

**Accessing financial resources aiming to
avert, minimize, and address the impacts
of
displacement associated with
the adverse effects of climate change**

Technical Guide

**Secretariat of the Platform on Disaster Displacement (PDD)
International Organization for Migration**

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Executive Summary

[to be completed]

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¹ Include ExCom champion members

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Abbreviations, Acronyms, and Other Shortened forms

AR	Assessment Report
BIM	Barbados Implementation Modalities
CCA	Climate Change Adaptation
CMA	Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement
CERF	UN Central Emergency Response Fund
COP	Conference of the Parties
DFI	Development Finance Institution
DRR	Disaster Risk Reduction
DTM	Displacement Tracking Matrix
EG	Expert Group
FCV	Fragility, Conflict and Violence
FRLD	Fund for Responding to Loss and Damage
GCM	Global Compact for Safe, Orderly, and Regular Migration
GCR	Global Compact on Refugees
IDMC	Internal Displacement Monitoring Centre
IOM	International Organization for Migration
IPCC	Intergovernmental Panel on Climate Change
MDB	Multilateral development bank
NAP	National Adaptation Plan
NC	National Communication
NCQG	New Collective Quantified Goal
NDC	Nationally Determined Contributions
NDR	Report on the determination of the needs of developing country Parties related to implementing the Convention and the Paris Agreement
PDD	Platform on Disaster Displacement
PDNA	Post-Disaster Needs Assessment
PoA	Plan of Action
RCP	Representative Concentration Pathway
RICD	Risk Index for Climate Displacement
SCF	Standing Committee on Finance
SIDS	Small Island Developing State
SN	Santiago network for averting, minimizing and addressing loss and damage associated with the adverse effects of climate change (SN)
SSP	Shared Socioeconomic Pathway
TFD	Task Force on Displacement
UNDRR	United Nations Office for Disaster Risk Reduction
UNFCCC	UN Framework Convention on Climate Change
UNHCRUN	High Commissioner for Refugees
WIM	Warsaw International Mechanism for Loss and Damage
WIM ExCom	Executive Committee of the WIM

PLACEHOLDER FOR EXCOM’S “INTRODUCTION/DISCLAIMER”

The following guide is technical in nature, voluntary and non-prescriptive. It reflects the views of the experts engaged in the Task Force on Displacement in preparing its contents and it does not seek to prejudge any international negotiations on the topic herein, and its content may not be applicable to all national contexts.

Introduction

1.1 Objectives and intended audience of the Guide

This Technical Guide on accessing financial resources aiming to avert, minimize, and address displacement associated with the adverse effects of climate change and its impacts (‘the Guide’) is intended to provide practical guidance to:

1. Identify needs and risks related with displacement and other forms of human mobility in the context of the adverse effects of climate change;
2. Identify priorities for operational responses to help avert, minimize and address the negative impacts these occurrences can have on affected persons, communities and societies;
3. Analyse options available to finance relevant responses, by looking at different funding sources, donors and instruments;
4. Plan to mobilize financial resources to support the identified responses.

The Guide is intended for Parties to the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, as well as for other international, national, and local actors working on human mobility and climate action, including loss and damage. It is intended to provide practical, actionable information and tools to access financial resources required to better promote integrated approaches to averting, minimizing and addressing displacement by identifying and prioritizing relevant operational responses and available funding arrangements.

1.2 Scope of the Guide

This Guide focuses primarily on displacement, as the form of human mobility most clearly and univocally associated with loss and damage. However, measures related to migration and planned relocation are important components of the integrated approaches needed to avert, minimise and address displacement and related loss and damage. Moreover, in many cases there is a continuity between the occurrence of different population movements, as well as between the efforts needed to anticipate or address them. For this reason, this Guide covers a broad variety of elements and dimensions that matter to the intersection of climate change and human mobility (see the terminology in Annex 1), and more specifically the following ones:²

² A full list of human mobility categories relevant for climate action is included in the Technical Guide on integrating human mobility into relevant national climate change planning, available at: https://unfccc.int/sites/default/files/resource/WIM_ExCom_human-mobility_TFD_2024.pdf. Given the focus of this Guide on loss and damage, however, categories such as migrants and just transition and transhumance are not analysed in depth in the following sections. Moreover, displacement due to climate change mitigation and adaptation projects was not included as it is not directly related to impact of climate change itself, but rather to failure to adhere to environmental and social safeguards.

- Internal Displacement (e.g. disaster displacement and planned or spontaneous evacuation)
- Migrants in vulnerable situations (e.g. migrants in reception centres, migrants moving through irregular pathways)
- ~~Cross-border displacement (including refugees, persons who do not meet legal refugee category definitions but may be in need of international protection, and cross-border evacuations) [Hafiza's proposal: Cross-border displacement and refugees to be replaced by migration and displaced persons. This is the proposal by Angela. I would check and get back as soon as possible i got response from the constituency]~~
- ~~Refugees~~
 - Diaspora
 - Planned relocation
 - Remittances
 - Trapped population

This broad approach is also consistent with the holistic consideration of 'human mobility' under the UNFCCC as referring to 'migration, displacement and planned relocation, as well as with existing guidance on integrating human mobility into relevant national climate change planning.³

1.3 Guide development

The Guide was developed by the Secretariat of the Platform on Disaster Displacement (PDD) and the International Organisation for Migration (IOM), in coordination with all the actors involved in the implementation of the TFD PoA. It was developed compiling guidance provided by the members of the WIM ExCom and of its EGs, and insights shared by professionals working on this topic outside the UNFCCC, gathered through a combination of:

1. analysis of technical guidance documents issued by relevant donors and funding arrangements (e.g. relating to the scope of their disbursements, the kind of financing options available, and the requirements to access relevant funds);
2. analysis of outcome documents and decisions from UNFCCC negotiations related to climate finance, in particular related to loss and damage;
3. interviews with experts on loss and damage finance and staff from relevant institutions and mechanisms;
4. a survey of relevant project and activities focusing on the different facets of human mobility in the context of the adverse effects of climate change; and
5. a review of relevant literature, news, and other information sources that have covered topics related to loss and damage finance, with specific mention to measures and activities related to human mobility.

1.4 Structure of the Guide

The present introduction lays out some basic information about the scope and audience of this Guide, as well as the process leading to its development.

³ https://unfccc.int/sites/default/files/resource/WIM_ExCom_human-mobility_TFD_2024.pdf

Section 2 provides a short background on human mobility and climate change, and its relevance for action and support on loss and damage.

Section 3 presents a mapping of operational approaches that can help achieve the objectives of averting, minimizing and addressing displacement in the context of the adverse effects of climate change.

Section 4 provides an overview of the current finance landscape, identifying key instruments and actors that can support efforts across all the areas of work relevant to averting, minimizing and addressing displacement in the context of the adverse effects of climate change .

Section 5 presents a framework and provides practical guidance for the development of a programmatic approach at the national level to enable access to climate finance specifically for averting, minimizing, and addressing displacement in the context of the adverse effects of climate change. It includes indications on the three technical pillars that underpin this work, namely: 1) the assessment of needs and risks associated with human mobility, and related responses; 2) the prioritization of relevant work, the development of a programme of action and the matching of its components to available funding options; 3) the development of governance and coordination mechanisms to support relevant efforts.

The Guide is complemented by a set of Annexes that provide additional details on available funding sources and operational approaches.

2 Background

2.1 Human mobility as a loss and damage issue

According to the 6th Assessment Report (AR6) of the Intergovernmental Panel on Climate Change (IPCC),⁴ global warming already caused global surface temperature to increase by 1.1°C above pre-industrial levels in the decade between 2011 and 2020. The consequences of a warming climate include the increased severity of extreme weather events such as tropical storms, dangerous heatwaves, wildfires, flooding and the occurrence or acceleration of slow-onset events for instance sea level rise, ocean acidification, glacial retreat, land and forest degradation, loss of biodiversity and desertification.⁵

In the context of increasing climate-related risks, the human mobility implications of disasters and the adverse effects of climate change are one of the impacts that will have the most profound, far-reaching and widespread ramifications. According to the IPCC WGII (working on Impacts, Adaptation and Vulnerability), climate hazards, including heavy precipitation, flooding, tropical cyclones, drought and sea level rise will all increasingly drive population displacement, both by directly triggering life-saving movements, and by creating the conditions for the occurrence of more complex humanitarian crises. Moreover, climate change impacts will interact with other drivers of risk, including impoverishment and marginalization of communities, demographic growth in areas at risk, unplanned urbanization, local processes of environmental degradation, and weak governance, to progressively reduce people's options for safe, informed and well-planned migration. These outcomes are already being felt most acutely in countries featuring high levels of exposure to climate hazards and low adaptive capacities, such as low-lying Small Island Developing States, those in developing mountain regions, and Least Developed Countries, including those affected by conflict and fragility, but are widely identified as part of a global trend. The importance of the nexus between climate change and human mobility has long been recognized: already in 1990, the very first IPCC report warned policymakers that “the gravest effects of climate change may be those on human migration as millions are displaced by shoreline erosion, coastal flooding and severe drought”.⁶ However, recent efforts to quantify the phenomenon and its potential implications underpin increased global awareness of the phenomenon. According to the Internal Displacement Monitoring Centre (IDMC), it is estimated that in 2024 alone, 45.8 million displacements occurred in the context of disasters, over 99% of which were triggered by weather or climate-related hazards.⁷

On average, over the last decade, these events triggered no less than 25 million displacements every year, with the well-informed assumption that almost all will have occurred within countries, rather than involving cross-border movements.⁸ These numbers are likely much higher when accounting for people compelled to move from their place of origin in the context of slow-onset events and processes, and do not account for the effect of climate-related hazards on other drivers of displacement, particularly for populations

⁴ The full AR6 is available at: <https://www.ipcc.ch/assessment-report/ar6/>.

⁵ The impacts of climate change are detailed in the work of the Working Group II on Impacts, Adaptation and Vulnerability, available at: <https://www.ipcc.ch/repo>

⁷ IDMC. 2025. Global Report on Internal Displacement 2025. <https://www.internal-displacement.org/global-report/grid2025/>.

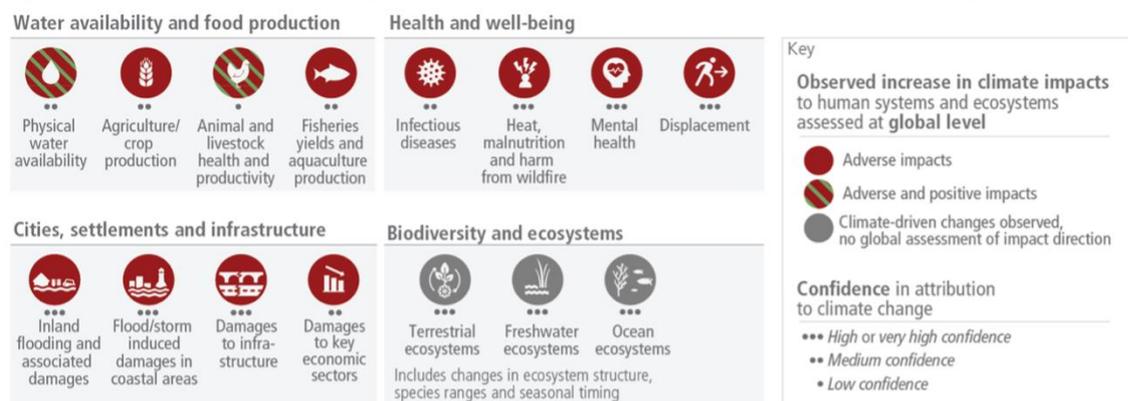
⁸ IDMC. 2025. Global Report on Internal Displacement 2025. <https://www.internal-displacement.org/global-report/grid2025/>.

affected by complex crises and multiple, recurrent and protracted displacement within and away from conflict-affected and fragile contexts).⁹ Moreover, the growing risk conditions resulting from the multiplication of hazards and their impacts also hinder efforts and progress towards resolving displacement, resulting in displacement becoming more protracted. This has significant consequences on the life, well-being and prospects of vulnerable people around the world, particularly affecting individuals and groups that face specific risks and challenges, including Indigenous Peoples, and women, boys and girls **and people with disabilities**.

Looking forward, the World Bank projects that in six regions (East Asia and the Pacific, North Africa, Eastern Europe and Central Asia, Sub-Saharan Africa, South Asia and Latin America), rising sea levels, water scarcity and declining crop productivity could compel between 44 and 216 million people to move within their own countries by 2050, with the actual numbers largely determined by the scope and effectiveness of measures to combat climate change, reduce its impacts and support at-risk and affected populations.¹⁰

Compounding these issues, **displaced persons and migrants and refugees** (especially those living and moving in the most destitute conditions) tend to be among the most vulnerable to the impacts of climate change, as they face differentiated circumstances that put them at greater risk of climate impacts.

Figure 1: Types of loss and damage associated with the adverse effects of climate change



Source: IPCC's WGII report on Impacts, Adaptation and Vulnerability, 2023

In light of all the above, integrating a comprehensive human mobility perspective is essential to effective climate action. Displacement, migration and planned relocation occur when people face losses and damages – they are a *symptom* of the impacts climate change has caused (or may cause) on areas and communities that are made vulnerable - most often through discrimination, exclusion, poverty and injustice. As clearly recognized within UNFCCC discussions,¹¹ displacement is also a *form* of (non-economic) loss and damage,

⁹ UNHCR. 2024. No Escape: On the frontlines of climate change, conflict and forced displacement. <https://www.unhcr.org/publications/no-escape-frontlines-climate-change-conflict-and-forced-displacement>

¹⁰ World Bank. 2021. Groundswell Part 2 : Acting on Internal Climate Migration. <https://openknowledge.worldbank.org/entities/publication/2c9150df-52c3-58ed-9075-d78ea56c3267>

¹¹ For a full overview of the evolution of human mobility discussions under the UNFCCC, please refer to: <https://unfccc.int/process-and-meetings/bodies/constituted-bodies/key-knowledge-products-2023/2024/executive-committee-of-the-warsaw-international-mechanism-for-loss-and-damage/technical-guide-on-integrating-human-mobility-and-climate-change-linkages-into-relevant-national>

linked with the loss of self-determination, sense of place, and identity, among others (figure 1).¹² Lastly, displacement, migration and planned relocations can also be drivers of further, cascading negative economic and non-economic outcomes for the people moving and otherwise affected individuals, communities and societies. This also includes creating conditions for the generation, perpetuation and increase of vulnerability to further climate impacts.¹³

These complex intersections highlight the need to fully integrate human mobility in the policy and practice on loss and damage at global, regional, national and sub-national levels. Such an integrated approach can be pursued through a diversity of interventions that contribute to the following objectives:

- 1) *Create conditions to avert displacement in the context of climate change*
Strong and effective mitigation efforts are needed to curb greenhouse gas emissions and related temperature increases, limiting their influence on extreme weather events. Effective local climate change adaptation (CCA) and disaster risk reduction (DRR) need to target areas where people will be facing the acute impacts of climate change to prevent negative impacts on vulnerable populations. These preventive efforts can reduce the climate shocks and stresses that force people to move.
- 2) *Strengthen capacities to manage and address displacement, migration and planned relocation in the context of the adverse effect of climate change*
Evidence from all regions shows that the limits of local resilience and adaptive capacity are being stretched, resulting in forced mobility and immobility. In such cases, having in place well-structured, effective disaster preparedness, response and recovery systems is essential to mitigating and managing direct and cascading impacts on individuals and societies, including by reducing the vulnerability of people already displaced or on the move.
- 3) *Enable safe, dignified and voluntary migration and rights-based community-led planned relocation as a strategy to avert, minimise and address loss and damage*
If relevant risks and challenges are adequately identified and anticipated, migration and planned relocation can be strategies that allow people and communities to reduce climate risk and strengthen adaptive capacities. This requires promoting participatory, well-planned and well-managed approaches, based on communities' free, prior and informed consent, which fully protect human rights and preserve local knowledge and culture.

Progress towards these objectives requires integrating displacement and human mobility concerns in all policies, plans and investments in a coherent manner, across the development, climate change, disaster risk management and humanitarian domains. Relevant operational options are explored in more detail in section 3.

2.2 Human mobility and loss and damage: limitations of the current finance landscape

Despite the recognized importance of human mobility work for climate action, there currently are few resources available to support relevant efforts. Work on human mobility

¹² https://unfccc.int/sites/default/files/resource/nels_paper_2024.pdf

¹³ <https://www.ipcc.ch/report/ar6/wg2/>

in the context of climate change is not usually identified as a discrete thematic area. While some programmes and interventions on human mobility have been funded by different donors and through different streams, the current financial landscape on this topic is fragmented and uncoordinated.

In fact, all available sources of finance present significant limitations.

- **Adaptation funding** currently covers no more than 10% of the estimated USD 215-387 billion needed annually to successfully minimize the impacts of climate change.¹⁴ Available funding falls short of the USD 300 billion objective agreed upon at COP29,¹⁵ and is particularly difficult to access for high-risk countries featuring limited levels of institutional capacities or instability.¹⁶
- **Disaster risk reduction funding** is even less sizable and is not tied to any quantified financial commitment by countries.¹⁷
- **Humanitarian funding** has been declining in recent years, is already insufficient in the face of today's crises and is expected to cover a fraction of humanitarian needs in a future humanitarian landscape featuring more frequent and more intense hazards and disasters, and more acute associated impacts (fig 2).¹⁸ Moreover, humanitarian funding tends to sharply decline over time, leaving many protracted crisis situations (including their displacement implications) largely underfunded.
- Dedicated sources of funding on **human mobility** (such as the Migration Multi-Partner Trust Fund on Migration¹⁹) and durable solutions (such as the Internal Displacement Solutions Fund²⁰) are smaller, less established and not specifically focused on climate change issues.

The picture that emerges from the analysis of existing finance on human mobility and climate change presents significant gaps. This is a particular concern in the context of increasing risks, leading to longer-lasting impacts in developing countries that are particularly vulnerable to adverse effects of climate change, including SIDS and LDCs, which have generally lower capacity to meet the complex requirements required to access these sources of finance, find it even harder to access adequate resources. Notably, **fragile** countries which host a disproportionately large number of displaced persons, have historically received much lower shares of available climate finance, due to the risk-averseness of donors.²¹ There are also significant limitations to the usefulness of this funding to support work on displacement, migration and planned relocation: laborious processing means that it can take years for funding to become available, and it might not

¹⁴ UNEP.2023. Adaptation Gap Report 2023. At: <https://www.unep.org/resources/adaptation-gap-report-2023>

¹⁵ <https://unfccc.int/news/cop29-un-climate-conference-agrees-to-triple-finance-to-developing-countries-protecting-lives-and>

¹⁶ World Bank. 2024. Closing the Gap : Trends in Adaptation Finance for Fragile and Conflict-affected Settings. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099071924093036614/p18036713fd35307f1987e1f37c1b5a9457>

¹⁷ <https://reliefweb.int/report/world/high-level-dialogue-international-cooperation-scaleup-financing-drr-financing-disaster>

¹⁸ <https://devinit.org/resources/global-humanitarian-assistance-report-2023/>

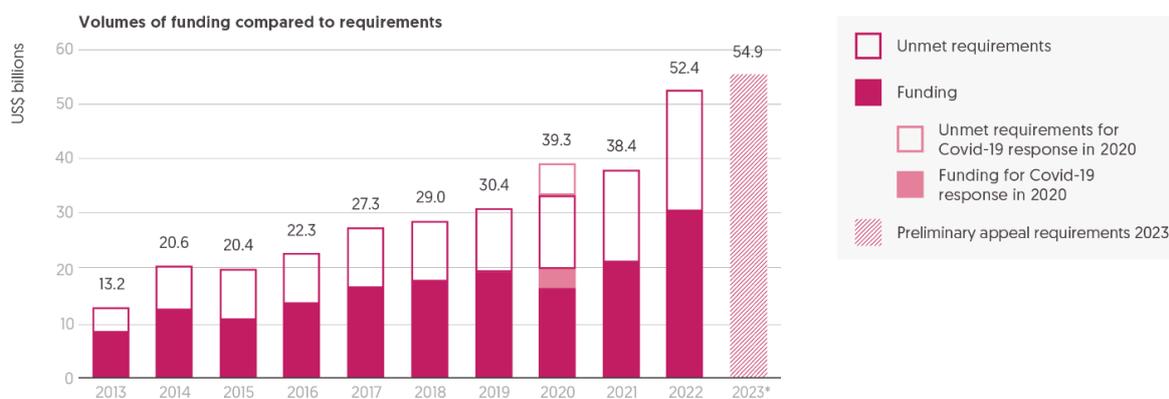
¹⁹ <https://migrationnetwork.un.org/mptf>

²⁰ <https://mptf.undp.org/fund/ids00>

²¹ <https://www.icrc.org/en/publication/4672-embracing-discomfort-call-enable-finance-climate-change-adaptation-conflict>

meet the most urgent needs of communities. Lastly, challenges in accreditation processes, project development and reporting make it overly difficult for local and community actors to directly access these resources – an issue that is particularly felt by **displaced persons, refugees and migrants**, who routinely face additional barriers to representation, awareness and ability to deal with administrative requirements.

Figure 2: Volume of humanitarian funding compared to requirements



Source: Devint²²

Addressing this funding gap will therefore require both increasing the overall scale of existing finance by making additional resources available and diversifying the sources of finance, to match the growing needs of people, communities and societies affected and displaced in the context of the adverse effects of climate change and lowering the barriers to accessing relevant financial resources for developing countries, and in particular those that have more limited capacities.

2.3 Ongoing evolutions in the loss and damage action and support architecture

In this context, the operationalization of specific arrangements to provide vulnerable countries with technical and financial assistance is an important development. In 2019, the Parties established the Santiago network for averting, minimizing and addressing loss and damage associated with the adverse effects of climate change (SN) as part of the WIM.²³ Its role is to catalyse the technical assistance of organizations, bodies, networks and experts for the implementation of relevant approaches at the local, national and regional level in developing countries that are particularly vulnerable to the adverse effects of climate change. Following its setup and resourcing, the SN began delivering services in 2025, awarding a first grant for technical assistance to Vanuatu. Based on the agreed rules and procedures, the SN is accepting requests for technical assistance from developing countries, which are the foundation to issue Calls for Proposals that SN members can apply to. As relevant technical assistance start being requested by and delivered to governments and communities to support the development of initiatives to avert, minimise and address loss and damage, human mobility can be integrated in all relevant capacity building, evidence

²² <https://devinit.org/resources/global-humanitarian-assistance-report-2023/key-trends-humanitarian-need-funding-2022/>

²³ UNFCCC. 2019. Decision 2/CMA.2: <https://unfccc.int/documents/209506>

generation, preparedness, and policy development efforts to promote more coherent and comprehensive technical assistance on loss and damage. Moreover, in 2022 COP27/CMA4 established a Fund for Responding to Loss and Damage (FRLD) and new funding arrangements for assisting developing countries that are particularly vulnerable to the adverse effects of climate change, in responding to loss and damage.²⁴ The FRLD aims to strengthen responses to economic and non-economic loss and damage associated with both extreme weather events and slow onset events. Importantly, the decision explicitly includes work on human mobility in the scope of the Fund, also recognising that displacement in the context of climate change is an underfunded area which might require the development of additional funding arrangements (Paragraphs 6, 17), and calls for the inclusion of climate migrants in procedures to consult and engage stakeholders in the operationalisation of the Fund (Paragraph 28). Work on the initial two-year start-up phase of the Fund has started with the "Barbados Implementation Modalities" (BIM), adopted at the fifth meeting of the FRLD Board in April 2025. Between 2025 and 2026, this mechanism will allocate US\$250 million to support developing countries **that are particularly vulnerable to adverse affects of climate change**, in order to test different access modalities, building on bottom-up and country-led approaches to addressing economic and non-economic loss and damage (including those related with human mobility).²⁵

²⁴ UNFCCC.2023. Operationalization of the new funding arrangements, including a fund, for responding to loss and damage referred to in paragraphs 2–3 of decisions 2/CP.27 and 2/CMA.4. Available at: <https://unfccc.int/documents/636618>

²⁵ UNFCCC. 2025. FRLD/B.5/7, at: https://unfccc.int/sites/default/files/resource/FRLD%20B.5%20Proposal_final%20draft_clean_final%2028%20Mar.pdf

3. Relevant operational approaches

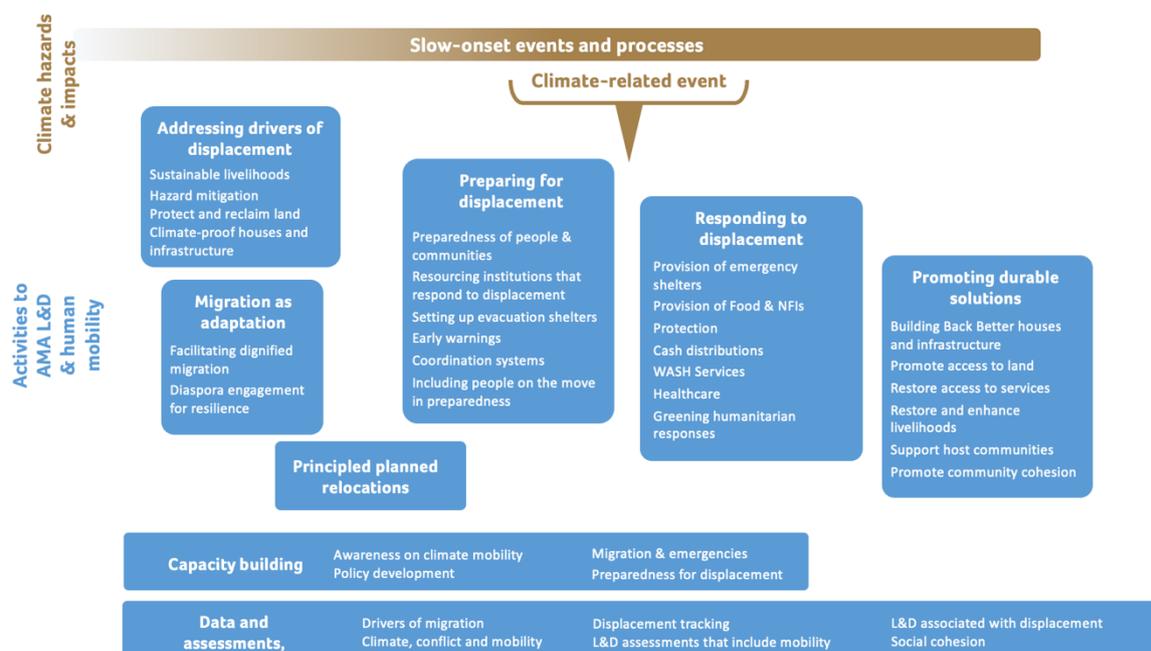
3.1 Working at the intersection of human mobility and climate change

Work focusing on the intersection between climate change and human mobility is very diverse, encompassing interventions that are implemented at different stages of different climate change-related events and processes (and of different population movements that might take place in these contexts). A comprehensive approach is essential to fully assess the needs related with human mobility and climate change, and to design and implement the most appropriate operational responses.

The landscape of approaches that this Guide considers is therefore quite broad, spanning interventions to avert loss and damage (e.g. resilience and promotion of sustainable livelihoods, food security and peace in areas of origin of large population movements or at high risk of displacement), minimize loss and damage (e.g. emergency preparedness and response following weather and climate hazards), and address loss and damage (e.g. post-disaster interventions for humanitarian assistance, reconstruction, access to services, livelihood recovery, decent work and durable solutions). A full breakdown of these domains of work is provided in Figure 3 and is explored further in this section. This conceptualisation, as well the categorisation of relevant interventions presented here, is based on the analysis of relevant literature (see also Annex 5 for additional readings on this topic) and of project information, both publicly available and specifically shared by operational actors and donors in support of the development of this Guide. Available information is presented in the [online Project Database](#).²⁶

Figure 3: Domains relevant to the work on human mobility and climate change

²⁶ Over 120 projects have been elaborated to support this effort, including about 80 that were contributed by TFD members and other partners upon request by the Wim ExCom through a dedicated survey. Additional information has been compiled by PDD and partners on planned relocation interventions as part of the ‘Leaving Place, Restoring Home’ research project: <https://disasterdisplacement.org/news-events/leaving-place-restoring-home-enhancing-the-evidence-base-on-planned-relocation-cases-in-the-context-of-hazards-disasters-and-climate-change-2/>. A further systematization of the work in this field is available through IDMC’s repository of good practices, here: <https://www.internal-displacement.org/good-practices/>



Source: Authors' elaboration based on a survey of relevant activities

In practice, few concrete responses will explicitly be articulated as 'action and support on loss and damage and human mobility', and many may not even primarily target climate change impacts, but rather focus on disaster response, resilience, development, environmental change. This has implications on the way programmes, projects and activities need to be framed in order to be relevant to different donors and funding streams. For the purpose of this Guide, all these responses are considered part of a diverse, evolving field of activities, projects and programs that increasingly identifies adverse climate change impacts on human mobility as a key concern. For additional information on each programming domain refer to Annex 1, which lists examples of the different operational approaches included under each programming domain.

3.1.1 Averting and minimizing the impacts of climate change that drive displacement

Supporting adaptation capacities and resilience in areas that have experienced significant past population movements, or that are experiencing climate risks or impacts that are expected to lead to significant population movements, is important to protect people's agency and mobility in the face of climate change. Many of these activities typically focus on:

- Increasing local awareness of climate risks;
- Preventing or mitigating the impacts of climate hazards;
- Protecting and diversifying capacities, livelihoods and incomes, and promoting food and water security.

Many of the relevant responses overlap with activities that are often framed as 'sustainable development', 'rural/urban development' or 'livelihood security'. They are however particularly relevant to the scope of this Guide whenever they are focused on areas whose populations have traditionally moved to cope with the physical, social, economic and

security implications of the impacts of environmental changes and disasters – through, for instance, seasonal or circular migration or transhumance of pastoralist communities.

These activities also remain relevant for communities that have already been displaced, have migrated or have been relocated in the context of climate change impacts, as they are key to ensuring that whatever solution is put in place to address their needs, is both more secure and more economically viable and sustainable.

In West Africa, the **African Development Bank** is supporting a large programme focusing on areas of origin of people’s migration in the Niger Basin to 1) build the resilience of ecosystems and natural resources; 2) build the resilience of local households through more sustainable livelihoods; and 3) ensure programme coordination and management.

With support from the **Green Climate Fund**, the Government of the Republic of Tanzania, UNHCR and the UN Environment Programme are collaborating on a five-year project. “Building Climate Resilience in the Landscapes of the Kigoma Region of Tanzania”, to address challenges linked with flood and erosion control in the refugee-hosting Kigoma region. The initiative adopts a holistic approach, using nature-based solutions and ecosystem restoration to adapt to climate change in areas hosting displaced populations. The project aims to conserve and improve 216,000 hectares of forest and agro-ecological systems in support of local livelihoods.

All these interventions can be supported by efforts to gather and collect relevant data. Evidence needed to inform, design, target and evaluate programmes at the intersection of human mobility and resilience typically include:

- drivers of population movements, including decision-making pathways and tipping points of different people facing climate risks;
- impacts on climate change on drivers of risk;
- patterns of population movements and how they are affected by pre-existing resources, characteristics, and vulnerability of the population;
- perspectives and lived experiences of communities to ensure people-centered responses, with a specific attention to groups particularly affected by displacement, such as Indigenous Peoples, women, girls and boys and people with disabilities;
- potential population movements that could take place in a given area due to climate change impacts.

A grant disbursed by **Canada’s Department for Immigration, Refugees and Citizenship** (IRCC) via its International Migration Capacity Building Program is supporting an assessment of the environmental drivers of migration in rural areas in Mexico, carried out by IOM and Rainforest Alliance. The grant specifically aims to inform capacity building support and empowerment for local women, encouraging their participation in farmers’ cooperatives and providing information on safe migration options.

Moreover, and given their emerging nature, these kinds of programmatic and operational approaches often need to be supported by awareness raising, capacity building and policy development interventions targeting key decision-makers. This is needed to enhance understanding of the issue and of potential responses, and to create a more conducive and integrated policy and institutional framework for the implementation of all concrete efforts. Capacity building on this topic is particularly important to enable regional, national and local actors to be able to develop context-specific, locally-owned approaches to addressing

The **NDC Partnership Action Fund**, a pooled fund with contributions from 7 European Countries, is supporting the FAO with a grant to assess loss and damage associated with human mobility in the context of climate change in Chile. The fund aims to support Country Members of the NDC Partnership in addressing gaps in the implementation of their Nationally Determined Contributions (NDCs). The success of FAO in funding this programme highlights the strategic relevance of ensuring that Human Mobility is captured in climate action planning at national level for relevant work to be funded through dedicated finance streams.

human mobility in the context of climate change and to be able to access relevant sources of technical and financial assistance.

3.1.2 Enabling safe, voluntary and dignified migration to leverage its resilience and adaptation potential.

In certain contexts, climate change adaptation activities can leverage the resources, skills and knowledge migrants can acquire through their migration for the benefit of their households and communities. Such activities may even facilitate migration (in conditions of safety and dignity) of some individuals to ensure that additional, diverse resources are made available to support adaptation to climate change or coping against its impacts. Such schemes could include, for instance:

- Livelihood diversification, as migration allows workers to gain an income in another sector or location, less at risk or affected by climate change;
- Upskilling, as migrants receive specific training that support further adaptation upon return in places of origin.

The conditions in which migration takes place, and the degree to which the rights of migrants are respected throughout their journey, and the way responses are targeted to the specific needs of different individuals (including members of indigenous communities, women, girls and boys and people with disabilities) are critical factors in determining the short and long-term benefits of these programmes. To this end, planning for future

In Bangladesh, the **Climate Justice Resilience Fund** is supporting households to make the best of migration opportunities to support adaptation outcomes. The project supports (prospective) migrants, as well as their households, through skill development opportunities for more economically successful migration, awareness on climate-smart use of remittances, as well as reconstruction/recovery support following disasters.

migration flows (especially into high-immigration areas such as urban centres) is a key measure to reduce future risks and create more inclusive communities.

A subset of these activities may include efforts to enable and protect the ability to move of people who traditionally rely on mobility for their livelihoods and culture (e.g. pastoralist communities).

3.1.3 Implementing principled, rights-based planned relocations as an option of last resort

When no in situ realistic risk reduction or adaptation options exist to allow people to remain in areas facing intolerable levels of risk or irreversible degradation of environmental conditions and, where applicable, the planned relocation of communities can be an option of last resort to minimise future impacts of climate change. Through planned relocations, communities or individuals are moved from a location at risk to a safer location, usually with the assistance of public, partners and private institutions that may support land use planning, land and housing tenure, housing and infrastructure construction, and livelihood restoration and decent work without adding additional burden.

Planned relocations, however, often are complex, costly and politically fraught processes, which (if poorly planned or executed) can have negative impacts on communities' resilience and well-being. Moreover, they can be lengthy operations, and need to be accompanied by significant effort to protect communities throughout their planning and implementation phases.

The r loss and damages averted by planned relocations are maximized whenever they are carried out:

- based on solid, rights-based policy frameworks that specifically cover planned relocations, or sectoral policies that regulate all its main components in a comprehensive manner;
- in a participatory and consultative manner, in accordance with the principle of communities' Free and Prior Informed Consent;
- through comprehensive and long-lasting interventions that address needs across all dimensions of the wellbeing of people being relocated, including the immaterial and non-economic ones such as the preservation of their cultural heritage and psychosocial well-being;
- considering the needs of, and impacts suffered by, other affected communities.

Financing these responses therefore requires integrating guardrails to prevent the violation of human rights principles.

In Fiji, the Climate Relocation of Communities (CROC) Trust Fund has been established to create a pool of resources coming from donors and other sources (e.g. levies) that can be disbursed in support of planned relocation operations – including for: research and assessments, risk reduction activities, identification of locations where people may settle, support to relocated communities. The CROC Trust Fund is an excellent example of how the financial landscape on human mobility and loss and damage is evolving. Among the different sources of funding that are being pooled in support of planned relocation operations, Fiji received in June 2024 a NZ\$3.6 million commitment from **New Zealand's International Development Cooperation Programme**, specifically targeting planned relocation operations as part of a broader intervention supporting human mobility in the context of climate change.

3.1.4 Preparing for displacement and other population movements in the context of the adverse effects of climate change

Preparedness activities targeting disasters whose frequency and severity might be affected by the impacts of climate change are part and parcel of interventions to minimise and address loss and damage. A key part of this work involves creating disaster risk management systems that address the specific needs stemming from displacement that can take place in the context of such disasters. Relevant activities can include:

- Setting up coordination systems to manage and address displacement through protection-sensitive approaches that include all vulnerable groups (including Indigenous people, women, boys and girls, people with disabilities, migrants and people who are already living in displacement **and refugees**);
- Setting up hazard monitoring, early warning and emergency communications systems;
- Strengthening of evacuation infrastructure and systems, including by building the capacities of disaster responders in areas at risk;
- Creating community-based systems, structures and capacities for preparedness, including by building the capacities of communities at risk;
- Identifying, planning and equipping locations that will receive inflows of displaced persons in the event of a disaster;

In the Federated States of Micronesia, the **US Office of Foreign Disaster Assistance** has been supporting a diversity of interventions to build local preparedness to disasters related with climate change. The activities, led by IOM, aim to build understanding and awareness of risks and responses among local communities, as well as to ensure that responders are well coordinated and capacitated in the event of a disaster, and able to respond to ensuing displacement more effectively.

Specific data efforts can support interventions to prepare for displacement. They include, for instance, analyses of past patterns of displacement and mobility in disasters, as well as forecasts of potential population flows towards evacuation sites or the identification of individuals who might face specific mobility constraints in disasters. Furthermore, preparedness efforts should build on capacity assessment, that quantify material, human, financial and organisational resources available locally to manage displacement, and help identify relevant gaps and priority interventions.

A specific subset of these preparedness activities encompasses planning, coordination and training to create disaster preparedness, response and recovery systems that are more inclusive of displaced persons and **migrants and refugees, who** face specific conditions of vulnerability in the face of climate change and related dis.

~~Refugees (and more in general)~~ Groups living in highly exposed, underserved displacement sites) constitute a group that is specifically vulnerable to the impacts of climate change. The **EU European Civil Protection and Humanitarian Aid Operations** has supported international and civil society actors to improve access to early warning information and anticipatory action for Rohingya populations in Cox's Bazar, building the capacity of nationally-owned preparedness and response systems to reach out to marginalized populations in camp.

An additional element of preparedness with specific implications for finance is the ability to rapidly leverage funds to allocate resources to communities and household at immediate risk of disasters and related displacement, through (for instance) forecast-based finance schemes, that allow to minimize and better address incurred loss and damages.

In the Philippines, the national Red Cross Society, with the support of the **German and Finnish Red Cross Societies**, as well as **IFRC**, is implementing forecast-based financing to respond to typhoons. The financial mechanism supports community responses by allowing households to: 1) evacuate their livestock, 2) obtain cash for work to clear drainages and harvest early, and 3) improve housing and local shelters through kits and materials. These activities allow to avoid displacement, or reduce risks and losses linked with displacement (e.g. loss of assets,

3.1.5 Responding to displacement and other forms of human mobility in the context of the adverse effects of climate change

Humanitarian response is key to minimising and addressing the losses and damages communities suffer when displaced in the context of both sudden and slow-onset hazards and related disasters. These activities might include:

- Distribution of essential goods, including food and non-food items;
- Provision of essential services, including water and sanitation, healthcare and education;
- Protection responses, including to prevent Gender-Based Violence;
- Provision of safe shelters, including by setting up and servicing displacement sites;
- Distribution of cash, both to meet immediate needs and specifically to address loss and damage related with displacement.

Many humanitarian activities to respond to displacement are funded by the **UN Central Emergency Response Fund (CERF)**. It is supported by 50 UN Member states and observers, international organizations, regional and local authorities, and Private sector and civil society Actors. Many of its State contributors have paid over 1 billion USD into the fund in the last 20 years. CERF is allocating an increasing share of its resources to responses to climate hazards. Moreover, at COP28 CERF launched a 'Climate Action Account' that allows donors to specifically support work to reduce climate impacts, by scaling up anticipatory action and responses to climate shocks.

Data collection and analyses are a key component of humanitarian interventions, informing planning and delivery of assistance over time. In displacement situations, key data collection activities integrated in the crisis responses of governments and international actors focus on:

- Number and demographic characteristics of displaced persons;
- Their location/distribution and patterns of movement;
- Evolution of the risks and the protection and assistance needs they face.

This information is typically collected in an iterative manner to provide up-to-date evidence for operations that take place over time in dynamic displacement situations. Fully integrating it into loss and damage assessments is key to providing a comprehensive picture of direct and cascading impacts due to climate change events.

Through the **African Risk Capacity Replica** parametric insurance programme, the Government of the Republic of Malawi and UNHCR received insurance payouts following the devastating 2023/24 El Niño-driven drought. The payout of over \$11.6 million supported humanitarian efforts to address food insecurity and reach the most vulnerable communities impacted by the widespread crop failures, including displaced persons refugees in the Dzaleka camp.

In Malawi, GiveDirectly (a nonprofit that lets individual and institutional donors pool resources that are used to support direct, unconditional cash transfers to vulnerable households) has used resources provided by the **Scottish Government's Climate Justice Fund** to address the losses and damages linked with displacement. The project was set up following Cyclone Freddy, which dropped six months' worth of rainfall in just six days, triggering floods and mudslides that displaced 659,000 people. Resources were allocated to 2700 households affected and displaced by the disaster, based on an assessment of household needs and cost of living. The project's specificities both in its model of implementation (unconditional cash transfers supported by an NGO, rather than an international organization), and by the specific loss and damage/climate justice focus of the donor's financial contribution.

In some cases, environmental sustainability objectives have been integrated into humanitarian operations aiming to assist displaced persons. In addition to reducing the environmental footprint of humanitarian operations, these measures can help reduce risks for displaced persons, potentially averting and minimizing conditions that may lead to secondary or more protracted displacement.

3.1.6 Promoting durable solutions to displacement

Durable solutions are reached when displaced persons have no outstanding need stemming from their displacement. Until that is the case, they continue to be at risk of suffering specific loss and damage as a consequence of their displacement. Progressing towards durable solutions is therefore a key consideration for interventions to avert, minimise and address current and potential losses and damages.

Supporting durable solutions requires long-term, comprehensive strategies and costly interventions, that comprise action to improve all facets of the displaced persons' lives and access to basic rights, including physical and housing reconstruction, decent work, strengthening community cohesion and reducing the risks people might face due to climate change. These interventions also require addressing underlying factors of vulnerability that disempower or marginalize specific groups, such as Indigenous Peoples, women, boys and girls and people with disabilities. They are often based on the set up of multi-sectoral strategies and coordination systems, and require leveraging large-scale investments from multiple sources to cover related infrastructural, livelihoods, service provision and community cohesion needs.

The **World Bank** has supported Senegal since 2018 through a \$30 million Saint-Louis Emergency Recovery and Resilience Project. The project is financed through IDA grants, specifically drawing on the IDA's Climate Change Action Plan (CCAP) and its Crisis Response Window (CRW) to enhance community resilience to sea-level rise and related displacement risks, and enhance urban planning for people displaced and at risk needing support to relocate elsewhere.

Gathering information throughout the displacement phase is key to informing durable solutions interventions. Relevant data work typically focuses on:

- Evolution of displaced persons' numbers, locations and degree of achievement of different well-being and recovery indicators;
- Evolution of their needs over time and the obstacle they face to achieving solutions;
- Their intentions to return or move elsewhere.

Gathering and analysing this information provides an important assessments of the losses and damages communities may suffer as a consequence of displacement, painting a more comprehensive picture of economic and non-economic impacts of climate change events.

3.2 Responding to human mobility as a component of averting, minimizing, and addressing the adverse impacts of climate change

The interventions described in the previous sections typically belong to different sectors or areas of work (ranging from development to disaster risk reduction, from humanitarian action to recovery and reconstruction). However, they all have relevance for climate action, and more specifically for averting, minimizing and addressing loss and damage. In order to support their full inclusion into planning of climate action and relevant programmatic approaches, it is important to make this relevance as explicit as possible. This is also key to ensuring that relevant work can be funded as part of interventions to avert, minimize and address the negative impacts of climate change.

Many efforts to **avert and minimize impacts of climate change** through adaptation change the parameters for people's decisions to move or to stay in place. Effective risk reduction efforts and investments in sustainable livelihoods allow people to make these choices in a less constrained, more empowered manner. This includes, for instance, efforts aiming to protect land, assets, homes and health of people in areas at risk, and who might be forced to leave in the face of potential hazards or suffered impacts. Integrating specific attention to people's current or potential mobility can improve the adaptation outcomes of such efforts:

- Monitoring human mobility patterns can help understand what impacts communities are suffering as a consequence of climate change. Changes in migration patterns from pastoral or rural societies towards urban areas, for instance, can be a response to resource or livelihood stresses. This can help target early assistance and responses so that more acute loss and damage (and related displacement) can be avoided.
- Safe and dignified migration out of areas affected by climate change, or at risk of relevant impacts, can be promoted as a way to support local resilience, including through rights-based labour migration schemes.
- Planned relocations supported by human rights-based approaches and sufficient resources, especially if community-led and/or based on communities free, prior informed consent can allow communities to leave high-risk areas and resettle into

safer locations where they can have better and more sustainable access to livelihoods, services and opportunities.

- Climate change adaptation and risk reduction work that meaningfully include **displaced persons, refugees and migrants** in their design and implementation can help improve the conditions of some of the most climate-vulnerable groups of our societies, as well as their host communities. This requires, in particular, adequately targeting relevant efforts so that they can address the needs of those hosted in displacement sites.

Human mobility considerations are integral to all efforts to **respond to climate impacts and address related loss and damage**, including disaster preparedness and response, rehabilitation and recovery, and setting up of appropriate social and financial protection mechanisms.

- All preparedness efforts need to integrate a specific attention to displacement triggered by hazards and disasters associated with climate change. Planning, capacity building, awareness and coordination efforts need to build on the potential displacement that affected persons might experience, including its occurrence and long-term assistance and solutions implications.
- Humanitarian action in response to climate-related disasters needs to address the needs of displaced persons through the provision of life-saving assistance, protection (including forms of international protection), and access to basic services. In the absence of these interventions, the amount of loss and damage communities suffer is multiplied.
- The provision of long-term assistance and durable solutions for displaced persons, through support to physical reconstruction, livelihoods, land and housing, restoration of culture and immaterial assets is essential to preventing displacement from resulting in a diversity of short- and long-term, direct and indirect, negative impacts on the lives of displaced persons, as well as other people affected by their displacement.

Table 1. Typical programming domains relevant to human mobility, and how they fit into Loss & Damage objectives

Domain	Avert			Minimise			Address		
	Addressing drivers of displacement and forced migration	Preventative planned relocation	Supporting migration as adaptation	Preparedness for potential displacement	Anticipatory action for displacement	Responding to human mobility	Addressing losses through financing instruments	Durable solutions	Minimising the environmental impacts of displacement
Example of activity	Livelihood resilience in places of origin	Resettlement	Dignified labour migration from areas at risk	Capacity building of institutions, systems and communities	Supplementing livelihoods	Evacuation support	Insurance	Housing and land tenure	Restoring ecosystems around displacement sites
	Hazard mitigation in places of origin	Housing reconstruction	Urban planning in areas of destination	Assessment of potential displacement	Preparing shelters Risk awareness and early warning	Provision of food and NFIs Shelter and protection	Cash transfers to offset costs of displacement	Restoring livelihoods and promoting decent work Restoring communities	

Source: Authors' elaboration based on a survey of relevant activities

Table 1 summarizes these considerations, aligning activities identified as typical for the work on human mobility and climate change with the objectives to avert, minimise, and address loss and damage. The relevance of **mitigation of climate change** as a specific objective of

interventions on human mobility is limited to work that reduces the carbon/environmental footprints of interventions to manage and address population movements. Such programmes are not analysed in details by this Guide in light of its specific focus.

3.3 Different types of interventions needed to work on human mobility and loss and damage

This Technical Guide focuses on funding work focusing on human mobility that supports the objectives of averting, minimizing and addressing loss and damage. For ease of analysis, the 9 groups of activities identified in the previous section are clustered in 6 areas of work, namely:

- Addressing the drivers of displacement.
- Preparing for displacement (including anticipatory action).
- Responding to displacement.
- Promoting durable solutions to displacement (including minimizing and addressing associated losses and environmental impacts).
- Enabling safe, voluntary, dignified migration.
- Implementing principled planned relocations.

From the programming perspective, these domains address a wide variety of needs of affected populations – ranging from the construction of infrastructures and buildings to the training of personnel and at-risk communities, and the set-up of coordination mechanisms to strengthen responses to displacement and pursue durable solutions – which has implications on donors’ interest in funding them and relevance of different financial instruments. The analysis of projects and activities performed for this guide has also allowed to further categorise these needs and related responses by 6 main types of intervention, namely:

- Infrastructure, structures and technology;
- Developing policies;
- Gathering and analyzing data;
- Building capacities and training;
- Providing equipment needed for operations;
- Enhancing the availability of financial resources.

Table 2 provides an overview of how different programming domains can be operationalised through different types of interventions to respond more effectively and comprehensively to the needs of target populations. It is important to note how responses in each domain may be supported by very different types of interventions, leveraging different expertise and resources.

Recognizing these categories of needs and interventions is useful for designing more targeted responses, understanding the cost and resource implications of each activity, and aligning proposed approaches with relevant donors’ framing and priorities, funding mechanisms, and financial instruments. More detailed guidance on this alignment will be further explored in Section 5.

Table 2. Matrix of types of interventions needed to support different kinds of work on human mobility and loss and damage

Type of intervention	Addressing the drivers of forced movements	Preparing for displacement	Responding to displacement	Promoting durable solutions to displacement	Promoting safe, voluntary, dignified migration	Implementing principled planned relocations
Infrastructure and technology	<ul style="list-style-type: none"> •Protect land and assets •Climate proof houses and critical infrastructure •Reclaim and regenerate land •Monitoring and Early Warning Systems for long-term climate trends and slow-onset hazards 	<ul style="list-style-type: none"> •Identify/protect safe locations for evacuation •Build or retrofit and service climate-proofed evacuation shelters •Identify and equip/improve evacuation routes •Hazard monitoring and Early Warning Systems 	<ul style="list-style-type: none"> •Set up and service displacement sites •Protect ecosystems around displacement sites 	<ul style="list-style-type: none"> •Provide transitional shelters and (re)build housing •Improve protective and service infrastructure in places of return/relocation 	<ul style="list-style-type: none"> •Improve transportation infrastructure and systems •Build and equip service centres for migrants along routes •Build or improve infrastructure and housing in (potential) places of destination 	<ul style="list-style-type: none"> •Provide housing that responds to the material and immaterial needs of each relocated family. •Develop infrastructure to enable access to all basic services •Build or protect spaces or structures of collective/ritual significance
Policy and enabling environment	<ul style="list-style-type: none"> •Risk-informed land-use planning •Social protection and just transition planning •Building codes •NAPs •Land ownership system 	<ul style="list-style-type: none"> •Define roles and responsibilities for providing assistance and protection, including through referral systems •Establish evacuation plans and protocols 	<ul style="list-style-type: none"> •Rights of IDPs, including land rights, assistance and protection •Access to social protection systems •Employment-based disaster response, livelihoods and decent jobs 	<ul style="list-style-type: none"> •Durable solutions collaboration frameworks, roles and responsibilities •Land-use planning •Building codes •Land ownership system 	<ul style="list-style-type: none"> •Urban and land-use planning in places of destination •Free movement protocols, bilateral migration schemes •Migrants' rights, including options to settle, work, access services and assistance, reunite with family members. 	<ul style="list-style-type: none"> •Risk-informed land-use planning •Principled planned relocation policies •Land ownership system •Building codes •Procedures to promote participation of all affected communities
Data	<ul style="list-style-type: none"> •Identification of areas at risk •Identification of potential displacement and past patterns of movement. 	<ul style="list-style-type: none"> •Tracking of evacuation flows 	<ul style="list-style-type: none"> •Tracking of displacement patterns •Tracking of displaced persons' needs and risks 	<ul style="list-style-type: none"> •Progress toward solutions and movement intentions •Risk identification in places of return/integration/resettlement •Economic and non-economic impacts of displacement 	<ul style="list-style-type: none"> •Modelling of potential migration •Monitoring migration flows •Migration intentions 	<ul style="list-style-type: none"> •Identification of potential risks in areas of relocation •Identification of potential losses and damages associated with the relocation
Capacity building	<ul style="list-style-type: none"> •Awareness/training of decision makers •Business support programs for people at risk •Livelihood diversification/strengthening programmes 	<ul style="list-style-type: none"> •Training on displacement management for disaster responders •Preparedness training for members of at-risk communities 	<ul style="list-style-type: none"> •Developing/resourcing systems for redocumentation, family tracing and protection 	<ul style="list-style-type: none"> •Increase capacity of service providers to address additional demand for services •Upskill displaced persons and support opportunities for decent work 	<ul style="list-style-type: none"> •Increase capacity of service providers along routes and in destinations •Train migrants to equip them with marketable skills at destination 	<ul style="list-style-type: none"> •Training on principled relocations for decision-makers •Upskill relocated individuals
Equipment		<ul style="list-style-type: none"> •Vehicles for evacuation support •Stockpiles in emergency shelters 	<ul style="list-style-type: none"> •Replenishing food and non-food stockpiles •Materials for emergency shelters 	<ul style="list-style-type: none"> •Materials for transitional shelters 	<ul style="list-style-type: none"> •Stockpiling service provision/assistance hubs 	
Access to finance	<ul style="list-style-type: none"> •Development of insurance mechanisms •Leveraging remittances for adaptation and resilience 	<ul style="list-style-type: none"> •Setting up an infrastructure for cash transfers for emergency assistance 	<ul style="list-style-type: none"> •Leveraging remittances for disaster response •Activating the infrastructure for cash transfers for emergency assistance 	<ul style="list-style-type: none"> •Leveraging remittances for disaster recovery and reconstruction •Setting up an infrastructure for cash transfers for post-disaster assistance 		<ul style="list-style-type: none"> •Leveraging remittances for resettlement •Leveraging specific relocation funds

4. Overview of the relevant finance landscape

This section offers a synthesis of the various donors and financial instruments available for interventions that address the impacts of climate change on human mobility. The current landscape of efforts to address, avert and minimize the impacts of climate change on human mobility is funded through a mosaic of several, different instruments and actors.

4.1 Financial instruments

The analysis of projects presented in Section 3 and of relevant literature shows that funding for human mobility in the context of climate change can be channeled through a diverse set of financial instruments.²⁷ However, grants remain by far the primary instrument for these interventions, and in most notably for work to address the humanitarian needs of displaced persons and migrants. Instruments such as equities, guarantees and risk-sharing schemes, in fact, are only suited to fund investments on infrastructure, technology and insurance (more information on the potential relevance of different funding instruments for different types of programming is provided in Section 5.4). Other instruments, such as loans, including concessional loans, increase debt and reduce fiscal space for recipient countries and entities. Grants, instead, are accessible to countries with vastly different capacity levels, and are the only instruments that allow countries and communities to receive additional financial support for all kinds of action, and without specific obligations or need for deferred repayment. As such, they typically are the preferred funding instrument for developing countries, particularly in the loss and damage space. In the current financial landscape, it is expected that grants will continue to represent the instrument more commonly used to support this kind of programming.

That being said, the list of instruments emerging from the analysis presented in Section 3 includes the following:

- **Grants:** non-repayable financial contributions that can cover the full, partial, or incremental costs of specific interventions. They are frequently used to fund non-revenue-generating activities and play an important role in supporting innovation, capacity building, the creation of an enabling environment, project preparation, and de-risking interventions that enhance the financial viability of projects. They play a particularly significant role in humanitarian responses, especially in ~~fragile and~~ conflict-affected areas.
- **Concessional loans:** loans that are provided on more favourable terms than those available on the financial market, e.g. these may include low or zero interest rates and extended repayment schedules. The level of concessionality is typically tied to considerations of vulnerability, access to other financial sources, and debt constraints. In the context of human mobility, concessional loans can support infrastructure and service delivery projects that have the potential to generate long-term returns, but may still require more affordable financing to move forward.

²⁷ The typology is adapted from WRI and contextualised for human mobility:
http://pdf.wri.org/glossary_of_financing_instruments.pdf

- **Equity:** direct capital contribution to a project, without the guarantee of repayment, in exchange for a share of ownership and participation in future profits or losses. The return on equity depends on project performance over the investment period. Equity investments often complement loans and are used by Multilateral Development Banks (MDBs), Development Finance Institutions (DFIs), and private sector actors to finance capital expenditures, such as infrastructure or technologies. In the context of human mobility and climate-related interventions, equity could be particularly important for financing climate mobility innovation and capital-intensive components such as climate resilient infrastructure and infrastructure that benefit displaced communities. Especially in the context of developing countries, equity investments from DFIs and MDBs can be catalytic and help overcome market hesitancy.
- **Guarantees:** protections for funders and investors against the risk of non-delivery of a project's outcomes and play a critical role in project finance by enhancing the financial viability of investments. A guarantee may cover a portion or the full value of an investment over its duration, helping to reduce funder or investor risk and improve access to finance. In the context of human mobility interventions, guarantees can facilitate financing by protecting investors from potential losses linked to factors such as political instability or regulatory uncertainty. As such, they can play an important role in enabling projects in ~~fragile or~~ high-risk settings where displacement and climate vulnerability are significant concerns.
- **Risk sharing instruments:** designed to distribute financial risk across multiple actors in order to improve the bankability of projects, particularly in challenging or high-risk environments. Insurance is a specific type of risk transfer instrument that can support both anticipatory action and post-event response. When linked to predictive triggers, such as weather forecasts or early warning systems, insurance can enable early disbursements for preparedness, while also providing financial protection and recovery support after an event. For example, insurance can prevent displacement by funding early action that protects livelihoods, provides preparatory support for relocation and reduces loss and damage and humanitarian costs by responding earlier to predictable climate change events.

Moreover, these categories of instruments can serve as the building blocks for blended finance approaches that can help structure funding for complementary activities that are commercially viable and support long-term resilience-building, rehabilitation and recovery in line with building back better principle. Some of these instruments, based on emerging practices, are listed in Annex 3.

4.2 Types of funding areas

The funding sources that are most prominent for supporting human mobility interventions can be classified in different categories, depending on their primary objectives or typical area of support, and therefore of the specific framing required for designing and supporting interventions. Identifying categories of funding sources and donors can help inform efforts to match needed activities with available sources of finance, and support the development of appropriate framing of projects in line with the requirements of specific funding sources of donors.

It is worth noting that it is not always possible to univocally match a funding arrangement, source, or donor to a specific area. For example, disaster risk reduction and development finance can cover very similar interventions; likewise, dedicated finance to address loss and damage often overlaps with ongoing humanitarian response efforts. Some bilateral donors and MBDs have started reflecting these overlaps through budget tagging or earmarking mechanisms, whereby climate action and resilience are recognized as objectives or areas of investment for broader humanitarian or development investments.

Also, it is worth noting that while a pool of finance actors and funds that have dedicated specific attention to human mobility needs and interventions can be identified,²⁸ this funding is not explicitly recognised as a standalone category of finance. Some limited examples of funds and mechanisms dedicated specifically to migration, planned relocations, displacement, **refugees and durable solutions** exist. However, in most cases human mobility-related funding typically spans across the categories outlined below.

The analysis of projects and literature carried out for the purposes of this Technical Guide has allowed to identify the following main categories of funding arrangements:

- **Development finance** refers to public and private financial resources deployed to support long-term economic growth, poverty reduction, and the broad implementation of sustainable development goals in developing countries.
- **Adaptation finance** refers to the portion of climate finance directed to activities that aim to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks.
- **Disaster Risk Reduction finance** refers to funding that aims to increase the resilience of governments, businesses, and households to disasters associated with natural hazards
- **Humanitarian finance** refers to funding designed to save lives, alleviate suffering and maintain human dignity during and in the aftermath of emergencies and meet the needs of people affected by humanitarian crises.

Funding to avert, minimise and address **loss and damage** associated with the adverse effects of climate change, including extreme weather events and slow-onset events, can be channeled from all the areas listed above. Loss and damage is however identified as a distinct funding area in relevant UNFCCC decision texts,²⁹ and funding specifically dedicated to loss and damage will indeed be channeled through the FRLD once it starts operating. The area will however remain broader and include all the funding arrangements that are relevant to these interventions. Further clarity will be provided as the Standing Committee on Finance continue its technical work on operational definitions of climate finance and its overviews on climate finance flows.

²⁸ These funders typically support efforts to create conditions for safe, dignified displacement, migration, and planned relocation.

²⁹ <https://unfccc.int/documents/644441>

4.3 Key funding actors

This section provides an overview of the major institutional actors and funding entities relevant to programming on human mobility in the context of climate change. These include multilateral development banks (MDBs), development finance institutions (DFIs), bilateral donors, vertical climate funds, humanitarian funding mechanisms, insurers, private sector actors, and philanthropies. A more comprehensive list of institutions under each group is provided in [the online database](#).³⁰ For the purposes of this guide, and based on the analysis of their portfolios as well as of actual projects with relevance for human mobility interventions presented above in section 3, the following groups of actors have been identified as the most relevant for the provision of funding on human mobility and climate change:

- **Multilateral Development Banks (MDBs):** International financial institutions set up by groups of countries that typically provide access to development, adaptation and DRR funding and finance through a various forms (including, grants, loans, equity, and guarantees).
- **Development Finance Institutions (DFIs):** Publicly backed institutions that provide finance to the private sector for development-related investments. DFIs often take on higher risk to crowd in private capital and are active in sectors relevant to increasing resilience and reducing displacement risk.
- **Bilateral donors:** Government agencies or public institutions that provide all key types of finance (including development, humanitarian, DRR, adaptation or loss and damage finance) to other countries.
- **Vertical Climate Funds:** Multilateral climate finance mechanisms (e.g., the GEF, Green Climate Fund, Adaptation Fund and Climate Investment Funds) with a global mandate to provide climate finance, often via grants, concessional loans and occasionally equity and guarantees. These funds focus primarily on mitigation and adaptation to climate change, but some have started supporting interventions relevant to minimising and averting the impact of climate change on human mobility. The FRLD, currently in its initial start-up phase through the BIM, is expected to provide targeted support for actions that avert, minimise, and address the impacts of climate change on human mobility, including displacement, planned relocation, and migration.
- **Humanitarian Funds:** Financial mechanisms and pooled donor funds that provide rapid, flexible financing for crisis response. These funds are used to meet immediate needs during and after climate-related disasters and often support displaced populations.
- **Private banks:** Commercial financial institutions that may provide loans, equity, or guarantees for projects with viable financial returns. Their engagement in human mobility-related finance is typically indirect and conditional on de-risking or blended finance structures.
- **Philanthropies:** Private, non-profit entities that provide grants to support innovation, local initiatives, or underserved areas. Philanthropies often fund

³⁰ Please note that this database is not comprehensive and will be updated based on future developments of the landscape.

research, early-stage project design, and community-based interventions, especially where other finance is hard to access.

- **Public sector insurers:** Government-backed insurance providers or regional risk pooling mechanisms (e.g., ARC, CCRIF) that offer sovereign and sub-sovereign risk transfer products. These actors play a key role in anticipatory action and financing responses to climate-induced loss and damage.
- **Private sector insurers:** Commercial insurance companies offer risk transfer products to businesses, governments, or households and, in some cases, guarantees such as credit or political risk insurance. These guarantees can help de-risk investments in human mobility and these actors are increasingly involved in providing funding to both post-event coverage and anticipatory support.

Each of these actors may use several of the financial instruments outlined in Section 4.1. For instance, MDBs and DFIs can provide grants, loans, equity, and guarantees, while also indirectly supporting insurance schemes or blended finance platforms. Similarly, bilateral donors and philanthropies often provide flexible grant-based support across a broad range of human mobility-related interventions. Moreover, while some actors are specialised in certain areas of finance presented in section 4.2 (e.g. adaptation, humanitarian or insurance-based risk finance), many institutions operate across multiple domains and instruments.

More details on how these actors use available instruments to support interventions in different areas of work are also available in [the online database](#).³¹ Section 5.4 below provides further guidance on how to match human mobility interventions with the funding instruments and funding actors.

³¹ Please note that this database is not an exhaustive snapshot of relevant funding mechanisms, and that it is a living document that will be kept updated based on the analysis of future trends and activities.

5. Programmatic framework for accessing finance

Section 3 has shown the diverse and fragmented nature of the current climate finance landscape. In this context, facilitating access to finance for averting, minimising and addressing climate change impacts through both adaptation and loss and damage efforts requires programmatic approaches.³²

For the aim of this Guide, a programmatic approach is defined as a set of outcomes to be achieved through a diversity of interconnected programmes, projects and activities with the overarching objective to avert, minimise and address the impacts of climate change on human mobility, implemented in a coordinated, synergistic manner. Developing such an approach is key to supporting strategic planning and coordination of responses to address different needs through different types of interventions (as presented in Table 2), allowing to identify optimal implementation and funding arrangements to deliver tangible, positive outcomes for people at risk or affected by climate change. Adopting such an approach is even more essential to identify, prioritise, fund and ultimately implement work on human mobility in the context of climate change, which is a highly diverse and contextual phenomenon, with different drivers, patterns, and implications and requiring widely different responses.

Programmatic approaches make it possible to account and plan for the full spectrum of needs related to human mobility in the context of climate change, including:

- needs that should be addressed by building the resilience of communities to slow and sudden onset climate change hazards (e.g. to address conditions that might result in displacement or affect traditional forms of human mobility); and
- needs that occur in the aftermath of climate change events and related human mobility, and that can help avert, minimise and address their direct and indirect impacts.³³

By adopting a programmatic approach, practitioners can systematically assess needs, anticipate likely impacts and identify potential responses. This helps to more effectively align potential activities with the objectives of specific funding streams and better identify options for accessing finance in a more comprehensive and systematic manner. This process simultaneously builds upon and complement other planning processes on the topic, providing guidance to operationalise recognised policy priorities.

In order to support these efforts, this chapter presents a programmatic framework tailored specifically for mobilizing finance for human mobility, articulated around four key elements:

1. Guidance for Human Mobility Needs Assessment in both anticipatory and post-climate change event programming settings.

³²

<https://unfccc.int/sites/default/files/resource/Final%20update%20Pacific%20Programmatic%20approach%20for%20Loss%20and%20Damage%20Fund.pdf>

³³ Most ex-ante interventions help avert and minimise losses and damages linked with human mobility. Ex-post interventions more directly aim to address losses and damages incurred the aftermath of climate change events. However, if carried out timely and effectively, they also help prevent potential future impacts – they are post-event interventions that help avert and minimise potential, future losses and damages.

2. Recommendations for the establishment and/or enhancement of governance and coordination mechanisms to support better investment and implementation decisions on human mobility with consideration of diverse needs and funding options.
3. Recommendations for the development of prioritisation criteria and appraisal mechanisms to support the development of concise programmes of action on human mobility, and subsequent matching of priority actions to funding options.
4. Guidance for matching programming needs and potential activities with available donors and funding mechanisms to support fundraising efforts.

5.1 Human Mobility Needs Assessment

Needs assessments are a common practice in both development and humanitarian settings and play an important role in increasing access to finance by providing an evidence base for action and requests. They are widely used to guide resource mobilization in response to extreme events and crises, including for addressing climate change impacts on human mobility.³⁴ Needs assessments are also frequently undertaken in the context of climate change impacts not related to human mobility. In order to specifically quantify climate finance needs, COP 24 requested the SCF to prepare, every four years, a report on the determination of the needs of developing country Parties related to implementing the Convention and the Paris Agreement (NDRs). So far, two NDRs have been prepared. The latest NDR³⁵ published in 2024 included quantitative and qualitative information retrieved from National Adaptation Plans (NAPs), Nationally Determined Contributions (NDCs), National Communications (NCs), Biennial Transparency Report (BTR) submissions, Technology Needs Assessments and Action Plans, and covered costed and non-costed needs for adaptation and mitigation, and needs to avert, minimize and address loss and damage. Loss and damage needs were included only in two NCs and five NDCs.

Comprehensively identifying needs related to human mobility in the context of climate change requires drawing on assessments that can be carried out in advance of or in response to displacement, migration or planned relocations:

- Ex-ante human mobility needs assessment, which inform efforts to avert and minimise the impacts of climate change on human mobility and related negative outcomes on communities, such as: adaptation planning and resilience-building to slow- and sudden-onset climate hazards that may drive human mobility, which reduce the risk of potential future displacement; or improved disaster preparedness and anticipatory action, which minimise the risks and impacts associated with displacement.
- Ex-post human mobility needs assessment, which help identify needs related with forms of mobility that have been triggered by climate impacts and mobilize relevant emergency, recovery and reconstruction support, and are typically conducted in the aftermath of (sudden-onset) climate events to inform immediate, medium and short-term responses related to displacement and other population movements.

³⁴ <https://crisisresponse.iom.int/index.php/response/burundi-crisis-response-plan-2024-2026>

³⁵ https://unfccc.int/sites/default/files/resource/2ndNDR_ES_SCF35_unedited%20version_0.pdf?download

Table 3 provides a comparative overview of ex-ante and ex-post human mobility needs assessment.

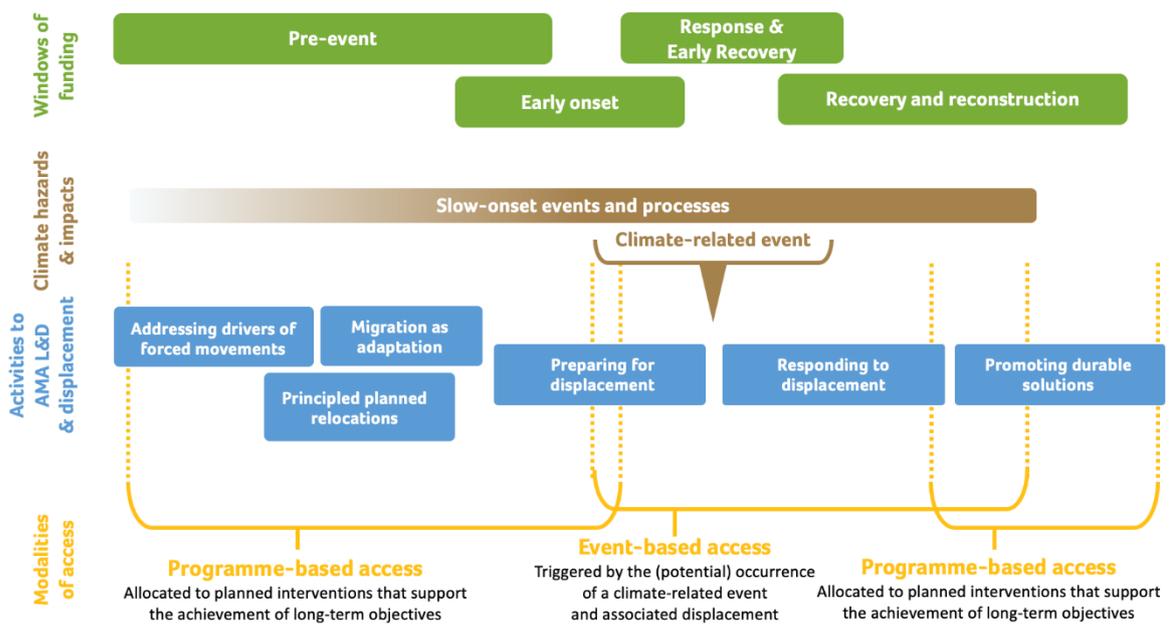
Table 3. Main features of ex-ante and ex-post human mobility needs assessments

Feature	Ex-ante human mobility assessment	Ex-post human mobility assessment
Objective	Support measures for averting and minimising loss and damage through adaptation planning and anticipatory action, based on historical exposure and projected risk to slow and sudden onset events	Support measures to address immediate, short- and medium-term needs, risks and losses and damages related to displacement and other forms of mobility following a climate event.
Timeframe	Pre-climate change event, medium – to long-term planning	Post-climate change event, short- to medium-term response
Focus	Resilience and preparedness needs of the population at risk of displacement; and resilience needs of especially vulnerable people, i.e. Indigenous peoples, women, girls and boys, people with disabilities and migrants and displaced persons and refugees.	Urgent needs, recovery and reconstruction needs of population displaced or on the move as a consequence of recent climate impacts.
Approach	Needs-based assessment aligned with historical exposure to climate change impacts and climate change scenario planning.	Needs-based assessment aligned with real-time information on occurred climate change events.

Pre- and post-event needs identified through such assessments can be met through different types of funding (Section 4.1), respectively aimed to support planned interventions to achieve long-term objectives or responsive interventions to address the impacts of specific events. Figure 5 shows how different human mobility interventions fit within different windows and modalities of funding, that have been specifically elaborated in discussions on funding for loss and damage (e.g. under the Transitional Committee and the work to operationalise the FRLD).³⁶ This has relevance for defining the kinds of financing options available for different types of interventions – and therefore all fundraising efforts that this Guide supports. Ex-ante needs are primarily addressed through programme-based access, while ex-post ones through a mix of event-based access (for short-term interventions) and programme-based access (for longer-term interventions).

Figure 5. Human mobility interventions and modalities of access to finance

³⁶ <https://unfccc.int/sites/default/files/resource/LDC%20Access%20Modality%20Paper.pdf>



Source: Author's elaboration based on evidence from projects and inputs to the work of the Transitional Committee

5.1.1 Ex-ante human mobility needs assessment

While ex-ante needs-based tools are widely used in the climate policy and finance landscape, their application has fallen short of integrating human mobility considerations. The integration of human mobility in key reporting and planning instruments under the UNFCCC and the Paris Agreement is becoming more common. However, further efforts can be undertaken at national and subnational levels to explicitly identify and communicate human mobility needs through climate change planning processes.³⁷ The Wim ExCom has published a Technical Guide to support these efforts.³⁸



Figure 6. Ex-ante Human Mobility Needs Assessments process

³⁷ <https://slycantrust.org/knowledge-resources/briefing-note-human-mobility-in-national-adaptation-plans-updated-version>

³⁸ https://unfccc.int/sites/default/files/resource/WIM_ExCom_human-mobility_TFD_2024.pdf

Assessing ex-ante human mobility needs is a forward-looking exercise (see figure 6) that supports the identification of potential impacts of climate change on human mobility, notably the increased risk of displacement and forced migration occurring, and their eventual negative outcomes on affected communities. In the context of ex-ante human mobility needs assessment, three key groups of beneficiaries are particularly relevant to work on human mobility: (1) people at risk of becoming displaced or trapped; (2) migrants and displaced persons, refugees and pastoralist groups, and (3) communities who may be hosting people moving in the context of the adverse effects of climate change.

Ex-ante needs assessments help identify the needs of these different at-risk communities in a rights-based, intersectional manner and inform the identification of measures to increase their resilience. To this end, ex-ante needs assessments should allow to:

- Localising and quantifying populations at risk of displacement based on both historical exposure and projected climate risks (related to both slow-onset processes and sudden-onset events);
- Identifying the drivers of displacement and other forms of human mobility and their linkages to climate change;
- Mapping the needs of people at risk of displacement (including people who might remain trapped in at-risk areas), identifying interventions needed to reduce the likelihood that they may be displaced in the future (including by moving voluntarily and in a dignified manner out of at-risk areas, if needed).
- Mapping the needs of people at risk of displacement, or that could be affected by future human mobility (including host communities), identifying interventions to reduce associated impacts when population movements actually take place.
- Mapping the specific adaptation and resilience needs of people already on the move, and who may need specific support to avert, minimise and address future loss and damage.

Table 4 presents more details on how to carry out each step of ex-ante human mobility needs assessment.

Table 4. Illustrative approach to ex-ante Human Mobility Needs Assessments

Step	Key Question	Output	Additional guidance
Step 1: Understand climate change hazards and displacement risk contexts	What are the drivers of displacement? How they are/ will be exacerbated by climate change	Climate and displacement risk profile (current and future human mobility hotspots and trends)	Gather and structure existing climate, economic, and social data through a human mobility lens. In many cases, climate, economic and social data is well captured through various national planning and reporting processes. However, this data requires further systematization and sensitization from the perspective of human mobility impacts. The approach to data systematization is described in Section 4.2 of the Technical Guide on Integrating Human Mobility and Climate Change Linkages into Relevant National Climate Change Planning Processes
Step 2: Identify vulnerable populations including	Who is at risk of displacement, and what makes them likely to be	A population vulnerability profile that defines key groups (e.g.	Identify who could be forced to move, affected by climate change-related population movements, or affected by climate impacts while on the move in current and future

populations already on the move, at risk of displacement or that could be affected by population movements	displaced? What other communities could be negatively affected (and how) if displacement takes place? How could people already on the move be affected by climate change impacts?	communities or socio-economic profiles at specific risk of being displaced, potential host communities, people already displaced) and the drivers of their vulnerability	scenarios developed in step 1, and analyze their key conditions of vulnerability.
Step 3: Analyse current and future human mobility needs	How can risks and potential impacts related with human mobility be reduced?	Needs matrix by population group and category (refer to Figure 6)	Match identified conditions of vulnerability and potential impacts with a menu of concrete interventions that can inform program design and resource mobilization. Analyze and categorize the specific human mobility needs of populations affected by climate change.

Supporting information and tools

Tools and methodologies that can assist with conducting ex-ante human mobility needs assessment include:

- **IDMC’s Displacement Risk Model** uses information about recorded and forecast hazards to model the risk of future displacement, calculating how many people will be forced to flee damaged or destroyed homes in a given location each year, decade or century. This global modelling approach has been scaled down at regional and national levels in locations all around the world.³⁹
- **IOM’s Risk Index for Climate Displacement (RICD)** supports the identification of current and future displacement hotspots, trends, and patterns. For the identification of future risk of displacement, RICD integrates data from Shared Socioeconomic Pathways (SSPs) and Representative Concentration Pathways (RCPs) to simulate different climate and development trajectories.⁴⁰
- **World Bank’s Groundswell** global and regional/national reports provide projections and analysis of internal climate migration for Sub-Saharan Africa, South Asia, Latin America, East Asia and the Pacific, North Africa, and Eastern Europe and Central Asia. They also provide qualitative analyses of climate-related mobility in countries of the Mashriq and in SIDS.⁴¹
- **IOM’s Displacement Tracking Matrix (DTM)** tracks and monitors displacement and mobility trends in real time, and can be useful to understand patterns of displacement by providing multi-layered data on: who is moving, why and where they are moving to and from; the conditions and needs of displaced and mobile populations. The DTM enables decision-makers to assess the present-day drivers of

³⁹ <https://www.internal-displacement.org/displacement-risk/>

⁴⁰ <https://roasiapacific.iom.int/sites/g/files/tmzbdl671/files/documents/2024-12/ricd-ap-factsheet.pdf>

⁴¹ <https://openknowledge.worldbank.org/entities/publication/2c9150df-52c3-58ed-9075-d78ea56c3267>

displacement and capture information that supports immediate and medium-term response planning, especially for those who are displaced.⁴²

- The **Toolkit for Anticipatory Action in Fragile, Conflict- and Violence-Affected Settings** developed by the Red Cross Red Crescent Climate Centre, the Anticipation Hub and the International Water Management Institute, helps assess and implement conflict-sensitive, effective, and sustainable anticipatory action in contexts featuring fragility, conflict and violence (FCV).⁴³
- The **Planned Relocation Toolbox**, developed by Georgetown University, UNHCR, and IOM in close cooperation with the World Bank and the UN University, provides guidance to plan for the relocation of communities in the context of climate change and disasters.⁴⁴
- The **Global Protection Cluster Toolkit on Preparedness for Protection in the Context of Climate Change and Disasters** provides resources to integrate protection issues in preparedness and implement appropriate responses in climate change and disasters scenarios.⁴⁵

Examples of ex-ante assessments based on historical projections and climate scenarios:

- ICPAC's Regional Flood Displacement Risk Profile⁴⁶
- Flood displacement risk assessment in Fiji and Vanuatu⁴⁷
- Example of human mobility assessment based on historical exposure: Afghanistan Climate Vulnerability and Human Mobility Assessment (IOM, 2025)⁴⁸
- Example of human mobility assessment based on climate change scenarios: Risk Index for Climate Displacement in the Philippines (IOM, 2025)⁴⁹
- IDMC's and ETH's Global assessment model on displacement risk in climate change scenarios⁵⁰
- COOPI Needs Assessment of Vulnerable Populations Living in Flood-prone Areas in Khartoum State (2022)⁵¹

⁴² <https://dtm.iom.int/>

⁴³ https://www.anticipation-hub.org/Documents/Training_and_Educational_Material/Toolkit_for_anticipatory_action_in_fcv_settings/AA_in_FCV_toolkit.pdf

⁴⁴ <https://www.unhcr.org/media/planned-relocation-toolbox>

⁴⁵ <https://globalprotectioncluster.org/publications/610/policy-and-guidance/tool-toolkit/gpc-toolkit-preparedness-protection-context>

⁴⁶ <https://www.icpac.net/publications/regional-flood-displacement-risk-profile/>

⁴⁷ <https://www.internal-displacement.org/publications/flood-displacement-risk-assessment-for-fiji-and-vanuatu-in-current-and-future-climate/>

⁴⁸

https://crisisresponse.iom.int/sites/g/files/tmzbd1481/files/appeal/documents/Afghanistan%20Climate%20Vulnerability%20Assessment%20_Round%201.pdf

⁴⁹ <https://environmentalmigration.iom.int/CMIL-AP/RICD>

⁵⁰ <https://www.science.org/doi/10.1126/science.abh4283>

⁵¹ <https://reliefweb.int/report/sudan/needs-assessment-vulnerable-populations-living-flood-prone-areas-khartoum-state-march>

Once potential impacts and at risk people/communities have been identified, programmatic needs can be identified to plan for effective responses. The **Human Mobility Needs Matrix** (Table 5) has been developed specifically for the purposes of this Technical Guide to offer guiding questions for identifying responses to the needs of different affected groups within various climate-related human mobility scenarios. It builds on the analysis of programming domains presented in Table 2 (Section 3) and is designed to support users in conducting a more comprehensive assessment of needs and potential interventions. An example of its application is provided in Annex 4.

Table 5. Matrix to match ex-ante needs with mobility responses

Beneficiaries of the intervention Type of intervention	People at risk of becoming displaced or trapped	Migrants and displaced persons and refugees at risk of climate impacts	Potential host communities
Infrastructure and technology	<ul style="list-style-type: none"> •What measures are needed to protect land, houses and assets and mitigate environmental pressures that could result in forced population movements? 	<ul style="list-style-type: none"> •Can structural safety be enhanced in sites/areas where people on the move transit or concentrate? 	<ul style="list-style-type: none"> •Should housing and infrastructure be strengthened in potential areas of destination of population flows?
	<ul style="list-style-type: none"> •Should evacuation routes and shelters be enhanced in advance of potential displacement? 		
	<ul style="list-style-type: none"> •Should hazard monitoring, Early Warning Systems and Emergency communication systems be set up or enhanced? 	<ul style="list-style-type: none"> •Do hazard monitoring, Early Warning Systems and Emergency communication systems cover areas of residence or transit of people on the move? 	
Policy and enabling environment	<ul style="list-style-type: none"> •Do land tenure systems, land-use and planning frameworks, building codes, social protection mechanisms (etc) enable reforms and interventions that support relevant resilience and adaptation interventions? 	<ul style="list-style-type: none"> •Are the rights of people on the move sufficiently recognised by DRR/DRM and emergency management frameworks? 	<ul style="list-style-type: none"> •Do potential areas of destination have adequate planning instruments?
	<ul style="list-style-type: none"> •Are there frameworks in place to enable migration or planned relocations from areas at risk? 		<ul style="list-style-type: none"> •Are the rights (to settle, work, access services) of potential incoming residents sufficiently recognised by local frameworks?
	<ul style="list-style-type: none"> •Do DRM/Emergency preparedness frameworks account for displacement? 		
Data	<ul style="list-style-type: none"> •Are drivers and potential patterns of displacement been identified to support adaptation/resilience and preparedness? 	<ul style="list-style-type: none"> •Is there sufficient information on the number, composition and movements of people on the move? 	<ul style="list-style-type: none"> •Are inflows of people monitored and potential immigration scenarios available?

Capacity building	<ul style="list-style-type: none"> •Do policy-makers have a clear understanding of human mobility and climate change issues, and fo they have sufficient capacities to develop and implement relevant interventions? 	<ul style="list-style-type: none"> •Are local DRR/DRM institutions and personnel able to work with people on the move? 	<ul style="list-style-type: none"> •Should the capacity of service providers be enhanced to address additional demands for services in case of population inflows?
	<ul style="list-style-type: none"> •How can the capacity of people at risk to anticipate and respond to climate change impacts be strengthened? 		
	<ul style="list-style-type: none"> •Should the ability of response personnel to manage displacement be strengthened? 		
Equipment	<ul style="list-style-type: none"> •What kind of items/equipment is needed as part of interventions that support livelihoods/income generating activities •What resources are needed to constitute specific emergency stockpiles? 	<ul style="list-style-type: none"> •Are specific items/equipment needed for DRR/preparedness work with people on the move? 	
Access to finance	<ul style="list-style-type: none"> •Can specific insurance mechanisms be supported? •Are there community-based financial resources (e.g. remittances) that can be used for adaptation/resilience or preparedness? 		

5.1.2 Ex-post human mobility needs assessment

A diversity of ex-post assessments are widely used in humanitarian response and recovery to identify needs and responses related with human mobility. However, their effectiveness in adequately account for losses and damages in the context of climate change is often limited, especially in relation to non-economic losses and damages and the development of climate-resilient recovery and reconstruction options.

Ex-post human mobility needs assessments are designed to capture the immediate and medium-term needs of populations displaced by climate hazards such as floods, cyclones, droughts or wildfires (including as they may overlap with conflict, violence and persecution), as well as of other communities affected by their movement. Figure 7 provides a schematic indication of how they progress. Such assessments provide a foundation to all interventions to address losses and damages associated with displacement, allowing to better design, coordinate and deliver humanitarian responses and support recovery and reconstruction planning. If effectively implemented, these interventions also help avert and minimise further negative outcomes of displacement.



Figure 7: process of ex-post human mobility assessments

Ex-post needs assessments aim to:

- Assess the impact of disasters associated with climate change on human mobility.
- Identify who has been displaced or otherwise affected, the specific protection and assistance needs and risks they face.
- The impacts displacement on people on the move and host communities.
- Inform recovery and rehabilitation needs using a human mobility lens.

Table 6 presents more details on a step-by-step approach for conducting ex-post human mobility needs assessment.

Table 6. Illustrative approach to ex-post Human Mobility Needs Assessment

Step	Key Question	Output	Additional Guidance
Step 1: Assess the impact of a climate change event and its human mobility outcomes	How has the climate event affected human mobility patterns (displacement, immobility, migration)?	Situation snapshot (real-time data on human mobility and its impacts, and the needs of affected persons)	Conduct assessments to map the scale of impact vis-à-vis baseline situation.
Step 2: assess losses, damages, and vulnerabilities of affected populations	What losses and damages have been experienced by displaced and other affected populations, and what conditions of vulnerability shaped these impacts?	Assessment of direct and indirect, economic and non-economic loss and damage suffered. Identification of factors of exposure and vulnerability	Identify affected population groups, and assess associated loss and damage in line with the data generated in Step 1.
Step 3: Assess response, recovery and reconstruction needs	What do affected populations need to cope with impacts and rebuild/recover (including to reduce future risk)?	Human Mobility Needs Matrix disaggregated by key groups of beneficiaries	Apply the Human Mobility Needs Matrix (Figure 2) to translate identified vulnerabilities, losses and damages into actionable climate-resilient recovery and rehabilitation needs.

Supporting information and tools

The following tools can be useful for supporting ex-post human mobility needs assessment in the context of climate change:

- IOM's **Displacement Tracking Matrix (DTM)** provides real-time data on population movements, conditions, and vulnerabilities. It is crucial for creating an early snapshot of displacement and for tracking needs over time.⁵²
- UNHCR has developed **nowcasting of statistics on the refugee and asylum-seeker populations**, with estimates produced for the previous month on a rolling basis. When new official statistics are released, the nowcasted estimates are realigned. The estimates can therefore be best used to measure changes in the size of refugee and asylum-seeker populations since the last published set of official statistics.⁵³
- **Post-Disaster Needs Assessment (PDNA)** is a structured methodology used to assess disaster impacts and identify recovery and reconstruction needs. It combines economic loss and damage analysis (DaLA) with a human recovery lens (HRNA) and includes planning for durable solutions. The PDNA is government-led, coordinated with international partners (EU, UN, WB), and emphasizes the participation of affected populations and local actors.⁵⁴
- IDMC provides methodologies to **assess the socio-economic impacts of displacement**, including by using proxy indicators that can help develop rapid country-specific estimates.⁵⁵
- UNHCR **Protection Monitoring Central Data Catalogue** includes the systematic and regular collection, verification, and analysis of information to identify violations of rights and/or protection risks, priorities for, and needs of populations of concern, including refugees and other displaced people.⁵⁶
- IOM and La Ruta Del Clima have developed tools to **assess the economic and non-economic impacts of displacement and planned relocation in the context of climate change**.⁵⁷
- The forthcoming Wim ExCom **Technical Guide on averting, minimizing and addressing non-economic losses in the context of human mobility** provides an overview of potential impacts, aiming to support successful responses to non-economic losses associated with displacement, migration, immobility and planned relocation.⁵⁸
- **IMPACT/REACH's Multi-Sectoral Needs Assessments (MSNA) and Area-Based Assessments (ABA)** provide data on displacement patterns, conditions of displaced persons and their needs in countries across all regions.⁵⁹
- UNHCR's **Needs Assessment for Refugee Emergencies** provides an analytical framework and easily customized rapid multi-sectoral needs assessment designed

⁵² <https://dtm.iom.int/>

⁵³ <https://www.unhcr.org/refugee-statistics/insights/explainers/nowcasting-refugees-asylum-seekers.html>

⁵⁴ <https://www.undp.org/publications/post-disaster-needs-assessment>

⁵⁵ <https://www.internal-displacement.org/focus-areas/socioeconomic-impacts-of-internal-displacement/#:~:text=The%20global%20cost%20of%20one,for%20their%20loss%20of%20income.>

⁵⁶ <https://microdata.unhcr.org/index.php/catalog/PRM/?page=1&ps=15&repo=PRM>

⁵⁷ <https://lac.iom.int/sites/g/files/tmzbd12601/files/documents/2024-09/asserssing-the-implications-of-climate-change-loss-and-damage-on-human-mobility-in-latin-america.pdf>

⁵⁸ https://unfccc.int/sites/default/files/resource/WIM_TEASER_4.pdf

⁵⁹ <https://www.impact-initiatives.org/where-we-work/>

for refugee emergencies, that can also be used in other forced displacement contexts.⁶⁰

- UNHCR's **Operational Data Portal** provides an information and data sharing platform to facilitate coordination of crisis response ~~refugee emergencies~~.⁶¹

Examples of ex-post assessments:

- International Organization for Migration. Caribbean Environmental Resilience and Disaster Displacement Response Plan (2025)⁶²
- IDMC's Unveiling the Costs of Internal Displacement (2021)⁶³
- UNHCR's Protection Needs Assessment and Related Vulnerability Scoring for UNHCR's Drought Response in Zambia (2024)⁶⁴
- UNHCR's Vulnerability Assessment Framework, Jordan, including climate vulnerability of Refugees in Host Communities (2024)⁶⁵
- USAID, Mercy Corps, and ACDI/VOCA: Assessing Communities' Coping Strategies during droughts (2023)⁶⁶
- IMPACT and PDD, How Multi-Sectoral Needs Assessments can strengthen the evidence base of international policymaking on non-economic losses in ~~fragile and~~ conflict-affected situations.⁶⁷
- IOM Costing Tool for Human Mobility and Loss and Damage Assessment Tool (in Spanish) focuses on planned relocation and on disaster displacement and has been piloted in Chile and Costa Rica in 2025.⁶⁸

Once human mobility impacts and affected persons and communities have been identified, programmatic needs can be identified to plan effective responses. The **Human Mobility Needs Matrix** in table 8 includes key guiding questions that can help steer the identification of responses to the needs of different groups of people following the impacts of climate change events.⁶⁹ A comprehensive overview of potential activities is provided in table 2 above (section 3). The matrix should support users with a more comprehensive analysis of needs and responses. A template matrix has also been compiled based on the extensive

⁶⁰ <https://emergency.unhcr.org/coordination-and-communication/refugee-coordination-model/needs-assessment-refugee-emergencies-nare>

⁶¹ <https://data.unhcr.org/>

⁶² <https://crisisresponse.iom.int/response/caribbean-environmental-resilience-and-disaster-displacement-response-plan-2025>

⁶³ <https://www.internal-displacement.org/publications/unveiling-the-cost-of-internal-displacement-0/>

⁶⁴ <https://data.unhcr.org/ar/documents/download/113272>

⁶⁵

<https://data.unhcr.org/en/documents/download/111279#:~:text=UNHCR's%20new%20socio%2Deconomic%20survey,the%20second%20half%20of%202023.>

⁶⁶ <https://reliefweb.int/report/somalia/assessing-communities-coping-strategies-during-current-drought-somalia-research-brief-somalia-resilience-population-measurement-rpm-activity-may-2023>

⁶⁷ <https://pamad.disasterdisplacement.org/2023/12/03/msna-Ind-cop28/>

⁶⁸ https://lac.iom.int/sites/g/files/tmzbd12601/files/oim_mecc_two-pages_hcf_pilotaje_costa-rica_spa.pdf

⁶⁹ A downloadable version of this matrix is available [here](#): (full link to be provided in due course)

analysis of projects presented in Section 3⁷⁰ to provide an example of the potential outcomes of this exercise. It is available in Annex 4.

Table 7. Human Mobility Needs Matrix to support ex-post assessment of needs

Beneficiaries of the intervention	Displaced persons	Host communities
Type of intervention		
Infrastructure and technology	<ul style="list-style-type: none"> •Should shelter/housing or service infrastructure be (re)built or strengthened in displacement sites? 	<ul style="list-style-type: none"> •Should housing and service infrastructure be strengthened in places of destination of displaced persons?
Policy and enabling environment	<ul style="list-style-type: none"> •Are there clear collaboration frameworks, roles and responsibilities to support response and durable solutions? •Do displaced persons have sufficient access to land, housing, employment, services and social protection? 	<ul style="list-style-type: none"> •Are the rights of host communities clearly spelled out? •Is land use, housing, and service planning adequate in areas of destination of displaced persons?
Data	<ul style="list-style-type: none"> •Is data on patterns of displacement, needs of displaced persons, and impacts of displacement systematically gathered? •Is it integrated in loss and damage assessments? 	<ul style="list-style-type: none"> •Are the impacts of displacement on host communities accounted for?
Capacity building	<ul style="list-style-type: none"> •Are systems for redocumentation, family tracing and protection sufficiently resourced? •Are response systems sufficiently resourced to manage displacement? 	<ul style="list-style-type: none"> •Do providers of basic services need additional resources to deal with the inflow of displaced persons? •Are there sufficient resources/capacity to support community cohesion programmes?
Equipment	<ul style="list-style-type: none"> •Do stockpiles of food and non-food items need to be replenished to address the needs of displaced persons? •Are there sufficient materials for rebuilding? 	<ul style="list-style-type: none"> •Are there sufficient material and immaterial resources to support relevant interventions?
Access to finance	<ul style="list-style-type: none"> •Can cash transfer mechanisms be activated to assist displaced persons? •Can community resources (e.g. remittances) be leveraged in support of response and durable solutions? 	<ul style="list-style-type: none"> •Can cash transfer mechanisms be activated to assist host communities affected by displacement?

5.2 Governance and coordination mechanisms

Robust decision-making systems are essential to support the mobilisation of finance to match human mobility needs in the context of climate change. The establishment of governance and coordination systems is necessary to ensure that programming and identified interventions are developed in a participatory manner that accounts for the perspectives of all relevant stakeholders, and align with key national and subnational

⁷⁰ Also available on the project database [here](https://docs.google.com/spreadsheets/d/1fSUWm2y85zfAFRH1baKLyO7bBtt6W9c6xGPkn5VhCk/edit?gid=0#gid=0): <https://docs.google.com/spreadsheets/d/1fSUWm2y85zfAFRH1baKLyO7bBtt6W9c6xGPkn5VhCk/edit?gid=0#gid=0>

priorities. As such, they are a precondition to effective needs assessments and mapping and prioritization of interventions, and a foundation to fundraise for the implementation of all measures for addressing, minimising and averting the impacts of climate change on human mobility.

- **Areas of coordination and functional responsibilities of coordination structures**

A robust governance system should identify the roles and responsibility of relevant coordination mechanisms, including the areas and processes for which coordination is needed, and the procedures needed. It is important to note that the set-up, mandates and functional responsibilities of coordination structures vary according to the country's institutional context and specific decision-making needs. However, at least three areas of coordination could be considered based on the analysis of the existing good practices:

- Provision of support to national planning processes. A coordination system or mechanism on human mobility should input to the development and contribute to the implementation of all relevant plans (on climate change, as well as on development, humanitarian interventions, resilience etc).
 - The Wim ExCom Technical Guide on integrating human mobility and climate change linkages (Section 4.1.1) describes how to mainstream human mobility into the coordination mechanisms for national adaptation planning.
 - IOM's Migration Crisis Operational Framework provides an approach to coordinating the planning of humanitarian and post-disaster situations in a variety of human mobility situations, and across a diversity of areas of work (including climate change and DRR/resilience).⁷¹
- Resource mobilisation, including match-making with appropriate sources of funding.
 - The NDC Partnership's guide on best practices in coordination mechanisms recognises the role of coordination mechanisms in supporting the mobilisation of funding for climate action across government and partners.⁷²
 - Humanitarian and refugee coordination mechanisms enable rapid response where state capacity is limited, leveraging local relationships, pre-positioned supplies, and coordination mechanisms to scale action quickly during crises. Humanitarian coordination extends to finance, providing funding mechanisms, models and channels that can support and inform financing for averting, minimizing and addressing loss and damage.
- Project prioritisation to support the identification of the most impactful areas of action for addressing, minimising and averting the impact of

⁷¹ <https://www.iom.int/mcof>

⁷² <https://ndcpartnership.org/sites/default/files/2024-07/country-coordination-mechanisms-best-practice-brief.pdf>

climate change on human mobility (refer to section 6.2 for additional information on operationalising project prioritisation).

- **Composition of coordination structures**

Human mobility is a cross-sectoral issue, and therefore actors and stakeholders engaged in these coordination mechanisms need to represent different sectors, authorities and institutions. These need to include those that are explicitly mandated with migration, displacement, and planned relocation topics, but also all other relevant domains, including land-use planning, decent work and livelihoods, housing and infrastructure, service provision, social cohesion, gender and inclusion, data and statistics, and so on. Such structures can also be built upon existing coordination mechanisms, such as:

- Dedicated Roundtables/Clusters on Human Mobility and Climate Change, as they have been set up by Chile and Guatemala, or on Disaster Displacement, as it has been set up by Bangladesh.
- National Coordination Mechanisms on Human Mobility: national systems aiming improve the coherence of government efforts related to migration and human mobility, by bringing together government entities across sectors to ensure a "whole-of-government" approach to implementing the Global Compact for Safe, Orderly, and Regular Migration (GCM).
- National coordination mechanisms for the implementation of the Global Compact on **Refugees** (GCR), which typically include a focal point and inter-ministerial and multi-stakeholder coordination to develop refugee response plans.
- National and sub-national Platforms on Disaster Risk Reduction.⁷³
- National Loss & Damage Coordination mechanisms (whenever available) or ad hoc consultation mechanisms informing the work of national loss and damage contact points and FRLD focal points.⁷⁴
- National Climate Change coordination Structures, including specifically on finance, such as National Designated Authorities for the GCF.⁷⁵

Different countries address these coordination needs in different manners: some set up coordination structures specifically dedicated to displacement, migration, or planned relocation. Others mainstream attention to specific topics into some of the above-mentioned structures (e.g. displacement issues addressed as part of broader disaster risk management or emergency management/humanitarian concerns by dedicated bodies). Each country needs to strike a balance between specificity of approaches and fragmentation of its institutional setups. Whatever the set-up, these needs assessments and prioritization exercises need to be carried out in the context of broader climate change discussions, assessments and responses and that they

⁷³ <https://www.preventionweb.net/sendai-framework/national-platforms>

⁷⁴ <https://unfccc.int/loss-and-damage-contact-points>

⁷⁵

[https://www.greenclimate.fund/about/partners/nda#:~:text=National%20Designated%20Authorities%20\(NDA s\)%20are,emission%20and%20climate%2Dresilient%20development.](https://www.greenclimate.fund/about/partners/nda#:~:text=National%20Designated%20Authorities%20(NDA s)%20are,emission%20and%20climate%2Dresilient%20development.)

build, as much as possible, on existing synergies with other discussions, structures and institutions. This is particularly important in light of the fragmentation of the donor landscape: humanitarian finance systems rely on specific coordination structures that frequently exist in isolation from climate finance and development finance coordination. MDBs and insurance industry actors are also coordinating through dedicated mechanisms and networks.⁷⁶ Comprehensive coordination mechanisms that involve stakeholders from multiple sectors are essential to bridging these multiple gaps.

It is important to note that different sets of actors may be involved in different coordination mechanisms for the development of ex-post and ex-ante programming responses in the context of climate change in different locations.⁷⁷ Table 8 provides a list of those that are more commonly involved in coordination mechanisms to support both pre-emptive and responsive assessment and action.

⁷⁶ https://unfccc.int/sites/default/files/resource/Final_Draft_5d_TSU.pdf

⁷⁷ For a specific list of actors that should be involved in National Adaptation Planning, please refer to the Technical guide on integrating human mobility and climate change linkages into relevant national climate change planning processes, p. 36: https://unfccc.int/sites/default/files/resource/WIM_ExCom_human-mobility_TFD_2024.pdf

Table 8. List of actors typically involved in relevant coordination mechanisms

Governmental actors by sector	Other actors
Disasters and climate change	Civil society
<ul style="list-style-type: none"> •Disaster Risk Reduction and Disaster Risk Management •Emergency Management/Civil Protection •Meteorological agency •Climate change 	<ul style="list-style-type: none"> •NGOs working on CCA/DRR/Disaster response •Red Cross/Red Crescent Societies •Organisation of farmers •Unions
Provision of basic services	<ul style="list-style-type: none"> •Organisations of specific demographics and minorities •Organisations of Indigenous People •Representatives of at-risk communities •Representatives of displaced communities
<ul style="list-style-type: none"> •Education •Health •Transportation and service networks 	Private sector actors
Habitat	<ul style="list-style-type: none"> •Service companies in key sectors •Employers and recruiters in key areas •Real estate and housing developers
<ul style="list-style-type: none"> •Local authorities •Land-use and urban planning •Housing •Land registry 	Academia
Employment	<ul style="list-style-type: none"> •Universities •Private researchers/think tanks
<ul style="list-style-type: none"> •Labour and employment •Rural development, agriculture, fisheries and forestry •Training 	International organisations
Human mobility	<ul style="list-style-type: none"> •Human mobility •Development, urban settlements (UN Country team) •Humanitarian action (Humanitarian Country team)
<ul style="list-style-type: none"> •Foreign Affairs •Migration •Border management 	Foreign governments
Social services and inclusion	<ul style="list-style-type: none"> •Embassies/consulates
<ul style="list-style-type: none"> •Gender •Social protection •Youth and the elderly 	
Data	
<ul style="list-style-type: none"> •Statistics office 	

All these mechanisms should work according to nationally-mandated decision-making processes. It is however important that they involve consultation with representatives of civil society representatives, and other spokespersons of at-risk and affected populations, in so far as possible.

Supporting information

- NDC Partnership. (2024, July). Country coordination mechanisms: Best practice brief.⁷⁸
- United Nations Development Programme. (2017). Institutional and coordination mechanisms: Guidance note on facilitating integration and coherence for SDG implementation.⁷⁹

⁷⁸ <https://ndcpartnership.org/sites/default/files/2024-07/country-coordination-mechanisms-best-practice-brief.pdf>

⁷⁹

https://sustainabledevelopment.un.org/content/documents/2478Institutional_Coordination_Mechanisms_GuidanceNote.pdf

- UNFCCC. 2023. TSU Working Paper from Working Group 5 (D): Coordination and Complementarity Mechanisms for Loss and Damage Funding Arrangements.⁸⁰
- NDC Partnership. 2023. NDC Investment Planning Guide. September 2023.⁸¹
- National Coordination Mechanism on Migration in Kenya.⁸²

5.3 Project appraisal mechanisms to support the identification of priority responses and the development of a concise program of action

The assessment of needs and responses carried out as part of step 1 is likely to produce a diversity of options in different sectors and for different populations. These potential interventions need to be appraised and prioritised in order to develop a coherent programme of action that can enable the matching of strategic priorities to suitable funding opportunities. This requires the development and application of decision-making tools. There is no “one size fits all” standard for such tools, and countries should consider the development of their own based on existing standards, procedures and institutions. However, this section provides examples of relevant decision-making criteria that can support the prioritisation process by helping stakeholders and relevant coordination structures evaluate potential interventions.

- **Impact potential**

Interventions mapped through the ex-post and ex-ante needs assessment can be prioritised based on the extent of their potential to avert, minimize, or address the impacts of climate change on human mobility.

For example, the following criteria could be used for assessing pre-emptive actions that can help minimise and avert climate change impacts on human mobility:

- Number of people at risk of displacement whose risk of displacement is reduced by a specific intervention;
 - Number of people with increased adaptive capacities through planned relocation from high-risk areas in cases where in situ adaptation is not feasible
 - Number of people who have increased options to move out of areas at risk.
- Number of people at risk of displacement who are likely to benefit from an anticipatory intervention.
- Estimated loss and damage related with displacement avoided through a given intervention that reduces displacement risk;
- Number of migrants and displaced persons or refugees whose resilience is enhanced through a specific intervention;
- Number of people who might remain trapped in an area at risk whose adaptive capacity is enhanced by a specific intervention.

⁸⁰ https://unfccc.int/sites/default/files/resource/Final_Draft_5d_TSU.pdf.

⁸¹ <https://ndcpartnership.org/sites/default/files/2023-09/ndc-investment-planning-guide.pdf>.

⁸² <https://usajili.go.ke/national-coordination-mechanism-migration-ncm>

- Number of people who might be affected by a population movement whose resilience is enhanced by a specific intervention.

The following criteria could be used to assess post-event actions that allow to address climate change impacts on human mobility or avert and minimize further associated losses and damages:

- Number of displaced persons, other people on the move, and other affected persons benefitting from a specific form of disaster response/recovery;
- Number of displaced persons achieving durable solutions;
- Estimated loss and damage related with displacement avoided through a given intervention;
 - Number of displaced (or otherwise affected) persons or households covered by mechanisms to preserve cultural identity and well-being in host or new communities;
 - Number of displaced (or otherwise affected) persons or households provided with access to sufficient education assistance to maintain minimum standards of access;
 - Number of displaced (or otherwise affected) persons or households provided with access to sufficient healthcare to maintain minimum standards of access;
 - Number of individuals benefitting from community cohesion interventions following displacement.

- **Country-specific needs**

Project prioritisation logic needs to reflect the specific circumstances, risks, and capacities of each context and affected communities. The scoped interventions should be further screened for alignment with the key national strategies and development plans. For instance: interventions promoting human mobility for resilience should be aligned with objectives and interventions spelled out in national adaptation plans; investments to prepare receiving areas to the inflow of migrants and displaced persons need to align with existing land-use and employment plans, and displacement or migration policies/strategies; preparedness interventions for displacement need to fit within disaster risk management interventions; and work supporting durable solutions needs to be embedded in post-disaster recovery strategies, relocation or reintegration frameworks. If these frameworks include reporting or monitoring and evaluation frameworks, their indicators and targets can also be used to help guide the prioritization exercise.

- **Co-benefits**

In both ex-ante and ex-post programmatic settings, interventions that address climate-related human mobility should be prioritized not only for their direct impact on mobility outcomes but also for the wider co-benefits they offer. Projects that generate multiple benefits have a stronger case for investment and funding. Potential co-benefits need therefore to be adequately identified and made visible.

Interventions that primarily address human mobility could have economic, social, environmental and inclusion/empowerment co-benefits:

- Economic co-benefits can include job creation through climate-resilient livelihoods or increased access to land, housing, markets and financial services to people displaced, or at risk of being displaced or becoming trapped.
- Social co-benefits can include improved access to housing and basic services in high-risk areas or areas of destination of human mobility flows as interventions to manage such population movements are implemented, or improved cohesion or conflict resolution mechanisms among diverse communities.
- Environmental co-benefits can include reduced (or reversed) environmental degradation following nature-based interventions to reduce risk in areas with high potential for outmigration or displacement or experiencing incoming population inflows, or reduced pollution as a consequence of green reintegration programmes for displaced persons.
- Inclusion/empowerment co-benefits can range from enhanced leadership roles for women and young community members through their involvement in mobility planning and risk reduction, financial literacy, or education and vocational training programmes, to reduced gender-based violence.

Supporting information

- Ministry of Finance, Ghana. Climate Change Project Prioritization Tool. 2016.⁸³
- Ministry of Finance, Ghana. 2020. Green Climate Fund Project Prioritization Guidelines for Ghana's GCF Country Programming.⁸⁴

5.4 Approaches to matchmaking of priority actions to funding options

As seen in the above sections, in order to address a phenomenon as complex as human mobility in the context of climate change is both necessary and strategic to rely on a diverse pool of donors and financial instruments that can be flexibly leveraged to work in different programming scenarios and in preventive and responsive manners. This final section of the programming framework proposes a step-by-step approach to help align the programming needs and interventions identified as priorities to respond to climate change impact on human mobility with available funding instruments and partners.

Step 1: Framing programming needs in line with the appropriate type of funding

The first step in the matchmaking process involves identifying the most appropriate framing applicable to a certain measure identified through the needs assessment process. This is important to:

⁸³ <https://mofep.gov.gh/sites/default/files/docs/Climate-Change-Project-Prioritization-Tool.pdf>

⁸⁴ <https://mofep.gov.gh/sites/default/files/news/GCF-project-prioritization-Tool-FG.pdf>

- select the type of funding that is most suitable to support a certain human mobility response;
- identify what aspects of the human mobility response should be highlighted to best fit with the framing typical of a specific type of funding.

Table 9 provides guidance on the typical framings associated with the five most relevant areas of funding discussed in Section 4. By following this step, needs and related responses can be organised and framed in line with relevant funding sources.

Table 9. Types of funding and typical framings of interventions

Funding area	Typical framing	Relevance for ex-ante	Relevance for ex-post
Development finance	Poverty reduction, sustainable development, economic growth	Addressing the systemic drivers of displacement	Rebuilding infrastructure, restoring livelihoods and promoting decent work
		Anticipating the development needs of displaced and host communities	
Adaptation finance	Increasing adaptive capacities of communities	Address the climatic/environmental drivers of displacement	Climate-resilient recovery and reconstruction
		Supporting planned relocation, in cases where in-situ adaptation is not feasible	
		Increasing resilience for people on the move	
Disaster risk reduction finance	Increased resilience and preparedness of communities	Reduce disaster risks that could result in displacement	Post-disaster recovery and reconstruction through building back better
		Preparedness for displacement	
Humanitarian finance	Provision of crisis response, protection and emergency relief to affected communities	Anticipatory action to address immediate drivers of displacement, or to prepare for potential displacement whenever pre-identified forecast threshold are crossed.	Assisting displaced persons and other people on the move during/after climate change events
Loss and damage finance	Addressing, minimising and averting economic and non-economic loss and damage suffered by communities affected by climate change	Measures to address the climate change drivers of displacement, including slow and fast onset events	Assistance to respond to economic and non-economic loss and damage
		Supporting planned relocation, in cases where in-situ allocation is not feasible	Enabling relocation of displaced communities
		Increasing resilience of IDPs and host communities	Supporting recovery after climate change events

Step 2: Matching needs and responses to funding instruments

The second step in the matchmaking process involves identifying instruments that are suitable to fund a specific priority response. Depending on the type of intervention planned, its capital intensity and the risk profile of the context where intervention takes place, different funding instruments may be more or less suitable for supporting responses to

specific human mobility needs.⁸⁵ Table 10 provides examples and guidance on how each instrument described in Section 4 can be used to address ex-ante and ex-post programming needs. By following this step, programming needs on human mobility can be better matched with appropriate financial instruments.

Table 10. Types of funding instruments and their use for financing human mobility

Funding instrument	Typical use	Examples of relevant ex-ante programming needs	Examples of relevant ex-post programming needs
Grants	Non-revenue-generating activities, project preparatory support	Policy & enabling environment, e.g. land-use planning and NAPs	Policy & enabling environment, i.e. emergency coordination
		Capacity building, e.g. awareness on human mobility and climate change, preparedness training	Infrastructure, e.g. emergency shelter, rebuilding service infrastructure
		Adaptive livelihoods and other mechanisms for resilience	Equipment, i.e. food/non-food stockpiles, materials for transitional shelters
		Equipment	Enabling access to finance: cash transfers for emergency assistance
		Data, e.g. research on drivers of migration	Displacement data collection
		Enabling access to finance, e.g. setting up insurance schemes	Protection responses
Concessional loans	Revenue-generating interventions or capital-intensive interventions	Infrastructure: e.g. construction of hazard protection works	Infrastructure: e.g. reconstruction or rehabilitation of service infrastructure, building back better housing
		Technology	Technology
Equity	Capital-intensive or innovative private-sector solutions	Private sector-oriented infrastructure, services and technology, e.g. early warning systems, irrigation schemes	Private sector oriented reconstruction or expansion of services for affected communities, e.g. private sector service hubs for affected communities
Guarantees	De-risking project finance in challenging contexts and enabling private sector investments	Infrastructure and technology	Catalysing investments in recovery and rehabilitation of relevant infrastructure and services in challenging contexts
Risk transfer instruments	Insurance	Insuring productive assets	Enabling rapid payouts for governments or communities to fund relief and recovery
		Supporting anticipatory action	

Step 3: Identify funding actors to approach

The third step of the matchmaking process involves identifying the appropriate set of actors and/or arrangements relevant for funding the identified programming needs. Table 11 outlines the typical funding instruments used by various funding actors who operate with various types of funding (in line with 5 key areas of finance introduced in Section 4.2). Along with the other tables in this section, it is intended to guide practical efforts to design, fundraise for, and subsequently implement programmes that address human mobility in the context of climate change. Additional information related to instruments, funding windows,

⁸⁵ Refer to Table 2 for a more detailed articulation of potential responses by type of intervention

types of financial instruments and objectives of the key relevant actors and facilities already present in the human mobility space is available [in the online database](#).⁸⁶

Table 11: Overview of funding actors, financial instruments and types of finance relevant to addressing, averting and minimizing the impact of climate change on human mobility

Actors	Grants	Concessional loans	Equity	Guarantees	Risk-sharing instruments
DFIs	A, D, DR	A, D	A, D	A, D	
MDBs	A, D, DR	A, D, DR	A, D	A, D	
Bilateral donors	H, A, D, DR, LD	D		A, D	
Vertical Climate Funds	A, LD	A, LD	A	A	
Humanitarian Funds	H, LD				
Private Banks		A, D	A, D	A, D	
Philanthropies	A, D, DR				
Public insurers					A, LD
Private insurers				A, D	A, LD

A – Adaptation finance

LD – Loss and damage finance

D – Development finance

H – Humanitarian finance

DR – Disaster Risk Reduction finance

Conclusion: Matching needs, programming and funding options

Following the programming logic outlined in Section 5 and in particular the matchmaking steps described above, national and local governments and other relevant actors should be able to: 1) identify needs related to human mobility in the context of climate change, 2) set up appropriate coordination mechanisms to support the identification and prioritization of human mobility programming needs and 3) match needs with appropriate funding options that can help support their implementation. The recommendations and tools provided in this Guide should help systematically analyze needs and options to access finance that can be leveraged in support of specific responses. Table 12 summarizes the different elements of this programming logic, providing some guiding questions and matching examples for relevant funding actors and instruments in various areas of work. While approaches to financing human mobility in the context of climate change are evolving, the logic presented in this technical guide is intended to help practitioners engage more strategically with a wide range of donors, allowing for flexible framing of human mobility priorities across different funding contexts, and enhanced access to a diversity of funding sources, through a diversity of funding instruments.

⁸⁶ Note that the donor database that supplements this guide is a snapshot of an evolving landscape and an up-to-date analysis of donors available in each specific country/region is recommended to ensure better matching.

Table 12: Matching interventions, donors, areas of finance and instruments

Domain of work	Type of intervention	Needs to be addressed	Potential donors	Funding area	Potential financial instrument
Addressing drivers	•Infrastructure and technology	•What infrastructural or nature-based interventions are needed to protect land, livelihoods, houses, assets?	•Development banks •Large multilateral funds •Private sector actors	•Development •Adaptation	•(Concessional) loans •Equity
		•What support is needed to set up and/or strengthen hazard monitoring and early warning systems?	•Smaller multilateral funds •Bilateral donors	•Adaptation •Disaster Risk Reduction	•Grants •(Concessional) loans
	•Policy & enabling environment	•What policies need to be strengthened to support adaptation/resilience?	•Bilateral donors •International funds	•Development •Adaptation •Disaster Risk Reduction	•Grants
	•Data	•What information is needed to assess and monitor risks?	•Bilateral donors •Smaller multilateral funds	•Adaptation •Disaster Risk Reduction	•Grants
	•Capacity Building	•How can the awareness and capacity of decision makers be built?	•Bilateral donors	•Adaptation •Human Mobility	•Grants
		• Which local skills need to be strengthened, and how?	•Bilateral donors •Smaller multilateral funds •Development banks	•Development •Adaptation •Disaster Risk Reduction	•Grants •(Concessional) loans
	•Equipment	•What tools/resources are needed to support adaptation/resilience interventions?	•Private sector •Investment banks	•Adaptation •Development •Disaster Risk Reduction	•Insurance
•Access to finance	•Can people at risk be insured against potential climate impacts?	•Private sector •Smaller multilateral funds	•Adaptation •Disaster Risk Reduction	•Insurance	
Preparing for displacement	•Infrastructure and technology	•What infrastructural interventions are needed to improve local evacuation and displacement management systems?	•Development banks •Smaller multilateral funds •Bilateral donors	•Disaster Risk Reduction •Humanitarian	•(Concessional) loans •Grants
		•What support is needed to set up hazard monitoring and early warning systems?	•Smaller multilateral funds •Bilateral donors	•Adaptation •Disaster Risk Reduction	•Grants •(Concessional) loans
	•Policy development	•Can preparedness coordination protocols and plans be strengthened?	•Smaller multilateral funds •Bilateral donors	•Disaster Risk Reduction	•Grants
	•Data	•What information is needed to assess and monitor evacuations and displacement?	•Bilateral donors	•Disaster Risk Reduction •Humanitarian	•Grants
	•Capacity Building	•Can awareness and response capacities of institutions and communities be strengthened?	•Bilateral donors	•Disaster Risk Reduction •Humanitarian	•Grants
	•Equipment	•Are emergency shelters adequately stockpiled to support displaced persons?	•Bilateral donors •International funds	•Disaster Risk Reduction •Humanitarian	•Grants
	•Access to finance	•Are there funds in place that can be disbursed as part of anticipatory responses?	•Bilateral donors •International funds •Private sector	•Disaster Risk Reduction •Humanitarian	•Grants •Insurance
Responding to displacement	•Infrastructure and technology	•What infrastructural or nature-based interventions are needed to set up safe, adequate displacement sites?	•Bilateral donors •International funds •Philantropies	•Humanitarian	•Grants
	•Policy & enabling environment	•What coordination frameworks and policies need to be strengthened to better protect and assist displaced persons?	•Bilateral donors •International funds	•Humanitarian	•Grants
	•Data	•What information is needed to track and monitor displacement?	•Bilateral donors •International funds	•Humanitarian •Loss and damage	•Grants
	•Capacity Building	•How can local response systems be strengthened to better assist and protect displaced persons?	•Bilateral donors	•Adaptation •Human Mobility	•Grants

	•Equipment	•What materials are needed to support responses to displacement?	•Bilateral donors •International funds •Private sector •Philantropies	•Humanitarian •Loss and damage	•Grants
	•Access to finance	•Are there systems and resources in place to support cash based interventions?	•Bilateral donors •International funds •Banks	•Humanitarian •Loss and damage	•Grants
Durable solutions	•Infrastructure and technology	•What infrastructural interventions are needed to rebuild, recover and promote solutions?	•Development banks •Smaller multilateral funds •Bilateral donors •Philantropies •Private sector actors	•Development •Disaster Risk Reduction •Adaptation	•(Concessional) loans •Grants •Equities
	•Policy development	•Can recovery coordination protocols and plans be strengthened?	•Smaller multilateral funds •Bilateral donors	•Development •Humanitarian •Disaster Risk Reduction	•Grants
	•Data	•What information is needed to track progress and obstacles to solutions and impacts of displacement?	•Bilateral donors	•Development •Humanitarian •Disaster Risk Reduction	•Grants
	•Capacity Building	•Can the capacities of service providers and individuals be strengthened?	•Development banks •Smaller multilateral funds •Bilateral donors •Private sector actors	•Development •Disaster Risk Reduction •Adaptation	•(Concessional) loans •Grants •Equities
	•Equipment	•Are sufficient resources in place to support recovery and reconstruction	•Bilateral donors •Private sector actors	•Development •Disaster Risk Reduction •Adaptation	•Grants •Equities
	•Access to finance	•Are there systems that can help mobilise resources for recovery?	•Bilateral donors •International funds •Private sector	•Development •Disaster Risk Reduction •Adaptation	•Grants •Insurance
Enabling safe and voluntary migration as adaptation	•Infrastructure and technology	•What infrastructural interventions can be implemented to facilitate movements or ensure adjustment in destinations?	•Development banks •Large multilateral funds •Private sector actors •Bilateral donors	•Development •Adaptation	•(Concessional) loans •Equity •Grants
	•Policy & enabling environment	•What policies need to be strengthened to enable movements with positive outcomes?	•Bilateral donors	•Development •Adaptation •Human mobility	•Grants
	•Data	•What information is needed to forecast and monitor migration?	•Bilateral donors •Smaller multilateral funds	•Development •Adaptation •Human mobility	•Grants
	•Capacity Building	•How can the capacity of service providers along routes/at destination be built?	•Development banks •Multilateral funds •Bilateral donors	•Development •Adaptation •Human mobility	•(Concessional) loans •Grants
		•Can migrants' skills be strengthened?	•Bilateral donors •Smaller multilateral funds •Private sector actors	•Development •Adaptation •Human mobility	•Grants •Equities
	•Equipment	•What materials are available to assist people on the move?	•Bilateral donors	•Development •Disaster Risk Reduction •Humanitarian	•Grants
•Access to finance	•What systems can help mobilise remittances for resilience/adaptation?	•Bilateral donors •Private sector actors •Investment banks	•Development •Adaptation •Disaster Risk Reduction	•Grants •(Concessional) loans •Equity	
Rights-based planned relocations	•Infrastructure and technology	•What infrastructural interventions are needed to secure dignified living conditions in relocation sites?	•Development banks •Smaller multilateral funds •Bilateral donors •Private sector actors	•Development •Disaster Risk Reduction •Adaptation	•(Concessional) loans •Grants •Equities
	•Policy development	•Can legal frameworks on planned relocations be strengthened?	•Bilateral donors	•Development •Disaster Risk Reduction	•Grants
	•Data	•What information is needed to assess and monitor relocations and their impacts?	•Bilateral donors	•Development •Disaster Risk Reduction	•Grants
	•Capacity Building	•Do people being relocated need skills trainings?	•Bilateral donors •Private sector actors	•Development •Disaster Risk Reduction	•(Concessional) loans

					<ul style="list-style-type: none"> •Grants •Equities
	<ul style="list-style-type: none"> •Equipment 	<ul style="list-style-type: none"> •Are sufficient resources available to support the material needs of relocation operations? 	<ul style="list-style-type: none"> •Bilateral donors •Private sector actors •Smaller multilateral funds 	<ul style="list-style-type: none"> •Disaster Risk Reduction •Humanitarian 	<ul style="list-style-type: none"> •Grants
	<ul style="list-style-type: none"> •Access to finance 	<ul style="list-style-type: none"> What systems and structure exist to catalyse and coordinate funds for planned relocations? 	<ul style="list-style-type: none"> •Development banks •Smaller multilateral funds •Bilateral donors •Philantropies •Private sector actors 	<ul style="list-style-type: none"> •Development •Disaster Risk Reduction •Adaptation 	<ul style="list-style-type: none"> •Grants •(Concessional) loans

ANNEX 1 - Information on funding of selected human mobility activities

The below information draws from the survey carried out to inform the development of this Technical Guide. Please note that a full list of project information for the below activities is available online.⁸⁷

Adaptation and resilience to address the drivers of displacement

- 1) In Kenya, the **United States Government** supports IOM with a grant to enhance adaptive capacities of climate-affected migrants, displaced persons and host communities in Garissa and Turkana counties. The grant has been released following a decision by the U.S. Special Presidential Envoy for Climate John Kerry at the 2023 Africa Climate Summit in Nairobi, Kenya in responses to multi-year droughts in the country.
- 2) In West Africa, the **African Development Bank** is supporting a large programme focusing on areas of origin of people's migration in the Niger Basin to 1) build the resilience of ecosystems and natural resources; 2) build the resilience of local households through more sustainable livelihoods; and 3) ensure programme coordination and management.
- 3) In Bangladesh, the **Climate Justice Resilience Fund (CJRF)** supports the COAST Foundation to support women and girls in some of the areas most vulnerable areas to disasters and related displacement in the country. *Char* dwellers are supported through a coastal advocacy network, education and awareness services, as well as livelihood support.
- 4) The **NDC Partnership Action Fund**, a pooled fund with contributions from 7 European Countries, is supporting the FAO with a grant to assess loss and damage associated with human mobility in the context of climate change in Chile. The fund aims to support Country Members of the NDC Partnership in addressing gaps in the implementation of their Nationally Determined Contributions (NDCs). The success of FAO in funding this programme highlights the strategic relevance of ensuring that Human Mobility is captured in climate action planning at national level for relevant work to be funded through dedicated finance streams.
- 5) The **Climate Justice Resilience Fund (CJRF)** pools funds from private foundations and philanthropists, as well as bilateral governmental initiatives (including for instance from the Government of Scotland) to issue grants that support women, youth, and Indigenous Peoples to create and share their own solutions for climate resilience. In the Pacific, CJRF is supporting the Unitarian Universalist Service Committee to lead community-based processes to assess climate-induced losses and damages being faced in their communities. Together, partners and communities co-design the responses needed, which are then funded through specific sub-grants.
- 6) A grant issued through **Canada's bilateral commitment to International Climate Finance** is supporting an assessment of the environmental drivers of migration in rural areas in Mexico, to be carried out by IOM and Rainforest Alliance. The grant is specifically disbursed by Canada's Department for Immigration, Refugees and Citizenship (IRCC) via its International Migration Capacity Building Program, with the main objective to support climate change adaptation. The assessment, in fact, will help inform capacity building support and empowerment for local women, encouraging their participation in farmers' cooperatives and providing information on safe migration options.
- 7) The **German Federal Ministry for Economic Cooperation and Development** is funding a Global Programme on Human Mobility in the Context of Climate Change, implemented by GIZ, which since its inception has been expanding through a series of regional sub-programmes in the Pacific and in West Africa. Now in its second phase, the programme supports capacity development and policy advice for regional organisations and national governments. It also supports interventions to address knowledge gaps and improve coordination at national and regional levels on climate and migration, displacement and planned relocations.
- 8) The **UN Trust Fund for Human Security** has been supporting a consortium of UN agencies and regional non-UN partners in the implementation of the Pacific Climate Change Migration and Human Security (PCCMHS) Programme. The programme aims to build knowledge on migration flows, policies and practices in the region and enhance national capacities to address the impacts of climate change on human mobility. It also seeks to support work to improve regional knowledge sharing and

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<https://docs.google.com/spreadsheets/d/1fSUWm2y85zfAFRH1baKLyO7bBtt6W9c6xGPkn5VhCkk/edit?usp=s haring>

cooperation. Following its first implementation phase, the project has been continued with funding from **New Zealand Ministry of Foreign Affairs and Trade**, and with the objective of improving policymaking at national level, and multi-stakeholder coordination on climate change and human mobility at national and regional levels.

- 9) The **Migration – Multi-Party Trust Fund (MPTF)** is supported by a diversity of donor countries that pool resources to advance the implementation of the Global Compact on Migration. Its resources have been allocated to several programmes that address the environmental drivers compelling people to move, including climate change (GCM Objective 2). In India, for instance, FAO and IOM work to support resilient rural livelihoods, avert and minimize loss and damage and support migrants' household members in places of origin (especially women and children) to mitigate the negative impacts of climate change and migration.
- 10) The **Climate Justice Resilience Fund (CJRF)** supported the Unitarian Universalist Service Committee in the organization of a First Peoples' Convening on Climate-Forced Displacement, identifying 60 representatives of communities from all over the world that needed to bring their specific perspective on the work around climate change and human mobility. This global effort resulted in the development of a Declaration, which calls for rights-based solutions to the challenges of human mobility in the context of climate change.

Enabling safe, voluntary and dignified migration to leverage its resilience and adaptation potential.

- 11) In the Horn of Africa, the **Migration – Multi-Party Trust Fund (MPTF)** supports a consortium of international actors through a project promoting data, preparedness, and regular pathways for migration in support of adaptation and resilience. The MPTF also supports research and policy work by ILO and IOM in the Pacific to enhance the benefits of safe and dignified migration as a sustainable development and climate-resilience strategy in Fiji, Kiribati, Solomon Islands, Tuvalu and Vanuatu.
- 12) In Bangladesh, the **Climate Justice Resilience Fund** is supporting households to make the best of migration opportunities to support adaptation outcomes. The project supports (prospective) migrants, as well as their households, through skill development opportunities for more economically successful migration, awareness on climate-smart use of remittances, as well as reconstruction/recovery support following disasters.
- 13) In partnership, the **UK Ministry of Foreign Affairs, through its Foreign, Commonwealth and Development Office and Canada's International Development Research Centre** have supported work to investigate successful forms of migration as adaptation. Relevant funds are provided respectively through UK's International Climate Fund and Canada's International Climate Assistance, and coordinated as part of the "Climate Adaptation and Resilience" (CLARE) initiative. The initiative supports climate change-specific research across three themes: understanding climate risk, risk-informed early action, and development in a changing climate.

Financing principled, rights-based planned relocations as an option of last resort

- 14) In Fiji, the Climate Relocation of Communities (CROC) Trust Fund has been established to create a pool of resources coming from donors and other sources (e.g. levies) that can be disbursed in support of planned relocation operations – including for: research and assessments, risk reduction activities, identification of locations where people may settle, support to relocated communities. The CROC Trust Fund is an excellent example of how the financial landscape on human mobility and loss and damage is evolving. Among the different sources of funding that are being pooled in support of planned relocation operations, Fiji received in June 2024 a NZ\$3.6 million commitment from **New Zealand's International Development Cooperation Programme**, specifically targeting planned relocation operations as part of a broader intervention supporting human mobility in the context of climate change.

Preparing for displacement and other population movements in the context of the adverse effects of climate change

- 15) With funding from the **Norwegian Agency for Development Cooperation (Norad)**, the Secretariat of the Platform on Disaster Displacement is implementing a series of preparedness efforts in Bangladesh, Fiji, Guatemala and Kenya, which integrate attention to displacement and planned relocations in the planning instruments and decision-making tools of national and local governments in the different countries. The project is explicitly framed as an effort to avert, minimize and address

loss and damage in vulnerable countries, and is funded under Norway's strategy on 'Climate change, hunger and vulnerability'.

- 16) The **EU European Civil Protection and Humanitarian Aid Operations (DG ECHO)** issues grants to a diversity of actors to improve preparedness in at-risk areas. In Somalia, for instance, ECHO supports IOM to prepare governments and communities for potential disaster displacement, through strengthening of evacuation infrastructure, community awareness, and equipment to better respond to potential displacement. These activities are supported through the creation of community-based Disaster Risk Management Teams, that are trained to lead community-based disaster response and help identify priorities for disaster risk reduction and management.
- 17) Refugees (and more in general groups living in highly exposed, underserved displacement sites) constitute a group that is specifically vulnerable to the impacts of climate change. The **EU European Civil Protection and Humanitarian Aid Operations** has supported international and civil society actors to improve access to early warning information and anticipatory action for Rohingya populations in Cox's Bazar, building the capacity of nationally-owned preparedness and response systems to reach out to marginalized populations in camp.
- 18) In the Federated States of Micronesia, the **US Office of Foreign Disaster Assistance** has been supporting a diversity of interventions to build local preparedness to disasters related with climate change. The activities, led by IOM, aim to build understanding and awareness of risks and responses among local communities, as well as to ensure that responders are well coordinated and capacitated in the event of a disaster, and able to respond to ensuing displacement more effectively.
- 19) In Mongolia, the national Red Cross Society, supported by the **British Red Cross** has started a forecast-based financing project to anticipate and address the impacts of the *dzud*, a climatic phenomenon featuring a dry period followed by a cold spell. The financing scheme allowed to protect 2,000 herders in some of the most at-risk areas with unconditional cash and animal care kits. This prevented the herders from losing their livestock and livelihoods, which resulted in reduced pressures for migration towards urban areas by destitute herders.
- 20) In the Philippines, the national Red Cross Society, with the support of the **German and Finnish Red Cross Societies**, as well as **IFRC**, is implementing forecast-based financing to respond to typhoons. The financial mechanism supports community responses by allowing households to: 1) evacuate their livestock, 2) obtain cash for work to clear drainages and harvest early, and 3) improve housing and local shelters through kits and materials. These activities allow to avoid displacement, or reduce risks and losses linked with displacement (e.g. loss of assets, impoverishment).
- 21) In Eastern Africa, WFP is supporting anticipatory unconditional cash transfers as a way to avert and mitigate loss and damage linked with droughts and sudden-onset weather extremes. The regional scheme is supported by a diversity of donors, including the **Danish International Development Agency, the International Fund for Agricultural Development, the EU European Civil Protection and Humanitarian Aid Operations** and the **U.S. Agency for International Development**. Cash transfers are triggered by early warning systems, according to parameters co-developed with the local governments, and allow recipients (identified as the most vulnerable individuals in affected areas) to take risk management actions and avoid displacement. In Somalia and Ethiopia, interventions target specifically nomadic groups, with the objective to protect their herds and lifestyle and prevent displacement towards urban areas. In Uganda, the scheme strengthens the government-led shock-responsive social protection system.

Responding to displacement and other forms of human mobility in the context of the adverse effects of climate change

- 22) Most activities in the humanitarian segment of this analysis are funded by the **UN Central Emergency Response Fund**. It is supported by 50 UN Member states and observers, international organizations, regional and local authorities, and Private sector and civil society Actors. Many of its State contributors have paid over 1 billion USD into the fund in the last 20 years. While it is not exclusively targeted towards responding to the adverse effects of climate change, CERF is allocating an increasing share of its resources to responses to climate hazards (over the last decade the share of relevant contributions has increased from roughly a quarter to a third of the total). Moreover, at COP28 CERF launched a 'Climate Action Account' that allows donors to specifically support work to reduce climate impacts, by scaling up anticipatory action and responses to climate shocks.
- 23) One standout example identified through the research is a project to provide unconditional cash transfers to address Loss & Damage in Malawi. Funded by the the **Scottish Government's Climate**

Justice Fund, it is implemented by GiveDirectly, an nonprofit that lets individual and institutional donors pool resources that are used to support direct, unconditional cash transfers to vulnerable households. The project was set up following Cyclone Freddy, which dropped six months' worth of rainfall in just six days on Malawi, triggering floods and mudslides that displaced 659,000 people. Resources from the climate justice fund were allocated to 2700 households affected and displaced by the disaster, based on an assessment of household needs and cost of living. The project's specificities both in its model of implementation (unconditional cash transfers supported by an NGO, rather than an international organization), and by the specific loss and damage/climate justice focus of the donor's financial contribution.

- 24) Another specific example is the work of Bangladesh's Young Power in Social Action Organisations in support of displaced persons in the South Eastern Coast of the Country. With a grant from the **Climate Resilience Justice Fund**, the organization is addressing holistically displacement response, by providing local displaced persons with improved access to water and sanitation, as well as land and livelihood support for relocations. Communities affected by displacement are also supported in setting up participatory awareness and decision-making committees that improve their ability to take decisions on adaptation, preparedness, response to disasters and solutions to displacement.
- 25) The **US Bureau of Humanitarian Affairs** has been supporting the Internal Displacement Monitoring Centre to improve data and evidence on disaster displacement and the impacts of climate change. Relevant activities include data collection and analysis on the rate of reconstruction following disasters, the development of an expert consortium on risk analysis, and piloting the roll out of a set of indicators for DRR on displacement.

Promoting durable solutions to displacement

- 26) The **World Bank** has supported Senegal since 2018 through a \$30 million Saint-Louis Emergency Recovery and Resilience Project. The project is financed through IDA grants, specifically drawing on the IDA's Climate Change Action Plan (CCAP) and its Crisis Response Window (CRW) to enhance community resilience to sea-level rise and related displacement risks, and enhance urban planning for people displaced and at risk needing support to relocate elsewhere.
- 27) The **Internal Displacement Solutions Fund (IDSF)** has been created to progress towards the objectives set out in the Action Agenda on Internal Displacement. The fund promotes collaborative engagement of UN Agencies, supporting work to address displacement that are aligned with national priorities and international humanitarian and development objectives. The fund has been supported by the governments of **Switzerland, Norway and Germany** and has supported work in 10 countries in Africa, Middle East, the Pacific and Latin America. The fund supports multi-sectoral interventions that can integrate climate change considerations in broader development/human security/recovery approaches. The IDSF has supported activities that specifically target displacement in the context of meteorological hazards in Vanuatu, and complex crises fuelled by climate change in Somalia and Ethiopia.
- 28) The **Greta Thunberg Foundation** has supported IOM with a pilot project to provide improved hazard-resistant housing to people displaced by floods in Pakistan. While small-scale compared to the need of the millions of people displaced, this intervention has allowed to test new operational models and construction approaches.
- 29) The **Robert Bosch Foundation**, a major foundation associated with a German private company, and typically financing work on access to Health, Education and other global development issues (including climate change) is supporting the Internal Displacement Monitoring Centre to realise a series of studies exploring the implications of climate change on the achievement of durable solutions for displaced persons.

ANNEX 2 – Key human mobility terminology⁸⁸

Diaspora

International migrants and displaced persons and refugees or descendants of migrants and displaced persons whose identity and sense of belonging, either real or symbolic, have been shaped by their migration experience and background. They maintain links with their homelands, and to each other, based on a shared sense of history, identity, or mutual experiences in the destination country.⁸⁹

Displacement

The movement of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-induced disasters. This may refer to forced movements within a country (~~internal displacement~~) or across international borders (~~cross-border displacement~~).⁹⁰

Disaster displacement

Refers to situations where people are forced or obliged to leave their homes or places of habitual residence as a result of a disaster or in order to avoid the impact of an immediate and foreseeable natural hazard. Such displacement results from the fact that affected persons are (i) exposed to (ii) a natural hazard in a situation where (iii) they are too vulnerable and lack the resilience to withstand the impacts of that hazard. It is the effects of natural hazards, including the adverse impacts of climate change, that may overwhelm the resilience or adaptive capacity of an affected community or society, thus leading to a disaster that potentially results in displacement.⁹¹ Note: The Nansen Initiative definition refers to natural hazards, some of which are climate related. Disaster may refer to the impacts of broader categories of hazards that may be related to the effects of climate change.

Evacuation

Means “moving people and assets temporarily to safer places before, during or after the occurrence of a hazardous event in order to protect them”. Note: Evacuation also constitutes a form of necessary, life-saving displacement that is intended to be temporary, and requires physical and social infrastructure in order to be able to respond to the protection and service needs of the affected population. Effective adaptation requires that Governments include these requirements in their planning process, taking into account national context and international humanitarian architecture.⁹²

Fair recruitment

Refers to recruitment which takes place in a way that respects, protects and fulfils internationally recognized human rights, including those expressed in international labour standards, and in particular the right to freedom of association and collective bargaining, and prevention and elimination of forced labour, child labour and

⁸⁸ This glossary has originally been elaborated as part of the development of the Technical guide on integrating human mobility and climate change linkages into relevant national climate change planning processes, available at: https://unfccc.int/sites/default/files/resource/WIM_ExCom_human-mobility_TFD_2024.pdf

⁸⁹ IOM (2019): Glossary on Migration. International Migration Law, No. 34. Edited by Sironi, A. C. Bauloz and M. Emmanuel for IOM, Geneva. <https://publications.iom.int/books/international-migration-law-ndeg34-glossary-migration>

⁹⁰ (adapted from UNCHR E/CN.4/1998/53/Add.2)

⁹¹ Nansen Initiative (2015): Agenda for the protection of cross-border displaced persons in the context of disasters and climate change. Geneva: The Nansen Initiative. <https://disasterdisplacement.org/wp-content/uploads/2015/02/PROTECTION-AGENDAVOLUME-1.pdf>

⁹² UNGA A/71/644.

discrimination in respect of employment and occupation. No recruitment fees or related costs should be charged to, or otherwise borne by, workers or jobseekers.⁹³

Human mobility

‘Human mobility’ is a descriptive term that is increasingly used under the UNFCCC processes to collectively refer to the three forms of population movement set out under paragraph 14(f) of the Cancun Agreement: (i) Displacement – the primarily forced movement of persons; (ii) Migration – the primarily voluntary movement of persons, (iii) Planned relocation – the process of settling persons or communities in a new location.⁹⁴ Note: In other contexts, the term ‘human mobility’ is used by some to refer to other movements such as tourism, to emphasize inner-urban movements, or to refer to commuting and other temporary or short-term movements of persons for employment-related purposes.

Internally displaced persons

Described in the Guiding Principles on Internal Displacement as “persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-induced disasters, and who have not crossed an internationally recognized State border”.⁹⁵

Internal migrant

Any person who is moving or has moved within a State for the purpose of establishing a new temporary or permanent residence or because of an inability to return to the place of residence after displacement.⁹⁶ For the purpose of this document, the term refers to population movements that are primarily voluntary in nature (see ‘human mobility’).

International migrant

Any person who is outside a State of which he or she is a citizen or national, or in the case of a stateless person, his or her State of birth or habitual residence. The term includes migrants who intend to move permanently or temporarily, and those who move in a regular or documented manner as well as migrants in irregular situations.⁹⁷ For the purpose of this document, the term refers to population movements that are primarily voluntary in nature (see ‘human mobility’).

Labour migration

Labour migration is defined as “covering both migrants moving within the country and across international borders. This choice is also justified by the significant number of persons moving within the same country for work purposes who sometimes face the same barriers or challenges faced by international migrants, such as

⁹³ ILO (2019): General principles and operational guidelines for fair recruitment and Definition of recruitment fees and related costs. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---migrant/documents/publication/wcms_536755.pdf

⁹⁴ FCCC/CP/2010/7/Add.1, Decision 1/CP.16

⁹⁵ ECOSOC, 1998.

⁹⁶ IOM (2019): Glossary on Migration. International Migration Law, No. 34. Edited by Sironi, A. C. Bauloz and M. Emmanuel for IOM, Geneva. <https://publications.iom.int/books/international-migration-law-ndeg34-glossary-migration>

⁹⁷ OHCHR (2014): Recommended Principles and Guidelines on Human Rights at International Borders. Office of the High Commissioner for Human Rights. https://www.ohchr.org/sites/default/files/Documents/Issues/Migration/OHCHR_Recommended_Principles_Guidelines.pdf

discrimination and difficulties in integration. Although such challenges may be greater for migrants moving across borders they are not totally absent also for internal migrants”.⁹⁸

Migrants and just transition

“A just transition requires bespoke actions within a common framework, centred on the interest and dignity of migrant workers and based on international labour standards. Well-managed and rights-based labour mobility and adaptation strategies can provide opportunities to increase resilience and adaptation, avoid the loss of assets and livelihoods and improve the skills base in receiving countries and in home communities when migrants return”,⁹⁹

Migration

“The movement of persons away from their place of usual residence, either across an international border or within a State”.¹⁰⁰ For the purpose of this document, the term refers to population movements that are primarily voluntary in nature (see ‘human mobility’).

Migrant in a vulnerable situation

Persons who are unable effectively to enjoy their human rights, are at increased risk of violations and abuse and who, accordingly, are entitled to call on a duty bearer’s heightened duty of care.”¹⁰¹

Migrant worker

“A person who is to be engaged, is engaged or has been engaged in a remunerated activity in a State of which he or she is not a national”,¹⁰²

Planned relocation

Planned relocation in the context of disasters or environmental degradation, including when due to the effects of climate change, is a planned process in which persons or groups of persons move or are assisted to move away from their homes or place of temporary residence, are settled in a new location and provided with the conditions for rebuilding their lives.¹⁰³

Refugee

~~According to the 1951 Convention Relating to the Status of Refugees, ‘refugee’ applies to any person who, “owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to~~

⁹⁸ IOM (2019): Glossary on Migration. International Migration Law, No. 34. Edited by Sironi, A. C. Bauloz and M. Emmanuel for IOM, Geneva. <https://publications.iom.int/books/international-migration-law-ndeg34-glossary-migration>

⁹⁹ ILO (2022a): Just Transition Policy Brief. Human mobility and labour migration related to climate change in a just transition towards environmentally sustainable economies and societies for all. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_860606.pdf

¹⁰⁰ IOM (2019): Glossary on Migration. International Migration Law, No. 34. Edited by Sironi, A. C. Bauloz and M. Emmanuel for IOM, Geneva. <https://publications.iom.int/books/international-migration-law-ndeg34-glossary-migration>

¹⁰¹ OHCHR and Global Migrant Group (2018): Principles and guidelines on the human rights protection of migrants in vulnerable situations. <https://www.ohchr.org/en/documents/tools-and-resources/principles-and-guidelines-human-rights-protection-migrants-vulnerable>

¹⁰² (UNGA A/RES/45/158).

¹⁰³ Brookings, Georgetown, and UNHCR (2015): Guidance On Protecting People From Disasters And Environmental Change Through Planned Relocation (“Guidance on Planned Relocation”). https://www.brookings.edu/wp-content/uploads/2016/06/guidance_planned-relocation_14-oct-2015.pdf

such fear, is unwilling to avail himself of the protection of that country".¹⁰⁴ 'Refugees' within wider regional definitions — under the 1969 OAU Convention Governing the Specific Aspects of Refugee Problems in Africa, or the 1984 Cartagena Declaration on Refugees — encompasses people who are compelled to leave their countries in the context of events or circumstances "seriously disturbing/disturbed public order", including climate change impact or disasters. The need for international protection arises because they are unable to avail themselves of the protection of their own country against these threats. For example, people may be refugees under the 1951 Convention Relating to the Status of Refugees where they are fleeing conflict or violence, which may in some cases be caused or exacerbated by the effects of climate change or disaster, rendering the State unable or unwilling to protect them.¹⁰⁵

Stateless person

A person who is not considered as a national by any State under the operation of its law, either because they never had a nationality, or because they lost it without acquiring a new one (UNGA, 1954). Note: the vulnerability and potential 'disappearance' of small island States due to sea level rise will not inevitably lead to statelessness, and the greatest risks of statelessness in the context of climate change is related rather to the significant number of people displaced in the context of climate change related disasters.¹⁰⁶

Trapped populations

Populations inhabiting areas of high risk and thus vulnerable to environmental shocks and impoverishment who want to flee or migrate but are unable to do so. Note: the notion of trapped populations applies in particular to poorer households who may not have the resources to move and whose livelihoods are affected, or to people whose freedom of movement is limited for other reasons.¹⁰⁷

¹⁰⁴ UNGA A/CONF.2/108.

¹⁰⁵ PDD and UNHCR (2023): Protection of Persons Displaced Across Borders in the Context of Disasters and the Adverse Effects of Climate Change. Policy Brief. Platform on Disaster Displacement and UNHCR. <https://www.preventionweb.net/media/92202/>

¹⁰⁶ UNHCR, NRC, Peter McMullin Centre on Statelessness (2021): Statelessness and Climate Change Factsheet, 29 October 2021. <https://www.refworld.org/reference/tools/unhcr/2021/en/123945>

¹⁰⁷ Foresight (2011): Foresight- Migration and Global Environmental Change. Final Project Report. The Government Office for Science, London. <https://assets.publishing.service.gov.uk/media/5a74b18840f0b61df4777b6c/11-1116-migration-and-globalenvironmental-change.pdf>

ANNEX 3 – Examples of innovative funding instruments

Some experiences suggest that other emerging financial instruments might hold potential to complement the approaches described in section 4.1 to scale up work on the different facets of human mobility and loss and damage.

- **Resilience and social bonds**

Bonds are medium to long-term debt-based financial instruments.¹⁰⁸ Some of these instruments have been designed to raise capital for climate-resilient investments or social outcomes, and could potentially be used to support measures to increase the resilience of communities on the move or at risk of displacement in the context of climate change.

A mobility bond was launched in France to assist vulnerable groups who live in sub-urban areas in becoming more mobile and improving their adaptive capacities through increased mobility and employment in urban areas. The programme was implemented in several regions across the country. For this social impact bond, there were three commissioners who jointly initiated the programme: the Ministry of Economy; the General Directorate for Employment and Professional Training; and the Ministry for Ecological and Inclusive Transition. The up-front financing for the programme was provided by several investors: BNP Parisbas, Caisses des Dépôts et Consignations and Aviva Impact Investing. In total, EUR 680 000 was invested¹⁰⁹.

- **Diaspora bonds**

The role of diaspora and remittances in supporting climate adaptation in developing countries has attracted growing interest.¹¹⁰ Notably, remittances have been mobilized through diaspora bonds to finance development projects,¹¹¹ and could support interventions that focus specifically on human mobility.

In Jamaica, IOM has worked with the Ministry of Foreign Affairs and Foreign Trade and the Planning Institute of Jamaica to develop a platform under the JA Diaspora Engage system to facilitate the involvement of the diaspora in climate action projects in the country (<https://jadiasporaengage.mfaft.gov.jm/diaspora4climate>). This platform offers a one-stop-shop for diaspora members and organizations to learn about potential engagement

¹⁰⁸ Kenya GIZ CLIMATE FINANCE CAPACITY BUILDING HANDBOOK

¹⁰⁹ Organisation for Economic Co-operation and Development (OECD). (2020). Social impact bonds. OECD. https://www.oecd.org/content/dam/oecd/en/topics/policy-issues/employment-services/social_impact_bonds.pdf

¹¹⁰ Annan-Aggrey, E. (2025). Harnessing diaspora finance for climate resilience in Africa (MiFOOD Paper No. 37). Migration & Food Security Network, Balsillie School of International Affairs. <https://mifood.org/wp-content/uploads/2025/04/MiFOOD37.pdf>

¹¹¹ World Bank. (2004). *Development finance via diaspora bonds: track record and potential*. World Bank Documents & Reports. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/867801468165874505>

opportunities on climate action in the country with an identification of key mitigation and adaptation priorities.

Similarly, in Bangladesh, IOM implemented a wide-ranging communications campaign linked to its iDiaspora platform, a global platform for knowledge sharing, idea generation, networking, and to mobilize resources and financing for projects in sustainable development, disaster risk reduction and climate action.

- **Debt-for-climate swaps**

Debt for climate swaps are a way for governments to mobilise additional funding by restructuring of sovereign debt in exchange for budgeted commitments – for example toward averting, minimizing and addressing displacement in the context of climate change.¹¹²

Barbados launched the world's first debt-for-climate-swap in 2024. The swap generated USD 125 mln in savings to be channelled into resilience investments, including water infrastructure projects and food security. The swap involved substantive support of international funding partners. The debt was backed by US\$300 million in guarantees from the Inter-American Development Bank (IDB) and the European Investment Bank (EIB). Also, The IDB and the Green Climate Fund (GCF) provided a total of USD 110 million of upfront funding for the project.¹¹³

- **Carbon markets**

Carbon markets enable governments and non-state actors to obtain and trade greenhouse gas emission credits, and could potentially play a role in partially filling the climate finance gap, including on adaptation and loss and damage. However, carbon markets revenues remain highly uncertain, given the volatility of carbon credit prices and the unpredictability of credit issuance volumes.

The Clean Development Mechanisms (CDM), a United Nations-run carbon offset scheme, channelled over USD 200 million from a share of proceeds into the Adaptation Fund, showing a proof of concept for this kind of schemes to support work to avert, minimise and address loss and damage.

It should be noted that, despite their potential, these instruments also present significant sensitivities. Debt instruments (such as bonds), reduce countries' fiscal space, while diaspora-backed investments require migrants themselves to shoulder investments (and

¹¹² Green Climate Fund. (2024). Debt–climate swaps: GCF feasibility study—updated. Retrieved September 8, 2025, from <https://www.greenclimate.fund/sites/default/files/document/241015-debt-climate-swaps-gcf-feasibility-study-updated.pdf>

¹¹³ Inter-American Development Bank. (2024). Barbados launched the world's first debt-for-climate-resilience operation. Retrieved September 8, 2025, from <https://www.iadb.org/en/news/barbados-launched-worlds-first-debt-climate-resilience-operation>

related risks). Moreover, all these innovative instruments will require significant capacity building and strengthening of institutions and systems to be leveraged at scale.

ANNEX 4 – Examples of compiled human mobility needs matrixes

The below is an example of the ex-ante human mobility needs matrix (presented in section 5.1) compiled with relevant examples of activities.

Beneficiaries of the intervention Type of intervention	People at risk of becoming displaced or trapped	Migrants and displaced persons and refugees at risk of climate impacts	Potential host communities
Infrastructure and technology	<ul style="list-style-type: none"> •Local adaptation and resilience (e.g. protect land and assets, climate-proof houses and critical infrastructure) •Reclaim and regenerate land and protect natural resources •Identify/build and prepare evacuation routes and sites •Monitoring and Early Warning Systems for slow and sudden-onset hazards 	<ul style="list-style-type: none"> •Protective infrastructure in displacement and transit sites •Hazard-resistant structures in displacement and transit sites •Build and equip assistance centres along migration routes • Inclusive Early Warning Systems 	<ul style="list-style-type: none"> •Improve availability of housing in potential places of destination •Strengthen infrastructure to ensure service provision
Policy and enabling environment	<ul style="list-style-type: none"> •Risk-informed land-use planning •Social protection systems •Implement building codes for hazard resistance •Promote dignified outmigration (migration schemes, free movement, portability of rights and qualifications) •Promote access to land 	<ul style="list-style-type: none"> •Migrant-inclusive DRR/DRM and adaptation frameworks •Inclusive social protection systems and access to basic services 	<ul style="list-style-type: none"> •Zoning and land-use planning in potential places of destination •Rights of incoming residents, including options to settle, work, access services and assistance
Data	<ul style="list-style-type: none"> •Identification of areas at risk •Identification of potential displacement and past patterns of movement •Identification of individual/household thresholds of impact and mobility options •Identification of potential evacuation behaviors and support needs 	<ul style="list-style-type: none"> •Data on mobility flows and distribution of people on the move •Risk assessments in transit areas/routes or areas in which people on the move concentrate •Socio-economic and cultural features of people on the move at risk 	<ul style="list-style-type: none"> •Modelling of potential migration •Monitoring of ongoing immigration flows •Identification of areas where there are opportunities or risk for incoming populations
Capacity building	<ul style="list-style-type: none"> •Awareness/training of decision makers •Business support programs for people at risk 	<ul style="list-style-type: none"> •Cultural competency of responders 	<ul style="list-style-type: none"> •Increase capacity of service providers to address additional demands for services •Train migrants to equip them with marketable skills at destination

	<ul style="list-style-type: none"> •Livelihood diversification/strengthening programmes for people at risk •Preparedness for displacement for responders 		
Equipment	<ul style="list-style-type: none"> •Items to support livelihoods/income generating activities •Emergency stockpiles 	<ul style="list-style-type: none"> •Culturally-specific emergency items 	
Access to finance	<ul style="list-style-type: none"> •Development of insurance mechanisms •Leveraging remittances for adaptation and resilience •Setting up an infrastructure for cash transfers for post-disaster assistance 		

The below is an example of the ex-ante human mobility needs matrix (presented in section 5.1) compiled with relevant examples of activities.

Beneficiaries of the intervention	Displaced persons	Host communities
Type of intervention		
Infrastructure and technology	<ul style="list-style-type: none"> •Set up and service displacement sites •Provide temporary, transitional, and permanent shelters •(re)build temporary and permanent infrastructure for basic service provision 	<ul style="list-style-type: none"> •Improve availability of housing and infrastructure to absorb population inflows
Policy and enabling environment	<ul style="list-style-type: none"> •Rights of IDPs, including land rights, assistance and protection, and livelihood support •Access to social protection systems for displaced persons •Durable solutions collaboration frameworks, roles and responsibilities •Land-use planning •Building codes •Land ownership system 	<ul style="list-style-type: none"> •Community cohesion
Data	<ul style="list-style-type: none"> •Tracking of displacement patterns •Tracking of displaced persons' needs and risks •Progress toward solutions and movement intentions •Estimating impacts of displacement 	<ul style="list-style-type: none"> •Estimating economic and non-economic impacts of displacement •Identifying risks in areas of destination of displaced populations
Capacity building	<ul style="list-style-type: none"> •Developing/resourcing systems for redocumentation, family tracing and protection 	<ul style="list-style-type: none"> •Increase capacity of service providers to address additional demand for services •Capacity building for social cohesion (staff, participatory processes)
Equipment	<ul style="list-style-type: none"> •Replenishing food and non-food stockpiles •Materials for reconstruction 	<ul style="list-style-type: none"> •Materials for reconstruction
Access to finance	<ul style="list-style-type: none"> •Leveraging remittances for disaster response and recovery •Activating the infrastructure for cash transfers for post-event assistance 	

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