CLIMATE-INDUCED HUMAN MOBILITY: HOW CAN ANTICIPATORY ACTION PLAY A ROLE IN ASIA AND THE PACIFIC?
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Abbreviations and acronyms

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<th>Acronym</th>
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<th>Description</th>
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<tbody>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
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<td>DRM</td>
<td>disaster risk management</td>
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<td>DTM</td>
<td>Displacement Tracking Matrix</td>
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<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>HDPN</td>
<td>Humanitarian-Development-Peace Nexus</td>
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<td>IDMC</td>
<td>Internal Displacement Monitoring Centre</td>
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<td>IDPs</td>
<td>internally displaced persons</td>
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<td>IOM</td>
<td>International Organization for Migration</td>
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<tr>
<td>OCHA</td>
<td>United Nations Office for the Coordination of Humanitarian Affairs</td>
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<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
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<td>WFP</td>
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Introduction

In Asia and the Pacific, human mobility, including both migration and displacement, due to disasters caused by natural hazards is at an all-time high and is set to rise significantly in the coming decades due to climate change. The region has consistently accounted for the largest share of global disaster displacement with record heights over the last few years.

Over the past 10 years, disasters have caused 225.3 million internal displacements in the region, representing around 78 percent of the global total (IDMC, 2022a). Disasters caused by hazards such as typhoons, floods, earthquakes and volcanic eruptions were the main drivers, resulting in 13.7 million new displacements in 2021 alone and constituting 58 percent of the global total for disaster displacement (IDMC, 2022b). This resulted in the highest level of disaster displacement the region has ever recorded, exceeding the decade-long average of 11.6 million (IDMC, 2022b).

These alarming numbers highlight a trend that is only growing and intensifying as the climate crisis deepens. It further showcases a gap where more needs to be done to protect and mitigate the impact of natural and human-induced hazards on these particularly vulnerable populations.

There is growing evidence that acting prior to the onset of a predictable shock is significantly more effective, faster and more dignified than traditional humanitarian response. This is what is known as anticipatory action. It links early warnings to pre-emptive actions designed to protect communities and their assets. However, while the approach has gained prominence and is becoming a staple in the disaster risk management (DRM) toolbox, its link to human mobility contexts remains relatively unexplored, despite the strong relationships between climate hazards, displacement and climate-induced migration. This paper, combining the efforts of the Food and Agriculture Organization of the United Nations (FAO) and the International Organization for Migration (IOM), aims to fill this gap and examine opportunities to integrate a human mobility lens within anticipatory action.

To meet the needs of displaced populations and the communities hosting them, it is critical that systems are put in place to understand and predict climate hazards and anticipate disaster-related displacement and its effects on populations at risk. Anticipatory action not only helps protect and mitigate the impact of hazards on displaced and host populations but also allows to set the basis for long-term planning, promoting self-reliance instead of dependence on humanitarian assistance. The current assumption of this paper harnesses the lessons learned so far on the approach and promotes that investing in anticipatory action before a climate-related shock or crisis is necessary to help displaced populations and host communities shield themselves and promote durable solutions to displacement. In particular, the complex relationship between climate change, conflict, migration and displacement demonstrates the importance of context- and gender-sensitive anticipatory action.

This paper offers anticipatory action actors an understanding of how to incorporate the human mobility lens, including both forced displacement and migration, into the anticipatory action approach. It will define anticipatory action and explore the possibilities of tailoring systems for human mobility contexts. It also explains how FAO and IOM will partner to build relevant knowledge, develop and launch innovative solutions in Asia and the Pacific.
What is anticipatory action?

Anticipatory action is driving change in the way partners and governments approach predictable crises. Thanks to technological advances, early warning information is now more accurate and readily available than ever before. However, with these advancements comes the responsibility to utilize them to their full potential.

Typically, the anticipatory action approach involves three building blocks:

1. Risk information, early warning and forecasts
2. Selection, design and delivery of anticipatory actions
3. Pre-arranged financing

Over time, different institutions have used a variety of terms to describe initiatives, mechanisms and systems that are largely consistent with the anticipatory action approach. These terms include “Forecast-based Financing”, “Forecast-based Action”, or “Early Warning Early Action” alongside anticipatory action. Despite differences in how these are defined and used across contexts, they share three characteristics: they are time-bound (implemented before the hazard); they have a protective intent; and they rely on pre-agreed and risk-informed triggers.¹

¹ As highlighted by the ASEAN Framework on Anticipatory Action in Disaster Management (2022). The Framework aims to ensure that early warnings are reliably translated into effective anticipatory action to reduce the negative impacts of disasters across the region. It provides guidance for defining anticipatory action for the region, articulates three-building blocks to guide national and regional anticipatory action efforts and lays out an action plan for ASEAN Member States through to 2025.
It is also important to understand how anticipatory action fits within the DRM system. The classic DRM cycle has four major components: prevention and mitigation, preparedness, emergency response, and recovery. Anticipatory action sits between preparedness and response, constituting a window of opportunity between an early warning (or another trigger for action) and the onset of disaster. It builds on preparedness efforts but remains distinct from them, as anticipatory action efforts are always undertaken for a specific and imminent threat. Efforts should consider the complementarity between the approach and emergency response, as anticipatory action is not meant as a standalone but can – and often should – be followed by an appropriate early response (ASEAN, 2022).

**Box 1 Example of anticipatory action in Viet Nam**

In late September 2022, alongside the Viet Nam Disaster and Dyke Management Authority (VDDMA), FAO activated its Typhoon Anticipatory Action Protocol (AA Protocol) ahead of Typhoon Noru for the central provinces of Quang Tri and Thua Thien Hue. The trigger for strong wind speed was met (90kph) and pre-arranged financing was quickly agreed to be released in collaboration with the European Commission.

With the activation confirmed 3 days before landfall, FAO worked in coordination with provincial and communal governments to implement a range of actions to protect at-risk households, their food security and livelihoods. This included the distribution of water-tight drums to safeguard critical personal and agricultural assets alongside the distribution of unconditional cash to help support immediate needs before the typhoon made landfall. A study conducted shortly after the impact highlighted such messages decreased the amount of food families borrowed, were able to cope better with the impact and had an increased sense of security and ability to resume everyday activities quickly.

**Figure 1 Key characteristics of anticipatory action**

The importance of integrating a displacement and migration lens into anticipatory action

Asia and the Pacific are on the frontlines of the climate crisis. Many vulnerable communities in the region are living in climate change ‘hotspots’ where they typically lack the capacity and resources to adapt to increasingly hostile environments. While it is difficult to estimate, approximately one-third of global displacement has been pinned to “sudden onset” weather events — with the main drivers being flooding, forest fires after droughts, and intensified storms (Podesta, 2019). While the remaining two-thirds of displacements are the result of other causes it is becoming obvious that climate change is contributing to so-called cumulative events such as desertification, crop failure, water stress, sea-level rise, conflict over natural resources and loss of biodiversity (Podesta, 2019). The increased frequency of disasters, combined with environmental degradation compounds increased economic pressure that undermine livelihoods. These factors constitute a ‘triple threat’ for increased migratory movements.

This deterioration in conditions will exacerbate many humanitarian crises, increase lost livelihoods, and may lead to increased levels of displacement. While some people are able to return home after a short time to recover and rebuild, others remain displaced for months or years, or never return home at all (European Commission, 2019).

In addition to exposing affected populations to higher levels of risk, climate-induced displacement and migration disrupt family, community and cultural life and erode the resilience of communities, which in turn leads to increased levels of vulnerability and poverty (European Commission, 2019). People displaced by disasters have not only immediate needs, but also lack access to adequate protection, basic social services and durable solutions. Consequently, there is an urgent need for new partnerships and innovative ways to support people who are most vulnerable to the increasing upheaval and damage inflicted by the climate crisis. When the scale and impact of the hazard exceeds communities’ resilience and coping mechanisms which allow them to stay in place, exposure to human mobility in response to triggers increases. Displacement and migration in response to climate hazards often pose significant risks to affected individuals and communities by deteriorating their livelihoods and underlying vulnerabilities. To tackle this issue, FAO and IOM are working together to develop new approaches to anticipatory action in the context of climate change-related human mobility which seek to:

- **Understand** contextual realities of climate-related human mobility contexts in Asia and the Pacific and the intersection with food crises. Forecast the impacts of climate-induced disaster/extreme events on households and communities as drivers of forced displacement and migration.

- **Adapt** anticipatory action interventions to ensure they are responsive to the needs and contextual realities of mobile populations and host communities.

- **Use** key migration/displacement/social cohesion indicators as triggers and integrate specific indicators into context monitoring while ensuring appropriate disaggregation of data (particularly for mobility status) to trigger specific anticipatory actions.

- **Measure** the effects of anticipatory action interventions in the context of sustaining peace and promoting peaceful coexistence between host and displaced/migrant communities.
Figure 2 Factors to consider in anticipatory action

**Economic**
- Negative impacts of climate related mobility on livelihoods, food security and nutrition on displaced and host populations
- Impacts of displacement on local agricultural production, local production, local services and rural infrastructure.

**Environmental**
- Increased pressure on natural resources from large population influxes.
- Environmental impacts and overuse of natural resources linked to migration/displacement.

**Social**
- Erosion of community relationships due to competition between hosts/migrants/displaced for access and use of natural resources and services.
- Inter-group dynamics and tensions between displaced and host communities.

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**Box 2 Displacement, environmental degradation, conflict, and exacerbated vulnerabilities**

Displacement settings can be characterized by tensions or disputes among or between different groups (e.g. host and displaced populations), linked to competition over access to natural resources and services. It can also be disasters caused by inequalities, stigmatization and other protection risks. Triggering events such as natural hazards or environmental degradation can escalate latent or pre-existing tensions into conflict, disputes and, in some cases, violence.

Displacement can create or escalate local tensions and conflicts, especially when displaced persons settle in areas already characterized by a lack of natural resources and services. When refugee and internally displaced person (IDP) camps or settlements are established in fragile ecosystems in which both host and displaced communities depend on the scarce natural resources found in surrounding areas, the increased pressure on existing resources such as woodlands, pasture and water sources may create or compound conflicts both between and within communities. For instance, in Cox’s Bazar, Bangladesh, the degradation of hill forests to accommodate displaced populations has intensified landslide risks to residing communities, while limited access to healthcare, food, and other social vulnerability factors worsen the impact of landslides.

In such contexts, it is especially important that anticipatory action interventions are conflict-sensitive, and subscribe to the Do No Harm principle, so as not to exacerbate or create conflict or tensions, but rather promote social cohesion and contribute to sustaining peace.

Acknowledging the importance of understanding the linkages between environmental degradation, conflict and displacement, FAO and IOM will ensure these considerations and approaches are prioritized jointly in anticipatory action interventions within displacement and migration contexts.
A joint approach: Anticipatory Action as a solution for climate-induced displacement human mobility

When designing anticipatory action interventions that are adapted to human mobility contexts and tailoring approaches to anticipate the needs of displaced and host populations in climate events, important steps should be undertaken. Each building block of anticipatory action provides an opportunity to integrate human mobility-related data and information, knowledge and best practices.

The following approach has been designed for field testing, refinement and validation, and thus follows the three building blocks highlighted in the ASEAN Framework on Anticipatory Action in Disaster Management. It provides concrete steps and considerations to predict human mobility and to provide an avenue to support those who are already displaced or have migrated from being further impacted by climate shocks.

Figure 3 FAO-IOM approach on anticipatory action and climate-induced displacement/migration

Context monitoring, risk information, forecast and early warnings

Step 1: Risk, exposure and vulnerability

Integration of human mobility monitoring data to vulnerability and risk assessment

Assessing environmental degradation (deforestation, soil erosion, water scarcity) as a compounding factor of climate and disaster risks and increased conflict (between mobile populations and host communities).

Understand how migrants, refugees and IDPs – disaggregated as a minimum by age, gender and disability – might experience discrimination, exclusion or inequality, and their exacerbated vulnerability to a hazard.

Vulnerability and capacity of the host communities. What would be the consequences of mass movement?

Step 2a: Predicting displacement/migration

Monitoring and collection of local human mobility trends including indicators of pressure on resources, food and nutrition security, environment, and community relationships:

Methods of data collection: IOM Displacement Tracking Matrix (DTM); joint FAO-IOM rapid assessments etc.

Potential indicators/triggers include:

- Predicted arrivals/migration intentions.
- Migration intention information at the household level (e.g. household expects 3-5 people to arrive over the coming month/s).
- Monitoring relationships between host communities and migrants (social cohesion indicators).
- Push and pull factors: climate events, environmental degradation, conflicts or social/economic events (e.g. fuel or food price increases).

To predict climate hazards, a trigger mechanism needs to be developed. This is when early warnings and forecasts show the time to act before the hazard strikes. It relies on a detailed risk analysis of relevant climate hazards, including impact assessments of past disaster events and analysis of exposure and vulnerability indicators. While the process varies between organizations and contexts, the following steps can guide the creation of this trigger mechanism:

- Select hazards and analyse their historical consequences through a crisis timeline.
- Identify vulnerability indicators to support already-displaced populations in geographic areas, communities, and households most likely to be affected by the selected hazard.
- Create an inventory of early warnings and forecasts (global, regional and national) to select the best-suited forecast to trigger action based on verification, lead time, accessibility and reliability. Ensure national government systems are included.
- Define hazard magnitudes and calculate a return period. The provision of funding for anticipatory action depends on the significance of the impact, so the return period is needed to provide a probability of an extreme event happening in a given year.
- Analyse links between historical hazard magnitude and impact, with information from the early warning and forecast sources. This will help pinpoint the best time for action and identify the trigger threshold value. This analysis is done using a combination of expert knowledge, elementary modelling and statistical modelling.
Step 3: Early warning communication

- Adopt protection- and conflict-sensitive Do No Harm approaches forecasting or utilizing human mobility data/predictive analytics.
- Ensure the translation and dissemination of appropriate and relevant early warnings. Consider potential barriers, e.g. language, disability, age, gender, minority status and adaptation to the local context, particularly in areas where refugees and IDP live.
- Use information channels appropriate and accessible to displaced populations (based on community consultation).
- Ensure inclusion of refugees, IDP and migrant communities’ perspectives (disaggregated as a minimum by age, gender and disability) in the planning and design of risk/early warning communication. Be mindful of stigma, existing community tensions, and protection considerations.

Anticipatory action: design, selection and delivery

- From past displacement and migration events, assess impact data and key needs to survey the priority sectors and actions that could be supported.
- Conduct a rapid survey with households to understand what push and pull factors they are currently facing that will make them move or could be displaced or migrate due to climate hazards.
- Identify anticipatory actions that can be easily accessible and transportable to households over time which could safeguard their livelihood and key assets.

Pre-arranged financing

- Funding is to follow the same principles as pre-arranged financing for anticipatory action. It needs to be both flexible and pre-planned/pre-agreed to ensure timely and effective implementation and quick decision-making.
- Funding needs to be made available for early monitoring and only when the situation evolves.
- In areas of high risk, it is recommended to have the fund allocated at the country level to allow rapid action.
- Funding models should be discussed and designed – ahead of time – with country-based experts on migration and displacement (for example. countries with DTM structures in place and a record of best practices).

Source: Elaborated by authors
Recommendations

Using the joint approach to anticipatory action and climate-induced human mobility FAO and IOM are committed to piloting and, ultimately, operationalizing a joint approach to anticipatory action in displacement and migration contexts across Asia and the Pacific. To move forward, the following recommendations should be considered:

1. Conduct joint research and evidence generation.
   Little is known about how anticipatory action can be used in the human mobility context.\(^2\) To inform joint anticipatory action approaches in Asia and the Pacific, FAO and IOM will conduct joint research and evidence-generation on the relationship between climate hazards and human mobility in high-risk countries. This has already been explored in the context of Africa and the Middle East.\(^3\) However, given that more than half of recorded climate displacement occurred in Asia and the Pacific, such evidence is both lacking and much needed. FAO and IOM will collaborate in high-risk target countries to gain a deeper understanding of the relationship between climate hazards and human mobility and their effects on vulnerable communities. This will include capturing historic push and pull factors for displacement and migration; giving an overview of response measures; and exploring the entry points for anticipatory action.

2. Develop integrated and context-specific early warning systems and triggers for anticipatory action.
   Together, FAO and IOM will develop integrated early warning systems, a fundamental requirement for anticipatory action to support both predictions of displacement and migration, and to protect lives and livelihoods of those already displaced or those hosting displaced populations from climate hazards. Such endeavours will look at developing a joint module on food security and nutrition in DTM data to improve the prediction of displacement and migration. This is a relatively new approach and has yet to be explored under the anticipatory action umbrella. Enhanced mapping of early warning and forecasting data in displacement camps will be explored to determine how information can be sourced more effectively for these high-risk areas.

3. Pilot the joint approach in selected countries to gather critical learnings on making anticipatory action a solution for climate-induced human mobility.
   FAO and IOM will explore joint pilot programmes in selected countries in the region. Governments, donors and partners are increasingly interested in how this will apply on the ground, and evidence–building is critical for this. The first step will be selecting pilot countries and areas and co-developing anticipatory action protocols that follow the joint FAO-IOM approach. The selection of pilot countries and areas will be made by considering (a) climate hazards’ impact in areas with high displacement and (b) these areas’ vulnerability to displacement due to socio-economic factors, community instability, and risks of conflict, among others.

4. Foster broader collaboration and partnerships.
   As anticipatory action is a relatively unexplored topic – and one that requires experts across sectors – collaboration and sharing of experiences will be necessary for its success. The approach should become part of the agenda in existing regional channels such as the Asia-Pacific Disaster Displacement Working Group, which IOM co-chairs. Other regional channels include the Asia-Pacific Technical Working Group on Anticipatory Action and the Asia-Pacific Emergency and Preparedness Working Group. Intergovernmental body discussions are also crucial, including with the South Asian Association for Regional Cooperation; the Association of Southeast Asian Nations; Pacific bodies such as the Pacific Islands Forum Secretariat; the Secretariat of the Pacific Regional Environment Programme; and the Pacific Community. Unpacking and ensuring the practical application of the joint FAO-IOM methodology on anticipatory action and climate-induced human mobility will be the critical next step. Given that the anticipatory action approach is new to many of these groups and intergovernmental bodies, ensuring that the displacement conversation is brought into normative guidance is important even in the early stages.

5. Explore ways to contribute to the Humanitarian-Development-Peace Nexus discourse and find lasting solutions.
   Working across the Humanitarian-Development-Peace Nexus (HDPN) is critical to achieving durable solutions to forced displacement, whether the goal is local integration into host communities, resettlement or return to places of origin. It is widely understood that the humanitarian system is stretched beyond capacity and the figures to prove it are daunting. In 2022 alone, an estimated 274 million people required humanitarian assistance – the highest in decades (OCHA, 2022). Over 100 million people are displaced due to persecution,

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\(^2\) Nonetheless, important advancements include initiatives from Red Cross Red Crescent Climate Centre, as documented in Anticipatory action in refugee and IDP camps: challenges, opportunities, and considerations (2022).

\(^3\) For example, World Food Programme, Scaling-up Resilience in the Sahel: A story of people, partnerships and practice (2021) or Internal Displacement Monitoring Centre, Internal Displacement’s Impact on Health in Yemen (2020).
conflict, violence, human rights violations and events seriously disturbing public order (UNHCR, 2022). Crises and displacement are also becoming more protracted and recurrent in nature: in 2020 protracted conflict was the main cause of six of the ten worst food crises (OCHA, 2022) and in 2021 protracted displacement was a reality for 15.9 million refugees (UNHCR, 2022).

The humanitarian system was not designed for such large-scale and prolonged needs, leading to a range of global commitments to reform current systems to reduce vulnerability, address humanitarian risk, and ensure humanitarian action links to long-term development and contributes to sustaining peace.

Anticipatory action not only aims to mitigate environmental effects but also to safeguard development gains and build the resilience of crisis-affected people and communities. The proposed joint FAO-IOM approach provides an opportunity to explore how anticipatory action can be an effective and relevant nexus approach, contributing to durable solutions to forced displacement. This includes investing in joined-up HDPN approaches, which are capable of safeguarding and rebuilding people’s livelihoods and resilience in the longer term; ensuring their long-term food security; and fostering social cohesion among communities in crisis-affected contexts. Rigorous learning processes have highlighted that anticipatory action can have a concrete effect on reducing humanitarian needs (FAO, 2021). However, FAO and IOM recognize a need for investment in improved evidence generation on how anticipatory action can form a crucial part of an overall HDPN approach in contexts experiencing climate-related displacement.

References


* IDMC (2022b) highlights that protracted displacement remains a concern for many IDPs living in countries such as Syrian Arab Republic and Iraq, where the sustainable return is hampered by the fact that many areas remain destroyed, unsafe and deprived of economic opportunities.
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