

Disasters and Displacement in Bangladesh: Re-conceptualising Strategies of Risk Reduction and Resilience

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INTRODUCTION

Among the highest levels recorded of disaster-related internal displacement globally², Bangladesh is also one of the most climate vulnerable countries³ and currently host to the world's largest refugee camp with nearly one million refugees exposed to the effects of climate change.⁴ Climate-related losses and damages threaten livelihoods, ecosystem services, food security, public health, human security and socio-economic development, often in the most vulnerable communities, and disproportionately impacting on those displaced.⁵ In turn, impacts from climate change, from severe weather to prolonged droughts and water insecurity, exacerbate internal and cross-border displacement.⁶

Given the scale, complexity, and protracted nature of displacement in Bangladesh amidst evolving shocks and stresses, solutions will need to become more community-driven. Humanitarian response efforts by national governments and international actors are usually top-down, bureaucratic⁷ and do not explicitly and purposefully engage and support refugees and IDPs to be active change agents in humanitarian operations.⁸ This paper presents a novel technical approach,⁹ which is centered on human rights, climate justice, public health and the participation of affected communities in risk reduction and resilience strategies. Such an approach is essential for national authorities and humanitarian actors to understand and work with those most affected by, and least culpable for, climate change, such as Internally Displaced Persons (IDPs) and refugees.¹⁰ This becomes increasingly relevant as national attention concentrates on the multiple risks, or 'crisis within a crisis', in responding to COVID-19 alongside numerous other public health risks, environmental degradation and the seasonal disasters common to Bangladesh.¹¹

Applying a socio-ecological systems lens, this background paper provides a snapshot of some of these critical intersections related to climatic risks, displacement, migration, environmental degradation and public health. It highlights the key role of communities in managing such complex interactions between

¹ The views expressed in this article are those of the authors and not of IOM or Mercy Corps.

² International Displacement Monitoring Centre (IDMC) (2019) *Global Report on Internal Displacement*. <https://www.internal-displacement.org/sites/default/files/publications/documents/2020-IDMC-GRID.pdf>

³ Eckstein, D., Künzel, V., Schäfer, L. and Wings, M. (2019) *Global Climate Risk Index 2020: Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2018 and 1999 to 2018*.

https://www.germanwatch.org/sites/germanwatch.org/files/20-2-01e%20Global%20Climate%20Risk%20Index%202020_14.pdf

⁴ Vince, G. (2020) 'The World's Largest Refugee Camp Prepares for COVID-19.' *The BMJ*. 368: m1205.

<https://doi.org/10.1136/BMJ.M1205>

⁵ Displacement Solutions (2012) *Climate Displacement in Bangladesh The Need for Urgent Housing, Land and Property (HLP) Rights Solutions*. https://unfccc.int/files/adaptation/groups_committees/loss_and_damage_executive_committee/application/pdf/ds_bangladesh_report.pdf

⁶ The Nansen Initiative (2015) *Disaster-Induced Cross-Border Displacement*. <https://nanseninitiative.org/wp-content/uploads/2015/02/PROTECTION-AGENDAVOLUME-1.pdf>

⁷ Sarker N.I. and Wu, M. (2019) 'Bureaucracy in Bangladesh: A Disaster Management Perspective.' In: Farazmand A. (eds) *Global Encyclopedia of Public Administration, Public Policy, and Governance*. Springer. Cham.

⁸ Henly-Shepard, S. (2018) *Planting Seeds of Resilience in Humanitarian Settings: Rapid Strategic Resilience Assessment Report for the Rohingya Crisis, Cox's Bazar, Bangladesh*. https://www.mercycorps.org/sites/default/files/2019-12/Mercy_Corps-IOM_Rapid_Strategic_Resilience_Assessment_Report.pdf

⁹ Saraswat, C. and Kumar, P. (2016) 'Climate justice in lieu of climate change: a sustainable approach to respond to the climate change injustice and an awakening of the environmental movement.' *Energ. Ecol. Environ.* 1. 67–74.

¹⁰ Mechler, R., Singh, C., Ebi, K. et al. (2020) 'Loss and Damage and limits to adaptation: recent IPCC insights and implications for climate science and policy.' *Sustain Sci.* 15. 1245–1251.

¹¹ UNHCR (2020) *Stay and Deliver in Bangladesh: Rohingya Refugees Face Double Threat*. <https://www.unhcr.org/ph/19267-may2020-eneews-bangladesh.html>

hazards, exposure, vulnerability and capacities, and the importance of rights-based approaches in Bangladesh. Building from empirical research from IOM and Mercy Corps's Rapid Strategic Humanitarian Resilience Assessment (2018)¹² and the pilot implementation of its corresponding Humanitarian Community-Based Disaster Risk Reduction Toolkit (2018-2020), this paper provides concrete lessons learned and examples of community-based risk reduction and resilience in practice. It emphasises that a community-led, refugee/IDP-centered approach is crucial for the development of practical and innovative risk-reduction and resilience-building actions that can more effectively enable those most affected by crises, to better navigate and mitigate the impacts of disasters and internal and cross-border displacement.

Against the backdrop of disaster displacement and climate change, it is imperative to develop sustainable and localised strategies of resilience that ensure participation of all at-risk groups. It is in the everyday practices, adaptive mechanisms and navigational strategies of internally displaced persons, refugees, stateless and displacement-affected host communities that solutions can be re-envisioned and better tailored to complex socio-ecological systems as well as people's capacities, needs and agency.



Figure 1: Bangladeshi woman in Bhola slum, Dhaka, Bangladesh. Many of the inhabitants moved there from Bhola Island after being displaced from their homes due to impacts from the devastating 1970 Bhola cyclone, whilst others have lost their land and livelihoods to river erosion, migrating for a combination of economic and climate-related factors. Amanda Nero / IOM. 2016.

MIGRATION AND DISPLACEMENT IN BANGLADESH

Internal displacement in Bangladesh is inextricably linked to the effects of climate change, which expose communities to a wide array of shocks and stresses forecasted to increase in frequency and intensity. Between 2008 and 2014, it is estimated that 4.7 million people were displaced due to disasters in Bangladesh.¹³ Over the last decade, an average of 700,000 Bangladeshis were displaced each year by rapid-onset natural disasters as was the case with Cyclones Aila (2009), Viyaru (2013), Koman (2015), Roanu (2016), Mora (2017), Bulbul (2019) and Fani (2019). With an estimated 4.1 million new displacements in 2019, it was the highest figure on record for the country since data became available in 2008 placing

¹² Henly-Shepard, S. (2018) *Planting Seeds of Resilience in Humanitarian Settings: Rapid Strategic Resilience Assessment Report for the Rohingya Crisis, Cox's Bazar, Bangladesh*. https://www.mercycorps.org/sites/default/files/2019-12/Mercy_Corps-IOM_Rapid_Strategic_Resilience_Assessment_Report.pdf

¹³ Internal Displacement Monitoring Centre (IDMC) (2015) *Global Estimates 2015: People Displaced by Disasters*. <https://www.internal-displacement.org/sites/default/files/publications/documents/20150713-global-estimates-2015-en-v1.pdf>

Bangladesh among the top countries globally with the most disaster-related internal displacement.¹⁴ The year of 2020 continued along this path with 2.5 million new displacements caused by Cyclone Amphan.¹⁵

Displacement and migration in Bangladesh is a complex picture comprised of rapid-onset hazards or shocks, ranging from floods, cyclones and storm surges, to chronic stresses including drought, salinity intrusion, sea level rise, and coastal and riverbank erosion, to man-made shocks such as fire, pollution, deforestation, water logging, conflict and public health challenges including the COVID-19 pandemic.¹⁶ Climate change continues to exacerbate these shocks and stresses, with coastal regions particularly at-risk to cyclones, storms and rising sea-levels, while mainland regions are more impacted by riverbank erosion and flooding.¹⁷



Figure 2: Family travels to a safer location amidst flooding, as water enters new areas after cyclone Aila hit in the southwest parts on Harinagar, Satkhira, displacing thousands. Abir Abdullah / IOM. 2009.

Bangladesh's National Strategy on the Management of Disaster and Climate Induced Internal Displacement acknowledges that migration is multidimensional and has historically served as a dynamic adaptation strategy to offset impacts of environmental or economic shocks and stresses.¹⁸ Chronic stresses, whether environmental, economic, social or political, can exacerbate acute events, like floods, storms and pandemics, and can hinder recovery from them, creating a deadly cycle. Where there are recurrent disasters, migration can be temporary, cyclical or permanent as a result of perceived future risk.¹⁹ People

¹⁴ IDMC (2019) *Global Report on Internal Displacement*. <https://www.internal-displacement.org/sites/default/files/publications/documents/2020-IDMC-GRID.pdf>

¹⁵ IDMC (2020) *Internal Displacement 2020: Mid-Year Update*. <https://www.internal-displacement.org/sites/default/files/publications/documents/2020%20Mid-year%20update.pdf>

¹⁶ IOM (2016) *Assessing the Climate Change Environmental Degradation and Migration Nexus in South Asia*. https://publications.iom.int/system/files/pdf/environmental_degradation_nexus_in_south_asia.pdf

¹⁷ McDonnell, T. (2019) 'Climate Migrants Face a Gap in International Law.' *Centre for international Governance Innovation*. <https://www.cigionline.org/articles/climate-migrants-face-gap-international-law>

¹⁸ Government of Bangladesh (2015) *National Strategy on the Management of Disaster and Climate-induced Internal Displacement*. https://www.preventionweb.net/files/46732_nsmdcidfinalversion21sept2015withc.pdf

¹⁹ Wilkinson, E., Kirbyshire, A., Mayhew, L., Batra P. and Milan, A. (2016) *Climate-related migration and displacement: closing the policy gap*. <https://www.odi.org/sites/odi.org.uk/files/resource-documents/10996.pdf>

may choose to migrate seasonally or before a crisis becomes more acute and are usually motivated by a combination of socio-economic and climatic reasons.²⁰ Vulnerability factors²¹ including gender, age, ethnicity, sexual orientation, disability and health status are also key to consider in these migration profiles, which may heighten exposure to protection and disaster-displacement-related risks.²² Households and individuals who have less access to power and resources, like female headed household or adolescents²³ are at heightened risk of exposure to violence, exploitation, abuse, gender-based violence, human trafficking, exclusion and discrimination amidst intersecting hazards, weak institutions and conflict.²⁴

Considering the complex dynamics between climate change and other underlying causes of environmental, political, economic and social instability, determining the extent to which climate-related mobility is voluntary or forced, or the influence of these factors on a decision to migrate, is not so easily clear-cut.²⁵ Repeated shocks and stresses exacerbate pre-existing vulnerabilities, power relations, and inequalities as well as the overall impact of disasters and public health crises on communities. A more useful conceptual framing is to understand migration and displacement as two opposite poles on a continuum.²⁶ In between these two poles is where most people will find themselves, where choice and coercion co-mingle given the evolving context of their circumstances and specific vulnerabilities.²⁷

COMPOUNDING RISKS OF CLIMATE CHANGE, DISASTERS AND DISPLACEMENT

Given this complexity, a nuanced understanding is required of the way climate change impacts interact with other social, economic, political and environmental factors.²⁸ Whether in the urban peripheries of those internally displaced in Dhaka, or the Rohingya refugee camps, exposure to shocks and stresses, and broader public health risks are widespread and related to high-density living conditions often in inadequate shelters with poor access to water, sanitation and hygiene, food insecurity, barriers to accessing essential health and social services. Lack of access to sufficient energy sources including cooking fuel, livelihood opportunities and human insecurity, heightens risks.²⁹ The risk of displacement increases as these conditions intensify due to climate change and as communities experience repeated shocks and stresses, including COVID-19. People's resources, their networks and skills to cope in the short-term, and their capacities to adapt in the long-term, become further eroded.³⁰

²⁰ Bernzen, A., Jenkins, J.C., and Braun, B. (2019) 'Climate Change-Induced Migration in Coastal Bangladesh? A Critical Assessment of Migration Drivers in Rural Households under Economic and Environmental Stress.' *Geosciences*. (9) 51.

²¹ Needs Assessment Working Group Bangladesh (2020) *COVID-19: Bangladesh Multi-Sectoral Anticipatory Impact and Needs Analysis*. https://reliefweb.int/sites/reliefweb.int/files/resources/COVID_NAWG%20Anticipatory%20Impacts%20and%20Needs%20Analysis.pdf

²² Peters K. and Lovell, E. (2020) *Reducing the risk of protracted and multiple disaster displacements in Asia-Pacific*. <file:///Users/megansmith/Downloads/202005%20DRR%20and%20displacement%20report.pdf>

²³ World Food Programme (WFP) (2020) *Refugee influx emergency vulnerability assessment, Cox's Bazar, Bangladesh*. 10. <https://docs.wfp.org/api/documents/WFP-0000115837/download/>

²⁴ Chowdhury, M.A., Khalid Hasan, M. Hasan, M.R. and Bintay Younos, T. (2020) 'Climate change impacts and adaptations on health of Internally Displaced People (IDP): An exploratory study on coastal areas of Bangladesh.' *Heliyon* (6) 9. e05282.

²⁵ Laczo, F. and Aghazarm, C. (2009) *Migration, Environment and Climate Change: Assessing the Evidence*. <https://environmentalmigration.iom.int/migration-environment-and-climate-change-assessing-evidence>

²⁶ IOM (2009) *Compendium of IOM's Activities in Migration, Climate Change and the Environment*. https://www.iom.int/jahia/webdav/shared/shared/mainsite/activities/env_degradation/compendium_climate_change.pdf

²⁷ Opitz Stapleton, S., Nadin, R., Watson, C. and Kellett, J. (2017) *Climate Change, Migration and Displacement: The need for a risk-informed and coherent approach*. <https://www.odi.org/sites/odi.org.uk/files/resource-documents/11874.pdf>

²⁸ Boano, C., Zetter, R. and Morris, T. (2008) *Environmentally displaced people Understanding the linkages between environmental change, livelihoods and forced migration*. <https://www.rsc.ox.ac.uk/files/files-1/pb1-environmentally-displaced-people-2008.pdf>

²⁹ Behnke, N.L., Cronk, R., Shackelford, B., Cooper, B., Tu, R. Heller, L., and Bartram, J. (2020) 'Environmental health conditions in protracted displacement: A systematic scoping review.' *Science of The Total Environment*. 726.

³⁰ Henly-Shepard, S. (2018) *Planting Seeds of Resilience in Humanitarian Settings: Rapid Strategic Resilience Assessment Report for the Rohingya Crisis, Cox's Bazar, Bangladesh*. https://www.mercycorps.org/sites/default/files/2019-12/Mercy_Corps-IOM_Rapid_Strategic_Resilience_Assessment_Report.pdf



Figure 3: Women work to rebuild an embankment in one of the regions hit by Cyclone Aila in Khulna. Abir Abdullah / IOM. 2010.

Cyclone Amphan (2020) was the largest storm to hit the Bay of Bengal, affecting 10 million people from 19 districts of Bangladesh and coinciding with COVID-19 which further compounded challenges in early recovery.³¹ COVID-19 also proved to complicate pre-emptive evacuations with cyclone shelters reduced to 40 per cent due to physical distancing measures.³² With an estimated 2.5 million people displaced, the socio-economic impacts were devastating for Bangladeshi communities, with needs assessments indicating the majority of families had serious food security issues, with almost a quarter of those surveyed having lost livestock or experienced contaminated drinking water.³³ It is unclear how many people have been permanently displaced from the cyclone, but there are at least up to half a million families who lost their homes, with many still residing in collective settlements in dangerous flood-prone embankments exposed to other hazards, putting them at high risk of secondary displacement and protection risks.³⁴

COVID-19 has impacted the socio-economic situation for all communities affected by cyclone Amphan (2020), especially in Cox's Bazar.³⁵ The sheer scale and speed of the 2017 influx of Rohingya refugees already had a profound impact on host communities with numerous economic, social, political, environmental, and security factors including environmental degradation, overstretched resources, and additional pressure on already weak public infrastructure, as well as inter-communal tensions and

³¹ United Nations Bangladesh (2020) *Humanitarian Coordination Task Team (HCTT) Response Plan: Cyclone Amphan*. https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/31.05.2020_final_hctt_cyclone_amphan_response_plan.pdf

³² *ibid.*

³³ IDMC (2020) *Internal Displacement Mid-Year Update*. <https://www.internal-displacement.org/sites/default/files/publications/documents/2020%20Mid-year%20update.pdf>

³⁴ *ibid.*

³⁵ Guglielmi, S., Seager, J., Mitu, K., Baird, S., and Jones, N. (2020) *People won't die due to the disease; they will die due to hunger': Exploring the impacts of covid-19 on Rohingya and Bangladeshi adolescents in Cox's Bazar*. <https://www.gage.odi.org/wp-content/uploads/2020/08/Exploring-the-impacts-of-covid-19-on-Rohingya-and-Bangladeshi-adolescents-in-Cox%E2%80%99s-Bazar.pdf>

conflict.³⁶ Rohingya refugees outnumber surrounding host communities by a ratio of two to one in some areas³⁷ with Ukhiya and Teknaf sub-districts particularly affected in food security, economic vulnerability, over-stretched resources, market access, labour opportunities, infrastructure, public services and the environment.³⁸ Comparing the labour market before and after the influx, a survey found that the prices for goods such as vegetables, fish, and meat, have risen and the availability of resources such as water and firewood decreased, due to cultivatable land being used for camps and poor camp environmental management, such as improper drainage of latrines or destruction of hillside forests, making local communities' farmland unusable or more susceptible to natural hazards like soil erosion, landslides and flooding. The environmental impacts of the influx have been dramatic, as more than two thousand hectares of forest and crop land have been depleted to establish the camps with secondary impacts to consider including increased exposure to storms, poor water quality in rivers, energy and livelihood insecurity³⁹

In a situation of hosting high numbers of IDPs, refugees, stateless, economic migrants, minority groups and vulnerable host communities at heightened risk of displacement and contending with a variety of shocks and stresses including natural disasters and public health issues, Bangladesh could face difficult decisions around the allocation of scarce resources, how to deal with those displaced within their borders in what is becoming a deteriorating protection environment. Given this complexity and protracted picture of displacement, it is clear that Bangladesh needs more medium to long term adaptation strategies to better manage those already displaced and those at heightened risk of displacement. Gaps in government and humanitarian aid remaining, crucial will be those at the frontlines of these climate, disaster and displacement impacts, to be empowered and supported with funding, training, and support to be able to engage in localised and bottom-up approaches to DRR, livelihoods and resilience-building.

DISASTER RISK REDUCTION AND COMMUNITY-BASED APPROACHES

There are many promising practices in community-based approaches to Disaster Risk Reduction (DRR) in Bangladesh.⁴⁰ Such strategies of community resilience can ensure that those displaced are more resilient to impacts from climate change and disasters whilst also considering the different stages of their displacement.⁴¹ It is essential to adopt a more holistic and community-driven approach, one that is inclusive of all affected communities, to better identify existing strategies of community resilience and better foster the capacities, reduce the risks and respond to the needs of IDPs, refugees, returnees as well as of other migrants and affected populations.

The vast majority of the 4 million disaster-related displacements reported in Bangladesh in 2019 were in the form of government-led pre-emptive evacuations prior to the landfall of Cyclones Fani and Bulbul, the largest number of planned evacuations ever recorded in a single year.⁴² In May 2020, 2.5 million people were evacuated prior to the fall of Cyclone Amphan, which had been further complicated by COVID-19 and

³⁶ UNDP (2018) *Impacts of the Rohingya Refugee Influx on Host Communities*.

<https://www.humanitarianresponse.info/en/operations/bangladesh/assessment/impacts-rohingya-refugee-influx-host-communities>

³⁷ Xchange (2018) *The Rohingya Amongst Us. Bangladeshi Perspectives on the Rohingya Crisis Survey*.

<https://reliefweb.int/sites/reliefweb.int/files/resources/The%20Rohingya%20Amongst%20Us%20Bangladeshi%20Perspective%20on%20the%20Rohingya%20Crisis%20Survey%20-%20Xchange.pdf>

³⁸ Inter Sector Coordination Group (ISCG) (2018) *Support to Bangladesh Host Communities and Institutions in the Joint Response Plan for the Rohingya Humanitarian Crisis*.

https://reliefweb.int/sites/reliefweb.int/files/resources/20180526_host_communities.pdf

³⁹ Oxfam (2017) *Uprooted by Climate Change: Responding to the growing risk of displacement*. https://www-cdn.oxfam.org/s3fs-public/file_attachments/bp-uprooted-climate-change-displacement-021117-en.pdf

⁴⁰ Azad MAK, Uddin MS, Zaman S, Ashraf MA. (2019) 'Community-based Disaster Management and Its Salient Features: A Policy Approach to People-centred Risk Reduction in Bangladesh.' *Asia-Pacific Journal of Rural Development*. 29 (2). 135-160. doi:10.1177/1018529119898036

⁴¹ IOM (2016) *Assessing the Climate Change Environmental Degradation and Migration Nexus in South Asia*.

https://publications.iom.int/system/files/pdf/environmental_degradation_nexus_in_south_asia.pdf

⁴² IDMC (2020) *Global Report on Internal Displacement*. <https://www.internal-displacement.org/sites/default/files/publications/documents/2020-IDMC-GRID.pdf>.

included a 40 per cent reduction in cyclone shelter capacity due to physical distancing measures.⁴³ Most impressively, community volunteers were at the vanguard of preparedness and response and Bangladesh managed to successfully extend key national DRR mechanisms to the Rohingya refugee population, such as their inclusion in the national Cyclone Preparedness Programme.⁴⁴



Figure 4: Kutapalong refugee camp during monsoon season. Muse Mohammed / IOM. 2017.

The Cyclone Preparedness Programme (CPP)⁴⁵, coordinated by the Government of Bangladesh and the Bangladesh Red Crescent Society has proven to be a promising model in reinforcing community resilience, which includes the participation of disaster-affected communities including Rohingya refugees. CPP volunteers are trained in multi-hazard preparedness and response as first responders, who play a key role in early warning systems through awareness raising and mobilizing communities to take early action.⁴⁶ They are trained to be improvisational in community planning, for example in the event of not having a megaphone, they have developed a contingency plan with the local mosque nearby for emergency announcements.⁴⁷ The CPP has ensured community-led responses and has proven to be a promising model in reinforcing community resilience. When Cyclone Amphan was forecasted, more than 70,000 CPP Bangladeshi and Rohingya volunteers were mobilised across coastal areas.⁴⁸ Just as they practiced, the

⁴³ IDMC (2020) *Internal Displacement 2020: Mid-Year Update*. <https://www.internal-displacement.org/sites/default/files/publications/documents/2020%20Mid-year%20update.pdf>

⁴⁴ IOM (2018) *Finding Safety Together: Rohingya Refugees, Local Villagers, IOM, Partners Join Forces with Bangladesh Authorities to Prevent Disaster*. <https://www.iom.int/news/finding-safety-together-rohingya-refugees-local-villagers-iom-partners-join-forces-bangladesh>

⁴⁵ Habib A., Shahidullah M. and Ahmed D. (2012) 'The Bangladesh Cyclone Preparedness Program. A Vital Component of the Nation's Multi-Hazard Early Warning System.' In: Golnaraghi M. (eds) *Institutional Partnerships in Multi-Hazard Early Warning Systems*. Springer. Berlin.

⁴⁶ IFRC (2019) *Stakeholder Workshop: Priority Areas for Disaster Risk Management*. https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/cyclone_and_monsoon_stakeholder_workshop_-_priorities_for_drm_in_coxs_bazar_2019.pdf

⁴⁷ Elli, J. (2020) 'Cyclone Amphan: In Bangladesh, preparedness paid off.' *American Red Cross*. <https://www.preventionweb.net/news/view/72083>

⁴⁸ *ibid*.

volunteers used megaphones and door-to-door visits to inform residents in low-lying areas about incoming danger and played a key role in supporting at-risk camps from landslides and flooding. Activities focused on communication, understanding flag signals and sectoral logos in the camps, to access services, information related to muster points for families or lost children, cyclone shelters.

Bangladesh has proven itself to be a global leader in DRR, facing significant losses and damages from climate change,⁴⁹ and investing in proactive policies and resourcing in development of successful early warning systems, planned evacuations, community awareness-raising, among other preparedness measures.⁵⁰ Such actions have significantly reduced the loss of life and livelihoods destroyed by natural disasters, particularly cyclone-related deaths. Much of Bangladesh's success lies in its localised disaster management structure shaped by a zero-causality policy for cyclone related deaths and its focus on community resilience. Whilst there are many promising examples of community-based approaches to DRR in Bangladesh that can be lauded, its key to highlight continued limitations.

Recent studies have highlighted significant discrepancies between official policies and the realities on the ground and an uneven implementation in these policies at the local level. Critiques range from not holding enough planning meetings, an absence of coordination forums with local communities, and it is unclear how local level Disaster Management Committees are monitored, nor if they are adequately resourced.⁵¹ Other studies have found there was no direct involvement of communities affected by climate change in national DRR planning and there were significant barriers to participation.⁵² However, there is a professed self-awareness among high-level decisionmakers in Bangladesh over the need to devolve activity to be more localised, and there are promising spaces for partnerships with a variety of existing grassroots networks, civil society organizations and NGOs, who also believe they have a larger role to play in community risk reduction and early recovery.⁵³

In Bangladesh, community participation is considered as one of the most effective elements to achieving sustainability in dealing with natural disaster risks.⁵⁴ Yet, concepts of community-based DRR remain primarily in the form of top-down frameworks, externally pre-defined, or at worst, technocratic. Meaningful participation is needed to strengthen existing strategies of resilience and to develop innovative solutions to dealing with disaster displacement. The devil is in the detail of how these community-based approaches are translated into practice and how communities define their own vulnerabilities and adaptive resilience capacities. Local communities are and will continue to be the first to respond in natural disasters and are self-determined actors. It is crucial to focus on how government and humanitarian actors can support them to more positively cope, adapt and respond effectively and safely to disasters and on their own perceptions of what early solutions look like.

⁴⁹ Bangladesh Housing, Land and Property Rights Initiative (2014) *Climate Displacement in Bangladesh: Stakeholders, Laws and Policies: Mapping the Existing Institutional Framework*.

https://unfccc.int/files/adaptation/groups_committees/loss_and_damage_executive_committee/application/pdf/mapping_study-climate_displacement_bangladesh.pdf

⁵⁰ Cook, A.D.B and Yen Ne, F. (2018) *Complex Humanitarian Emergencies and Disaster Management in Bangladesh: The 2017 Rohingya Exodus*. <https://assessments.hpc.tools/assessment/impacts-rohingya-refugee-influx-host-communities>

⁵¹ Cook, A.D.B and Yen Ne, F. (2018) *Complex Humanitarian Emergencies and Disaster Management in Bangladesh: The 2017 Rohingya Exodus*. <https://www.rsis.edu.sg/wp-content/uploads/2018/07/NTS-Report11-Bangladesh-HADR.pdf>

⁵² Islam, R. and Walkerden, G. (2017) 'Social networks and challenges in government disaster policies: A case study from Bangladesh.' *International Journal of Disaster Risk Reduction*. 22. 325-334.

⁵³ *ibid*.

⁵⁴ Huq, S. (2016) *Community-Based Disaster Management Strategy in Bangladesh: Present Status, Future Prospects and Challenges*. <https://www.idpublications.org/wp-content/uploads/2016/03/Full-Paper-COMMUNITY-BASED-DISASTER-MANAGEMENT-STRATEGY-IN-BANGLADESH.pdf>

COMMUNITY-BASED RISK REDUCTION AND RESILIENCE IN PRACTICE

In an effort to promote a more grassroots approach to building resilience in humanitarian contexts through Community-Based DRR (CBDRR), IOM and Mercy Corps conducted a participatory Rapid Strategic Humanitarian Resilience Assessment, which included a corresponding CBDRR toolkit, piloted in Rohingya refugee camps and mixed sites in Cox's Bazar Bangladesh.

This process focused on understanding, analysing and effectively reducing risks and strengthening existing capacities and adaptation strategies, in partnership with affected communities. This process included three key phases:

- Phase 1 (April to May 2018) consisting of piloting the CBDRR toolkit adapted for a humanitarian refugee camp context, by embedding this approach within the IOM Protection team activities.
- Phase 2 (November to December 2018) including a participatory evaluation and adaptation of the toolkit, and training of facilitators (including IOM Protection and Site Management team members, and civil society organisations)
- Phase 3 (January to April 2019) culminated with the formulation of recommendations to operationalize and scale-out the harmonized CBDRR toolkit across IOM humanitarian operations in Cox's Bazar.

Methodology

A final adapted CBDRR toolkit was piloted across IOM's Protection programming in ten sites across Teknaf and Ukhiya sub-districts in Southern Bangladesh, with Rohingya and Bangladeshi communities. A total of 123 FGDs with 1206 participants were conducted from Oct.-Dec. 2019.

Group	Age	# Participants	# FGDs conducted
Adolescent Female	10 - 19	247	26
Youth Female	20 - 34	172	18
Adult Female	35 - 50	207	21
Adolescent Male	10 - 19	120	12
Youth Male	20 - 34	180	18
Adult Male	35 - 50	280	28
Total		1206	123

The toolkit was subsequently integrated and rolled out as a core component of IOM's programming. It serves as a localised, embedded and comprehensive risk reduction and resilience-building approach to protection, in partnership with displacement-affected communities able to engage people directly and identify climate, disaster related risks. This pilot provided a more comprehensive understanding of community capacities, risks and needs, which better accounts for differential vulnerabilities across a range of social, environmental, physical, personal, economic and political shocks and stresses.

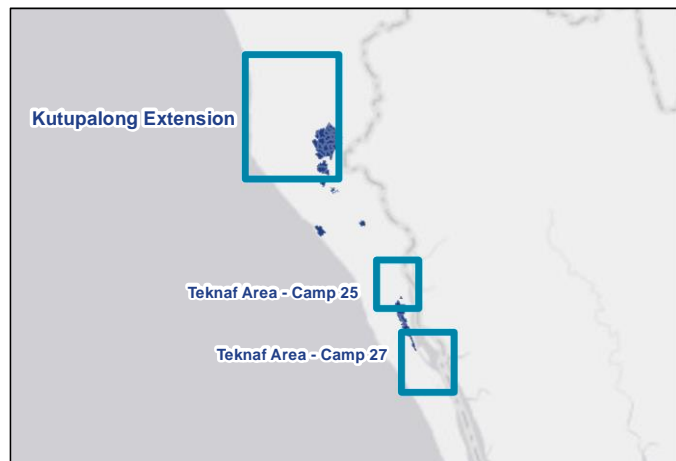
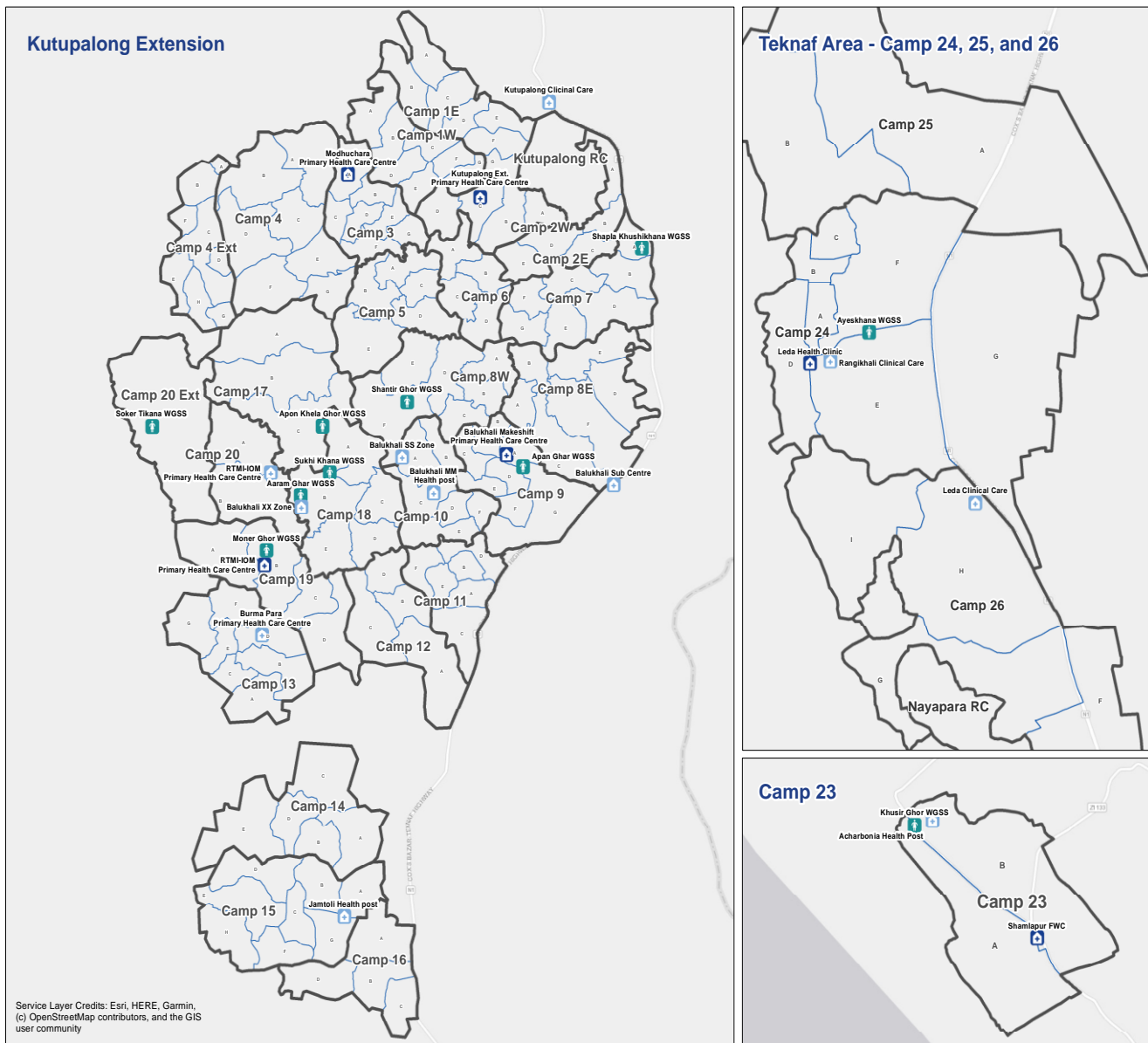


Figure 5: Maps of 10 sites across Rohingya refugee camps and mixed host community areas where the pilot implementation of the toolkit was conducted.

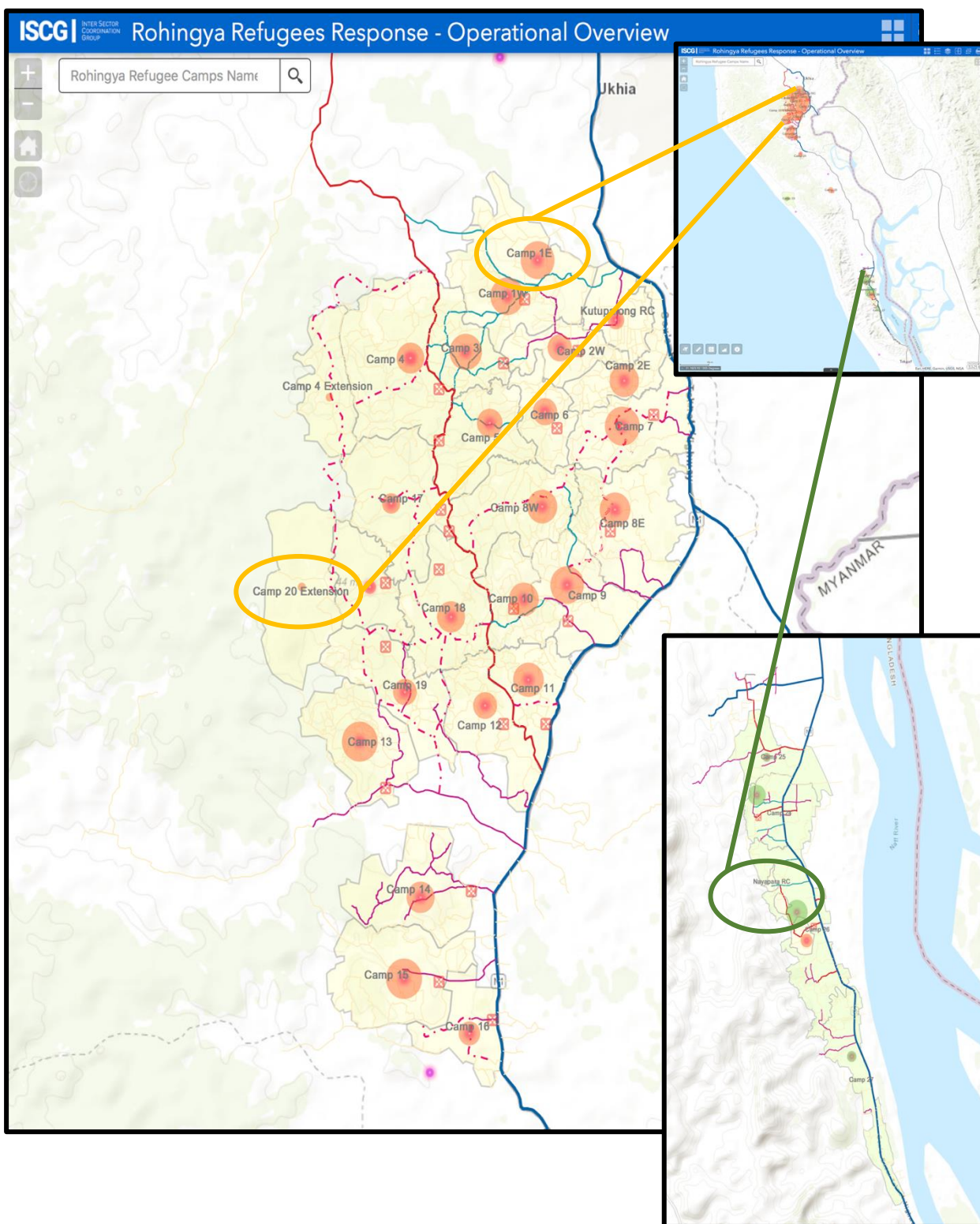


Figure 6: Assessment sites for Rapid STRESS Assessment 2018. Assessment Pilot Camps (Source: ISCG & IOM)

The CBDRR Toolkit was designed to support community-driven risk assessments to ensure a more comprehensive understanding of community needs and allows for a more systems-level analysis of risk, including natural hazard shocks and stresses and protection-related risks. Through participatory focus group discussion (FGD) workshops, communities define, and map risks and resources identified at household and block level⁵⁵ and build consensus on planning community actions to reduce risks and strengthen resilience capacities for prevention, preparedness, response and recovery. The key objectives of the workshops are to engage with all affected communities, and their supporting institutions, community mobilizers and government, in order to build a relationship of trust, and support motivation, participation and learning around integrated risk reduction mapping and planning and identify opportunities for local disaster risk reduction solutions. It is key to identifying localised actions that can have a catalyzing impact on reducing multiple risks. For example, communities have defined lighting and firewood as key risk factors related to their safety and security and have highlighted relationships to inter-communal conflict and resource competition, proposing their own solutions that address these multi-risk issues.

Results

Since the inception of the CBDRR toolkit, there have been several indications of promising successes and the involvement of communities in DRR, representing a strong improvement for building resilience. Training and capacity building was provided to Rohingya and Bangladeshi community members in a culturally tailored manner, and they were their communities' first responders as part of the Cyclone Preparedness Programme.⁵⁶ This was a crucial area of focus that had been identified in previous stakeholder workshops on priority areas for disaster risk management in Cox's Bazar. It was highlighted that though there had been efforts to raise awareness and information, DRR education and awareness was weak, and many people still did not understand early warning systems with significant information gaps for women, adolescents, children, elderly, people with disabilities or ethnically different groups.⁵⁷ In addition, there were information barriers for many at-risk households and radio broadcast coverage misses a significant part of the population and other gaps related to the institutionalization of processes for community DRR education and knowledge.⁵⁸ First responders who were illiterate or had language barriers were trained primarily through simulations, plays, songs and such strategies also helped to increase the participation of women and persons with disabilities.

Both Bangladeshi and Rohingya communities have taken a greater role in early warning and response and preparedness planning including pre-emptive evacuations, safe identification and referrals, developing tailored household plans and providing psychological first aid. Information provision and emergency messaging have increased related to household safety, distribution access points, and logistics and information related to safe emergency shelters in the event of a cyclone. Such outreach and participation have become more community-driven, and culturally tailored to be inclusive of Rohingya communities through often simple solutions such as developing simulation, visual or audio-based training resources.

In Leda, an area in close proximity to the Myanmar border, community resilience assessments were conducted with a mixed population of Rohingya refugees from the previous exodus, new arrivals from the 2017 influx, as well as Bangladeshi host communities, including IDPs and stateless individuals living in disaster-prone areas. The area itself, has numerous pre-existing protection risks and hazards such as drugs, kidnappings and human trafficking as well as natural disasters. In addition, there is often competition over

⁵⁵ The smallest administrative unit level (block, subblock, or union depending on the area).

⁵⁶ American Red Cross (2017) *Expanding early warning into refugee settlements of Cox's Bazar*.

<https://globalcompactrefugees.org/article/expanding-early-warning-refugee-settlements-coxs-bazar>

⁵⁷ IFRC (2019) *Stakeholder Workshop: Priority Areas for Disaster Risk Management*.

https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/cyclone_and_monsoon_stakeholder_workshop_-_priorities_for_drm_in_coxs_bazar_2019.pdf

⁵⁸ *ibid*.

common resources such as land, water, food, shelter, and firewood in the area often resulting in inter-communal conflict and violence and risks of gender-based violence.⁵⁹

This situation becomes worse during monsoon and cyclone season with many households unsure of where they will find fuel, water, and other basic resources. Through regular consultations, community action plans have been developed to improve preparedness around a number of weather-related hazards and also mitigate exposure to protection and GBV risks of affected populations. Such actions have included the expansion of community volunteers and porters, the development of evacuation plans for vulnerable or at-risk households in rapid-onset disasters, and a greater involvement of women in early warning, awareness-raising and household preparedness planning.

The participation of women as Safety Unit Volunteers catalysed the inclusion of people with disabilities in evacuation plans, who were previously invisible in in early warning and response mechanisms.⁶⁰ As one participant highlighted, *“Now we are more aware of risks and now we can discuss who’s house is stronger for evacuation sheltering during storms, (we) learned of risk areas and where more vulnerable people are; we learned and know better that they can work together as a group in time of disasters.”* Other women highlighted as well how empowering it felt to be asked for their experiences and their opinions to solutions.

Community risk and resilience mapping also served as a key forum to mitigate inter-community conflict and identify common solutions to shared challenges and promoting social cohesion. For example, Rohingya and Bangladeshi woman-headed households had identified common challenges related to safety of children with particular concerns over the open pits and ponds that flood during heavy rains. After one child had died after falling in an open pit, these women had advocated with local authorities and humanitarian actors to provide fencing around the most dangerous pits and open ponds in Leda. From this shared goal, and positive feedback from the community was a sense of a shared achievement and greater sense of social cohesion. Trained volunteers highlighted that certain protection categories were essential regardless if they were Rohingya or Bangladeshi, akin to the similar engagement on ensuring that persons with disabilities living in flood or landslide risk areas are accounted for in local DRR planning.

“Now we are more aware of risks and now we can discuss who’s house is stronger for evacuation sheltering during storms, (we) learned of risk areas and where more vulnerable people are; we learned and know better that they can work together as a group in time of disasters.”

⁵⁹ Inter-Agency Report (2018) *Protection Needs and Trends Assessment for Refugee and Host Communities in Teknaf Sub-district*. https://reliefweb.int/sites/reliefweb.int/files/resources/teknaf_protection_assessment_-_inter-agency_final.pdf

⁶⁰ Activities focused on developing individual household plans for emergencies, understanding flag signals and sectoral logos related to services, muster points for families and separated children, information related to cyclone preparedness and ensuring specialised assistance to persons with mobility issues via porters, the distribution of assistive devices, or support to caregivers.



Figure 7: Community risk mapping with mixed men's group in Shamlapur, Teknaf. Mithu Mirjahan / IOM. 2018.



Figure 8: Community risk mapping with Rohingya women's group in Camp 17 (Kutapalong), Ukhiya. Rushni Akter / IOM. 2019.

More recently, community risk mapping and action plans have focused on household preparedness as related to the COVID-19 crisis and monsoon season. Ensuring alternative childcare arrangements for example when a parent becomes sick and may have to be separated at an Isolation and Treatment Centre, was a key challenge in which resilience of community-based networks, neighbors and relatives played a key supportive role in the absence of other formalized support mechanisms. Keeping documents protected so if families were separated during a disaster or became sick was another way to mitigate protection and risks of further displacement.

Such efforts may seem like mere drops in the ocean against the scale of the complex and ever-evolving system of shocks and hazards yet are crucial processes that are practical to engage all at-risk communities, and most importantly, build a relationship of trust, support, motivation, and participation in DRR. What is key for continuity of impact is to focus on how such information is used and channeled into humanitarian INGO, local NGO and national government planning efforts. The capacities of communities in complex socio-ecological systems to learn, cope, adapt, and transform in the face of shocks and stresses should be better harnessed to feed into the design, development and implementation of national DRR and climate change adaptation plans and strategies.

CONCLUSION

Community-based DRR and resilience-building is key to navigate, cope with and adapt to the destabilizing impacts of COVID-19, the inter-related public health risks, natural disasters, impacts from climate change, and resulting displacement. National governments and humanitarian actors will need to put local communities in the driver's seat of DRR policy and practice. The inclusion and meaningful participation of affected persons in planning and response before, during and after displacement, can help to identify early solutions to identify early solutions and more long-term climate adaptation strategies. The CBDRR toolkit has generated numerous opportunities in local DRR solutions at a practical operational level in humanitarian response. Such approaches can equip Bangladesh to better plan for and facilitate voluntary internal migration as an adaptation strategy and plan safe relocations and measures for local integration for communities at risk within its borders. This will help to further reduce the risk of displacement associated with efforts to mitigate or respond to climate change and strengthen resilience of affected communities to all threats. Above all else, it demonstrates the value of ensuring a rights-based approach in practice, recognising that individuals, households and communities are agents of their own destinies.