



© Caroline Haga / IFRC

2022

Anticipatory Action in Refugee and IDP Camps: Challenges, Opportunities, and Considerations



Climate
Centre

By Evan Easton Calabria, Catalina Jaime and Benjamin Shenouda
with support from
Cathrine Tranberg and Achala Navaratne, Archieval Molos, Yasif Hasan



Table of contents

Introduction	3
Camp characteristics, origins, current context	5
Case Study: IDP Camps in Northwest Syria	5
<i>Disaster events and impacts in Syria</i>	5
<i>State of Anticipatory Action in Syria</i>	6
Case Study: Anticipatory Action in Refugee Camps in Bangladesh	8
<i>Humanitarian Response in Bangladesh</i>	9
<i>Disaster events and impacts in Cox's Bazar</i>	10
<i>State of Anticipatory Action in Cox's Bazar</i>	10
Considerations when designing Anticipatory Actions in refugee and IDP camps	12
Conclusion	14
References	15

Introduction

How do disasters affect people in situations of displacement, and in particular how might the humanitarian system better anticipate and respond to climate disasters impacting displaced people? In the last decade, the number of climate disasters and people displaced by conflict has risen globally, illustrating a pressing need to better understand how already displaced people are impacted by climate disasters.

Today, there are over 82.4 million forcibly displaced people worldwide, including at least 26.4 million refugees and 4.1 million asylum seekers (UNHCR 2022a). Although the drivers of displacement are increasingly intertwined, often including a combination of conflict, climate variability and climate change, poverty, and food insecurity (UNHCR 2021), in 2021 disaster related displacement continued to be the highest number with 23.7 million people, while conflict and violence triggered an increase of 50 per cent displacement compared to 2021 with a total of 14.4 million people (IDMC 2022). Of the global total of forcibly displaced people, nearly half of all internally displaced persons (IDPs) and 20% of the world's refugees live in camps.

Strikingly, although camps are generally considered to be short-term solutions, displaced people end up living in camps on average for many years, with some estimates being as high as between 10 and 26 years (Ferris 2018). Despite this knowledge, camps often lack long-term strategic planning and are instead better equipped to respond to urgent needs in emergency contexts. While perhaps useful at the beginning of displacement, this approach has been criticized for limiting displaced people's autonomy and capabilities and impeding their ability to establish independent lives through education, employment, and other opportunities (Smith 2004).

The short-term focus of humanitarian assistance in camps, including decisions made early in a response, can also lead to negative consequences later on, such as limited risk reduction and preparedness in the face of disasters. Important factors influencing the impacts of climate related disasters include where a refugee or IDP camp is located, how it is designed, including its accessibility and security during extreme weather events; the availability of resources in a given area where a camp is located, including the potential of tension or hostility with local inhabitants; their impacts on the environment around them; the durability of housing and infrastructure in camps, which are often constructed as temporary and are therefore not equipped to withstand extreme weather; and, very importantly, the different conditions of vulnerability that people affected by conflict living in a camp can experience, ranging from mental health challenges, trauma, the disruption of social networks, and separation of family members, all of which can limit displaced people's capacity to withstand the impacts of climate-related hazards. This paper acknowledges that the short term approach on camps planning and management is often not the result of a humanitarian interventions but it is the result of political circumstances that are sometimes outside of humanitarian influence.

Displacement and Anticipatory Action

Given these factors and the vulnerability of many displaced people, the compounding effects of climate and conflict, as well as responses to displacement, are important to explore in relation to humanitarian assistance in the framework of climate risks management. There is a particular gap in research on how Anticipatory Action, a newer form of humanitarian assistance that seeks to respond to disasters *before* they occur, could be implemented in refugee and IDP camps.

Anticipatory Action, commonly known as forecast-based financing within the Red Cross Red Crescent Movement, takes place in the often-short window of time between weather forecasting and a climate event. These short-term interventions can reduce vulnerability before a disaster, increase preparation for disaster response, and have positive long-term impacts (Coughlan de Perez *et al.* 2015). Today over 50 countries are developing Anticipatory Action systems, although very few focus on camp settings.

However, research shows that displaced people are more likely to be secondarily displaced by disasters than those who have never been displaced (UNHCR 2015). Often people displaced by conflict, settle in high risks areas, where disaster displacement is induced by hydro-meteorological hazards. This is attributed in part to the hazard-prone location of many refugee and IDP camps areas where displaced people settle, as well as more individual factors such as displaced people having limited assets and social networks. Indeed, the scale of secondary displacement is so high that the Internal Displacement Monitoring Centre (IDMC) has begun, for example, measuring 'displacements' to account for this (IDMC 2021b). The risk of secondary displacement as well as the supposedly temporary nature and corresponding impermanent infrastructure of many camps for displaced people highlight the value of further exploring the potential for Anticipatory Action for displaced people (Wagner, M and Jaime, C 2020).

Paper Overview

The following sections of this paper present two case studies of displacement which highlight particular challenges and opportunities for Anticipatory Action that are also relevant for other displacement contexts. The first case study explores camps for internally displaced Syrians near Aleppo and Idlib, specifically the Dana sub-district of camps, in the northwest region of Syria. The second case study focuses on Cox's Bazar in southeast Bangladesh, home to nearly a million Rohingya refugees who have fled Myanmar. An overview of historical disaster events and their impacts is provided followed by an exploration of Anticipatory Actions that could be developed in these contexts. The report concludes with key considerations and potential next steps in developing Anticipatory Action interventions in displacement contexts.

Camp characteristics, origins, current context

Case Study: IDP Camps in Northwest Syria

In Northwest Syria over 1.7 million displaced people live in temporary and informal settlements and IDP camps, with 83% of camp residents living in densely populated areas with insufficient infrastructure (Shelter Cluster 2021). Representative of many other sites in the region, inadequate shelter is a critical issue in Idlib. 88% of IDP shelter sites in the governorate are unplanned self-settled camps, with 60% of IDPs living in inadequate housing that is unable to withstand extreme weather, including 30% living in tents (ibid.).



© Bassel Al-Hafiz / SARC Homs

One IDP-hosting area in Northwest Syria is the Dana sub-district of Idlib governorate, which is home to the highest number of IDPs, including IDPs in camps, of any governorate in the country. Over 800,000 Syrian IDPs live across 575 camps within 26 clusters (OCHA 2021). This translates to approximately 145,000 households living in these camps, some of which have been occupied since the start of the conflict in 2011. Approximately 80% of these populations are women and children (UNICEF 2022), illustrating the importance of tailoring interventions to specific populations.

Expanded on below, the Dana sub-district has experienced repeated flooding events on several occasions since 2016 (REACH *et al.* 2021). Despite rainwater flooding posing an increasing and significant risk, three-quarters of IDP sites lack rainwater drainage infrastructure, leaving IDPs vulnerable to flooding (ibid.) In other months, however, these same sites lack fresh drinking water due to drought, illustrating the importance of addressing climate shocks in camps.

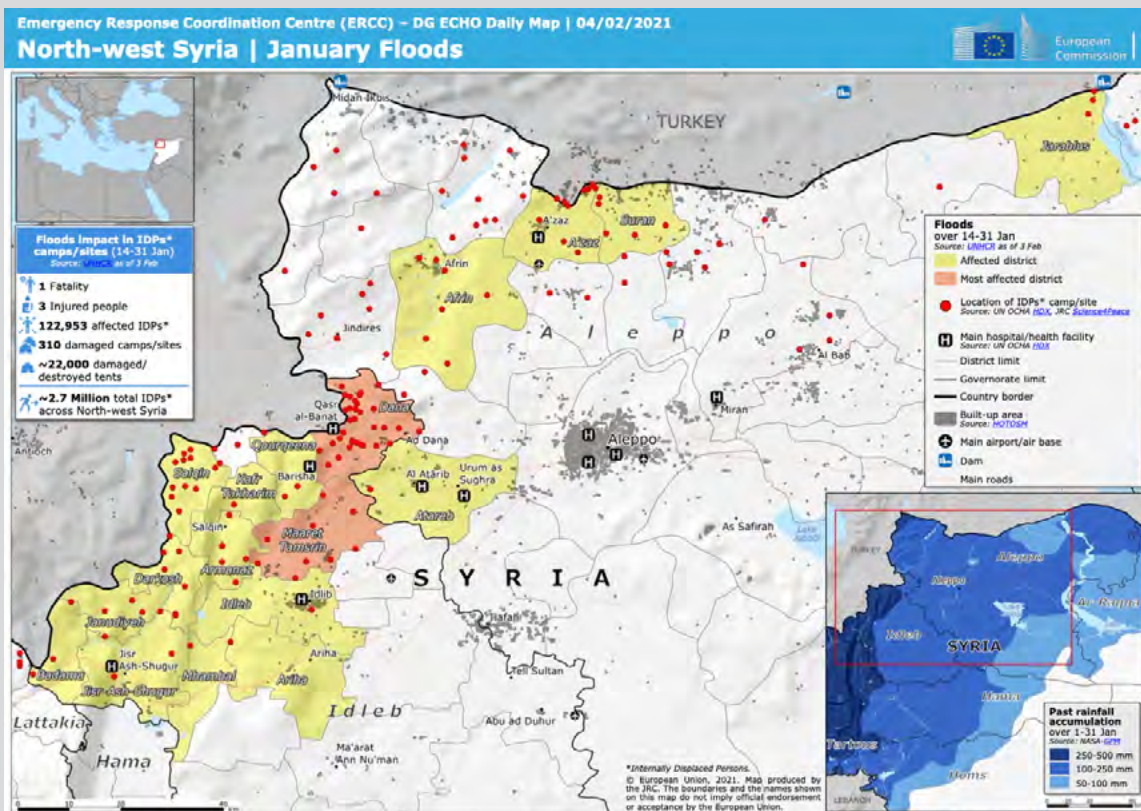
Disaster events and impacts in Syria

Between January 14 and 31 2021, heavy rains caused widespread flooding in northwestern Syria in the Dana subdistrict of Idlib. Over 122,000 IDPs across more than 300 camps in the area were affected. More than 8,400 shelters were destroyed, with another 13,800 sustaining some level of damage (REACH *et al.* 2021a). Thousands of households were forced to seek shelter in schools, mosques, and open spaces. Nearly

120 schools were damaged in the floods. One child was killed from a shelter collapse and three others were injured (Southern Turkey Education Cluster 2021). Below is a map showing the affected areas and IDP camp sites from January 2021.

The map shows that while there was widespread flooding across Idlib and Aleppo governorates, the most affected districts were Dana and Maaret Tamsrin. This was not the first event of its kind in the region. Flooding in the area has been a recurring problem with similar events taking place in November 2016, December 2018, March 2019, and in June 2020. Critical disaster impacts in camps included the destruction of tents, and damage of personal assets and food. These impacts represented a critical humanitarian situation, as people’s capacities to withstand the winter conditions were severely debilitated. This is a recurrent challenge in camps with similar conditions across the region.


These flood events affect people living both in and outside of IDP camps in northwest Syria. However, those living in camps are at greater risk, and have generally suffered more severe impacts for several reasons. First, IDPs frequently live on land that is closer to or within areas that are prone to flooding. Secondly, overcrowded conditions limit movement from flooded areas and inadequate shelters like tents are not made to withstand extreme weather. Poor sanitation infrastructure can lead to health problems after such an event has taken place as many WASH needs remain unmet for IDPs (Rohwerder 2017). This was the case in January 2021, when the Dana sub-district saw a higher incidence of water-borne diseases compared to the months before and after. IDP camps in other regions of the world, such as the Bentiu IDP camp in South Sudan, face similar incidences of water-borne diseases due to a combination of intense flooding and inadequate WASH (MSF 2021).



Source: ECHO 2021

State of Anticipatory Action in Syria

In Northwest Syria, recurrent winter storms have damaged infrastructure and shelters for several consecutive years. Idlib and Aleppo are the hardest hit governorates, with the Dana sub-district and surroundings suffering the most severe impacts. As of yet, there are no country-wide Anticipatory Action protocols in place, and no such program



targeted to IDP populations in the region of Northwest Syria. Given the high density of IDPs living in the Dana sub-district and its surroundings, Anticipatory Action measures could have the potential to greatly reduce the impact of recurring storms and flooding in the area. For example, Anticipatory Action could mean that people receive timely warning information to take action to protect their personal belongings and assets. An Impact based forecast could enable the Camp Coordination and Camp Management (CCCM) cluster members to preposition crucial early action and relief material in advance of a hazard and thereby making sure that key items are available directly after it occurs. In some contexts the provision of anticipatory cash-based transfers also mean IDPs would have the ability to stock up on food or water, or fortify their shelters as they best saw fit.

From the weather forecasting perspective, a recent study shows the evidence that the 2019 flood event induced by heavy rainfall was predicted with a 70% probability with a lead-time of 3 days and 50% with a lead-time of 7 days (Jaime *et al. forthcoming*). This positive ability to forecast such extreme weather events well raises questions of how humanitarian agencies and communities might have been able to use this information to reduce the impacts of nearly 235,000 people – or could make use of them in the future.

The REACH Initiative has also led the way in collecting and analyzing data related to the recurring flooding events in Northwest Syria as well as their impacts on IDPs and infrastructure. Along with UNITAR, they have conducted analyses on flood risk in the Northwest region of Syria with in-depth flood risk assessments on the Dana sub-district using hydrological modeling and satellite imagery (REACH et al 2021a, 2021b). They found that 85% of the locations surveyed identified access to adequate shelter as a top priority, in part due to climate hazards. 5,724 IDP shelters in North Dana, 1,644 IDP shelters in West Dana, and 4,957 IDP shelters in South Dana are exposed to flash flooding, illustrating the high level of need for early warning systems and climate-smart, durable shelter in the region. The death that was reported during the 2021 flooding, for example, occurred due to a shelter collapse.

Information such as that collected by REACH is extremely useful in determining what kinds of Anticipatory Actions may be feasible as well as identifying longer-term disaster risk reduction (DRR) measures in particular areas. Given that the flood extent and shelters at risk are known, risk reduction measures could be taken, for example, by permanently relocating shelters away from the main flooding areas. In the medium term, further research on infrastructure and topography could also be useful, such as identifying areas of camps in need of better drainage systems to avoid deep water flows through the camps.

Just as longer-term DRR must be implemented, short term Anticipatory Actions could play a crucial role in minimizing climate disaster impacts. With the proper advance information, actions could include a cash-based intervention along with temporary relocation to shelters, bringing food and assets to higher grounds, protecting camp surroundings with temporary gabion or sandbags walls, identifying and bringing highly vulnerable people to suitable accommodation, protecting water sources from flood water through water drums, and so on. One of the enabling factors for these types of actions is the existing presence of humanitarian actors in camps, who with proper funding and resources can conduct readiness and early action planning and then interventions themselves in advance of an extreme weather event or in areas known to be hazard-prone. Implementing Anticipatory Action is particularly important in contexts where camp inhabitants are unable to leave camps before an extreme weather event due to factors such as lack of transport, funds, or legal regulations. In the Syria context there are some positive prospects for enhancing Anticipatory Action due to initiatives of the World Meteorological Organization, OCHA and the UK Met office and the new community of practice on Anticipatory Action of WFP and IFRC.

Case Study: Anticipatory Action in Refugee Camps in Bangladesh

Today, three quarters of the Rohingya population live outside of their native Myanmar, with 90% of those displaced by the armed conflict living in Bangladesh. The Government of Bangladesh has focused on disaster management in its five-year development plans, but in its most recent plan included very little on refugees beyond expressing its desire for their repatriation (Development Initiatives 2022).

Refugee responses in Bangladesh are challenging, as refugees have few rights and very limited freedom of movement, which add to refugees' existing vulnerabilities from having fled conflict and systematic violence in Myanmar. While there is no policy that explicitly prohibits refugees from working, they do not have access to labor markets nor wage earning employment except for engagement in cash-for-work and refugee volunteer programming linked with the humanitarian service delivery. 95% of all Rohingya households are moderately to highly vulnerable and remain entirely dependent on humanitarian assistance (WFP 2022). The poor condition of shelters and conditions in the camps is in fact the result of policy restrictions on construction materials and not due to the level of humanitarian investment.



© Tanvir Murad Topu /
World Bank

Like many other refugee populations, Rohingya refugees in Bangladesh also have high levels of trauma, with one study finding 61% had symptoms indicative of Post-Traumatic Stress Disorder (PTSD) and 84% with symptoms of anxiety and depression (Riley *et al.* 2020). The severe damage to the lives and wellbeing of refugees from this context of violence and persecution, including mental and physical health challenges (Riley *et al.* 2017, Joarder *et al.* 2020) increases refugees' susceptibility to being severely impacted mentally by climate-related hazards (Cianconi *et al.* 2020).

At the same time, persecuted and conflict-affected populations like the Rohingya may fare worse in climate disasters even if early warnings or anticipation actions are available due to past traumatic experiences. Research shows that people who have experienced trauma due to conflict or other crises may experience traumatic flashbacks (Shephard & Wild 2014), mistrust authority figures (Levenson 2017), have anxiety or panic attacks that can hinder cognition as well as movement (Hinton et al 2005), and experience depression that can impair decision-making (Roberts et al 2009). Given this, some refugees' ability to trust information provided by governments or other sources of authority might be reduced, for example, or Anticipatory Actions meant to assist may in fact exacerbate feelings of loss of control or retrigger trauma, such as evacuation to a new site. One humanitarian who had worked in Cox's Bazar shared, for example, that a main reason refugees were resistant to evacuation in advance of cyclones was a fear of family separation based on experiences from Myanmar (Interview, July 2022). Taking these possible reactions and experiences into account is important for the development of Anticipatory Action for any trauma-affected population.

Humanitarian Response in Bangladesh

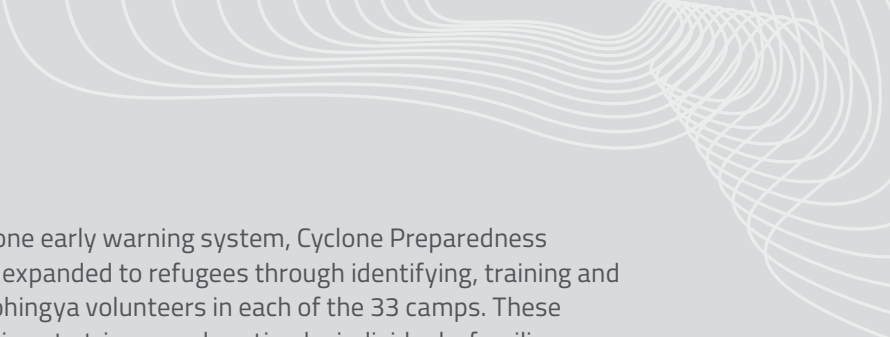
The Rohingya humanitarian response in Bangladesh is significant, with a range of international humanitarian and development agencies including national organisations, the International Organisation for Migration, the UN Refugee Agency, the Red Cross and Red Crescent Movement, and a variety of implementing and operational partners. The 2022 Joint Response Plan seeks over 881 million USD for 136 partners, including 74 Bangladeshi organisations (OCHA 2022). The type of assistance varies from the provision of shelter and food to the development and setting up of cyclone early warning systems throughout the camp settlement (expanded on below).

On a country level, Bangladesh has been recognized as a worldwide leader in EWEA while also being one of the most vulnerable countries to disasters in the world according to the INFORM index (DRKMC 2022). It has significantly reduced its number of fatalities from rapid and slow-onset disasters since the 1970s, achieved in part through development and social welfare investments (Sammonds *et al.* 2021). Multiple Anticipatory Action interventions have been taken in Bangladesh by actors such as the UN Central Emergency Response Fund (CERF), Red Cross Red Crescent, and World Food Programme in response to a variety of hazards including flooding, heatwaves, and cyclones (Anticipation Hub 2022).

Few specific projects focus on Anticipatory Action for refugees in particular in Bangladesh. However, opportunities for meaningful Anticipatory Action to take place have been created through existing humanitarian infrastructure, including:

- A broad early warning system connected to the national system
- A pool of over 3,300+ Rohingya CPP/Disaster Management Unit (DMU) volunteers, actors ranging from Red Cross and Red Crescent, UN bodies, and local government agencies engaged in disaster risk reduction efforts, and
- The existence of a robust coordination system through the Inter-Sectoral Coordination Group (ISCG).

Using the available coordination systems and structures, the Bangladesh Red Crescent Society (BDRCS) and International Federation of Red Cross and Red Crescent Societies (IFRC) have actively engaged in sharing national Anticipatory Action trigger information with ISCG to trigger sector-specific and camp-focused Anticipatory Action across the 33 camps managed by Government of Bangladesh through the office of Refugee Repatriation Commissioner (RRRC) Office and humanitarian agencies responsible for camp management.



The Bangladesh national cyclone early warning system, Cyclone Preparedness Program (CPP), has also been expanded to refugees through identifying, training and equipping at least 100 CPP Rohingya volunteers in each of the 33 camps. These volunteers provide early warnings to trigger early action by individuals, families, community, and organizations. Early actions are adapted to the limitations of the camp context, where major evacuations or the mass movement of people is impossible and could pose further risks.

Disaster events and impacts in Cox's Bazar

Cox's Bazar is home to the largest refugee settlement in the world, with 900,000 Rohingya refugees living in an area of 26km². As of January 2022, over half (52.5%) of Rohingya in Bangladesh were under the age of 18, with almost 40% 11 years old or younger (UNHCR 2022b). Most of the refugees arrived with a massive influx occurring in 2017, but nearly 250,000 Rohingya were already settled in Cox's Bazar before then. The largest settlement in Cox's Bazar is the Kutupalong Balukhali expansion site, home to over 620,000 Rohingya refugees. The area has also experienced repeated flooding and storm events since 2017.

Refugee camps in Cox's Bazar have experienced recurring natural disasters since large numbers of Rohingya refugees arrived in 2017. In 2021, over 11,000 shelters were damaged or destroyed due to flooding, displacing 24,000 residents in the camps. A joint IOM and Reach assessment carried out in September 2021 found that a large percentage of shelters did not meet the minimum standards when assessed against criteria such as adequate drainage, sufficient bracing and spacing of bamboo rafters and columns, and integrity of roof fixtures. When considering future Anticipatory Actions for Cox's Bazar, shelter considerations, as in many other refugee camps, should be a top priority.

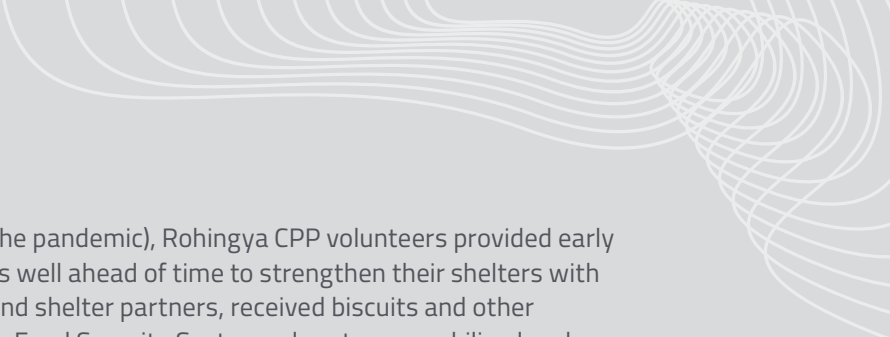
Every year since then, monsoon season has affected thousands of residents living in the Cox's Bazar settlements. In the 2021 season, 30 of the 34 camps in Cox's Bazar were affected by flooding, with food, shelter, and belongings washed away, and people killed, some by landslides (Islam 2021). Like many refugee camps around the world, these camps were created in challenging physical environments that increase their susceptibility to climate disasters. The camps are built on hilly terrain, which increase the frequency of landslides sparked by flooding.

State of Anticipatory Action in Cox's Bazar

Anticipatory Action in camps in Cox's Bazar can be understood a system that utilises existing Anticipatory Actions based on sectors, and aligned to overall disaster risk management plans.

This was a conscious decision made after enhanced weather forecasting systems were made widely available, which helped Anticipatory Actions to become owned by all sectors, agencies and partners, so as to avoid a project-based, siloed approach. In this way it represents an important example of streamlining the process and system of Anticipatory Action across actors and sectors.

In Cox's Bazar, in addition to the Cyclone Early Warning and Early Action System, which has been in place in the camp settlements since 2018, a pre-alert phase has been added in the overall cyclone response strategies. This is activated based on the cyclone synoptic weather forecast analysis and monitoring update shared by BDRCS/IFRC to ISCG with the support of a wide range of humanitarian agencies and climate experts. When the pre-alert is activated, ISCG along with its sectors and working groups including all humanitarian actors are informed and activate their own and overall preparedness, early action and response checklists. For example, during Cyclone



Amphan in 2020 (and during the pandemic), Rohingya CPP volunteers provided early warnings to their communities well ahead of time to strengthen their shelters with support from Shelter Sector and shelter partners, received biscuits and other emergency food supplies from Food Security Sector and partners, mobilized and pre-positioned health teams to safer field locations to be available in case of need, and prepared the emergency evacuation of COVID-19 patients from several locations in the camp to safer Isolation and Treatment Centers. While not all of the early actions were fully implemented as the cyclone path shifted, many of the Anticipatory Actions taken helped prepare the communities to face future severe weather conditions.

The vulnerability of refugee camps to disasters in Bangladesh was previously made evident in 2017 when Cyclone Mora passed through Chittagong and Cox's Bazar. An estimated 335,000 people in Cox's Bazar district, which experienced the heaviest impact, were affected and six camps in the district had significant destruction of shelters as well as facilities such as clinics and latrines (ISCG 2017). The severity of the impact led to not only emergency relief and the rebuilding and repair of damaged facilities but the expansion of the national coastal multi-hazard early warning and early action system, the Cyclone Preparedness Programme (CPP), in the camps. Some research on cyclone preparedness for Rohingya in Bangladesh highlights, however, low dissemination of messaging and a desire by Rohingya for more formal early warning information channels (AmRC *et al.* 2019).

Alongside work on early warning systems, other important measures relevant for Anticipatory Action were taken by humanitarians. This included the establishment of a Natural Hazards working group to ensure actors were basing responses on the same hazard and risk assessments, and the installation first of simple weather gauges with an automated SMS warning system and later a full weather station connected to the Bangladesh Meteorological Department (Interview, June 2022).

One of the challenges experienced by humanitarians in Cox's Bazar was the lack of forecast literacy and a lack of clarity around the best, most reliable forecasts to share and use (Interview, June 2022). Notably, to help address this, an integrated forecast dissemination portal known as 'INSTANT'² was developed specifically for Cox's Bazar by UNDP with financial support from humanitarian donors and technical support from the Regional Integrated Multi-Hazard Early Warning System (RIMES) in collaboration with the Bangladesh Meteorological Department. This portal offers 5-day weather forecasts, seasonal forecasts, a hazard calendar, and other tools to help inform humanitarian and development actors. In so doing, it provides a strong foundation for Anticipatory Action due to the availability of accurate, timely forecasts.

This effort on cyclone early warning system in camp settlements paved the way for humanitarian actors through the ISCG to adapt the existing early warning systems in Cox's Bazar such as the flood forecasting system through the Integrated Forecast Dissemination Portal (INSTANT) and Food and Agriculture Organization's (FAO) Landslide Early Warning System (LEWS) where thresholds based on the forecast data produced by both systems trigger the readiness and response actions from sectors and humanitarian actors in camps settlements, as reflected in ISCG's recently developed Multi-Hazard Response Plan for Rohingya Refugees.

2 The portal is available at: <https://instant.rimes.int>

Considerations when designing Anticipatory Actions in refugee and IDP camps

The case studies above present several key considerations when designing Anticipatory Action in refugee and IDP camps. These include:

- **Freedom of movement:** Many refugees and in cases IDPs face legal restrictions on their right to freedom of movement, meaning that they are often confined to camps or are not legally recognised as inhabitants in urban areas. When designing Anticipatory Action in refugee camps in particular, it is important to understand whether displaced people will be able to leave the camp if needed when selecting an appropriate action. If leaving a camp for higher ground during a flooding event, for example, is not possible, then more emphasis may need to be placed on flood-proofing existing infrastructure in advance, or carefully selecting the safest areas in a camp for evacuation shelters.
- **Characteristics of camp populations:** More than half of the world's refugees are women and children, and female single-headed households often make up a large percentage of refugee camp inhabitants. Understanding characteristics of camp populations is imperative to deciding how displaced people can best be helped. For example, children and elderly people are likely less able to travel long distances by foot to access assistance such as community cooling or cyclone shelters. Carefully selecting locations with these types of characteristics in mind is important for enabling as successful a response as possible.
- **Short-term infrastructure and long-term displacement:** As illustrated in the case studies above, decent shelter is a key concern in many camps, compounded by the long-term nature of many displacement situations. Due to a variety of factors including government restrictions and a lack of resources, many shelters and types of infrastructures in camps are ill-equipped for extreme weather events. This in turn has significant impacts on people's access to safe shelter, drinking water, and other rights. Given the prevalence of temporary infrastructure in camps, reinforcing shelter and infrastructure should likely be a core component of many camp-based Anticipatory Action responses.
- **Climate smart logistic to reach camps:** Many refugee and IDP camps are in remote parts of countries with roads that may be impassable during an extreme weather event. While some camps are so-called 'humanitarian hubs', Anticipatory Action interventions must be carefully designed with supply chain access in mind. This may mean storing supplies in nearby warehouses far in advance of a season where extreme events are likely, and relying as much as possible on local supply chains.

- **Making use of existing humanitarian responses and coordination systems:** In contrast to many other places, refugee and IDP camps often have significant amount of humanitarian resources and a large humanitarian presence. While it is clear that the needs of displaced people often out-match existing resources, it is important to consider how existing humanitarian responses could increase a climate lens to contribute to or follow Anticipatory Action interventions. This may mean adjusting the timing of existing humanitarian assistance distributions to occur at a key moment before an extreme weather event, or engaging in dialogue with humanitarian actors to ensure that interventions are not duplicated and can instead build on and strengthen each other. For this, it is essential that Anticipatory Action is not seen as a project-based initiative but streamlined into the existing humanitarian preparedness, EW, EA and response architecture in order to make better use of systems and leverage the collective responsibility of actors.
- **Engagement with national and local disaster management actors:** Anticipatory action and preparedness in camps illustrates the importance of breaking down humanitarian siloes as these interventions require engagement with disaster management actors at different scales. Existing early warning messages and systems in host communities could in instances be extended to refugee populations, such as Bangladesh's Cyclone Preparedness Programme, for example, or drawn on for learning. Aligning plans and investing in capacity building when necessary and appropriate with actors such as the members of the CCCM cluster, national hydrometeorological services and local or regional disaster management duty-bearers could both strengthen existing early warning early action systems as well as support these systems and Anticipatory Action within camps. Such engagement and investment therefore has the potential to improve refugee responses and camp conditions overall.
- **The importance of trauma-informed Anticipatory Action:** It is well-documented that people who have experienced trauma due to conflict or other crisis may have traumatic flashbacks as part of post-traumatic stress disorder (PTSD), mistrust authority figures, have anxiety or panic attacks that can hinder cognition as well as movement, and experience depression that can affect decision-making (Shepherd & Wild 2014, Szabo *et al.* 2017). Outcomes and symptoms of trauma such as these all have the potential to make refugees and IDPs less likely to heed early warnings, take early action, or otherwise engage in Anticipatory Action. Developing trauma-informed Anticipatory Action for conflict-affected populations is a critical next step in extending Anticipatory Action to encamped populations.

Finally, although this paper focuses on Anticipatory Action in the contexts of refugee and IDP camps, it is important to address more widely the needs of displaced and refugee populations outside of camps, who often find themselves living in very high risks areas exposed to climate related hazards.

Conclusion

Climate hazards and forced displacement, due to conflict and natural hazards, are both disturbing global trends that are set to continue. Given this, it is likely that the level of humanitarian need will only increase. It is crucial for the humanitarian system to better anticipate and respond to climate disasters impacting displaced people, including those living in camps. This necessitates not just considerations such as those outlined above but adequate financing and effective coordination among humanitarian, climate, development, peace and other actors. Identifying and bringing together actors with expertise on climate forecasting, Anticipatory Action, camp management, emergency shelter, conflict sensitivity, mental health and the specific needs of displaced populations – including displaced people themselves – are important next steps for developing appropriate Anticipatory Action interventions for refugees and IDPs living in camps.

References

- Anticipation Hub (2022) Early Action Database: Bangladesh. Available at: https://www.anticipation-hub.org/experience/early-action/early-action-database/ea-list?tx_braprojectfiles_earlyactions%5Bdemand%5D%5Bareas%5D%5B0%5D=25&cHash=74e9581733cd744559c1ec463480142e#c844
- AmRC (American Red Cross), Bangladesh Red Crescent Society, IFRC, and UNDP (2019) *Extreme Weather and Disaster Preparedness in the Rohingya Refugee Response – 2018 Cyclone Preparedness Lessons Learnt*. Available at: <https://reliefweb.int/report/bangladesh/extreme-weather-and-disaster-preparedness-rohingya-refugee-response-monsoon-season>
- Cianconi, P., Betrò, S., & Janiri, L. (2020). The impact of climate change on mental health: a systematic descriptive review. *Frontiers in psychiatry*, 74.
- Coughlan de Perez, E., van den Hurk, B. J. J. M., Van Aalst, M. K., Jongman, B., Klose, T., & Suarez, P. (2015). Forecast-based financing: an approach for catalyzing humanitarian action based on extreme weather and climate forecasts. *Natural Hazards and Earth System Sciences*, 15(4), 895-904.
- Development Initiatives (2022) *Supporting longer term development in crises at the nexus: Lessons from Bangladesh*. Available at: <https://devinit.org/resources/supporting-longer-term-development-crises-nexus-lessons-bangladesh/policy-and-strategy/>
- DRKMC. (2022) *INFORM Risk Index*. Available at: <https://drkmc.jrc.ec.europa.eu/inform-index/INFORM-Risk/Results-and-data/moduleId/1782/id/433/controller/Admin/action/Results>
- ECHO (2021) *ECHO Daily Map of 4 February 2021: North-west Syria, January Floods*. Available at: <https://erccportal.jrc.ec.europa.eu/ECHO-Products/Maps/Daily-maps#/maps/3631>
- Ferris, E. (2018) When refugee displacement drags on, is self-reliance the answer? Brookings Institute. *Order from Chaos Series*. Available at: <https://www.brookings.edu/blog/order-from-chaos/2018/06/19/when-refugee-displacement-drags-on-is-self-reliance-the-answer/>
- FTS (Financial Tracking Service) (2022) Bangladesh: 2021, filtered by Bangladesh Rohingya Refugee Crisis Joint Response Plan. Geneva: UN OCHA. Available at: <https://fts.unocha.org/countries/19/flows/2021?f%5B0%5D=destinationPlanIdName%3A1023%3ABangladesh%3A%20Rohingya%20Refugee%20Crisis%20Joint%20Response%20Plan%202021>
- IDMC [Internal Displacement Monitoring Centre] (2021b) GRID 2021: Internal displacement in a changing climate. IDMC, Norwegian Refugee Council. Available at: https://www.internal-displacement.org/sites/default/files/publications/documents/grid2021_idmc.pdf#page=7
- IDMC (2021a) Global Report on Internal Displacement 2021. IDMC/Norwegian Refugee Council. Available at: <https://www.internal-displacement.org/global-report/grid2021/>
- IDMC (2022) Global Report on Internal Displacement 2022. IDMC/Norwegian Refugee Council. Available at: <https://www.internal-displacement.org/global-report/grid2022/>
- Islam, A. (2021) Floods in Bangladesh: An unprecedented emergency where emergencies are the precedent. *Concern Worldwide*. Available at: <https://www.concernusa.org/story/2021-bangladesh-floods-coxs-bazar/>
- IUCN/UNHCR (2019) The Greening of Cox's Bazar – The Positive Impact of Liquefied Petroleum Gas (LPG) distribution among the Refugee and Host communities. *Press Release*, 19 December. Available at: <https://reliefweb.int/report/bangladesh/greening-cox-s-bazar-positive-impact-liquefied-petroleum-gas-lpg-distribution>
- MSF (2021) South Sudan: “Deplorable” situation in Bentiu camp behind jump in hepatitis E cases. Available at: <https://msf.org.uk/article/south-sudan-deplorable-situation-bentiu-camp-behind-jump-hepatitis-e-cases>
- Jaime, C., Coughlan de Perez, E., M., Van Aalst, Raju, E., Sheaffer, A. (2022) What was known: Weather forecast availability and communication in conflict-affected countries (*forthcoming*)

- Joarder, T., Sutradhar, I., Hasan, M. I., & Bulbul, M. M. I. (2020). *A record review on the health status of Rohingya refugees in Bangladesh*. *Cureus*, 12(8).
- OCHA (2021) Humanitarian Needs Overview. New York: OCHA. Available at: https://reliefweb.int/sites/reliefweb.int/files/resources/syria_2021_humanitarian_needs_overview.pdf
- REACH, CCCM Cluster, UNITAR, & UNOSAT (2021) Syria - West Dana sub-district | Idleb: IDP Camps and Informal Sites Flood Susceptibility and Flood Hazard Assessment. February 2021. Available at: https://reliefweb.int/sites/reliefweb.int/files/resources/REACH_SYR_Thematic_assessment_WestDana_Flood_simulation_report_SYR2008_February2021_compressed.pdf
- Riley, A., Varner, A., Ventevogel, P., Taimur Hasan, M. M., & Welton-Mitchell, C. (2017). Daily stressors, trauma exposure, and mental health among stateless Rohingya refugees in Bangladesh. *Transcultural psychiatry*, 54(3), 304-331.
- Sammonds, P.; Shamsudduha, M.; and Ahmed, B (2021) Climate change driven disaster risks in Bangladesh and its journey towards resilience. *Journal of the British Academy*, 9(s8), 55–77. Available at: <https://www.thebritishacademy.ac.uk/documents/3537/JBA-9s9-04-Sammonds-et-al.pdf>
- Shepherd, L., & Wild, J. (2014). Emotion regulation, physiological arousal and PTSD symptoms in trauma-exposed individuals. *Journal of behavior therapy and experimental psychiatry*, 45(3), 360-367.
- Smith, M. (2004). *Warehousing refugees*. *World refugee survey*, 38(1), 38-56.
- Southern Turkey Education Cluster. (2021) Nearly 120 schools damaged in northwest Syria by floods, thousands of children pushed out of education - Syrian Arab Republic. Available at: https://reliefweb.int/report/syrian-arab-republic/nearly-120-schools-damaged-northwest-syria-floods-thousands-children?utm_medium=social&utm_campaign=shared&utm_source=twitter.com
- Szabo, Y. Z., Warnecke, A. J., Newton, T. L., & Valentine, J. C. (2017). Rumination and posttraumatic stress symptoms in trauma-exposed adults: a systematic review and meta-analysis. *Anxiety, Stress, & Coping*, 30(4), 396-414.
- UNHCR (2015) UNHCR, The Environment and Climate Change. Geneva: UNHCR. Available at: <https://www.unhcr.org/540854f49.pdf>
- UNHCR (2021) Global Trends in Forced Displacement 2021. Geneva: UNHCR. Available at: <https://www.unhcr.org/flagship-reports/globaltrends/>
- UNHCR (2022a) Figures at a Glance. Webpage, available at: <https://www.unhcr.org/flagship-reports/globaltrends/>
- UNHCR (2022b) Operational Data portal: Refugee Response in Bangladesh. Available at: <https://data2.unhcr.org/en/situations/myanmar-refugees>
- Warner, M., and Jaime, C. (2020) An Agenda for Expanding Forecast-Based Action to Situations of Conflict. https://gpipi.net/media/Wagner_Jaime_2020_Forecast-Based-Action-in-Conflicts.pdf
- WFP (2022) Refugee Influx Emergency Vulnerability Assessment (REVA-5), June 2022. Available at: <https://reliefweb.int/report/bangladesh/refugee-influx-emergency-vulnerability-assessment-reva-5-coxs-bazar-bangladesh-summary-report-june-2022>
- Interview, July 2020. Red Cross Red Crescent Bangladesh Country Representative. Conducted by Dr Evan Easton-Calabria.
- Interview, July 2022. International Federation of the Red Cross Employee. Conducted by Dr Evan Easton-Calabria.

The findings and conclusions in this brief are those of the authors alone and do not necessarily reflect the views of the Red Cross Red Crescent Climate Centre, the IFRC or its National Societies.



Supported by Danish Red Cross and German Red Cross.

