



In Pakistan's Sindh province, where CRS is supporting flood response and disaster risk reduction, community members meet to map out a process for disaster risk management. Photo by GSF staff/CRS

Breaking the Cycle of Emergency Response through Disaster Risk Reduction

EXAMPLES FROM MALAWI, MEXICO, NEPAL AND PAKISTAN

BACKGROUND

The world has experienced a sharp increase in disasters over the last 20 years. While a wide range of factors play a role including climate change, urbanization, population growth, unplanned development and environmental degradation, one thing is clear: Traditional emergency response will never address underlying needs of vulnerable communities to prepare for and mitigate these events prior to their occurrence. As these disasters have greater impact on women, children, elderly people and people with disabilities, additional efforts are needed to involve these groups in decision making relating to disaster

management. Therefore, Catholic Relief Services sees Disaster Risk Reduction, or DRR, as an approach that offers an opportunity for communities and other stakeholders to break the cycle of emergency response.

In line with this vision, starting in 2022, the Emergency Rapid Response Fund, or ERRF mechanism, funded by Margaret A. Cargill Philanthropies, began supporting DRR initiatives in countries experiencing cyclical natural hazard induced disasters such as floods, storms, and droughts, which are intensifying due to the changing climate. The ERRF DRR interventions

aim to build capacity of CRS and partner staff, along with government counterparts relating to community-level, participatory, risk reduction actions. Highlighting experience from ERRF projects implemented in Malawi, Mexico, Pakistan, and Nepal from August 2022-November 2023, this learning brief presents:



Key highlights of the DRR approaches undertaken.



High level results from endline data collection.



Lessons learned and recommendations to improve these approaches moving forward.



CONTEXT

1. Malawi

Disaster-prone communities in the Karonga District of Northern Malawi are increasingly impacted by floods and storms over the past five years. These events typically result in injury to community members and are affecting homes, critical community infrastructure and people's livelihoods. In 2020, the area was hit by floods affecting nearly 3,000 households comprising of over 13,000 individuals. In 2022, the same area was devastated by hailstorms affecting many of the same communities. Karonga-Northern Malawi district was the first area where the ERRF was applied for DRR interventions starting in September 2022 through the Karonga Participatory Community Action for Preparedness, or KPCAP project in partnership with Catholic Development Commission-CADECOM of Karonga Diocese.

2. Mexico

Mexico, particularly the state of Guerrero, is highly vulnerable to natural hazards. The state, which is part of the Ring of Fire, experiences significant seismic activity which can trigger earthquakes and tsunamis. Additionally, hazard events like hurricanes, landslides, flooding, and forest fires have accounted for the 62 emergency declarations in the Archdiocese of Acapulco between 2017-2022. The ERRF provided direct support to Caritas Mexicana in February 2023, who worked with Caritas Acapulco to implement a project focused on community mobilization for improved disaster risk management.

3. Nepal

The Terai area of Nepal is home to several rivers that support lives and livelihoods for people in the region. However, following heavy and

persistent rainfall, many of these rivers have been the source of devastating floods in 2014, 2017, 2020, 2021, and again in 2022. Over the last decade, floods caused 1,045 deaths and seriously affected 71,033 families in Nepal, causing substantial structural damage to 42,839 houses across Nepal. Fifty-nine percent of the damage was reported from Lumbini Province. Banke District in Lumbini Province is one of the worst-hit by recurrent floods in the Terai. In 2022 alone, more than 8,700 households were inundated by floods triggered through incessant rainfall in Banke district. Starting in January 2023, CRS and Caritas Nepal began working in Banke to address gaps in disaster management within at-risk communities and local authorities.

4. Pakistan

Globally, Pakistan is one of the ten countries most affected by extreme weather events, according to the Global Climate Risk Index and Climate Watch. As a result of catastrophic flooding in 2022, one-third of the country was under water, affecting 15% of the total population. A CRS-led DRR assessment conducted in the most affected districts of Dadu and Jacobabad in Sindh province confirmed the 2022 floods were unlike any experienced in the past. The extensive loss of livelihoods, assets, housing and critical infrastructure which followed from the floods rolled back development gains and further compounded existing disparities, affecting the most vulnerable households, with disproportionate impacts on women and girls. CRS Pakistan, along with Goth Sengar Foundation began implementing DRR interventions through the ERRF in December 2022.



In Nepal, community members work together to construct an embankment using sand bags, vegetations and nearby shrubs. Photo by Bibek Shrestha/CRS.

THE APPROACH



Communities lead the way

While DRR involves working with individuals, communities, government, and other stakeholders to reduce risk and strengthen resilience to natural and manmade hazards experienced by the most vulnerable, there are many different means to achieve this goal. CRS approaches DRR by supporting programs and partners to work through the guiding principles and priorities in the Sendai Framework for Disaster Risk Reduction, or SFDRR. CRS utilizes the [Community Led Disaster Risk Management, or CLDRM](#) approach to ensure participatory and inclusive actions are developed to reduce risk and build resilience in vulnerable communities. The approach is based on three core principles: Inclusion of all social groups in the community; leadership of the process by the community; and promotion of accountability by all involved. One size never fits all. Therefore, CLDRM is always tailored to the local context and never looks the same across countries. Using the three principles of CLDRM, the ERRF DRR projects took the following approaches:

In Malawi, communities formed Village Disaster Management Committees, or VDMC, which were comprised of diverse community

members including women, men, young and elderly people. These diverse stakeholders worked to identify vulnerabilities, capacities, and overall risks relating to natural hazards. These diverse stakeholders developed action plans which consisted of:

- Training on safe shelter techniques including construction of a demonstration home.
- Planting trees along riverbanks, hills and mountains to mitigate future storm and flood hazards and reduce erosion.
- Rehabilitating boreholes and other critical water points.
- Installing river gauges and rain gauges to enable communities to monitor water levels.
- Providing early warning equipment such as whistles and solar-powered radios.
- Training and simulation activities for evacuation in case of flood events.

“ The approach is based on three core principles: Inclusion of all social groups in the community; leadership of the process by the community; and promotion of accountability by all involved.



In Mexico, community members take part in a training as members of a community emergency response team. Photo by Caritas Acapulco.

In Mexico, community preparedness to respond to disaster events was prioritized in the target areas. This resulted in the formation and training of community emergency response teams. In addition to training, these teams were provided with essential equipment needed during an emergency response, which were utilized on October 25, 2023 when hurricane Otis hit. Teams also worked to develop a community DRR plan which included community sensitization on multi-hazard events.

In Nepal, community disaster management committees were supported to develop action plans. The approach integrated Gender, Equality, Disability and Social Inclusion, or GEDSI principles, to ensure that the most vulnerable, including ultra-poor women and other disadvantaged groups were represented in local DRR planning and implementation process. The mitigation activities included piloting flood resilient housing techniques and use of nature-based solutions like supporting river embankments with shrubs and other native vegetation. Due to the community contributions and investments across the mitigation projects they were able to accomplish more activities than were originally budgeted for. This contribution was linked to communities wanting to take ownership of the activities. Additionally, at-risk communities were engaged in sensitization exercises to increase their understanding of disaster risks. This included a community orientation to identify and monitor triggers for flood events. Following these activities, they were able to identify and act upon priority actions which included establishing community flood markers—135 flood markers across 8 communities—using reference levels to past flood occurrences.

In Pakistan, the project strengthened the capacity of local communities by raising awareness of risks and putting the decision-making power in their hands. Priorities for action were identified through an inclusive and participatory process, under the leadership of the VDMCs who were set up, revived and strengthened through the project. Community action plan activities included:

- Cleaning/de-silting of drainage canals to reduce flooding risks.
- Establishment of nurseries and tree planting to reduce exposure to extreme heat.
- Kitchen gardens to promote self-reliance and complement food security.
- Simulation exercises and drills.
- Identification and dissemination of evacuation routes.



Government linkages are essential

Communities cannot make sustainable strides in disaster mitigation and preparedness without support. Coordination and collaboration with government actors, plans, and policies is essential to ensuring project activities continue. As with all DRR programming at CRS, the ERRF DRR projects closely coordinated with government actors during project design, startup, implementation, and closeout. Highlighted by:

In Malawi, officials were trained on the CLDRM approach and formed a district level task force to provide guidance throughout the project. The make-up of the task force comprised of experts from various technical fields. This allowed government experts to engage with communities regarding implementation of key activities such as shelter reconstruction, tree plantation, installation of rain gauges and rehabilitation of water points. Task force members indicated they would lobby for continued use of CLDRM approaches through the District Executive Council as this approach fosters collaboration between stakeholders and strong community leadership.

In Mexico, the integration of the CLDRM approach facilitated swift buy-in as they aligned with the National Strategy for Resilient Communities, a strategy championed by the Mexican government. This was realized through the training of local advisors within the community and fortifying the capabilities

of Caritas Mexicana. This process was executed in six out of the eight target communities, thereby heightening their awareness of various risks. Additionally, the project prioritized coordination of actions with the National Civil Protection System to promote linkage in the project implementation process, in accordance with their initiatives and regulations.

In Nepal, support was provided to government actors at municipality and ward level to plan, budget for and implement Disaster Risk Management Plans. This allows the local government to take the leadership role in planning, budgeting, and implementation of DRR activities, thereby ensuring sustainability of actions. Two plans were developed at the municipal level, with 11 activities implemented across both areas. With government actors actively dedicated to routinely updating their plans and budgets, this proactive commitment reflects a precise understanding of the changing risks and needs within their specific communities. By regularly assessing and refining these documents, they ensure that the plans and budgets are always current, responsive and aligned with the latest information.

In Pakistan, through targeted trainings, coordination and the creation of a Dadu district DRR forum, the project contributed to strengthening the capacity of the local disaster management actors and the VDMCs, reinforcing the relationship between these actors' ensuring accountability and continued support. This led to the institutionalization of the action plans at district level, contributing to wider local efforts, coordinated by the district and provincial disaster management authorities, under national priorities and plans. The process enhanced the local



In Pakistan's Sindh province, school children in Tehsil Mehar, Dadu receive plants as part of a climate change campaign. Photo by CRS Staff.

“ These activities started because of the effective linkages built by the project and improved coordination with livestock department and other NGOs through District DRR Forum initiated in Dadu.

government's understanding of the risks affecting communities and their capacity to support them. Central to the approach was the sensitization of communities on the role of local authorities and government institutions in reducing and responding to disaster risks. This improved communities' capacities to better map the services available to them, leading to improved coordination and collaboration with local actors. District-level authorities are therefore better able to provide continued support as community action plans have been integrated into their own plans and priorities. Although not planned as part of the original project design, the Dadu district-level forum on DRR was instrumental in convening diverse stakeholders, to encourage collaboration and coordinated action, this also led to the set-up of the District Disaster Management Office which will operate after the project ends. Union Council Disaster Management Committees actively participated in various resilience building activities including conducting livestock vaccination drives, reaching three villages overseen by VDMCs. These activities started because of the effective linkages built by the project and improved coordination with livestock department and other NGOs through District DRR Forum initiated in Dadu.



In Pakistan's Sindh province, in Sohbat Khoso village in Dadu, women take part in programs that strengthen their crafts and income generating opportunities. Here, a woman sews a "Rillis" – traditional patchwork bedsheets. Photo by CRS Staff.

STORIES OF IMPACT

In Malawi,

attesting to the success of the project, Kanyuka Village Civil Protection Committee chairperson Glory Lowe from the Traditional Authority of Wasambo, said, “Through these interventions some communities have moved from flood-prone areas and resettled in safer places.” She added that through the support of the project, communities are now taking an active role in the use of nature-based solutions for DRR; such as planting trees along riverbanks, hills, and mountains to control erosion, storm and flood hazards. In addition, the project also improved access to potable water by drilling new boreholes and rehabilitating various water points.



In Malawi's Karonga district, a community member utilizes a recently rehabilitated borehole, one of the priorities in the DRR plan. Photo by CRS Staff

In Mexico,

a community mobilizer involved in the project noted that despite initial skepticism from the communities, the project was successful in raising awareness about disaster preparedness and resilience. The project's impact was particularly evident when two hurricanes hit the area before the planned community drills could take place. Instead of being caught unprepared, the community emergency response teams, trained and equipped through the project, were able to alert and prepare the population. The hurricane evolved incredibly fast, and the community committees created, equipped and prepared through the project reacted even before the authorities did and then joined forces when civil protection when they were activated. This real-life experience underscored the importance of the project and left the communities and the project team with a sense of accomplishment.

From the perspective of Caritas Acapulco, the project has had a significant impact on the community. Following the devastation of Storm Max, the community of El Cayaco was able to respond effectively,



In Coyuca de Benitez, Mexico, the trained community emergency team response with to provide support during Tropical Storm Max. Photo by Caritas Acapulco.

thanks to the training and empowerment they received through the project. The community emergency response team, equipped with vests and boots, not only took charge of the situation but also coordinated with the Mexican Army, impressing them with their organization and initiative.

The experience also opened opportunities for collaboration with other organizations such as Central Kitchen and World Vision,



In Mexico, the trained community emergency team in Coyuca de Benitez coordinates actions with the Mexican Army during Hurricane Otis. Photo by Caritas Acapulco

demonstrating to the community that there are multiple avenues of support available. The presence of the Director of Civil Protection of Coyuca and his team at the training in Espinalillo further underscored the potential for alliances with government entities.

Implementing direct funding to Caritas Mexicana revealed the importance of maintaining a delicate balance between project agility and accountability, guaranteeing rapid responses to emergencies while adhering to established standards.

Also, the assistance and accompaniment were critical in raising Caritas Mexicana's operational standards. While acknowledging the gains made thus far, it is critical to emphasize that work is still being done to strengthen these practices. This lesson lays the groundwork for future collaborative efforts to improve and grow.

In Nepal,

Jit Kumari Bishwokarma, a mother of five, had experienced the loss and damage inflicted by the floods to her and the community in Bankhor village, Banke district in western Nepal. Especially food and safety are key concerns for at-risk residents during the floods. "Every time it rains, we were scared and couldn't sleep at night thinking, what's going to happen to us? We focus more on escape rather than trying to store food and go somewhere else," Jit says.

Using locally available materials such as sand, bags, bamboo and native plant species, communities are leveraging these nature-based solutions to reduce the risks of extreme floods for communities. Jit's village is one of these communities, and her family also played a significant role in this community effort. Her daughter and daughter-in-law dedicated their time and energy to the project, working for 12 days to build the retainer walls alongside the community. They volunteered their labor for two days, and for the remaining



In Nepal, Jit Kamari takes part in programs that help her to recover from disasters. Photo by Ben Manser/CRS.

10 days, CRS compensated them. This ensured that everyone involved was treated equally and fairly.

Jit says, "Before people would not drink the water that I gave them because I come from a lower caste. But when they were working, I took water to give them. Everybody drank the water, which was one

of the best feelings for me.” Despite the completion of the sand embankment, Jit has been active in the community planting trees around the sand embankment to stabilize and ensure the long-term sustainability.

“Through technical know-how from CRS engineers, we were told that the more trees you plant around the sandbags, the more stable the soil becomes,” Jit says. “Since I live near to the riverbank, I’ve taken this a little personally. I plan to plant at least 100 trees around the riverbanks we were taught that once you put the sandbags down, it’s

good to plant trees especially bamboos to stabilize the ground. So, I have already gone there, and I planted some trees.”

Although Jit is thankful that her family and community is now safe and protected, she is also mindful of other communities in similar predicaments. “There are other people like me living along the riverbanks who need similar support. This is something that we can reach out to the government to think about other community members like me, in flood prone areas,” she says.

In Pakistan...

The floods of 2022 badly damaged a bridge that was one the key connectivity infrastructures in Haro Paro village in Dadu district. Twelve communities—more than 550 households—were left stranded with no evacuation route. Hundreds of commuters use this bridge daily to access markets, schools, health facilities and to reach their fields. The loss of the bridge negatively impacted agriculture-based livelihoods for households living in the area due to increased transportation charges and extended travel times.

Recognizing the importance of connectivity to resilience the Haro Paro’s VDMC prioritized the restoration of this bridge in their disaster management plan. The cluster of villages met with the VDMCs leaderships and requested for restoration of this important infrastructure.

The VDMC of Haro Paro village gathered all the VDMCs and led the process, framing a strategy for collaboration and coordination. As a result of this large consultation, the design of the bridge was changed as originally it was just a small repair of the damaged portion. The VDMC used the seed money from the project, with additional community contribution, and completed the bridge. “This might seem a small bridge, but in reality, it’s a backbone of our survival,” said the Chairman of Haro Paro VDMC while thanking CRS, GSF and the project donor.



After flooding in Pakistan in 2022 destroyed key infrastructure in the Dadu district and left communities without an evacuation route, community members came together to restore a critical bridge and other infrastructure as part of their disaster preparedness for safety in the future. Photo by CRS Staff

This small bridge will play a significant role in communities’ safe evacuation in case there is a disaster of similar scale in the future, as well as will enhance accessibility and community’s connectivity to farmland, schools, markets and more. It is also resistant to flooding, providing a safe emergency exit. Communities no longer face prolonged travel and transportation costs to bring their harvest to a neighboring town, resulting in increased income and sustained development.

Sadeer Ahmed, a resident of the village shared, “We are happy for this bridge is reconstructed, it restored accessibility for twelve communities and more than two thousand acre of land and when our village was cut off by a raging canal, it was a difficult time. We are relieved that we have returned to normal life and will use this as an evacuation route in case of floods.”

BY THE NUMBERS

IN MALAWI:

94.9% of households interviewed receive information on early warning or disaster preparedness compared to **42.7%** that were interviewed before the project, as evidenced in the baseline.

9 communities implemented actions from their DRR plans.

9 communities had households implement DRR measures promoted by the project.

The project's endline survey indicated that communities felt overwhelmingly positive about the relevance of the project and its approach, with **97%** of respondents highlighting DRR as "very important" or "important."

IN PAKISTAN:

84% of households reported an increased ability to recover from shocks and stresses.

12 communities implemented actions from their DRR plans.

12 communities had a DRR leadership group in place, recognized by local authorities.

18 district administration and line departments staff oriented and trained on CLDRM approaches, leadership and coordination.

12 VDMCs have access to functioning EWS (EWS kits distribution, messages dissemination, establishment of EWS sub-committee at village level and linkages development with disaster management authority).

93% of project participants interviewed in the endline reported better access to early warnings, risk information, and planning resources to mitigate impacts.

71% of those interviewed at the endline cited better understanding and increased knowledge on emergency response procedures.

IN MEXICO:

6 communities with a DRR leadership group in place, recognized by local authorities.

3 training sessions covering first aid, search and rescue, and evacuation in the communities of El Cayaco, Coyuca de Benitez and Espinalillo.

64 Engaged a total of **64** participants from **8** communities, including active involvement from **2** members of the municipal civil protection team.

Notably, **16%** of the participants were minors, displaying a keen interest in the training and were accompanied by a responsible adult family member. Additionally, **15%** of the participants were older adults.

Demonstrated a commitment to gender inclusivity with **70%** of the total participants being women.

IN NEPAL:

92% of households reported an increased ability to recover from shocks and stresses.

8 communities implemented actions from their DRR plans.

8 communities had a DRR leadership group in place, recognized by local authorities.

8 communities had DRR plans in place that received financial support from local authorities.



In Nepal, children point to a mural painted in the public gathering space that conveys messages on flood preparedness. Photo by Shuvam Poudel/Caritas Nepal

LESSONS LEARNED AND RECOMMENDATIONS



Timing and Buy-in

All project teams recognized the challenge of implementing DRR activities in short project timeframes, which were between 9-13 months. Fortunately, project goals were achieved because of the enthusiasm of local communities and the acknowledgement by government actors regarding the need for targeted DRR interventions. **Therefore, working in an environment with equally supportive community and government buy-in is essential for the success of future programming.** It should be noted that these short timeframes do foster an environment focused on implementation, rather than systematic learning at the project level.

For better or worse, **buy-in for DRR is often generated by recent experience with disaster events.** All participating communities and local authorities were able to use these experiences to inform DRR action plans. No place was this more apparent than in Pakistan, where the project target area had been battered by the 2022 floods. When the project was launched, communities were very eager to avoid similar disasters in the future. Because of the short project timeframes, **aligning DRR planning to**

occur outside of typical hazard seasons can result in fewer delays throughout the process. Furthermore, experience from Nepal highlights that, where possible, **aligning DRR planning with the local government budget cycle can enhance implementation and should be considered for future projects.**



Adaptability of DRR plans

Sometimes, working during peak-hazard season cannot be avoided. This was the case in Mexico where the completion of the project was delayed due to the devastating impacts of two storms, Max and Otis. On October 10, Max, a rapidly forming tropical cyclone, made landfall in southwestern Mexico, causing minor damage. Shortly after in late October, Hurricane Otis, a record-breaking Category 5 storm, slammed into the coast, leaving Acapulco in ruins and causing considerable damage to the communities in the project. While the emergency response teams were already established, these events occurred before the planned community drills and implementation

of all actions in the DRR plans could take place. As a result, **project activities were reoriented based on the experience gained from these real-life scenarios, rather than simulations.** The revised plan includes conducting an evaluation exercise of the actual response, restoring, or creating signage, contributing to the repair of critical infrastructure, providing equipment to support early warning communication efforts, and protecting and restoring mangrove forests for future flood mitigation and tree cover recovery.



Government provides technical assistance

Ensuring the right government representatives are involved during orientation of the project is essential. This not only creates buy-in but can also link with technical assistance to implement community plans. Projects in Malawi and Nepal worked to **ensure that technical experts from the district and ward-level disaster management committees were involved to assist with both planning and implementation.** This contributes to the quality of DRR actions, specifically those relating to local shelter, WASH, hazard monitoring and environment.



Targeting the most vulnerable

While vulnerable populations were directly involved in all participating countries, DRR actions typically benefitted the wider community. **Where timing and funding allow, future projects could include a two-pronged approach that focuses on community-level and household level interventions.** This would permit the systematic targeting of the most vulnerable households and ensure measures are taken to prevent disaster risk to the specific characteristics of these households, either through provision of cash or sector specific interventions.



Multi-hazard approaches ensure greater coverage

While floods and storms are typically the major hazard faced in Northern Malawi, target communities experienced erratic rainfall during project implementation. This was unexpected

based on the recent experience of heavy rainfall and storm events but speaks to the unpredictability of climate patterns. While the project interventions will undoubtedly provide benefit during future rainy seasons, this shows that **allowing for a multi-hazard lens enhances the capacity of communities to plan to address a variety of hazards and associated challenges.**



Aligning with complementary activities

Working in project silos is not conducive to success in the short or long term. **Where possible, working through existing platforms and approaches is always encouraged.** In the case of Pakistan, the project complemented larger recovery efforts for the 2022 floods. Aligning with an initiative from the [CRS Homes and Communities Platform](#), the DRR action plans fed into wider settlement plan sustaining efforts beyond the project cycle. In Nepal the interventions also highlighted other areas for further systemic support and interventions to reduce underlying risks such as on updating flood models to reflect river changes due to constant floods and improvements in early warning communication systems.



Communities working with nature

From tree plantation in Malawi and Pakistan, to strengthening embankments with natural vegetation in Nepal, and recognizing the importance of mangroves for flood mitigation in Mexico, **DRR action plans in all countries showcase the importance of working with nature to mitigate hazards.** In addition to these activities, community sensitization efforts about natural hazards carried out by **DRR interventions provide the opportunity to raise awareness about environmental degradation, linkages to climate change, and the importance of sustainably managing natural resources.**



Community sensitization can be fun and engaging

Individuals prefer to receive information in a variety of ways. Therefore, **developing multiple strategies to disseminate hazard information**

will ensure greater uptake within communities.

In Nepal, murals and flood markers, served as an accessible medium to convey DRR messages. Additionally, the project developed a “forum theatre” that put on live performances

to promote a shared understanding of various risks and associated threats. Both methods enable the communities to enhance their understanding of complex information in a simple and relatable manner.



Flood prone area in Banke district Nepal. Photo by CRS Staff

CONCLUSION

As hazards become more complex through the intersection of man-made and natural causes, DRR interventions should increasingly be considered as a proactive means of mitigating and preparing for future events. The use of the ERRF for DRR demonstrates the flexibility of both traditional emergency response and highlights how the sector can address

immediate needs of vulnerable communities while also striving for longer term resilience in the face of disaster events. The learning provided from the great efforts of CRS and partner staff in Malawi, Mexico, Nepal and Pakistan goes a long way to inform future DRR projects funded by the ERRF and other mechanisms.



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