DIIS
DANISH INSTITUTE
FOR INTERNATIONAL
STUDIES

UN environment programme | copenhagen climate centre

Loss and Damage:
Assessing Institutional Arrangements from National to Local Levels

Policy Brief



© 2026 United Nations Environment Programme – Copenhagen Climate Centre (UNEP-CCC)

This publication may be reproduced in whole or in part and in any form for educational or non-profit services without special permission from the copyright holders, provided acknowledgement of the source is made. UNEP-CCC would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or any other commercial purpose whatsoever without prior permission in writing from UNEP-CCC.

This publication was developed by the UNEP Copenhagen Climate Centre with funding provided by the Ministry of Foreign Affairs of Denmark (Danida).

Disclaimer

The designations used and the presentation of material in this publication do not imply, in any way, the expression of an opinion by the UNEP Copenhagen Climate Centre (UNEP-CCC) regarding the legal status of any country, territory, city, or area, or its authorities. Similarly, they do not imply any opinion on the delimitation of its frontiers or boundaries. Mention of company names and commercial products does not imply endorsement by UNEP-CCC or the authors. The use of information from this publication for publicity or advertising purposes is not permitted.

The views expressed in this publication are those of the authors and do not necessarily reflect the views of UNEP-CCC, or their member states. We regret any errors or omissions that may have been unwittingly made.

Acknowledgements

This publication draws on the contributions of the following research consultants who coordinated and carried out country-specific data collection:

- Somalia: Hannah Marcus, Independent Climate-Health Consultant and Environmental Health Working Group Co-Chair, World Federation of Public Health Associations
- Viet Nam: Assoc. Professor Le Thi Hoa Sen, Faculty of Rural Development, University of Agriculture and Forestry, Hue University; Dr. Le Nguyen Que Huong, Independent Research Analyst
- Vanuatu: Brian Maltera, Loss and Damage Officer in Vanuatu and Independent Climate Consultant
- India: Divya Prakash Vyas, Associate Director at ICLEI South Asia and Emani Kumar the Executive Director of ICLEI South Asia
- Mauritius: Marie Stéphania Perrine, Independent Consultant and UNFCCC Fellow
- Zambia: Felix Kanungwe Kalaba, Professor at Mukuba University

Suggested Citation

United Nations Environment Programme Copenhagen Climate Centre (UNEP-CCC) and Danish Institute for International Studies (DIIS). 2026. Loss and Damage: Assessing Institutional Arrangements from National to Local Levels. Policy Brief. Copenhagen, Denmark.

Lead Authors, Editors and Coordination

Fatemeh Bakhtiari (UNEP-CCC), Lily Salloum Lindegaard (DIIS), Joshitha Sankam (UNEP-CCC), Julia Rocha Romero (UNEP-CCC), Emilie Marie Falk Due (DIIS), Emily Grünendieck (independent)

Reviewers

Emily Boyd (Lund University), Henry Neufeldt (UNEP-CCC), Rajib Ghosal (L&D Expert, Member of the Santiago Network for Loss and Damage), Chawanangwa Nyirenda (UNEP), Talat Munshi (UNEP-CCC), Jingjing Gao (UNEP-CCC)

Media and Communication Support

UNEP-CCC Communication Team: Mette Annelie Rasmussen (UNEP-CCC), Lasse Hemmingsen (UNEP-CCC), Aristeidis Tsakiris (UNEP-CCC)

Design and Layout

Formato Verde

Proofreading and Language Editing

Laurie Thompson

Additional Thanks

With appreciation to all colleagues and contributors whose support has made this report possible.

The authors gratefully acknowledge the financial support from the Ministry of Foreign Affairs of Denmark (Danida).

Use of Artificial Intelligence (AI)

This report has made limited use of Artificial Intelligence (AI) tools to support drafting, formatting, and editing processes. All outputs generated through AI were reviewed and validated by the authors to ensure accuracy, relevance, and quality. The use of AI adhered to the *UNEP interim guidance on the use of Artificial Intelligence tools for publication development, June 2025.*

UNEP-CCC is supported by UNOPS

Executive Summary

Countries face rising climate-related loss and damage that increasingly strain existing governance, finance and institutional systems. Strengthening national and sub-national governance is essential to move from fragmented, reactive approaches toward more coherent, anticipatory and equitable action. When L&D remains embedded across disaster management, adaptation and sectoral policies without a clear institutional anchor, responsibilities can become fragmented, coordination may weaken, and non-economic losses and damages tend to fall through the cracks. At the same time, the evolving international architecture – such as the Fund for Responding to Loss and Damage (FRLD), Enhanced Transparency Framework (ETF) and Global Stocktake (GST) – effectively requires nationally identifiable focal points and integrated data systems, which diffuse institutional arrangements often struggle to provide.

This policy brief provides four priority areas where policymakers can drive progress, supported by practical entry points that can be adapted to different country contexts and aligned with emerging international guidance. Achieving coherent, integrated governance for loss and damage requires strengthening institutions, improving data, embedding participation, and aligning finance. Countries can tailor the recommendations under this policy brief to their own governance structures and capacities while drawing on emerging international guidance and support mechanisms.

Key Messages and Recommendations for Policymakers

1. Establish Clear Mandates and Strengthen Cross-Government Coordination

Effective loss and damage governance depends on clear mandates, streamlined coordination and well-defined responsibilities across institutions and levels of government.

Key messages for practitioners:

- Establish or reinforce a national coordination mechanism for loss and damage to ensure coherence across climate, disaster risk reduction (DRR), development, humanitarian and sectoral policies.
- Make loss and damage explicit in existing national frameworks (e.g., climate strategies, DRR plans, development policies) to clarify institutional roles and collaboration pathways.
- Improve vertical coordination between national, sub-national and local authorities to unlock timely action, facilitate external support and create clear entry points for non-state actors.

2. Build and Strengthen Robust, Multi-Hazard Data Systems to Guide Decisions and Reporting

Robust, comparable and multi-hazard data are foundational for designing effective policies, prioritizing investments and making the case for finance.

Key messages for practitioners:

- Build on existing data systems—disaster loss databases, post-disaster needs assessments, sectoral statistics—to develop nationally appropriate loss and damage indicators.
- Gradually expand data systems to capture slow-onset processes and non-economic loss and damage, improving the evidence base for long-term policy decisions.
- Strengthen data flows from local to national levels and ensure alignment with reporting requirements under the Enhanced Transparency Framework, the Sendai Framework and the Sustainable Development Goals (SDGs) to enhance visibility of national needs and improve access to international support.

3. Embed Inclusive and Equitable Participation in All Loss and Damage Processes

Inclusive governance is essential to ensure that loss and damage responses reflect lived realities, reduce inequalities and build legitimacy.

Key messages for practitioners:

- Move from ad hoc consultations to formalized, sustained participation mechanisms in loss and damage assessment, planning and monitoring.
- Integrate community-based assessments, locally defined non-economic loss indicators and social vulnerability analyses into national planning processes.
- Strengthen or establish multi-stakeholder platforms, such as advisory committees, thematic working groups or national L&D forums, to enable meaningful engagement of local governments, civil society, Indigenous Peoples and affected communities in decision-making, including on national UNFCCC positions and FRLD engagement.

4. Expand Local Capacity, Foster Continuous Learning and Align Finance with National Priorities

Building institutional capability and strategically aligning financial resources are critical to scaling durable and effective approaches.

Key messages for practitioners:

- Prioritize capacity-building for local and sub-national institutions to ensure L&D tools and approaches are integrated into everyday planning and service delivery.
- Replace isolated pilot projects with continuous learning systems—national hubs, communities of practice, peer-learning platforms—to document, evaluate and scale effective solutions.
- Map and align existing financial flows across DRR, adaptation, humanitarian assistance and social protection to identify synergies, reduce duplication and guide engagement with the Fund for Responding to Loss and Damage (FRLD).

Table of Contents

Acknowledgements **03**

Executive Summary **04**

Key Messages and Recommendations for Policymakers **04**

List of Abbreviations **07**

1 Introduction and Purpose of the Guide 09

1.1 Approach and Structure 10

2 International Institutional Arrangements for Loss and Damage 11

2.1 UNFCCC Institutions 12

2.2 Beyond the UNFCCC 12

2.3 Institutional Evolution and Challenges 13

3 Country Overviews: Loss and Damage in Practice 14

3.1 India 15

3.1.1 Climate-Related Loss and Damage 15

3.1.2 Institutional Arrangements: Gradual but Fragmented Integration 15

3.1.3 Data and Reporting Systems: Economic Loss-Focused and Fragmented 15

3.1.4 Capacity Gaps and Local-Level Constraints 16

3.1.5 Key Challenges and Opportunities 16

3.2 Mauritius 16

3.2.1 Climate-Related Loss and Damage 17

3.2.2 Institutional Arrangements: Attention without Integration 17

3.2.3 Data and Reporting Systems: Infrastructure-Focused and Fragmented 17

3.2.4 Capacity Gaps and Local-Level Constraints 17

3.2.5 Key Challenges and Opportunities 18

3.3 Somalia 18

3.3.1 Climate-Related Loss and Damage 19

3.3.2 Institutional Arrangements: Early Policy Developments 19

3.3.3 Data and Reporting Systems: Fragmented and Event-Oriented 19

3.3.4 Capacity Developments and Funding Gaps 19

3.3.4 Key Challenges and Opportunities 19

3.4 Vanuatu 20

3.4.1 Climate-Related Loss and Damage 20

3.4.2 Institutional Arrangements: Rapid developments 20

3.4.3 Data and Reporting Systems: Reactive Approaches 21

3.4.4 Strong Disaster Capacity, but Gaps on Outer Islands 21

3.4.5 Key Challenges and Opportunities 21

3.5 Viet Nam 22

3.5.1 Climate-Related Loss and Damage 22

3.5.2 Institutional Arrangements: Anchored in Disaster Response 22

3.5.3 Data and Reporting Systems: Extensive, but lacking NELD 22

3.5.4 Strong Disaster Capacity, with L&D Gaps 23

3.5.5 Key Challenges and Opportunities 23

3.6 Zambia 23

3.6.1 Climate-Related Loss and Damage 23

3.6.2 Institutional Arrangements: Gradual but Fragmented Integration 24

3.6.3 Data and Reporting Systems: Economic Loss-Focused and Fragmented 24

3.6.4 Capacity Gaps and Local-Level Constraints 24

3.6.5 Key Challenges and Opportunities 24

4 Cross-Cutting Insights and Key Challenges 26

4.1 Governance, Mandates and Legal Anchoring 27

4.2 Impacts, Non-economic Losses and Data Systems 27

4.3 Participation, Equity and Representation 28

4.4 Implementation, Capacity and International Interfaces 28

5 Conclusion 29

References **31**

List of Abbreviations

BTR	Biennial Transparency Report
CBO	Community-Based Organization
CCA	Climate Change Act
COP	Conference of the Parties of the UNFCCC
CSO	Civil Society Organization
DANA	Damage Assessment and Needs Assessment
DIIS	Danish Institute for International Studies
DIMS	Disaster Information Management System
DMMU	Disaster Management and Mitigation Unit
DoCC	Department of Climate Change
DRR	Disaster Risk Reduction
ETF	Enhanced Transparency Framework
EU	European Union
FRLD	Fund for Responding to Loss and Damage
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GST	Global Stocktake
IO	International Organization
IPCC	Intergovernmental Panel on Climate Change
L&D	Loss and Damage
NAB	National Advisory Board on Climate Change and Disaster Risk Reduction
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
NDMIS	National Disaster Management Information System
NDRRMC	National Disaster Risk Reduction and Management Centre
NDS	National Development Strategy

NELD	Non-Economic Loss and Damage
NGO	Non-Governmental Organization
PDNA	Post-Disaster Needs Assessment
SDGs	Sustainable Development Goals
SIDS	Small Island Developing States
SoDMA	Somali Disaster Management Agency
UN	United Nations
UNDP	United Nations Development Programme
UNDRR	United Nations Office for Disaster Risk Reduction
UNEP-CCC	United Nations Environment Programme Copenhagen Climate Centre
UNFCCC	United Nations Framework Convention on Climate Change
WARMA	Water Resources Management Authority
WIM	Warsaw International Mechanism
ZEMA	Zambia Environmental Management Agency



© Nicholas Murawski, Unsplash

1 Introduction and Purpose of the Guide

Losses and damages are increasingly severe across the globe, driven by climate change in interaction with distinct development contexts. Their impacts are "pervasive" (IPCC 2022: 9), affecting social and economic development, culture, infrastructure, environments and well-being and impacting vulnerable settings most. In response, national and sub-national loss and damage (L&D) response mechanisms are rapidly developing, linking also to international efforts.

To inform institutional development and support, this brief provides a sweeping overview of developments and challenges across diverse country settings. It documents how country governments are establishing national and sub-national policies, systems and institutions as they develop a path for responding to losses and damages on the ground. These often build on existing disaster response and climate adaptation efforts, while dedicated L&D institutions, policies and approaches are also emerging.

Governments also look to new international L&D institutions for possible financial, capacity building and technical support. Internationally, discussions and negotiations on loss and damage response have been ongoing for decades, with recent results in the Santiago Network for technical support and the Fund for Responding to Loss and Damage under the UNFCCC. Other major international institutions are also engaged, supporting relevant systems and response efforts.

This brief's assessment of ongoing L&D developments at country and international levels provides timely insights to governments and other engaged actors. It includes focus on national, sub-national and international actors, and linkages between them. At country level, it sheds light on critical aspects of loss and damage response, including policy and governance; data, reporting and response systems; and capacity. Further, the brief outlines cross-cutting insights and key challenges, relevant for informing both national and international future efforts towards coordinated, inclusive and responsive systems to document and respond to growing climate-related harms.

1.1 Approach and Structure

This policy brief zooms in on six countries spread across Asia, Africa and Oceania, examining how loss and damage efforts are being structured across diverse climate and development contexts. These include India and Viet Nam in Asia, Zambia and Somalia in Africa and SIDS Mauritius and Vanuatu. It is based on the joint UNEP-CCC – DIIS study *Assessing institutional arrangements for loss and damage: From local to global scales* and presents a synthesis of country-based and cross-cutting findings and recommendations.

The brief is structured as follows: First, it provides an overview of international institutional arrangements for loss and damage followed by country-based findings for the six countries. Then, the brief presents a forward-looking overview of cross-cutting insights and key challenges and concludes with key messages and ways forward.





© Magnific

2 International Institutional Arrangements for Loss and Damage

International institutional arrangements for loss and damage have expanded rapidly in recent years, creating new opportunities but also new demands for national systems.

2.1 UNFCCC Institutions

The Warsaw International Mechanism for Loss and Damage (WIM) remains the central UNFCCC body mandated to enhance knowledge, coordination and support for addressing loss and damage in vulnerable developing countries. Its Executive Committee increasingly functions as a hub, linking technical work on risk assessment, non-economic losses, displacement and slow-onset events with country practices and emerging funding arrangements.

A major milestone has been the operationalization of the Santiago Network for averting, minimizing and addressing loss and damage, with institutional arrangements and modalities now in place to respond to country requests for technical assistance. These developments underscore the importance of clear national focal points, coordination mechanisms and articulated priorities so that international support can be targeted, sustained and aligned with domestic needs.

The creation of the Fund for Responding to Loss and Damage (FRLD) at COP27, followed by further decisions at COP28 and COP29 and the opening of its first call for country proposals in December 2025, has added a dedicated financing pillar to the international architecture. Early pledges of several hundred million US dollars heighten the need for credible national baselines, robust data systems and coherence between loss and damage priorities and broader climate, development and disaster risk strategies.

At the same time, the Paris Agreement's Enhanced Transparency Framework (ETF) offers an important, though voluntary, avenue for countries to communicate qualitative and quantitative information on experienced losses and damages, institutional arrangements and support needs through their Biennial Transparency Reports. Information reported under the ETF feeds into the Global Stocktake, which in its first cycle included a dedicated section on loss and damage and highlighted persistent gaps in indicators, especially for non-economic losses and slow-onset processes.

Ongoing technical initiatives are piloting nationally appropriate loss and damage indicators by extending disaster loss metrics, displacement statistics and sectoral data, pointing to the value of integrated national data governance.

2.2 Beyond the UNFCCC

Loss and damage arrangements intersect closely with the Sendai Framework for Disaster Risk Reduction and the 2030 Agenda for Sustainable Development. The Sendai Framework has spurred the development of national disaster loss databases and standardized post-disaster needs assessments, which can provide a foundation for tracking both economic and non-economic climate-related impacts if data sharing and coordination are strengthened.

Many Sustainable Development Goals and targets are directly affected by loss and damage, including those on disaster mortality, affected populations, economic losses and access to basic services, making it possible to position loss and damage as a cross-cutting development concern rather than a stand-alone topic.

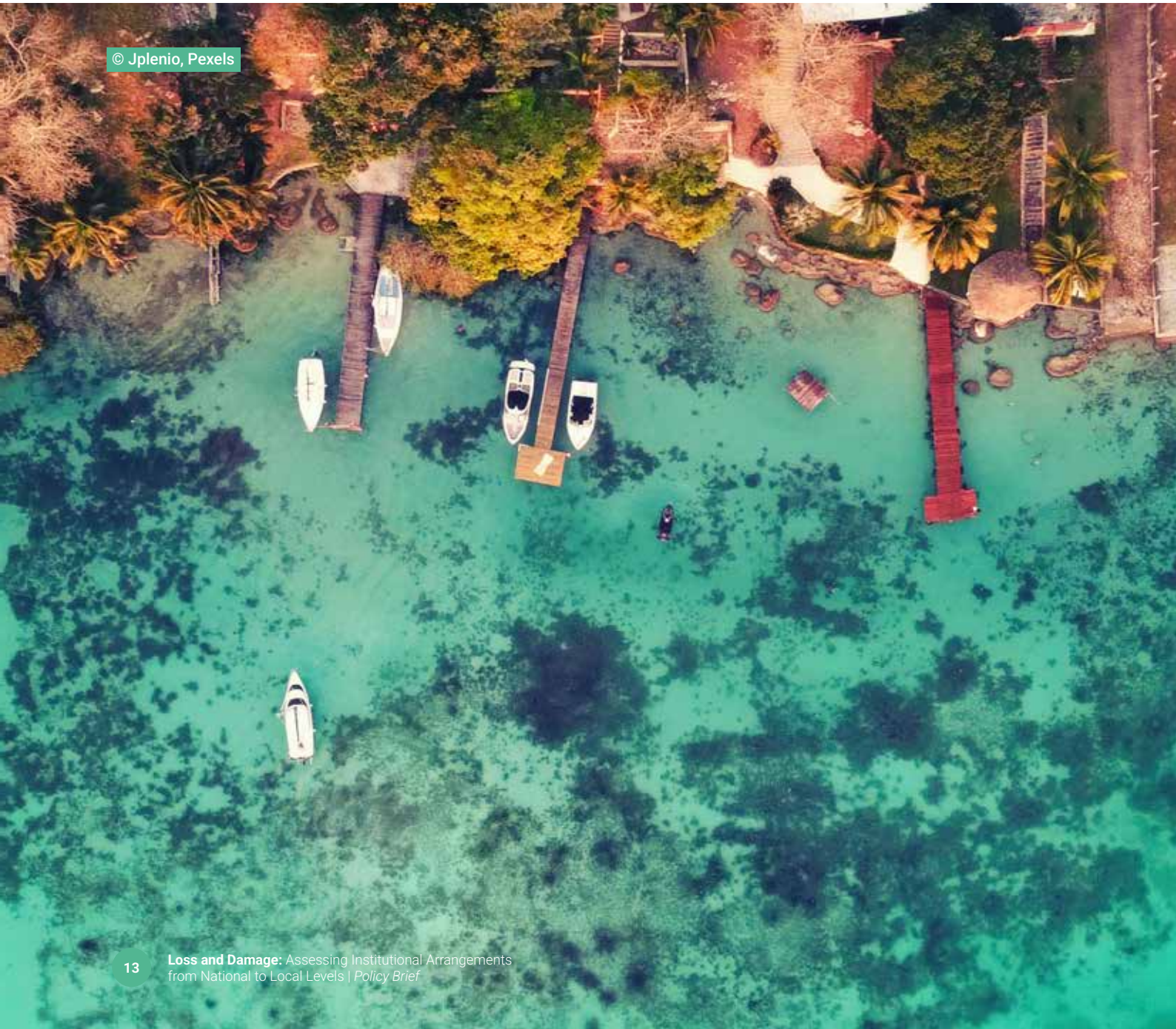
A growing ecosystem of international initiatives and peer-learning platforms, such as the Loss and Damage Collaboration and the NAP Global Network, supports countries in refining governance arrangements, developing impact methodologies, and integrating loss and damage into national planning and reporting.

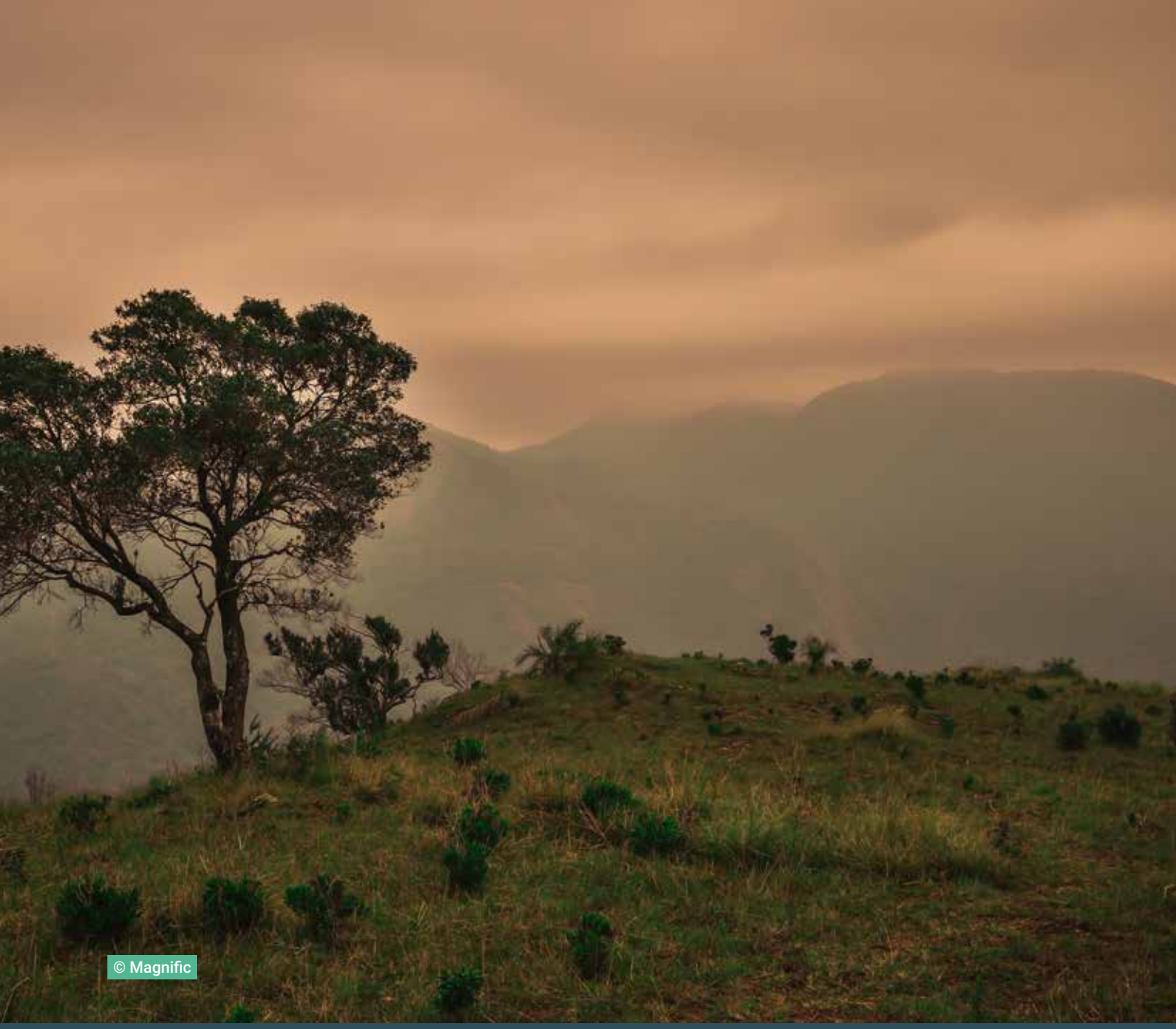
However, fragmented mandates, ad hoc data collection and weak vertical coordination at the country level often limit the extent to which these international processes can reinforce domestic priorities, and make it more difficult to formulate coherent funding proposals or ensure that external support contributes to sustained institutional strengthening.

2.3 Institutional Evolution and Challenges

Overall, the evolving international loss and damage architecture presents a dual challenge for countries. On one hand, multiple entry points through the WIM, Santiago Network, FRLD, ETF-related capacity building, Sendai implementation, SDG monitoring, and peer networks offer unprecedented opportunities for technical and financial support. On the other hand, taking advantage of these opportunities requires coherent national governance arrangements, clear roles and responsibilities across ministries and levels, robust data systems that capture both economic and non-economic losses, and mechanisms for inclusive participation and learning.

Experiences from early ETF implementation, WIM reviews and pilot FRLD work suggest that modest but sustained investments in institutional clarity, standard operating procedures for data and reporting, and cross-sector capacity development can significantly enhance countries' ability to engage strategically with international loss and damage processes. Periodic national reviews of loss and damage-relevant arrangements, in light of new UNFCCC decisions, updated Sendai and post-disaster needs assessment guidance, and emerging practice, can help ensure that domestic systems remain both context-appropriate and aligned with a rapidly developing global architecture.





3 Country Overviews: Loss and Damage in Practice

3.1 India

India

Geographic region:	South Asia
Economic status:	Lower middle income country
Population:	1.46 billion (2025)
GDP:	USD 3.96 trillion (2025)



Source: World Bank Open Data, India.

3.1.1 Climate-Related Loss and Damage

Climate change in India results in extensive economic and non-economic losses across rural and urban contexts. Economic losses include damage to housing, transport and social infrastructure, disruptions to trade and local businesses, loss of agricultural production and livelihoods, and interruptions to education and basic services.

Non-economic losses are also significant, including heightened mortality and disease risk, severe mental health impacts, large-scale displacement, erosion of social cohesion, and loss of biodiversity and ecosystem services that underpin cultural and livelihood practices. The diversity of climatic conditions—from heatwaves and droughts to extreme rainfall and floods—underscores the need for region-specific approaches to assessing and addressing loss and damage.

3.1.2 Institutional Arrangements: Gradual but Fragmented Integration

India's institutional approach to loss and damage is shifting from post-disaster relief to more anticipatory frameworks addressing economic and non-economic dimensions. The Disaster Management Act (2005) and National Policy on Disaster Management guide relief, rehabilitation and "build back better" measures, including livelihood restoration for vulnerable groups.

State-level disaster and climate action plans increasingly reference L&D through post-disaster needs assessments across key sectors. Yet, responsibilities remain scattered across multiple departments, resulting in inconsistent attention to slow-onset impacts, migration and non-economic losses. Although participatory governance is mandated, engagement of vulnerable groups often remains tokenistic and project-based, with limited influence on planning and financing.

3.1.3 Data and Reporting Systems: Economic Loss-Focused and Fragmented

National systems for loss and damage data and reporting exist but are fragmented and largely focused on quantifying economic losses to life, property and key sectors. Multiple institutions collect post-disaster data, and a National Disaster Management Information System is in place, yet methods differ across states and sectors and consolidation into a coherent national picture remains weak.

Post-disaster needs assessments and local emergency reports are conducted unevenly and rarely capture non-economic dimensions such as psychosocial impacts, climate-related displacement, biodiversity loss or long-term effects on education. Health data tend to focus on mortality and disease incidence rather than broader well-being, while climate-linked migration statistics are partial and inconsistently reported.

Emerging initiatives by research organizations and civil society, including dedicated loss and damage observatories, are beginning to address methodological gaps but are not yet systematically integrated into official data and reporting systems.

3.1.4 Capacity Gaps and Local-Level Constraints

Existing disaster management institutions provide a strong base for loss and damage work, but technical and institutional capacities remain uneven across regions and levels. Most expertise—especially on non-economic impacts—resides with national agencies, research institutions and NGOs, while state and municipal authorities face gaps in awareness, skills and resources.

Local governments often depend on external support for new assessment methods and for linking slow-onset changes to livelihoods and social outcomes. Sector-based budgeting further constrains cross-cutting capacity building, data integration and coordination. These gaps also hinder systematic community-level documentation and the meaningful participation of vulnerable groups in defining priorities and responses.

3.1.5 Key Challenges and Opportunities

India has advanced disaster risk management and begun integrating loss and damage into climate and development policy, but institutional and data fragmentation still limit coherent action. Clearer role division across agencies and stronger coordination across governance levels are needed to align priorities.

Expanding and harmonizing data on both economic and non-economic losses—such as health, displacement and ecosystems—would strengthen planning and engagement with emerging international L&D finance. Investing in sub-national capacity, participatory assessments, and better links between local evidence and national planning can foster more inclusive and anticipatory L&D responses.

> **Participation is often limited to disaster response. […] Apart from this, engagement of vulnerable groups in policy and planning, if at all, is tokenistic."**
>
> *– National non-state actor, India*

Source: *Direct quote from study respondent.*

3.2 Mauritius

Mauritius

Geographic region:	Indian Ocean
Economic status:	Upper middle income country
Population:	1.24 million (2025)
GDP:	USD 16.16 billion (2025)



Source: World Bank Open Data, Mauritius.

As a densely populated island state, Mauritius faces significant exposure to sea-level rise, coastal erosion, flooding, biodiversity loss and shifting rainfall patterns. These risks are concentrated in coastal zones and urban areas, where infrastructure, tourism assets and housing are particularly vulnerable. Climate impacts affect both economic sectors and social systems, with disproportionate consequences for low-income households, women, children and people with medical needs.

3.2.1 Climate-Related Loss and Damage

Climate impacts in Mauritius generate both economic and non-economic losses. Economic losses include damage to infrastructure and housing, disruptions to businesses, and reduced productivity in tourism and agriculture. At the same time, non-economic losses are substantial but less visible in policy and reporting systems. These include mental health impacts following cyclones and floods, disruptions to education and social cohesion after displacement, degradation of cultural heritage, biodiversity loss and increasing water scarcity linked to rainfall variability. While economic losses are relatively well documented, non-economic losses remain insufficiently captured in national systems.

3.2.2 Institutional Arrangements: Attention without Integration

Relevant elements appear in the Climate Change Act 2020, the National Disaster Risk Reduction and Management Policy and Strategic Framework 2020-2030, Mauritius's First Biennial Transparency Report (2024) and the forthcoming National Development Strategy 2025–2040.

The National Disaster Risk Reduction and Management Centre (NDRRMC) leads emergency response and disaster data coordination under the Sendai Framework, but L&D responsibilities are dispersed across ministries and agencies. Limited cross-sector coordination, weak vertical integration and minimal engagement of village-level institutions constrain coherence.

While public participation mechanisms exist under the Environment Protection Act, consultations remain largely top-down and insufficiently inclusive of vulnerable groups. Stakeholders continue to note the absence of a unified national strategy to align L&D efforts.

3.2.3 Data and Reporting Systems: Infrastructure-Focused and Fragmented

Mauritius has disaster data systems in place, but these are primarily oriented toward documenting economic and physical infrastructure losses. Ministries collect data separately—housing, health, infrastructure and agriculture—without a centralized or interoperable system. Data collection is often reactive, based on compensation claims or post-disaster needs assessments, rather than systematic monitoring of long-term or slow-onset impacts.

Non-economic losses, including psychosocial impacts, ecosystem degradation and cultural loss, are rarely integrated into official datasets. Local authorities report to district councils, but structured procedures and technical expertise at the local level are limited. A new Disaster Information Management System (DIMS) is under development by the NDRRMC, which may improve coordination, but awareness and alignment across stakeholders remain uneven.

3.2.4 Capacity Gaps and Local-Level Constraints

Awareness of "Loss and Damage" as a distinct policy concept remains limited among government officials, NGOs and communities. Capacity gaps include technical skills for assessing and reporting losses, understanding of international L&D mechanisms and integration of L&D considerations into legislative and planning frameworks.

Local-level actors report insufficient tools and training to systematically document losses. Early warning systems are in place but do not yet cover all high-risk events, such as flash floods and torrential rainfall. An Early Warning System for All is under development, though its reach and awareness remain limited.

While community-based disaster response initiatives have been introduced, some inspired by international training exchanges, there is no systematic framework to document, evaluate and scale successful practices. Funding continuity and structured learning mechanisms remain key constraints.

3.2.5 Key Challenges and Opportunities

Mauritius has demonstrated increasing attention to loss and damage within its climate and disaster policy frameworks. At the same time, further efforts to enhance coordination across institutions, strengthen data integration and deepen local-level engagement could support more comprehensive and inclusive responses. Strengthening alignment between national strategies, disaster management structures, and emerging data initiatives may offer opportunities to further consolidate institutional arrangements and enhance readiness to address both economic and non-economic impacts of climate change.

Looking ahead, continued efforts to clarify institutional roles related to loss and damage, strengthen coordination across governance levels, and further develop data systems—including for non-economic and slow-onset impacts—may support more integrated approaches. Enhancing platforms for cross-sector exchange and learning could also contribute to strengthened national coherence. Such measures may help reinforce domestic resilience efforts while supporting engagement with evolving international loss and damage arrangements.

> **"This silo-working problem in Mauritius is very serious. Everyone works only in their own area such as education, social services, etc. But this is such a crucial issue, impacting us all and will continue to do so. What is the synergy? What is the national strategy? Do all actors understand where we're going? And how to build that strategy with different actors?"**
>
> *– National non-state actor, Mauritius*

Source: *Direct quote from study respondent.*

3.3 Somalia

Somalia

Geographic region:	Africa
Economic status:	Low-income country, Least Developed Country (LDC)
Population:	19.7 million (2025)
GDP:	USD 13 billion (2025)



Source: World Bank Open Data, Somalia.

Somalia is a least developed country located on the Horn of Africa. Nomadic pastoralism and agriculture remain the most typical livelihoods, despite increased urbanization (IGAD CAEP, 2023: 2; Lewis and Janzen 2025; SPARC 2024, p. 12). Poverty remains widespread with 67% of the population facing multidimensional poverty with deprivations across living standards, education and more (SNBS and MoLSA 2024, p. VII).

Civil conflict has affected Somalia severely since 1991. Together with reoccurring droughts and floods, this has driven a prolonged humanitarian crisis (Lewis

and Janzen 2025). The government is burdened beyond its capacity by climate impacts and conflict and is highly dependent on humanitarian assistance and international donor finance (SPARC 2024, p. 21).

3.3.1 Climate-Related Loss and Damage

Somalia is ranked among the thirty most climate-vulnerable countries globally (ND-GAIN n.d.) and has already experienced severe losses and damages. Economic losses mainly affect agriculture and pastoralism through loss of crops and livestock, but infrastructure and fishing are also considerably impacted (SPARC 2024, pp. 14, 20; IGAD CAEP 2023, p. 3).

Non-economic losses are also severe. They include significant displacement and loss of life and health associated with droughts and floods, which drive food insecurity and famine and can exacerbate conflict dynamics due to competition over scarce resources (SPARC 2024, pp. 14, 16, 18; IGAD CAEP 2023, pp. 1, 5).

3.3.2 Institutional Arrangements: Early Policy Developments

Loss and damage governance in Somalia is at an early stage, with weak institutional architecture and capacity constraints. L&D is included in relevant policy documents such as the latest NDC. However, there is no stand-alone policy, and policy implementation remains weak. Key institutions include the Ministry of Environment and Climate Change at national and state levels, the Somali Disaster Management Agency (SoDMA) and major humanitarian and international organizations.

Coordination between national and state governments is inconsistent, with barriers of volatile funding, shifting leadership and, in some cases, federal–state tensions. Existing institutions and processes limit bottom-up influence and participatory governance.

3.3.3 Data and Reporting Systems: Fragmented and Event-Oriented

Somalia's data and reporting systems are fragmented and event-oriented. The main source of data is post-disaster needs assessments after major disasters, which are the responsibility of the state institution SoDMA with support from the World Bank, EU and UN. These assessments include considerable data on economic loss and damage but with gaps in non-economic loss and damage. State-level capacity for data collection generally varies widely, and clear data sharing mechanisms are lacking across sectors, government levels and with non-state partners.

3.3.4 Capacity Developments and Funding Gaps

Current capacity development by government and international partners focuses on disaster management, particularly prevention. Improvements in forecasting, early warning and anticipatory action have particularly received donor support. These improvements have boosted national level capacity but remain insufficiently localized.

Regarding financial capacity, national institutions generally benefit from greater funding than those at state and local levels, despite critical gaps overall. Funding limitations hinder institutional development and contribute to major technical and human resource gaps. Sub-national officials particularly highlight a lack of essential tools for forecasting and climate monitoring, as well as problems with staff hiring, retention and training, leaving institutions without necessary skills and tools.

3.3.4 Key Challenges and Opportunities

Institutional fragmentation remains a key challenge—both across state levels and between state and non-state actors. International organizations remain central in loss and damage related efforts. Going forward, government-led capacity development across scales is needed to reduce dependence on outside actors and to promote coordinated, long-term efforts to address losses and damages and enhance climate resilience. Further, despite national ambition to build on local experiences, this is limited by resource and funding constraints and a lack of bottom-up governance.

> **They generalize the issue [of loss and damage] with broader humanitarian response and crisis response instead of focusing specifically on damage and loss, and they generalize the data too. So they need to be capacitated on how to use the tools specific to loss and damage.**
>
> *– Sub-national state actor, Somalia*

Source: *Direct quote from study respondent.*

3.4 Vanuatu

Vanuatu		
	Geographic region:	Pacific Ocean
	Economic status:	Small Island Developing State (SIDS)
	Population:	335,169 (2025)
	GDP:	USD 1.35 billion (2025)

Source: World Bank Open Data, Vanuatu.



Vanuatu is a Small Island Developing State located in the western Pacific Ocean with a diverse population living mostly in coastal villages on the country's 83 islands. Vanuatu is often designated as one of the most climate vulnerable countries in the world due to a geographic location with significant disaster risk combined with its development status (World Bank 2021; Adil *et al*. 2025).

3.4.1 Climate-Related Loss and Damage

Losses and damages in Vanuatu are of a severe and existential nature. Economic losses are acute in tourism, agriculture and fisheries, which are threatened by damage to infrastructure, sea-level rise, saltwater intrusion, coral bleaching, cyclones and ocean acidification (Maynard *et al*. 2018; UNCDF 2020; World Bank 2021; FAO 2023). Prominent non-economic losses include losses of cultural heritage and traditional knowledge and of biodiversity, environment and territory as well as forced mobility (Stephens *et al*. 2022).

3.4.2 Institutional Arrangements: Rapid developments

Loss and damage is under rapid development as an independent policy area. A National L&D Policy and Implementation Roadmap was passed in 2025 and the country is currently implementing a national loss and damage programme with support from the Santiago Network. Institutionally, L&D is addressed under the Department of Climate Change and the National Advisory Board on Climate Change and Disaster Risk Reduction (DoCC 2025).

Practical efforts remain nascent. Current measures are mostly present in disaster management and climate adaptation, creating silos and gaps. Respondents note that legal and institutional frameworks are underdeveloped and lack clarity, dedicated legislation, and financial mechanisms for loss and damage. Respondents furthermore indicate that coordination across government levels is weak, especially downward communication from national to sub-national levels. Partnerships with donors, IOs, NGOs, and CBOs are strong, though support can be fragmented.

3.4.3 Data and Reporting Systems: Reactive Approaches

Loss and damage data is integrated into disaster response and climate adaptation reporting. PDNAs are the primary source of loss and damage data, which is largely reactive and event-based rather than systematic. Long-term trends and slow-onset climate impacts are poorly documented, and there are gaps in coverage of non-economic losses.

Data flows from local and provincial assessments to national systems, but respondents note that consistency and integration vary. Strengthening the capacity of provincial governments and Area Councils is seen as key to improving coverage and quality.

3.4.4 Strong Disaster Capacity, but Gaps on Outer Islands

Technical capacity in Vanuatu is largely built around disaster response, with strengths in early warning systems and post-disaster needs assessments, and continued improvements. Gaps include assessing slow-onset climate impacts, inter-agency data sharing, real-time and locally specific data collection, anticipatory action and the ability to analyse data for planning—limiting the utility of collected data.

Human resource capacity is stronger nationally and on central islands, while outer islands lack trained staff and resources.

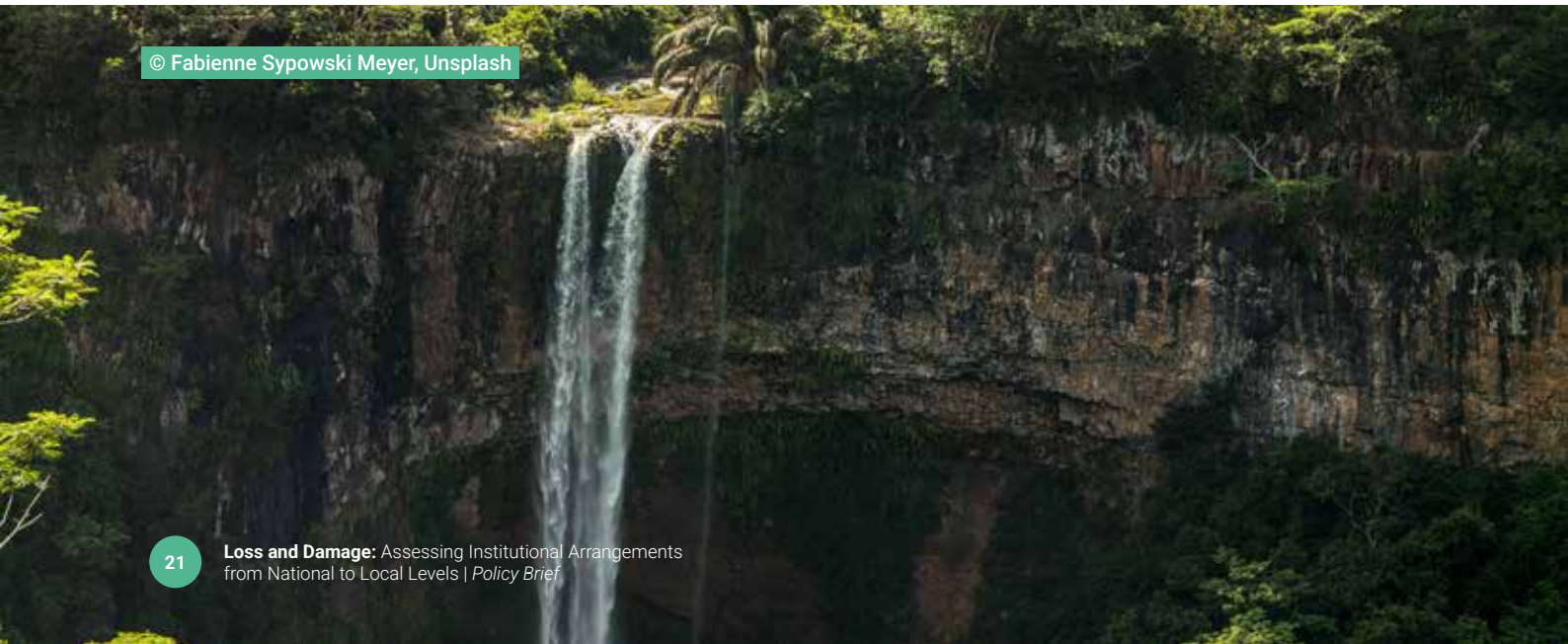
3.4.5 Key Challenges and Opportunities

Vanuatu's unique development of new L&D institutional arrangements and policies offers opportunities to develop a strong L&D architecture suited to domestic values and needs.

Reporting and data systems and sub-national and bottom-up efforts remain areas for improvement. For the latter, limitations include lack of standardized frameworks for uptake or replication, limited decentralization of authority and resources, weak coordination between ministries and local authorities, and absence of formal mechanisms to integrate traditional knowledge and community-led initiatives into national policies. State–non-state collaborations have yielded positive results but require coordination to avoid fragmentation.

> **As a chief, I want the government and outside groups to work with us, not just after a disaster but also before – for prevention and planning. Our kastom systems help protect our people, but we need better support, training and communication. Chiefs and youth should be part of national planning so our voices and knowledge are not left behind.**
>
> *– Sub-national non-state actor, Vanuatu*

Source: *Direct quote from study respondent.*



© Fabienne Sypowski Meyer, Unsplash

3.5 Viet Nam

Viet Nam		
	Geographic region:	South-East Asia
	Economic status:	Lower-middle income country
	Population:	101.6 million (2025)
	GDP:	USD 514.7 billion (2025)

Source: World Bank Open Data, Viet Nam.

Viet Nam is a rapidly developing country (World Bank 2025a), often classified as highly vulnerable to climate change (UN ESCAP 2025; WBG and ADB 2021). The country has undergone significant socioeconomic transformations, transitioning from one of the poorest countries globally to a lower-middle-income economy in mere decades (World Bank 2025a; World Bank 2025b).

3.5.1 Climate-Related Loss and Damage

Viet Nam is subject to far-reaching current and projected climate impacts including extreme weather events, temperature increase and variability, sea-level rise, salination, coastal erosion and extreme and variable rainfall (UNDP 2025; Hai *et al*. 2024; VMSA 2024; Tran-Anh et al. 2022).

Climate impacts have had severe economic implications, costing up to 1.5% of Viet Nam's GDP annually (CFE-DM 2025). Agriculture is often identified as the most affected sector in relation to economic losses and damages (GoV NDC 2022), but infrastructure and tourism are also severely impacted (GoV NDC 2022; UNDP 2025; Ngoc 2019). Non-economic losses are widespread and include loss of life, health, cultural heritage and displacement (UNDP 2018).

3.5.2 Institutional Arrangements: Anchored in Disaster Response

Loss and damage is incorporated into climate and especially disaster policy and response efforts, which are well-established from national to village levels. Key state institutions are the Ministry of Agriculture and Environment and Civil Defence committees from national to commune levels. Policy direction is set by the national level, while area-specific planning and implementation are decentralized to sub-national levels. Institutional arrangements, while robust, remain focused on disaster preparedness and economic losses to homes, infrastructure and livelihoods. Gaps persist in addressing non-economic losses and slow-onset impacts.

Disaster-related coordination is highly structured across state levels and integrated into decision-making bodies. However, cross-sectoral coordination is limited, and climate-related health and social impacts are poorly integrated. Participatory governance remains weak. Formal non-state participation is limited to Viet Nam's Mass Organizations (e.g., Farmers and Women' Unions), and minority and vulnerable groups are poorly represented.

3.5.3 Data and Reporting Systems: Extensive, but lacking NELD

Disaster-related data and reporting systems are well-established through the Damage Assessment and Needs Assessment (DANA), supported by international actors. Coverage is extensive for economic and material impacts, but significant gaps remain in non-economic loss data and slow-onset impacts.

Respondents note quality issues, including inconsistent reporting and subjective damage levels, compounded by challenging disaster conditions

during assessments. Better training for local officials and clearer criteria are recommended. Currently, data informs disaster response and compensation but is underutilized for policymaking, planning, projections and awareness. Respondents suggest leveraging data more proactively for future efforts.

3.5.4 Strong Disaster Capacity, with L&D Gaps

Viet Nam has relatively strong forecasting, early warning and disaster response systems, but respondents note the need for modernization and further capacity development. Human resource capacity requires significant strengthening within loss and damage as a new area of policy and response, especially for addressing non-economic and slow-onset impacts. Increased collaboration between state and non-state actors could enhance complementary capacities.

3.5.5 Key Challenges and Opportunities

Currently, disaster-based approaches offer a robust foundation but also contain key gaps in terms of slow-onset impacts and NELD. Further barriers include the absence of clear policy and institutional roles regarding L&D as well as reliance on sector-based vertical reporting from local to national level, which restricts cross-sectoral and -provincial exchange. Formalizing non-state actor involvement could add value, as non-state actors pilot innovative approaches, gather localized insights and engage vulnerable groups.

> **We can report only things they can quantify, but qualitative [impacts], we don't know how to report them, so when households have different feelings, experience it differently, we don't know how to report it. We are not sure how to support them.**
>
> *– Sub-national state actor, Viet Nam*

Source: *Direct quote from study respondent.*

3.6 Zambia

Zambia

Geographic region:	Sub-Saharan Africa
Economic status:	Lower-middle-income country
Population:	21.9 million (2025)
GDP:	USD 28.88 billion (2025)



Source: World Bank Open Data, Zambia.

3.6.1 Climate-Related Loss and Damage

Zambia faces severe impacts from the triple planetary crisis of climate change, pollution and biodiversity loss. The country experiences both rapid onset hazards – such as floods, storms and heatwaves – and slow onset changes like rising temperatures and prolonged dry spells (Government of the Republic of Zambia 2021, 2023). These have led to significant economic and non-economic losses, including reduced agricultural production, ecosystem degradation, infrastructure damage, and pressure on health and energy systems.

Over 60% of Zambians live in rural, rainfed agriculture areas with limited access to essential services (Zambia Statistics Agency 2023). Vulnerability is intensified by insecure land tenure, limited participation in decision-making, and erosion of traditional support networks. These interconnected risks drive climate-induced migration and loss of communal identity, requiring inclusive, transformative policy action (IIED 2023).

3.6.2 Institutional Arrangements: Gradual but Fragmented Integration

Zambia lacks a central coordinating body for loss and damage, and current responses remain fragmented. The absence of standardized procedures and overlapping institutional mandates hinder systematic action across sectors. Non-economic losses and damages (NELD) are poorly captured, reflecting limited coordination and missed opportunities for integration (Gilder and Rumble 2022).

The Disaster Management and Mitigation Unit (DMMU), Water Resources Management Authority (WARMA) and Zambia Environmental Management Agency (ZEMA) lead L&D-related responses. While DMMU gathers local data, weak vertical information flow, overlapping roles and inadequate funding constrain coherence and consistency.

The Environmental Management Act promotes participatory governance, and stakeholders note strong government interest in collaboration with communities and non-state actors on climate issues. However, implementation remains sector-driven and siloed, limiting coordinated action.

3.6.3 Data and Reporting Systems: Economic Loss-Focused and Fragmented

Zambia's multi-level structures for loss and damage lack clear procedures for reporting and data management, which limits vertical integration between national and local levels (Government of the Republic of Zambia 2023). Coordination often occurs in silos; for example, while the Ministry of Finance engages local governments on budgets, this cooperation rarely includes L&D financing.

National-level policies and resources remain stronger but fragmented and weaken sub-nationally, particularly in rural areas. Most L&D data are gathered without standardized frameworks or methodologies, hindering baseline development and consistent tracking over time (Banda *et al*. 2022). Implementation challenges—rather than policy alignment—pose the greatest barrier.

Emergency response coordination is generally more effective than data sharing, though still reactive. The activation of disaster-response clusters, meeting daily or weekly during crises, remains a key institutional strength (Government of the Republic of Zambia 2021).

3.6.4 Capacity Gaps and Local-Level Constraints

Zambia faces a great level of capacity gaps, largely derived from siloed, parallel and sometimes competing mandates and agendas of different institutions, and even within the same institution. While capacity gaps exist at all levels, particular sub-national authorities have a high demand for training. Apart from raising awareness of loss and damage in general, there is also an urgent need to train personnel in technical skills like assessment and reporting, and in accessing connected opportunities for support. Furthermore, financial constraints contribute to the challenges of building loss and damage capacities. Non-experts like local communities would also benefit from continuous knowledge transfer. Technical gaps include inadequate or outdated tools and data systems for loss and damage quantification, data collection, and reporting. Technical systems exist and are in use, and the digitization of L&D-related fields has improved over the years

3.6.5 Key Challenges and Opportunities

There are currently no formal mechanisms for systematically capturing and scaling lessons learned related to loss and damage tracking in the country, although some locally successful, bottom-up practices show potential for expansion. These could be supported through the Community Development Fund, which allocates 30 million USD per constituency,

including for environmental and emergency response activities, though awareness of and access to this fund remain limited.

Some knowledge-sharing mechanisms do exist. The Local Government Association of Zambia annually invites councils to submit best practices, and district-level bodies such as the District Development Coordinating Committee compile lessons from sector departments to inform wider planning processes. External actors, including the German international development agency GIZ and the Salvation Army, have also supported knowledge transfer through community-based workshops.

Despite these examples, scaling remains challenging. Differences in local capacities and resources limit replication, while cross-sector learning at the national level is weak. Financial constraints further hinder the expansion of successful practices, even where institutional learning occurs.

> **Yes, contextual differences between councils can act as barriers to replicating proven models. For example, some councils lack foundational tools like local area plans, which are already in place in more established areas like Lusaka. While there are opportunities for capacity building, such as training visits supported by partners like GIZ and the Salvation Army, these efforts highlight the disparities in institutional readiness and capacity across councils.**
>
> *– Sub-national state actor, Zambia*

Source: *Direct quote from study respondent.*





4 Cross-Cutting Insights and Key Challenges

Across diverse country development and climate contexts, our assessment documents extensive cross-cutting trends and challenges relevant to future L&D institutional development and support:

4.1 Governance, Mandates and Legal Anchoring

Across countries, loss and damage governance is generally handled within disaster risk management or climate adaptation frameworks, rather than as a distinct policy area. This is reflected in institutional arrangements and policies, where responsibility for and policies on loss and damage are often integrated into existing institutions and ongoing policy processes. In many instances, this leads to unclear responsibilities and siloed approaches, though also benefits from existing, well-established systems. Vanuatu is an exception with their ambition to move towards treating loss and damage as a stand-alone policy field, evident in recently passed policies and plans. However, despite this ambition, respondents indicate that important gaps remain in practice, resulting in continued reliance on disaster-response and climate adaptation frameworks.

Across country contexts, governance is characterized by a combination of strong central-level control and limited integration of sub-national and community levels. In Mauritius and Zambia, decision-making is concentrated at the national level, while local structures are mainly engaged in emergency-situations (Government of Mauritius 2020; Government of Zambia 2023). In India and Viet Nam, local authorities mainly implement centrally defined policies, despite the formal existence of multi-level governance structures (Government of India 2009). Somalia and Vanuatu face additional coordination challenges linked to volatile funding, leadership changes and tensions between state levels, limiting bottom-up influence on L&D priorities (DoCC 2025).

4.2 Impacts, Non-economic Losses and Data Systems

Assessments across all six countries indicate an important and systematic gap in data coverage of non-economic loss and damage (NELD). While economic and physical losses are relatively well covered, especially in cases of major disasters, non-economic losses such as mental health impacts, cultural heritage loss, ecosystem degradation, and social cohesion remain overlooked. Partial exceptions are Vanuatu and parts of Somalia, where NELD is more explicitly recognized; however, documentation is usually project-based and linked to donor-funded initiatives, humanitarian assessments or research efforts rather than embedded in national monitoring frameworks (DoCC 2025).

Another significant gap is data coverage of the effects of slow-onset events, which are rarely captured due to a general reliance on disaster loss databases, post-disaster needs assessments and sectoral reporting concerned with acute events.

The visibility of L&D needs in global processes is limited by weak links between national data systems and international reporting frameworks (ICAT 2023; UNFCCC 2023d; United Nations 2023). This reinforces the focus on measurable economic losses and also complicates the development of funding proposals due to challenges with building consistent national loss and damage baselines (Climate Funds Update 2025; UNDP and WMO 2025).

4.3 Participation, Equity and Representation

While all six countries have mechanisms to facilitate participation, such as consultations, community meetings and NGO-facilitated processes, these are often project-based and lack sufficient systematization and integration into decision-making processes. Even though inclusion is increasingly promoted in policy documents, gaps persist in practice, linked to issues of limited government capacity especially at sub-national levels (Makondo and Thomas 2024). Furthermore, the inclusion and recognition of traditional knowledge is inconsistent, often mediated by external actors, instead of being embedded in state systems. These gaps lead to issues of under-representation of vulnerable and marginalized groups and also constrains the identification of non-economic losses.

4.4 Implementation, Capacity and International Interfaces

Implementation remains fragmented across country cases. In Mauritius, Viet Nam, Somalia and Zambia, L&D ambitions in policies lack clear designations of responsibility as well as standard procedures and financing, limiting practical utility. While India and Viet Nam have stronger disaster and climate institutions, problems with addressing slow-onset impacts and NELD persist. As mentioned, Vanuatu also has significant implementation gaps despite strong policies.

In terms of capacity, technical, human and financial capacity gaps are widespread, particularly at sub-national levels. There is a clear lack of dedicated training on L&D concepts, NELD methodologies and integrated data systems, and problems with retaining staff are common, undermining institutional memory (UNDRR 2025).

Another clear gap is a lack of vertical links between data, decision-making and finance, which means local information is often used for immediate emergency response but rarely influences long-term investments or national positions under the UNFCCC (e.g., DoCC 2025; UNDRR 2025). In Somalia and Vanuatu, government coordination and oversight is particularly challenging due to parallel data and funding channels, a result of heavy reliance on humanitarian and development partners.

The growing international loss and damage architecture offers new entry points for support but also raises expectations for the governance arrangements, data and policies that governments should have in place (UNFCCC 2023a, 2023b, 2023c). Our assessment shows that countries rarely fully fulfil the conditions for accessing technical assistance and finance, limiting their access to international support (Climate Funds Update 2025; UNDP and WMO 2025).



© Ruslan Bardash, Unsplash

5 Conclusion


© Seyhmuskino, Pexels

Strengthening governance for loss and damage requires purposeful action across institutions, data systems, participation mechanisms and financing structures. Countries can make significant progress by clarifying mandates and improving coordination across climate, DRR and development frameworks, for example by designating or reinforcing national coordination mechanisms for loss and damage. Clear institutional responsibilities and stronger vertical coordination can enhance the effectiveness of domestic action and improve access to external support.

Improving data systems is equally important. Building on existing disaster loss databases, post-disaster needs assessments and sectoral statistics can help countries develop nationally appropriate indicators and gradually incorporate slow-onset processes and non-economic loss and damage. Stronger data flows between local and national levels, and alignment with reporting under the Enhanced Transparency Framework, the Sendai Framework and the SDGs, can increase visibility of needs and strengthen the case for finance.

Embedding inclusive and equitable participation in assessment, planning and monitoring processes ensures that national responses reflect lived experiences. Institutionalizing mechanisms such as community-based assessments, social vulnerability analyses, and multi-stakeholder platforms can improve representation of local governments, civil society and affected communities in national decision-making processes, including those related to UNFCCC engagement and the FRLD.

Finally, sustained investment in capacity, learning and financial alignment is essential. Local and sub-national capacity-building enables practical application of loss and damage approaches, while ongoing learning platforms, rather than isolated pilot projects, can support the scaling of effective practices (UNFCCC 2023a). Mapping and aligning existing finance for DRR, adaptation, humanitarian action and social protection can help countries better match resources to national priorities and prepare for future engagement with the FRLD.

Taken together, these actions can help countries transition toward more coherent, anticipatory and equitable governance frameworks for addressing loss and damage—anchored in national needs, supported by local capacities, and aligned with emerging international guidance.

References

Adil, L., Eckstein, D. Künzel, V. and Schäfer, L. (2025). Climate Risk Index 2025. Germanwatch. https://www.germanwatch.org/sites/default/files/2025-02/Climate%20Risk%20Index%202025.pdf

CFE-DM (2025). Viet Nam Disaster Management Reference Handbook, April 2025. Center for Excellence in Disaster Management & Humanitarian Assistance (CFE-DM). https://www.preventionweb.net/media/106481/download?startDownload=20251009

Climate Funds Update (2025, May 12). Fund for responding to loss and damage. https://climatefundsupdate.org/the-funds/fund-for-responding-to-loss-and-damage/. Accessed March 17, 2026.

DoCC (2025). Loss and Damage: General Information. Government of Vanuatu, Department of Climate Change (DoCC). https://docc.gov.vu/index.php/lnd/general-information. Accessed March 17, 2026.

FAO (2023). Vanuatu: Response overview, August 2023. Food and Agriculture Organization (FAO). https://openknowledge.fao.org/items/7f10433d-f25d-4ceb-8c17-e4180945a24b. Accessed March 17, 2026.

Federal Government of Somalia, Somalia National Bureau of Statistics (SNBS) and Ministry of Labour and Social Affairs (MoLSA). https://ophi.org.uk/Pub%3Bications/Somalia-MPI-report-2024. Accessed March 17, 2026.

Gilder, A., and O. Rumble. 2022. *An African Perspective on Loss and Damage.* South African Institute of International Affairs Policy Insight 130

GoV NDC (2022). *Nationally Determined Contribution of Viet Nam*, Updated 2022. Government of Viet Nam NDC (GoV NDC).

Government of India. (2009). *National policy on disaster management 2009*. National Disaster Management Authority, Ministry of Home Affairs, Government of India.

Government of Mauritius. (2020). *Climate Change Act 2020 (Act No. 11 of 2020)*. Government of Mauritius.

Government of the Republic of Zambia (2023). *National Adaptation Plan (NAP) for Zambia*. Ministry of Green Economy and Environment.https://unfccc.int/sites/default/files/resource/NAP-Zambia-2023.pdf. Accessed March 17, 2026.

Hai, D. H., Nam, V. Q., Samadhiya, A., Kumar, A., Gupta, S., and Jagtap, S. (2024). Unravelling the economic impact of climate change in Viet Nam's Mekong River Delta and Southeast region. Discover Sustainability, 5(1): 125.

IGAD CAEP (2023). Somalia's Loss and Damage Assessment. Intergovernmental Authority on Development Centre of Excellence for Climate Adaptation and Environmental Protection (IGAD CAEP). https://igadcaep.org/wp-content/uploads/2020/07/loss-and-damages.pdf. Accessed March 17, 2026.

Initiative for Climate Action Transparency (2023). Guidance for assessing climate impacts and loss and damage [Technical report]. https://climateactiontransparency.org/wp-content/uploads/2023/05/Assessing-climate-change-driven-losses-and-damages.pdf. Accessed March 17, 2026.

IPCC (2022) Summary for Policymakers [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem (eds.)]. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3–33, doi:10.1017/9781009325844.001.

Lewis, I. M. and Janzen, J.H. (2025, September 21). Somalia. Encyclopedia Britannica. https://www.britannica.com/place/Somalia. Accessed March 17, 2026.

Makondo, C. C., & Thomas, D. S. (2024). Multidimensional poverty and vulnerability assessment in the face of climate change adaptation in developing economies: focus on ecosystem-based livelihoods in Zambia. *Environment, Development and Sustainability*, 1-47.

Maynard, J., Heron, S., van Hooidonk, R. and Tracey, D. (2018). *Past and projected future impacts of coral bleaching on the reefs of Vanuatu*. Report to the Secretariat of the Pacific Regional Environment Programme (SPREP). https://library.sprep.org/sites/default/files/coral-reef-bleaching-vanuatu-final.pdf. Accessed March 17, 2026

Ngoc, Q. T. K. (2019). Assessing the value of coral reefs in the face of climate change: The evidence from Nha Trang Bay, Viet Nam. *Ecosystem services*, *35*: 99–108

Notre Dame Global Adaptation Initiative (ND-GAIN) (n.d). Rankings. https://gain.nd.edu/our-work/country-index/rankings/. Accessed March 17, 2026.
SNBS and MoLSA (2024). *Multidimensional Poverty Index (MPI) for Somalia* (Report).

Republic of Mauritius. 2020a. *Climate Change Act 2020 (Act No. 11 of 2020).* Government Gazette No. 145 of 28 November 2020.

Republic of Mauritius. 2020b. *National Disaster Risk Reduction and Management Policy, Strategic Framework and National Action Plan 2020–2030.* National Disaster Risk Reduction and Management Centre.

Republic of Mauritius. 2024a. *First Biennial Transparency Report under the Paris Agreement.* Ministry of Environment or Department of Climate Change (adjust to official issuer once you confirm).

National Development Strategy: Republic of Mauritius. forthcoming. *National Development Strategy 2025–2040.* Government of Mauritius.

SPARC (2024). Assessing and financing loss and damage due to climate change in Somalia (Technical report). Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises (SPARC). https://www.sparc-knowledge.org/sites/default/files/documents/resources/Report%20Assessing%20and%20financing%20loss%20and%20damage%20due%20to%20climate%20change%20in%20Somalia_HiRes.pdf. Accessed March 17, 2026.

Stephens, S., Koran, G., Missack, W., Waiwai, M., Bartlett, C. McNamara, K. E., Clissold, R. and Westoby, R. (2022). Incorporating a consideration of Climate Impacts on Human Rights into the Design of the Loss & Damage Fund: Insights from Vanuatu. https://unfccc.int/sites/default/files/resource/Vanuatu%20Submission%20TC%20LnD%20Human%20Rights%20considerations.pdf. Accessed March 17, 2026.

Tran-Anh, Q., Ngo-Duc, T., Espagne, E. and Trinh-Tuan, L. (2022). A high-resolution projected climate dataset for Viet Nam: Construction and preliminary application in assessing future change. *Journal of Water and Climate Change*, *13*(9): 3379–3399.

UNCDF (2020). Economic Impacts of Natural Hazards on Vulnerable Populations in Vanuatu. United Nations Capital Development Fund (UNCDF). https://www.uncdf.org/article/6318/climate-risk-insurance-literature-reviews.
Accessed March 17, 2026.

UNDP and WMO (2025). Mapping the impact and informing economic resilience: Using disaster loss and damage data for risk-informed development. United Nations Development Programme. https://www.undp.org/sites/g/files/zskgke326/files/2025-12/undp-wmo-mapping-the-impact-and-informing-economic-resilience.pdf.
Accessed March 17, 2026.

UNDP (2018). ISSUE BRIEF: Climate change loss and damage in Viet Nam. United Nations Development Programme (UNDP). https://files.acquia.undp.org/public/migration/vn/Issue-brief--CC-Loss-and-Damage_final.pdf. Accessed March 17, 2026.

UNDP (2025). Viet Nam Explores Financing Solutions for Climate Loss and Damage. United Nations Development Programme (UNDP). https://www.undp.org/asia-pacific/news/Viet Nam-explores-financing-solutions-climate-loss-and-damage.
Accessed March 17, 2026.

UNDRR (2025). Disaster losses and damages data. United Nations Office for Disaster Risk Reduction. https://www.undrr.org/building-risk-knowledge/disaster-data. Accessed March 17, 2026.

UN ESCAP (2025). Economic and Social Survey of Asia and the Pacific 2025: Understanding the Macroeconomic Implications of Climate Change. United Nations Economic and Social Commission for Asia and the Pacific. https://repository.unescap.org/server/api/core/bitstreams/285cfe3b-0e49-4412-a2b4-ddd68a02d501/content.
Accessed March 17, 2026.

UNFCCC (2023a). Fund for responding to loss and damage. United Nations Framework Convention on Climate Change. https://unfccc.int/fund-for-responding-to-loss-and-damage.
Accessed March 17, 2026.

UNFCCC (2023b). Decisions on the Santiago Network on loss and damage. United Nations Framework Convention on Climate Change. https://unfccc.int/topics/resilience.
Accessed March 17, 2026.

UNFCCC (2023c). Decision 1/CP.28 and 1/CMA.5: Operationalization of the new funding arrangements, including a fund, for responding to loss and damage, and outcome of the first Global Stocktake. United Nations Framework Convention on Climate Change. https://unfccc.int/documents.
Accessed March 17, 2026.

UNFCCC (2023d). Preparing for implementation of the Enhanced Transparency Framework under the Paris Agreement (2nd ed.). United Nations Framework Convention on Climate Change. https://unfccc.int/sites/default/files/resource/ETF%20Handbook-second%20edition%2023_final.pdf.
Accessed March 17, 2026.

UNFPA. 2025. *World Population Dashboard: Zambia.* United Nations Population Fund.
Accessed February 6, 2026.

United Nations (2023). The Sustainable Development Goals report 2023. United Nations. https://unstats.un.org/sdgs/. Accessed March 17, 2026.

VMSA (2024). Viet Nam Multi-Sector Assessment (VMSA) Report for Typhoon Yagi Recovery. https://www.undp.org/sites/g/files/zskgke326/files/2024-12/vmsa_final.pdf.
Accessed March 17, 2026.

WBG and ADB (2021). Climate Risk Country Profile: Viet Nam. The World Bank Group (WBG) and the Asian Development Bank (ADB). https://climateknowledgeportal.worldbank.org/sites/default/files/country-profiles/15077-Viet Nam%20Country%20Profile-WEB.pdf.
Accessed March 17, 2026.

World Bank (n.d.a). Population, total - Somalia, Fed. Rep. Population, total - Somalia, Fed. Rep. | Data.
Accessed February 6, 2026

World Bank (n.d.b). GDP (current US$) - Somalia, Fed. Rep. GDP (current US$) - Somalia, Fed. Rep. | Data Accessed February 6, 2026.

World Bank (n.d.c). Population, total – Vanuatu. Population, total - Vanuatu | Data.
Accessed February 6, 2026.

World Bank (2021a). Climate Risk Country Profile – India. https://climateknowledgeportal.worldbank.org/sites/default/files/country-profiles/15503-WB_India%20Country%20Profile-WEB.pdf.
Accessed March 17, 2026.

World Bank (2021b). Climate Risk Country Profile: Vanuatu. https://climateknowledgeportal.worldbank.org/sites/default/files/country-profiles/15825-WB_Vanuatu%20Country%20Profile-WEB.pdf

World Bank. 2024a. India. DataBank, *Population, total; GDP (current US$)*. Accessed February 6, 2026

World Bank. 2024b. *Zambia – Population, total; GDP (current US$).* Data. Accessed February 6, 2026.

World Bank. 2025a. *Viet Nam – Population, total.* Data. Accessed February 6, 2026.

World Bank. 2025b. *Viet Nam – GDP (current US$).* Data. Accessed February 6, 2026.

DIIS
DANISH INSTITUTE
FOR INTERNATIONAL
STUDIES

UN
environment
programme

copenhagen
climate centre