's networks and how people organize themselves, with M&E systems then needing to be designed to track how people share information and develop their skills
- Livelihoods repeatedly comes up as a key driver for disaster resilience, both in the Urban Assessment (VCA), focus groups and with NRCS district chapter. As a result the SURE programme has included economic security component in its programming focusing on how to link target vulnerable groups into existing systems and support.
- Complexity of working in urban systems continues to create challenges; multiple actors to engage with, the movement of people, boundaries being arbitrary, the scale of the SURE programme only able to address specific needs and not able to address larger infrastructure deficiencies.
- Engaging with partners continues to be challenging including:
  - Complexities of managing Government interests,
  - Willingness of stakeholders such as community-based organizations (CBO) to collaborate,
  - Importance and challenges in understanding who, what, where in each municipality.

<sup>1</sup> 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.

## What were the Good Practices arising from this action?

Good Practice 1	Understand how 'communities' organize themselves and work within these existing systems, and not imposing 'community' onto vast urban areas
Good Practice 2	In order to make the programme and its deliverables relevant, populations need to identify and work on disaster management issues that are relevant to them, that means being flexible about the type of hazards the programme focuses on – from man-made to natural hazards.
Good Practice 3	In order for an approach to have traction and be meaningful to populations it needs to be contextualised and the programme needs to be able to recognize and adapt to these demands; recognizing that even groups within the same municipalities have different risks.

## Policy Relevance to DRR in Action

This DRR in action relates directly to the Sendai Framework Priority 3 – Investing in DRR for resilience, and acts on:

- Importance of moving from information dissemination model of DRR, to behavioural change models for longer term impact and ownership of risk reduction behaviours; and,
- Supporting the mobilization of vulnerable populations to have the confidence and capacity to engage with government and stakeholders who have the resources to improve their disaster resilience.

## Key Messages from this Case Study

- A meaningful DRR intervention in urban communities must first recognize what defines an urban community and how they are organized to guide specific engagement with participatory-led approaches for each type of urban community.
- A behavioural change DRR model for longer term impact and ownership of risk reduction behaviours for an urban community, in which the populations identify and work on disaster management issues that are relevant to them, is more effective than an information dissemination model.
- Recognizing and working within the realities of how people network with one another, where traditional power dynamics influence results, identifying and investing capacity development of vulnerable target group champions to build their confidence and ability to advocate for their disaster priorities will address specific needs and sustainability.

The target group and network-based approaches are innovations in how to conceptualise and organize an urban disaster resilience programme. Aiming to build confidence and skills of local (urban) communities to own and strengthen their resilience and DRR efforts, this is a new way of working that provides a depth in terms of focusing on behaviour change and breadth of coverage.

## References for this Case Study

1. BRCS, 2015, 'Earthquake Preparedness for Safer Communities After Action Review'
2. Hamdi, 2004: 'Small Change: About the Art of Practice and the limits of Planning in Cities' (published by Earthscan) and Kupp, 2016, cited in ALNAP (2016), 'Stepping back: understand cities and their systems' (Campbell)
3. UCL City Leadership Lab, 2016, 'Informal Governance Networks for DRR'
4. SURE Programme overview
5. SURE Urban Assessment overview
6. Defining 'community' in the urban context – SURE Programme, Nepal
7. SURE Summary of Urban Assessments 2017
8. [SURE Urban Assessment guideline](#)
9. [SURE Urban Assessment tools](#)

Target vulnerable urban groups;  
People living on the river bank in  
Kathmandu. | NRCS



### Collaborators for this Case Study:

Nepal Red Cross Society,  
British Red Cross,  
Municipal Governments of Kathmandu, Bhaktapur,  
Mhadhapur-Thimi, Godavari, Bhudhnilkantha,  
Dhangadhi, and Pokhara-Leknath

### Contact Person for this Case Study:

Rudra Adhikari  
SURE Programme Manager,  
Nepal Red Cross Society  
Email: rudra.adhikari@nrccs.org





## Red Goes Green!

Emergency responses have the potential for positive and negative impacts on the environment. A good example is the supply chain, where sourcing local, sustainably produced materials can result in not only less environmental impact, but improved sustainability and localisation of aid. Our challenge is to continually minimize our environmental footprint, in all aspects of our work. Green Response is an International Red Cross and Red Crescent initiative aimed at improving the environmental outcomes of humanitarian activities and that emphasises stronger accountability to affected populations and the environment.





**DRR IN  
ACTION  
CASE  
STUDY**

## Greening IFRC supply chains; mapping our GHG emissions

### Theme of the Case Study

Green Response / Enhancing Preparedness for Effective Response

### Country

Philippines, Nepal, Bangladesh

### Case location

Asia Pacific region

## Background

The International Federation of Red Cross and Red Crescent Societies (IFRC) wants to pay better attention to the environmental impacts of Red Cross and Red Crescent humanitarian relief supply chains. In carrying out disaster relief, operations involve significant volumes of procurement and passage of goods and services to reach the most vulnerable people affected. In parallel with a focus to increase investment in sound disaster risk reduction, IFRC has an obligation to prevent and reduce environmental risks through responsible practices and policies.

The Regional Logistics, Procurement and Supply Chain Excellence unit in Kuala Lumpur is leading efforts to improve environmental outcomes by reviewing emergency operations in Asia Pacific. In order to conduct a proper study with operational data for recent and sizable disasters, three countries were selected – the Philippines, Nepal and Bangladesh.

### What did the action seek to change?

The project aims to map the present level of greenhouse gas (GHG) emissions generated by humanitarian relief operations of the IFRC and their reduction potential and to implement GHG reduction activities to lower the environmental impact of the emergency operations.

### What were the key actions taken to achieve this change?

The project identified existing relevant standards, tools and best practices for managing the environmental impacts of humanitarian relief supply chains, analysed in comparison with IFRC's current practices. The results and gaps highlighted will inform recommendations for changes or improvements. In parallel, the life cycle of main relief items and their transportation has been assessed to draw out a GHG inventory and index.

*Photo: IFRC logistician inspecting goods at BDRCS/IFRC Palong Garden Warehouse in Ukhtia, Cox's Bazar, Bangladesh – December 2017. | Jess Letch/IFRC*

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

Step 1	Scoping of the study, methodology and approach: Define the main relief items to be explored and the IFRC emergency supply chain designed.
Step 2	GHG analysis: Study of the greenhouse gas emissions of the main relief items used in disaster response and their impact along the supply chain from start to end in the three operations.
Step 3	Recommendation and reduction roadmap: GHG emission hotspots identified in the supply chain as well as main potential source of emission reduction in the life cycle of relief items.

## What SFDRR principles<sup>1</sup> were applicable to this change process?

- Principle 1 «Build Back Better» for preventing the creation of, and reducing existing, disaster risk.
- Principle 2 Coherence of disaster risk reduction and sustainable development policies, plans, practices and mechanisms across different sectors.

## What were the Achievements and the Impacts?

The mapping outputs below contribute to the global emission baseline for IFRC supply chain monitoring, to design the reduction roadmap, and build internal capacity:

1. Established work plan at the start of the project, which clearly indicates the methodology and guide achievement of target outputs efficiently
2. Facilitated the mapping of current typical supply chains and evaluation of current environmental impacts and priorities
3. Identified relevant standards and practices for managing supply chain and environmental impacts of relief operations
4. Conducted market research on available environmental management tools
5. Comparison of commercially available measurement, reporting and verification (MRV) tool capabilities to IFRC requirements
6. Established GHG Inventory of key sectors
7. Developed training materials and conducted workshops on carbon emission assessment and measure progress on reduction
8. Recommendation on best buy sustainability approach for the main relief items
9. Recommendation and report on areas of focus: Manufacturing of relief items, transportation of relief items, usage of relief items, disposal of relief items, fleet
10. Development of a manual for conducting GHG Inventory for sustainability and future preparation of GHG inventories and MRV system implementation;
11. Documented IFRC requirements for environmental management tools and management practices
12. Facilitated the decision to acquire or develop tools



Warehouse worker carrying mosquito nets for truck loading and to be dispatched from BDRCS/IFRC Palong Garden Warehouse in Ukha, Cox's Bazar to distribution point – December 2017. | Jess Letch/IFRC.

<sup>1</sup> 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.

## What were the key Lessons Learnt?

Lessons Learnt	Recommendations
In a global project with cross functional coordination, it is important to appoint environmental champions to ensure effective implementation of green activities, strategies and decision-making across the organization.	This should be considered at higher management level as well as in the technical units.
The Green argument for alternative and environmentally beneficial solutions to address needs is a compelling factor to drive changes internally.	Use the Green perspective to foster cooperation to support change; to break internal silo-mentality and attitude barriers.
There is interest from other humanitarian actors (ICRC, WFP) to join and partner on the approach.	Proposed pilot to concretize this potential synergy.
While some IFRC suppliers have already embarked on environmental awareness, there are varying degrees of sensitivity or willingness across the supplier base studied.	Embark with the most advanced supplier in terms of environmental awareness, to define reduction objectives, and show case to the other suppliers to replicate.
IFRC is very good at collecting data; nonetheless, improvement is needed on the quality of data and to have better data management system to facilitate the extraction and consolidation process. This can be done in two steps →	<ol style="list-style-type: none"> <li>1. Define the data to be collected and ensure data is captured in one system (avoid crossing source of information);</li> <li>2. Codify and standardize data entry to avoid multiple redaction form (example: Cox Bazar warehouse, warehouse in Cox Bazar, CB warehouse, etc.)</li> </ol>
Great potential for partnering with best in class private sector company.	Identify synergies with corporate sector companies that are eager to support greening strategies for knowledge exchange on supply chain aspects.
Expand the influence on greening our supply chain to tiers 2 and 3 suppliers.	Once a green consciousness is developed with tier 1 suppliers, leverage on the process and spread the approach to the next tiers.

## What were the Good Practices arising from this action?

Good Practice 1	Defining the IFRC supply chain emission baseline to measure reduction activities with evidence-based comparative information.
Good Practice 2	Sharing knowledge and results with other humanitarian actors to create synergies and leverages for improving overall humanitarian environmental impact.
Good Practice 3	Aligned approach with international standard and practices (ISO, GHG protocol)

## Policy Relevance to DRR in Action

This case study contributes to the **Goal** of the Sendai Framework for Disaster Risk Reduction as it will prevent new and reduce existing disaster risk through the implementation of environmental measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience.

Greening IFRC supply chain supports the Sendai Framework **Targets** to reduce global disaster mortality, number of affected people, economic losses and disruption of basic services. It further supports the **Priorities for Action**, especially priorities 1, 3 and 4.

### Key Messages from this Case Study

- This study indicates that a significant share of the greenhouse gas (GHG) emissions of humanitarian operations occur from logistics, as transporting goods to the affected areas has a major role in most response operations. The supply chains of the relief items are often global, and large quantities of goods are transported by air to reach affected people rapidly as per Red Cross priorities, mandate and objectives. By paying attention to transportation routes, storage locations and capacities, as well as expected time of utilization of the goods, substantial emission reductions can be unlocked. This does not only benefit the environment but can also enable significant monetary savings allowing more relief to be delivered to those in need.
- Another aspect related to the environmental impacts has to do with the items procured and supplied. Especially with regards the materials and the source of energy used in the production of the goods having a drastic impact on their carbon footprint. In some cases, the footprint of an item produced using renewable energy can be only a third of a similar one manufactured utilizing fossil fuels. Correspondingly, promotion of renewable and recyclable materials can have a major impact on the lifetime emissions of a single item.

During the analysis of the study there is evidence of similarities among supply chains of humanitarian organizations in regard to environmental impact as well as the activities to reduce them.

By sharing the case study of Greening IFRC supply chain, we encourage other organizations to embark into greening their supply chains and use our results as guidelines to foster their approach and reduction implementation.

### References for this Case Study

Carbon efficiency of humanitarian supply chains has been identified – both in practice and in research – as a major gap in humanitarian logistics, but there is still very little study on this.

1. Eng-Larsson, F. & Vega, D. *Green, Logistics in Temporary Organizations: A Paradox? Learnings from the Humanitarian Context*, 2011.
2. Oberhofer, P. et al. *Carbon Efficiency of Humanitarian Supply Chains: Evidence from French Red Cross Operations*, 2014.
3. IFRC, *Green Response Snapshot 2018*



#### Collaborators for this Case Study:

Australian Red Cross,  
Canadian Red Cross,  
Swedish Red Cross,  
International Federation of  
Red Cross and Red Crescent Societies

#### Contact Person for this Case Study:

Mathieu Grenade  
Programme Manager,  
Regional Logistics, Procurement and Supply Chain Excellence,  
Asia Pacific Regional Office,  
International Federation of  
Red Cross and Red Crescent Societies  
Email: mathieu.grenade@ifrc.org



**DRR IN  
ACTION  
CASE  
STUDY**

## Environmental Field Advisor deployment in an emergency response

### Theme of the Case Study

Green Response /  
Enhancing  
Preparedness for  
Effective Response

### Country

Bangladesh

### Case location

Cox's Bazar

## Background

Through the Green Response Initiative, the International Federation of Red Cross and Red Crescent Societies (IFRC) aims to improve the environmental outcomes of its emergency response activities. As part of these efforts, an Environmental Field Advisor (EFA) has been deployed to the Population Movement Operation (PMO) set up in response to the massive influx of people into Cox's Bazar district from Rakhine State, Myanmar. The arrival of almost one million people into a poor farming and forest environment has had a significant environmental impact. This increases the difficulties and potential conflict of the host community and, complicates and delays recovery operations. It is important that emergency response activities do not further exacerbate the environmental damage.

## What did the action seek to change?

The IFRC seeks to improve the environmental outcomes of the actions it takes in response to the crisis in Cox's Bazar. Largely, the work is inward looking at IFRC projects and programmes seeking to reduce negative impacts and enhance activities that may produce a positive environmental impact. Primarily, this work is focused on improving ongoing projects within the response but in addition it aims to collect information to highlight broader issues that may affect other future response activities.

## What were the key actions taken to achieve this change?

A limited Environmental Impact Assessment (EIA) was conducted to identify issues of significant concern both for immediate action or for future institutional improvement. Simultaneously, work is done with sector and project leads to identify areas of significant environmental impact or where improvements can be made. It is important that these changes and improvements are implemented without negatively impacting the effectiveness and efficiency of the operation.

*Photo: Clean surface water sources are scarce in Cox's Bazar refugee site. Existing surface water ponds accumulate solid waste including organic and latrine waste, turning ponds into veritable health hazards and breeding grounds for disease-bearing vectors. February 2018. | Patrick Fox, Swedish Red Cross.*

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

Step 1	Conduct initial scoping of EIA study to identify key issues
Step 2	Work with sector and programme leads to identify improvements
Step 3	Integrate changes into programme plan
Step 4	Institute monitoring plan to capture impact of changes

## What SFDRR principles<sup>1</sup> 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.** By working to prevent environmental harm particularly associated with increased erosions and landslide risk, the project reduces underlying risk factors in a cost-effective manner.
- Principle 2 **Coherence of disaster risk reduction and sustainable development policies, plans, practices and mechanisms, across different sectors.** The EFA deployment works across all sectors of the emergency response to promote sustainable response, recovery and development practices.
- Principle 3 **Accounting of local and specific characteristics of disaster risks when determining measures to reduce risk.** The focus of the EFA deployment is on improvement of ongoing work within the emergency response and as such, it is cognisant of specific local characteristics.

## What were the Achievements and the Impacts?

As the work is currently underway it is not possible to identify long-term impacts. However, achievements made from the deployment to date include:

- IFRC joining the UNHCR/IOM/WFP/FAO initiative to provide LPG as a cooking fuel to all households in the camp community to combat the massive deforestation caused by firewood collection;
- Increased general awareness of environmental issues within the PMO including waste management at warehouse sites;
- Assistance with small scale improvements such as Danish Red Cross' Micro-DRR and community greening project.



*Camp communities in Cox's Bazar use wood for construction or as firewood, collected from formerly dense forest land. Now the area of refugee residence is almost completely void of any vegetation and trees, putting the population at risk as rains easily turn into rapid runoff and flash floods with heightened possibility for landslides. February 2018. | Patrick Fox, Swedish Red Cross.*

## What were the key Lessons Learnt?

The deployment of an Environmental Field Advisor within an emergency response is an effective way to identify environmental issues and improve environmental outcomes. It is important as an environmental advisor to support ongoing work by the sectors and focus on providing solutions to improve outcomes, not focus on issues that are unsolvable or disrupt programmed activities.

<sup>1</sup> 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.

## What were the Good Practices arising from this action?

Good Practice 1	Rapid deployment and assessment of issues focusing on providing real time solutions rather than report writing
Good Practice 2	Working in a positive supportive manner with sector and programme leads to provide positive solutions to environmental issues
Good Practice 3	Deployment of a knowledgeable and experienced environmental field advisor able to rapidly complete the initial assessment

## Policy Relevance to DRR in Action

The case study highlights the importance of, and a method by which humanitarian actors can take responsibility for the environmental impacts of their emergency response activities. The deployment of an EFA to work across all sectors of an organization's response activities and raise awareness of environmental issues increases the effectiveness of response activity, particularly in promoting recovery and development. In addition it reduces the, often externalised, environmental costs of disaster response that normally is passed onto the host country.

## Key Messages from this Case Study

A healthy environment and functional robust eco-system is fundamental in reducing disaster risk and increasing resilience to disaster events. By improving the environmental outcomes of emergency response activity, it is likely to speed recovery of the affected community and reduce the likelihood of impact of future disaster events.

The awareness within many humanitarian actors about the environmental impacts of emergency response activity is poor. The externalising of environmental costs to the host countries and communities, particularly in displacement situations, causes conflict and hardship than can be avoided.



## References for this Case Study

1. Environment Assessment Report, IFRC Bangladesh Population Movement Operation 2017
2. Environmental Field Advisor proposed work outline
3. IFRC, *Green Response Snapshot* 2018

### Collaborators for this Case Study:

Swedish Red Cross,  
International Federation of  
Red Cross and Red Crescent Societies

### Contact Person for this Case Study:

Thomaz Carlzon  
Manager, Disaster Risk Management  
Asia Pacific Regional Office,  
International Federation of  
Red Cross and Red Crescent Societies  
Email: thomaz.carlzon@ifrc.org



# The Fundamental Principles of the International Red Cross and Red Crescent Movement

**Humanity** The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.

**Impartiality** It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

**Neutrality** In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.

**Independence** The Movement is independent. The

National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

**Voluntary service** It is a voluntary relief movement not prompted in any manner by desire for gain.

**Unity** There can be only one Red Cross or Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

**Universality** The International Red Cross and Red Crescent Movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.

For more information, please contact:

**Sanna Salmela-Eckstein**

Regional Disaster Risk Reduction Coordinator  
& Climate Change Focal Point  
Disaster & Crisis Prevention,  
Response and Recovery (DCPRR) Unit

**International Federation of  
Red Cross and Red Crescent Societies**

Asia Pacific Regional Office  
Suite 10.02 (North Block),  
The AmpWalk 218 Jalan Ampang  
50450 Kuala Lumpur, Malaysia  
E-mail: [sanna.salmela@ifrc.org](mailto:sanna.salmela@ifrc.org)