



When Climate Forces People to Move: Bridging the Gap Between Global Frameworks and Local Action

Lessons and Recommendations from the
Global Programme on Human Mobility in the Context
of Climate Change - A Practitioner's Brief

September 2026

Published by

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

Imprint

As a federally owned enterprise, GIZ supports the German Government in achieving its objectives in the field of international cooperation for sustainable development.

Published by

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices

Bonn and Eschborn, Germany

Address

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH
Friedrich-Ebert-Allee 32 + 36
53113 Bonn, Germany
T +49 61 96 79-0
E info@giz.de
I www.giz.de/en

Global Programme

Human Mobility in the Context of Climate Change

Head of Programme

Björn Euler
bjoern.euler@giz.de

Authors

Jona Huber, David Silber & Amina Schild

Design and layout

Clara Engelsleben, Nils Fleischmann

Contributions

Manuel Friedlein

On behalf of

Federal Ministry for Economic Cooperation and
Development (BMZ)

September 2026

Maps

The maps printed here are intended only for information purposes and in no way constitute recognition under international law of boundaries and territories. GIZ accepts no responsibility for these maps being entirely up to date, correct or complete. All liability for any damage, direct or indirect, resulting from their use is excluded.

Disclaimer

The information in this report, or upon which this report is based, has been obtained from sources the authors believe to be reliable and accurate. While reasonable efforts have been made to ensure that the contents of this publication are factually correct, GIZ GmbH does not accept responsibility for the accuracy or completeness of the contents, and shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of this publication.

URL links

This publication contains links to external websites. Responsibility for the content of the listed external sites always lies with their respective publishers. When the links to these sites were first posted, GIZ checked the third-party content to establish whether it could give rise to civil or criminal liability. However, the constant review of the links to external sites cannot reasonably be expected without concrete indication of a violation of rights. If GIZ itself becomes aware or is notified by a third party that an external site it has provided a link to gives rise to civil or criminal liability, it will remove the link to this site immediately. GIZ expressly dissociates itself from such content.

GIZ is responsible for the content of this publication.

For more content on HMCCC please visit:

adaptationcommunity.net/HMCCC

Picture credits:

© GIZ/Ranak Martin (coverpage)

© Amina Schild (backpage, page 4)

© GIZ/Britta Radike (page 8)

© GIZ (page 2)

© GIZ/Lucas Wahl (page 1)

© GIZ/Climax Film Production (page 7)

© GIZ/Aaron March (page 3)



Table of Contents

List of Acronyms

Executive Summary	1
1 Introduction	2
2 Climate Change Adaptation, Loss & Damage, and its Relevance for HMCCC	3
3 Lessons from HMCCC in Practice	4
3.1 Governance, Institutionalisation, and Policy Coherence	4
3.2 Evidence-Based and Data-Informed Mobility Planning	5
3.3 Piloting Rights-Based Approaches	6
3.4 Financing HMCCC	6
3.5 Knowledge-Sharing and Cross-Regional Learning	6
4 Recommendations	7
References	9





List of Acronyms

AU	African Union
AUC	African Union Commission
BMZ	German Federal Ministry for Economic Cooperation and Development
CROC	Climate Relocation of Communities (Trust Fund)
CRVAM	Climate Risk and Vulnerability Assessment Methodology
ECOWAS	Economic Community of West African States
FRLD	Fund for Responding to Loss and Damage
GEDSI	Gender Equality, Disability and Social Inclusion
GGA	Global Goal on Adaptation
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
HMCCC	Human Mobility in the Context of Climate Change
ICPAC	IGAD Climate Prediction and Applications Centre
IDMC	Internal Displacement Monitoring Centre
IGAD	Intergovernmental Authority on Development
IOM	International Organisation of Migration
MENA	Middle East and North Africa
MIDWA	Migration Dialogue for West Africa
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
RBIM	Registry of Barangay Inhabitants and Migrants
REC	Regional Economic Communities
SDC	Swiss Agency for Development and Cooperation
SOPs	Standard Operating Procedures





Executive Summary

Human Mobility in the Context of Climate Change is increasingly recognised in international climate and development policy – yet translating these commitments into practical responses remains a persistent challenge. HMCCC occupies a complex position between adaptation and loss and damage. Mobility can reduce climate risks and strengthen resilience, but it can also be a consequence of climate impacts and a source of new vulnerabilities. Effective governance therefore requires coordinated responses across policy domains that rarely operate together, including climate adaptation, disaster risk reduction, migration governance, and development planning.

Drawing on the experience from the GIZ Global Programme on Human Mobility in the Context of Climate Change – working across the African Union, the Economic Community of West African States, Fiji and the Philippines – this Brief documents practical lessons from governance approaches, institutional reforms, pilot initiatives, and regional exchange processes. The lessons are grounded in practice and ready to be applied more widely.

Five lessons stand out from the Programme's implementation experience (detailed in Chapter 3):

- 1. Institutionalising HMCCC within existing governance structures is essential to move beyond project-based responses and sustain action over time.*
- 2. Data systems are most valuable when they directly inform planning, early warning, and decision-making processes.*
- 3. Pilot initiatives can help translate policy commitments into practical approaches and generate models that are adaptable to other contexts.*
- 4. Access to finance remains a major constraint and requires both dedicated funding mechanisms and stronger financing readiness.*
- 5. Structured exchange between countries, regions, and institutions accelerates learning and helps avoid repeating costly mistakes.*

Together, these lessons highlight that effective HMCCC governance depends not only on policy ambition, but on the institutions, capacities, financing mechanisms, and partnerships required to turn commitments into action.



1 Introduction

Without decisive action, more than 216 million people could be forced to move within their own countries by 2050 (Clement et al., 2021). Human Mobility in the Context of Climate Change (HMCCC) is reshaping lives and livelihoods across every world region. Climate-related extreme events and slow-onset processes are already displacing people, undermining livelihoods, and eroding development gains. In 2025, weather-related extreme events triggered 29.9 million internal displacements, with almost 60 per cent occurring in East Asia and the Pacific alone (IDMC, 2026).

HMCCC covers four interconnected phenomena: displacement, migration, planned relocation, and immobility (see definition box). Agency, resource access, and broader socioeconomic context largely determine whether mobility leads to positive or harmful outcomes (Mester et al., 2025). Climate change-exacerbated vulnerabilities – including structural poverty, gender inequality, insecure land tenure, and conflict – shape who can move safely, who must move under distress, and who cannot move at all. As such, climate change often acts as a risk multiplier to already existing vulnerabilities (Nabong et al., 2023).

Governing this effectively remains deeply challenging. Institutional mandates are fragmented, data systems are insufficient, and funding for mobility-related measures remains difficult to access – particularly at the subnational level where responses must ultimately be implemented.

Against this backdrop, the Global Programme Human Mobility in the Context of Climate Change (hereafter referred to as Global Programme) implemented by GIZ, commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and co-funded by the Swiss Agency for Development and Cooperation (SDC), supports partner institutions from the African Union (AU), the Economic Community of West African States (ECOWAS), Fiji, and the Philippines in integrating anticipatory, rights-based, and gender-responsive approaches into climate mobility governance.

This Brief synthesises practical experiences from that work and presents tailored recommendations for development cooperation actors seeking to strengthen HMCCC governance.

Definition: HMCCC

Human mobility is an umbrella term for various types of movement. Mobility can serve as an adaptation strategy, result from loss and damage, or cause loss and damage itself. Climate-related mobility drivers often interact with preexisting vulnerabilities, thus making mobility outcomes complex and context-specific.

- **Displacement:** Involuntary mobility triggered by rapid-onset (e.g., storms, floods) or slow-onset events (e.g., sea level rise). While displacement can result in cross-border mobility, the majority of people are displaced within their own country (Adger et al., 2018).
- **Migration:** Often pursued for livelihood diversification when climate change undermines economic activities (e.g., agriculture). Migration can be anticipatory or distress-driven, with boundaries between voluntary and forced frequently blurred (Adger et al., 2018).
- **Relocation:** Government-assisted, planned movement away from high-risk areas. Undertaken before or after impacts, when adaptation in place is no longer viable (e.g., in the context of sea-level rise in low-lying islands) (Bower et al., 2023).
- **Immobility:** Remaining in place either voluntarily or involuntarily. Involuntary immobility occurs when people lack financial, social, legal or physical resources to move, effectively trapping vulnerable populations as climate pressures intensify (A. Thomas et al., 2025).



2 Climate Change Adaptation, Loss & Damage, and its Relevance for HMCCC

HMCCC occupies a complex position between adaptation and loss and damage. Within international climate policy, loss and damage refers to the negative impacts of climate change that occur despite – or in the absence of – sufficient adaptation, including both economic and non-economic losses. In some contexts, mobility can be seen as an effective adaptation strategy (Birkmann et al., 2026). Households may diversify income, move seasonally, or migrate temporarily to reduce risks and boost resilience. Remittances help finance local adaptation, such as climate-smart agriculture or rebuilding after climate shocks (Redicker et al., 2025).

However, mobility becomes maladaptive when it is forced, unsafe, or poorly supported (Vinke et al., 2022). Communities exposed to recurrent disasters, declining agricultural productivity, or inadequate public services may be compelled to move without sufficient planning or protection. Cumulative loss and damage, such as climate-induced crop failures, declining incomes, and the gradual erosion of livelihoods, can trigger distress migration among agriculture-dependent rural households (FAO & UNU-EHS, 2025). Such movement often generates new forms of vulnerability, including hazardous living conditions, exploitation, loss of land and cultural identity, and long-term livelihood insecurity (Srihari et al., 2024; McMichael et al., 2023). These outcomes constitute loss and damage in their own right (Woroniecki et al., 2025) and disproportionately affect groups already facing structural poverty, gender inequality, and social or ethnic marginalisation (Dorkenoo et al., 2022; K. Thomas et al., 2019).

Immobility carries equivalent risks: those unable to move due to lack of resources, legal status, or social networks may face escalating harm as climate impacts intensify (Benveniste et al., 2022; A. Thomas et al., 2025). Women and girls face compounded risks – from restricted mobility and heightened exposure to gender-based violence, to limited access to resources needed for safe movement (Redicker et al., 2025).

“Relocation is one of our priorities and part of Fiji’s adaptation planning. Still, we see planned relocation as loss and damage – because of the loss of social networks, cultural assets, and heritage.”

Lebaiatelaite Gaunavinaka | Adaptation Unit, Climate Change Division, Office of the Prime Minister Fiji

The international policy landscape is slowly catching up with this complexity. The Global Goal on Adaptation (GGA) and its recent operationalisation aim to close the widening adaptation gap by setting targets across water and food systems, health, and livelihoods, and by enabling more structured National Adaptation Plans (NAPs). Since key mobility drivers are shaped directly by the adaptation outcomes, progress on the GGA has direct implications for HMCCC. At the same time, the establishment of the Fund for Responding to Loss and Damage (FRLD) at COP27 marked an important step: by explicitly recognising displacement and forced migration as forms of non-economic loss and damage, the FRLD opens new financing pathways for HMCCC responses, including planned community relocation.



3 Lessons from HMCCC in Practice

While global policy frameworks on HMCCC continue to evolve, translating these commitments into effective responses remains a major implementation challenge. Drawing on almost a decade of experience from the Global Programme across different regional and national contexts, this chapter presents five practical lessons – spanning governance, data, piloting, financing, and cross-regional learning – alongside the institutional lessons and persistent gaps that emerged in applying them.

3.1 Governance, Institutionalisation, and Policy Coherence

Addressing HMCCC requires coordinated action across multiple policy domains, including climate adaptation, disaster risk reduction, migration governance, and development planning. In most contexts, these policy domains are handled by different ministries with separate mandates – and HMCCC falls between them. This results in the risk that the topic remains an ad hoc element of policy discussions rather than becoming embedded in sustained governance processes – limiting governments' ability to translate political commitments into consistent responses.

“Countries need to be enabled to identify their priorities and integrate climate-related policies into broader national development plans, ensuring that they can be included in fiscal budgets of the relevant ministries and agencies.”

Dr. Sabelo Mbokazi | Head of Labour, Employment & Migration, AUC

An increasing number of countries and regional organisations are therefore working to institutionalise HMCCC within existing governance frameworks: integrating it into NAPs and migration strategies, strengthening cross-ministerial coordination, and developing regional policy frameworks that link climate and migration governance. Such institutionalisation is essential to ensure that HMCCC responses extend beyond individual projects and become anchored in long-term government structures. The Global Programme supports these processes through targeted institutional and policy engagement at continental, regional, and national levels.

At the continental level, the Global Programme supports the AUC in developing a continental HMCCC strategy – a coherent framework intended to align national and regional policy approaches, strengthen coordination across AU departments, and serve as a shared strategic reference point for Member States. As the first continental framework dedicated specifically to climate-related mobility, the strategy has the potential to strengthen policy coherence across Africa and provide a common foundation for national and regional action on HMCCC.

At the regional level, collaboration with the Migration, Environment and Climate Change Division of the International Organisation of Migration (IOM) has contributed to the reactivation of a dedicated Thematic Working Group on climate change, land degradation, desertification, environment, and migration under the Migration Dialogue for West Africa (MIDWA). This platform systematically feeds good practices on HMCCC into national policy processes and strengthens Member States' influence on regional HMCCC governance.



At the national level, Fiji illustrates how HMCCC responses can be institutionalised within permanent government structures: through technical support and policy dialogue, the Global Programme has contributed to establishing and operationalising a dedicated Relocation Unit within the national administration. This unit coordinates relocation processes, integrates relocation planning into national policies, and – by embedding responsibilities within a permanent state structure – ensures that capacities and coordination mechanisms remain in place beyond individual project cycles.

At the local level, the Global Programme works with two Local Government Units in the Philippines to integrate HMCCC considerations into local development planning and to strengthen data management capacities for evidence-based decision-making.

“Regional frameworks facilitate the mainstreaming and translation of human mobility into national actions. Within this mainstreaming process, it is important to involve all stakeholders, including at the local level. [...] The goal is the implementation at community levels, so they need to be consulted from the very beginning”

Yao Bernard Koffi | Acting Director of Environment and Natural Resources, ECOWAS

3.2 Evidence-Based and Data-Informed Mobility Planning

Effective responses to HMCCC depend on robust, context-specific data (Keenan et al., 2025). In many partner countries, however, data systems remain fragmented and insufficiently equipped to capture the complex and dynamic nature of climate-related mobility. Key gaps persist in linking climate risks, vulnerability, and mobility patterns, thereby limiting governments' ability to plan anticipatory and targeted interventions.

These challenges are highlighted by the Internal Displacement Monitoring Centre (IDMC), as they explain that data collection often ends only days or weeks after a disaster event, limiting understanding of longer-term displacement dynamics and resulting in an incomplete picture of displacement over time.

“Lack of data is a significant problem, as well as available research and studies to inform the development of solid policy measures [...]. Rapid urbanisation highlights the need to address internal migration, but policy development and planning must be informed by improved information, which is inadequate particularly at the local level.”

Lolito R. Tacardon | Deputy Executive Director on Population and Development, Philippine Statistics Authority

Several initiatives supported under the Global Programme demonstrate how strengthening the evidence base can directly inform policy and planning. In the Philippines, the digitalisation of the Registry of Barangay Inhabitants and Migrants (RBIM) has supported local governments in systematically collecting and analysing data on climate risks and human mobility. By integrating these dimensions, the RBIM helps identify populations at risk of displacement, supports local adaptation planning, and enables more targeted, evidence-based decision-making.

In West Africa, the strengthening of regional climate services through the cooperation with the AGRHYMET Regional Centre and the Intergovernmental Authority on Development (IGAD) Climate Prediction and Applications Centre (ICPAC) has improved access to climate and environmental data relevant to mobility dynamics. Enhanced early warning systems, climate risk analysis, as well as data dissemination capacities contribute to a better understanding of how slow-onset processes and extreme events affect livelihoods and mobility patterns. These systems are supporting regional and national actors in shifting from reactive responses to more anticipatory and risk-informed approaches.



3.3 Piloting Rights-Based Approaches

Turning policy frameworks on HMCCC into concrete action on the ground remains a persistent challenge. Many countries face limited institutional capacity, unclear procedures, and a lack of practical tools to implement measures such as planned relocation or anticipatory adaptation – leaving policies at a strategic level without being effectively put into practice.

Pilot approaches are key to bridging this gap. By testing concrete solutions and generating practical experience, they help develop models that can be adapted and scaled. In Fiji, where climate-related displacement is already a pressing reality, pilot initiatives have supported the development and application of Standard Operating Procedures (SOPs) for voluntary planned relocation. These provide government actors with clear, step-by-step guidance, helping to operationalise national policies and ensuring that relocation processes are rights-based, coordinated, and sensitive to local contexts. Alongside this, the Global Programme supported the development of the Climate Risk and Vulnerability Assessment Methodology (CRVAM), strengthening the evidence base for identifying at-risk communities and enabling more anticipatory and informed relocation planning. Together, the SOPs and the CRVAM offer scalable approaches that provide valuable lessons for other regions facing similar climate-related relocation challenges and ultimately contribute to more effective and lasting responses to HMCCC.

3.4 Financing HMCCC

Financing remains a challenge in addressing HMCCC. Existing climate finance mechanisms are often difficult to access and insufficient to meet the scale of global need (Shawoo et al., 2025; Garschagen & Doshi, 2022). Country experiences confirm this: In Fiji, planned relocation has become a central policy priority, but implementation is held back by high upfront costs, complex coordination requirements, and a lack of predictable funding.

In response, the Global Programme and its partners have begun to explore what more tailored financing could look like. In Fiji, the establishment of the

Climate Relocation of Communities (CROC) Trust Fund marks an important step towards a dedicated national mechanism for planned relocation. By pooling resources from multiple sources and providing more predictable, long-term financing, the fund aims to put relocation processes on a more stable and sustainable footing (Government of Fiji, 2023).

At the international level, the Global Programme supports partner countries in identifying and accessing funding opportunities, including the FRLD, which explicitly recognises displacement as a form of non-economic loss and damage. Building the capacity to navigate complex funding landscapes and align national priorities with global instruments is a precondition for unlocking the resources these responses require beyond project lifetimes.

3.5 Knowledge Sharing and Cross-Regional Learning

HMCCC is a global challenge that manifests in diverse local contexts. While impacts differ across regions, many of the underlying dynamics are shared. Yet knowledge of HMCCC remains fragmented, and lessons learned are rarely shared systematically across regions.

The Global Programme addresses this by actively promoting inter-regional learning and policy transfer. Inter-REC exchanges – bringing together Regional Economic Communities (RECs) of the AU – have proven particularly effective in strengthening regional coherence, allowing actors to compare policy approaches and jointly advance the integration of climate-related mobility into regional frameworks. Beyond Africa, the GIZ-SLYCAN Trust South-South Dialogue Series connects policymakers from the Pacific, Africa, and Asia, enabling peer-to-peer learning on practical solutions such as planned relocation frameworks, data systems, and anticipatory approaches – and supporting their adaptation to different political and institutional contexts. In creating sustained platforms for dialogue and mutual learning, the Global Programme supports the uptake of effective approaches as well as coherent and scalable responses to a shared global challenge.



4 Recommendations

Building on the five implementation lessons above, this section translates that experience into seven cross-cutting recommendations for development cooperation actors seeking to strengthen governance responses to HMCCC. These recommendations are grounded in practical insights from the Global Programme and are directed at implementing organisations working to embed HMCCC into more coherent, rights-based, and sustainable governance frameworks.

1. Strengthening institutional and technical capacity at all governance levels.

One of the clearest lessons is that national policy frameworks only deliver results when (subnational) institutions have the capacity to implement them. Investing in capacity at the local level – and linking it to regional and national processes from the outset – is a precondition for scaling and sustained impact. This includes not only technical training but the cultural and procedural dimensions of implementation: experience with planned relocation has shown that without adequate attention to dignity, identity, and social cohesion, even well-designed processes risk increasing rather than reducing vulnerability.

2. Fostering intersectoral coordination and embedding HMCCC within permanent governance structures.

HMCCC consistently falls between institutional mandates, and coordination rarely happens without deliberate effort. Observations showed that coordination mechanisms were most effective where mandates and responsibilities were formally embedded in government structures and linked to dedicated resources. Without such institutional anchoring, strategies and coordination platforms often remain project-based and difficult to sustain beyond individual interventions.

Experience further showed that HMCCC gains stronger political traction when integrated into existing policy and governance frameworks rather than being treated as a standalone technical issue.

3. Improving data and knowledge systems to enable anticipatory, evidence-informed planning.

Reliable, disaggregated data is foundational to anticipatory governance – yet data systems in most partner contexts remain fragmented or are unable to link climate risks to mobility patterns. A recurring lesson is that investing in data alone is insufficient: training and institutional mandates that require and enable the use of data are equally critical. Knowledge exchange between institutions with different levels of capacity – through formats such as peer learning, benchmarking visits, and job-shadowing – has proven an effective and underused means of building data and analytical capacities across regions.

4. Promoting rights-based, context-sensitive, and participatory approaches at every stage.

A consistent lesson is that policies and programmes are more likely to gain ownership and be implemented effectively when stakeholders are engaged early and meaningfully throughout the process. Experience from the development of the AU Continental Strategy on HMCCC demonstrated that regional frameworks require continuous consultation and buy-in from Member States to ensure relevance, legitimacy, and implementation. Similarly, project concepts are more likely to be understood, applied, and sustained when they are linked to people's everyday realities and operational challenges. Trainings on Gender Equality, Disability and Social Inclusion (GEDSI) showed that practical and context-specific approaches resonated more strongly with partners than abstract policy terminology. These experiences highlight the importance of participatory, context-sensitive, and implementation-oriented approaches at all levels.



5. Facilitating access to climate finance and investing in financing readiness.

Financing is one of the most persistent structural barriers to effective HMCCC responses, and the challenge is not only one of volume. Experience in supporting partner countries to access the FRLD has revealed that many lack the administrative and technical capacity to respond to funding opportunities at all – pointing to a clear need for dedicated support. At the same time, national-level experience has demonstrated the value of dedicated financing mechanisms that pool resources, provide predictability, and are anchored in existing governance and coordination structures. Furthermore, direct access for subnational actors is needed to fund HMCCC measures on the ground. Both dimensions – improving access to international funds and strengthening national and subnational financing instruments – need to be pursued in parallel.

6. Strengthening peer-to-peer learning and exchange across regions and governance levels.

HMCCC is a global challenge, but many governance responses are still developed in isolation. A recurring lesson is that countries and regional actors facing similar mobility challenges can benefit significantly from exchanging experiences with one another. Dialogue formats and regional exchange processes can help practitioners anticipate implementation challenges, avoid costly mistakes, and build confidence in addressing complex mobility issues. Sustained investment in peer-to-peer learning and practitioner exchange should therefore be treated not as an add-on, but as a core component of effective HMCCC governance.

7. Embed HMCCC within broader agendas

HMCCC does not occur in a vacuum, yet policy and programming routinely treat it as one – siloed within climate ministries and climate-specific strategies, disconnected from the conflict, development, and humanitarian architecture shaping the same displacement dynamics on the ground. In many of the world's most affected regions – including the Horn of Africa and the Middle East and North Africa (MENA) – displacement and migration are shaped by the intersection of climate change, conflict, fragility and food insecurity. Addressing these dynamics in isolation risks both misdiagnosing the problem and misallocating responses. A recurring lesson from implementation experiences is that HMCCC gains neither sufficient political traction nor adequate resources when it remains confined to climate policy circles alone.

Broadening the conversation means deliberately connecting climate, development, humanitarian, and security actors around shared challenges – while keeping the security of people on the move central, rather than framing mobility itself as a threat. HMCCC should be reflected in stability strategies and humanitarian response plans, not only in Nationally Determined Contributions (NDCs) and NAPs. High-level forums offer access to decision-makers and financing streams that climate diplomacy alone rarely reaches. Development cooperation actors are well-placed to facilitate these connections – fostering joint analysis of climate-conflict-mobility dynamics and advocating for integrated approaches that match the complexity of why people actually move.



References

- Adger, W. N., Safra De Campos, R., & Mortreux, C.** (2018). Mobility, displacement and migration, and their interactions with vulnerability and adaptation to environmental risks. In R. McLeman & F. Gemenne (Eds.), *Routledge Handbook of Environmental Displacement and Migration* (pp. 29-41). Routledge. <https://doi.org/10.4324/9781315638843>
- Benveniste, H., Oppenheimer, M., & Fleurbay, M.** (2022). Climate change increases resource-constrained international immobility. *Nature Climate Change*, 12(7), 634-641. <https://doi.org/10.1038/s41558-022-01401-w>
- Birkmann, J., Jamshed, A., Totin, E., Handmer, J., Huang, L., Qiu, S., Anthonj, C., Hess, J., & Boyd, E.** (2026). Assessing climate-related non-economic loss and damage and rethinking the relation between L&D and adaptation. *Environmental Research Letters*. <http://iopscience.iop.org/article/10.1088/1748-9326/ae34cb>
- Bower, E. R., Badamkar, A., Wong-Parodi, G., & Field, C. B.** (2023). Enabling pathways for sustainable livelihoods in planned relocation. *Nature Climate Change*, 13(9), 919-926. <https://doi.org/10.1038/s41558-023-01753-x>
- Clement, V., Rigaud, K. K., de Sherbinin, A., Jones, B., Adamo, S., Schewe, J., Sadiq, N., & Shabahat, E.** (2021). Groundswell Part 2: Acting on Internal Climate Migration. <https://hdl.handle.net/10986/36248>
- Dorkenoo, K., Scown, M., & Boyd, E.** (2022). A critical review of disproportionality in loss and damage from climate change. *WIREs Climate Change*, 13(4), e770. <https://doi.org/10.1002/wcc.770>
- FAO & UNU-EHS** (2025). Integrating human mobility through a rural livelihood lens into national adaptation and mitigation planning - Guiding framework. <https://openknowledge.fao.org/items/756cfc9-2203-4876-b765-af583c7a5504>
- Government of Fiji** (2023). An introduction to the Climate Relocation of Communities Trust Fund for communities and the public. <https://fijiclimatchangeportal.gov.fj/wp-content/uploads/2023/05/CROCTF-Information-Brief-1.pdf>
- Garschagen, M., & Doshi, D.** (2022). Does funds-based adaptation finance reach the most vulnerable countries? *Global Environmental Change*, 73, 102450. <https://doi.org/10.1016/j.gloenvcha.2021.102450>
- IDMC.** (2026). Global Report on Internal Displacement 2026. <https://www.internal-displacement.org/global-report/>
- Keenan, J. M., Ajibade, I., & Tietjen, B. C.** (2025). The state of planning, policy, and justice for human mobility in national adaptation plans. *Earth System Governance*, 25, 100266. <https://doi.org/10.1016/j.esg.2025.100266>
- McMichael, C., Schwerdtle, P. N., & Ayeb-Karlsson, S.** (2023). Waiting for the wave, but missing the tide: Case studies of climate-related (im)mobility and health. *Journal of Migration and Health*, 7, 100147. <https://doi.org/10.1016/j.jmh.2022.100147>
- Mester, B., Frieler, K., Korup, O., Desai, B., & Schewe, J.** (2025). Socioeconomic predictors of vulnerability to flood-induced displacement. *Nature Communications*, 16(1), 8296. <https://doi.org/10.1038/s41467-025-64015-8>
- Nabong, E. C., Hocking, L., Opdyke, A., & Walters, J. P.** (2023). Decision-making factor interactions influencing climate migration: A systems-based systematic review. *WIREs Climate Change*, 14(4), e828. <https://doi.org/10.1002/wcc.828>
- Redicker, S., Franco Gavalon, M., Adger, W. N., Safra De Campos, R., Abu, M., Boly, S., Codjoe, S. N. A., Etana, D., Gurmu, E., Nicolle, H., & Owuor, J.** (2025). Gender dimensions of adaptive capacity and adaptation responses to climate shocks in rural households: Ghana, Mali, Kenya, and Ethiopia. *Environmental Research Letters*, 20(9), 094017. <https://doi.org/10.1088/1748-9326/adf23b>
- Shawoo, Z., Browne, K., Canales, N., & Nazareth, A.** (2025). Assessing the distributive equity of adaptation finance: a framework. *Climate Policy*, 1-16. <https://doi.org/10.1080/14693062.2025.2456552>
- Srihari, G., Ishaan, S., Beth, S., Yasmina, B., Imen, E. A., Florencio, V. C., Victoria, K., Aryan, S., Aidan, L., & Celine, H.** (2024). Climate change, modern slavery, and its impact on health – A youth perspective and global call to action. *The Journal of Climate Change and Health*, 20, 100327. <https://doi.org/10.1016/j.joclim.2024.100327>
- Thomas, A., Sircar, A., Abu, M., Boyd, E., Howe, L., Pinho, P., Scown, M., & Shenga, C.** (2025). Immobility in the Context of Climate Change. *Annual Review of Environment and Resources*, 50(Volume 50, 2025), 47-66. <https://doi.org/10.1146/annurev-environ-121923-120443>
- Thomas, K., Hardy, R. D., Lazrus, H., Mendez, M., Orlove, B., Rivera-Collazo, I., Roberts, J. T., Rockman, M., Warner, B. P., & Winthrop, R.** (2019). Explaining differential vulnerability to climate change: A social science review. *WIREs Climate Change*, 10(2), e565. <https://doi.org/10.1002/wcc.565>
- Vinke, K., Rottmann, S., Gornott, C., Zabre, P., Nayna Schwerdtle, P., & Sauerborn, R.** (2022). Is migration an effective adaptation to climate-related agricultural distress in sub-Saharan Africa? *Population and Environment*, 43(3), 319-345. <https://doi.org/10.1007/s11111-021-00393-7>
- Woroniecki, S., Feetham, P., Linnér, B.-O., Movono, A., Singh, P., Vaccarino, F., Wibeck, V., & Zeiler, K.** (2025). Grounding the conversation on loss and damage: insights from sense-making analysis with Pacific leaders. *Climatic Change*, 178(11), 190. <https://doi.org/10.1007/s10584-025-04032-0>



Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn

Friedrich-Ebert-Allee 32 + 36 Dag-Hammarskjöld-Weg 1 - 5
53113 Bonn / Germany 65760 Eschborn / Germany
T +49 228 44 60-0 T +49 61 96 79-0
F +49 228 44 60-17 66 F +49 61 96 79-11 15

E info@giz.de
I www.giz.de

Commissioned by

