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Institutional architechtures for loss and damage

National approaches and local to global linkages

Lindegaard, Lily Salloum; Due, Emilie Marie Falk

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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
Vietnam	Assoc. Professor Le Thi Hoa Sen, ,Faculty of Rural Development, University of Agriculture and Forestry, Hue University
	Dr. Le Nguyen Que Huong, Research Analyst, Mekong Development Research Institute
Vanuatu	Brian Maltera, Loss and Damage Officer in Vanuatu and Independent Climate Consultant

Lily Salloum Lindegaard
Senior Researcher, Danish Institute for International Studies
liln@diis.dk

Emilie Marie Falk Due
Student Assistant, Danish Institute for International Studies
emfd@diis.dk

Cover photo: On May 29, 2016, in Beletweyne, Somalia, local government workers prepared food to distribute to those affected by severe flooding in the Hiraan region. Photo: AMISOM by Tobin Jones / Alamy.com.

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DIIS · Danish Institute for International Studies
Gl. Kalkbrænderi Vej 51A, DK-2100 Copenhagen, Denmark
Tel: +45 32 69 87 87
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INSTITUTIONAL ARCHITECTURES FOR LOSS AND DAMAGE

Lily Salloum Lindegaard & Emilie Marie Falk Due

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LIST OF ACRONYMS

ABCs	Area-Based Coordination Committees
BRCiS	Building Resilient Communities in Somalia
CBO	Community Based Organisation
CCDRR Policy	Climate Change and Disaster Risk Reduction Policy (Vanuatu)
CSO	Civil society organisation
DANA	Damage Assessment and Needs Assessment
DIIS	Danish Institute for International Studies
EU	European Union
FRLD	Fund for Responding to Loss and Damage
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ICC	International Criminal Court
ICJ	International Court of Justice
INGO	International non-governmental organisation
IO	International organisation
IOM	International Organisation for Migration
ITLOS	International Tribunal for the Law of the Sea
MAE	Ministry of Agriculture and Environment (Vietnam)
MoECC	Ministry of Environment and Climate Change (Somalia)
MRV	Measuring, Reporting and Verification
NAB	National Advisory Board on Climate Change and Disaster Risk Reduction (Vanuatu)
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
NDMO	National Disaster Management Office (Vanuatu)
NELD	Non-Economic Losses and Damages
NGO	Non-governmental organisation
NSDP	National Sustainable Development Plan (Vanuatu)
PDNA	Post Disaster Needs Assessment
SoDMA	Somali Disaster Management Agency
SomReP	Somalia Resilience Programme
SPARC	Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises
UN ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNDP	United Nations Development Programme
UNEP-CCC	United Nations Environment Copenhagen Climate Centre
UNFCCC	United Nations Framework Convention on Climate Change
WFP	World Food Programme
WHO	World Health Organisation

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ABSTRACT

Loss and damage is increasingly a reality, and country governments, local officials and international actors are seeking to respond. This translates into rapidly developing institutional landscapes and processes across local to global levels, state and non-state actors, and topics of data and reporting, institutional coordination, capacity building and participation. Understanding these diverse developments, and related opportunities and gaps, will be essential for relevant institutional development and support.

This DIIS working paper therefore examines: (1) What institutional arrangements are emerging in diverse country and climate contexts, and (2) How can an improved understanding of emerging institutional arrangements support loss and damage relevant institutional development and ultimately response?

We address these questions through new data and analysis on Somalia, Vanuatu and Vietnam – countries with diverse development and institutional contexts as well as climate challenges. We provide assessments for each country with key takeaways as well as cross-cutting reflections and ways forward.

PREFACE

This DIIS working paper is part of the study, Assessing institutional arrangements for loss and damage: from local to global scales. The study is a collaboration between United Nations Environment Copenhagen Climate Centre (UNEP-CCC) and the Danish Institute for International Studies (DIIS), with funding from the Ministry of Foreign Affairs of Denmark.

The study aims to support institutional arrangements for loss and damage by providing latest knowledge on institutional developments and experiences across six countries: India, Zambia, Mauritius, Somalia, Vanuatu and Vietnam, including focus on national efforts and international support to assess, report on and address climate-related losses and damages. This includes both economic and non-economic losses and damages linked to climate change, including production and livelihoods, infrastructure, health and human life, natural resources and biodiversity, cultural heritage, etc.

By documenting institutional developments and experiences in different countries, the study aims to provide insights into diverse loss and damage contexts and institutional set-ups, as well as to identify potential opportunities and challenges across contexts. These findings can inform both national and international efforts towards coordinated, inclusive and responsive systems to document and respond to growing climate-related harms.

This working paper provides an in-depth look at three of the country cases: Somalia, Vanuatu and Vietnam. Subsequent study outputs will assess institutional developments in each of the six country cases and identify cross-cutting trends and findings, as well as provide additional recommendations for policymakers and practitioners.

INTRODUCTION

Loss and damage is increasingly a reality across the globe. Slow-onset climate changes to temperature, rainfall and sea levels are intensifying, and extreme climate events are also more powerful, frequent and unpredictable. These changes are driving losses and damages to GDP, culture, infrastructure, environments and well-being – in interaction with diverse development contexts. Some countries and communities find themselves in perpetual recovery, as recurring climate shocks and ongoing slow-onset climate change erode development and well-being (IISD, 2025).

In addition to those affected, country governments and local officials are grappling with these challenges. Often, they are responding through institutional systems and processes built for other purposes, yet they are also developing new approaches to meet felt and future losses and damages. Internationally, major organisations are engaging with loss and damage and supporting relevant systems and response efforts; also, new international institutions – specifically the Santiago Network and Fund for Responding to Loss and Damage under the United Nations Framework Convention on Climate Change (UNFCCC) – offer new options for support. Many country governments look to these for possible financial, capacity building and technical support as they try to chart a path forward in loss and damage response.

This rapidly developing institutional landscape raises questions of how different countries are structuring their loss and damage efforts, specifically: (1) What institutional arrangements are emerging in diverse country and climate contexts, and (2) How can an improved understanding of emerging institutional arrangements support loss and damage relevant institutional development and ultimately response? This DIIS working paper responds to these questions, focusing on loss and damage data, reporting and response systems and practices. These are interlinked and crucial for future loss and damage understanding and efforts.

In this working paper, we present data and analysis on Somalia, Vanuatu and Vietnam – countries with diverse development and institutional contexts as well as climate challenges. The working paper is structured as follows:

Country loss and damage profiles. These background profiles provide an overview of the current context, including: country development and climate profiles; loss and damage status and projections; and loss and damage policy, institutions and practice.

Assessment of loss and damage institutional developments. Building on the country profiles, we present an assessment of loss and damage related institutional developments for each country. These draw on new primary data collected specifically for this study and focus on four sub-topics: developments in institutional arrangements and praxis; data and reporting systems; capacity status and gaps; and learning and scaling successful practices. Questions of representation, coordination and participatory governance are also addressed. These sections conclude with brief takeaways on loss and damage institutional development for each country.

Reflections and ways forward. Cross-cutting reflections and possible ways forward draw on trends and initial findings across countries. Further findings and recommendations will be published in later study outputs, drawing on data from a total of six country cases. In addition to Somalia, Vanuatu and Vietnam, these include Mauritius, India and Zambia.

On the basis of original primary data and analysis, this working paper offers new insights for policymakers, practitioners and also citizens. It not only supports efforts to address losses and damages directly but also the underlying institutional frameworks and processes shaping understandings, governance processes and response options for loss and damage in practice.

STUDY APPROACH

This DIIS working paper presents the initial results of a multi-sited study of institutional development relating to loss and damage in different country contexts. The study, *Assessing institutional arrangements for loss and damage: from local to global scales*, is a collaboration between United Nations Environment Copenhagen Climate Centre (UNEP-CCC) and the Danish Institute for International Studies (DIIS).

A joint methodology was developed to collect primary data for the purpose of the study. It includes a vertical assessment of state institutions, horizontal assessment of state and non-state actors, and examination of interactions between these. This provides an overview of institutional frameworks and practice at different levels and across different actors, such as government institutions, international organisations and civil society.

In many national contexts, loss and damage in both formal institutions and practice is integrated into other policy and institutional spheres, particularly disaster management and climate change adaptation. In this study, we focus on de facto loss and damage efforts, also those that fall under other institutional spheres, in order to understand loss and damage in practice. The study also reviews early experiences with loss and damage reporting and implementation from multiple stakeholder perspectives.

The study employs institutional mapping, document and policy review and stakeholder interviews:

- Institutional mapping of relevant loss and damage-related institutions including at national and sub-national levels and international institutions and major programmes. This includes climate and disaster related institutions as relevant in the particular country context.
- Document and policy review of relevant state and non-state policies, programmes and plans, as well as topic-specific assessments and reports.
- Stakeholder interviews covering topics of legal and institutional framework, institutional coordination, participatory governance, data and reporting, human resources and technical capacity, and learning and scaling. For each country, 12-15 interviews or responses to a written questionnaire were gathered including individuals working in national level state institutions, sub-national level state institutions, non-state institutions at national or sub-national levels, international organisations, and in-country experts, with the aim of securing three to four perspectives for each actor type.

Table 1. Type and number of respondents

	State actors		Non-state actors		
	National level	Sub-national level	National or sub-national NGO/ CSO	International organisation/ donor	Country expert
Somalia	3	4	3	2	1
Vanuatu*	-	1	5	3	-
Vietnam	3	4	3	3	1

*Data collection for Vanuatu was not yet completed at the time of writing.

This working paper presents a synthesis of these sources and analysis, providing insight into institutional and policy frameworks as well as challenges and opportunities on recent developments for each country.

COUNTRY LOSS AND DAMAGE PROFILES

Loss and damage profiles for each country – Somalia, Vanuatu and Vietnam – are presented in this section. Each loss and damage profile includes: a country development and climate profile; loss and damage status and projections; and loss and damage policy, institutions and practice.

Somalia

Development and climate profile

Somalia is a least developed country located on the Horn of Africa with an extensive coastline along the Indian Ocean and the Gulf of Aden (IGAD CAEP, 2023: 2; UNCTAD, n.d.). The country is mostly arid and semi-arid and consists of vast flat areas and a few mountainous regions (IGAD CAEP, 2023: 2). Somalia is a federal republic with a central government located in the capital Mogadishu and several member states with their own governance structures (Bhatti et al., 2023: 8). The people of Somalia are almost exclusively Muslim, and social organisation is characterised by clans (Lewis and Janzen, 2025).

Nomadic pastoralism and agriculture are the most typical livelihoods, with three fifths of the population leading nomadic lifestyles (IGAD CAEP, 2023: 2; Lewis and Janzen, 2025). However, in the last decades, many people have settled permanently in the big cities, especially the capital Mogadishu, leading to rapid urban expansion and challenges with basic services in cities (Lewis and Janzen, 2025; SPARC, 2024: 12). Poverty remains widespread in Somalia, with 67% of the population facing multidimensional poverty with deprivations across living standards, education and more (SNBS and MoLSA, 2024: VII).

Conflict and fragility

The country has been severely affected by civil conflict since 1991. Together with reoccurring drought and floods, this has driven prolonged humanitarian crisis with widespread malnutrition and displacement both internally and to neighbouring countries (Lewis and Janzen, 2025). After the central government collapsed in 1991, the north-western region of Somaliland was declared an independent republic by a local clan-

based political alliance, which has established its own government. Further, in 1998, the north-eastern region of Puntland was declared an autonomous region by a local political alliance, also forming its own government, though not claiming independence from Somalia. Neither Somaliland nor Puntland have received international recognition (ibid.). The southern region is still riven by conflict, and military operations and attacks by the government, the armed Islamic group Al-Shabab and clan militias caused several hundred civilian losses and widespread displacement in 2024 (HRW, n.d.).

The governance system remains fragile and limited in capacity, despite a new federal governance system constituted in 2012 (Lewis and Janzen, 2025). There is a large dependence on international humanitarian aid to respond to protracted and reoccurring crises and meet basic needs. According to a recent assessment, drought and conflict were expected to result in crisis levels of food insecurity for nearly a quarter of the population in the second quarter of 2025 (Mishra, 2025). This situation necessitates large-scale humanitarian support, but severely low levels of funding could force humanitarian agencies to scale down or close programmes (ibid.).

Climate change

The mean annual temperatures of Somalia are some of world's highest, but there is significant geographical variation (Lewis and Janzen, 2025). In the north, mean temperatures are as low as 19 °C in some areas, while central and southern regions have mean temperatures around 30 °C (SRCS Climate Centre, 2022: 1). Rainfall also varies considerably, with little rain in most of the north and centre, some areas receiving only 50-150 mm/year, and higher figures between 300 and 700 mm/year in southern areas (ibid.). There are two rainy seasons, one from April to June and one from October to December, each of which is followed by a dry season (Lewis and Janzen, 2025).

Somalia is ranked among the thirty most climate-vulnerable countries globally by the University of Notre Dame's Global Adaptation Initiative (ND-GAIN, n.d.). The long-term state of conflict and insecurity has been central in creating this high vulnerability, since it has resulted in very limited livelihood diversification and a lack of access to water, electricity and social services (SPARC, 2024: 12). As mentioned, most of the population relies on rain-fed agriculture and pastoralism, which are very climate-vulnerable and have been exposed to recurrent climate impacts (IGAD CAEP, 2023: 3). Currently, underlying socio-economic vulnerability combined with recurrent extreme climate events creates a reinforcing cycle where social and environmental vulnerability is maintained and deepened (SPARC, 2024: 13).

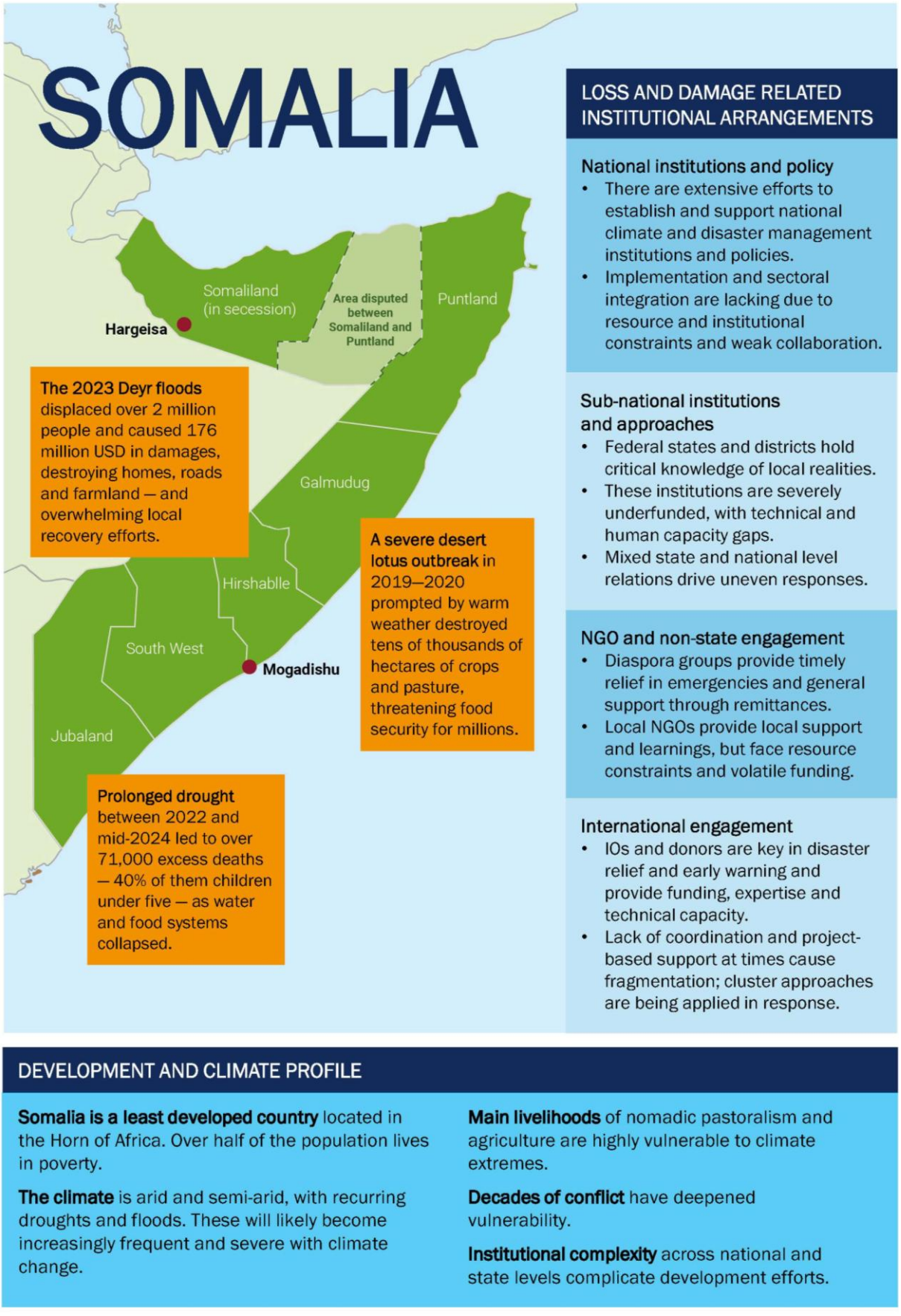
The country has already experienced significant climate-related extreme events, particularly droughts and floods. Five out of nine floods and droughts between 2000 and 2023 are likely partly attributable to climate change (SPARC, 2024: 9-10) with devastating consequences. The devastating 2022 drought, estimated to have caused 43,000 deaths, was assessed to have been 100 times more likely due to climate change (UNICEF, 2023a; WWA, 2023).

Research indicates the following future climate changes:

- **Rainfall and flooding** In the long term, annual rainfall, rainfall variability and extreme rainfall are expected to increase (SPARC, 2024: 10). This means that flooding could increase (ibid. 10-11).

- **Temperature and heat waves** Mean annual temperatures are projected to increase by 1.5 to 2.4 °C by 2050 compared to pre-industrial levels (IGAD CAEP, 2023: 5). Extreme heat events are also expected to increase (IGAD CAEP, 2023: 5; SPARC, 2024: 11).
- **Droughts** An increase in droughts is likely (IGAD CAEP, 2023: 5; SPARC, 2024: 11). Different models indicate a change in drought occurrence from between -2% to +20% depending on emission scenario (SPARC, 2024: 11).
- **Sea level rise** Sea level is expected to rise by 20-21 cm by 2050 (SPARC, 2024: 11).

Figure 1. Losses and damages and institutional development in Somalia



Sources: IGAD CAEP, 2023; EEAS, 2024; SPARC, 2024; GoS et al., 2025. See also this DIIS Working Paper.

Loss and damage status and projections

This section outlines Somalia's main previous and projected losses and damages.

Economic losses

Climate-related droughts and floods have already caused considerable losses and damages to different sectors, mainly agriculture and pastoralism, as elaborated below. The total direct economic losses between 2000-21, excluding the 2010 drought, stand at 7.9% of Somalia's GDP, of which almost half is potentially attributable to climate change (SPARC, 2024: 16). This share (3.3% of GDP) is equal to 86% of the Somali government's average annual revenue, underscoring the overwhelming pressure of such losses on state finances (ibid.). Further, floods and droughts also create indirect, cascading economic effects which are not included in these estimates (ibid.: 18).

Recent projections indicate that future economic losses from flooding attributable to climate change could reach 24 to 27 million USD by the 2050s (SPARC, 2024: 19). An increase in droughts could amount to cumulative losses of about 5 to 5.4 billion USD by the 2050s, a striking amount in a country with widespread poverty and severely limited public resources (ibid.). Key affected sectors include:

- **Agriculture and pastoralism** Potentially climate attributable losses to key sectors of agriculture and livestock are estimated at 2.84 billion USD from 2000 and 2021 (SPARC, 2024: 14). During the prolonged drought in 2020-23, 3.8 million livestock animals were lost, entailing a major loss of wealth (IGAD CAEP, 2023: 3). Further, slow-onset changes of rising temperatures and increased rainfall variability are likely to impact crop yields negatively, increase livestock mortality and reduce milk production (SPARC, 2024: 20). Additionally, crop pests can proliferate under increased temperatures and rainfall, as experienced in 2019-20, where large locust outbreaks destroyed vast areas of pasture and cropland (ibid.).

- **Fishing** Warmer coastal waters are expected to impact fishing negatively by contributing to coral bleaching, increased harmful algae and ocean acidification (SPARC, 2024: 20).

- **Infrastructure and housing** Sea level rise is expected to cause damage to coastal infrastructure, housing and farmland by causing coastal flooding and saltwater intrusion (SPARC, 2024: 20). Other climate-related disasters also contribute to pressure on already very fragile infrastructure and housing (IGAD CAEP, 2023: 3).

Non-economic losses

Somalia also faces significant non-economic losses, including:

- **Loss of life** Extreme climate events are associated with significant loss of life (SPARC, 2024: 14). About half of the 20,300 recorded deaths between 2000-2021 from droughts and floods are likely to be related to climate change (ibid.). Further, heatwaves are expected to increase health risks and heat-related deaths (IGAD CAEP, 2023: 2-3).

- **Loss of health** Droughts and floods have led to food insecurity and famine. Droughts between 2008-11, combined with other vulnerability factors, are estimated to have pushed 17% of the population of central and southern Somalia into famine conditions, while over 8 million were pushed into acute food insecurity during droughts in 2020-22 (SPARC, 2024: 14, 16). Further, droughts and floods also create conditions for the spread of disease by reducing access to clean drinking water and affecting the spread of vector-borne disease (e.g. malaria and dengue fever) (IGAD CAEP, 2023: 3; Jayte, 2025; SPARC, 2024: 19). Mental health challenges have also been linked to displacement triggered by extreme events (SPARC, 2024: 18).

- **Displacement and conflict** Droughts and floods also lead to displacement. During severe drought in 2020-22, 3.7 million people became internally displaced in the search for food and feed for livestock (SPARC, 2024: 16). This was followed by floods in 2023, which ruined crops and livestock only just recovering, and resulted in more than 100 deaths and over 700,000 displaced (IGAD CAEP, 2023: 1; SPARC, 2024: 16). Disasters and displacement also fuel conflict dynamics, for example by increasing competition over resources (IGAD CAEP, 2023: 5; SPARC, 2024: 18).

- **Loss of biodiversity and ecosystems** Combined with unsustainable human practices (deforestation for charcoal, poor agricultural practices, etc.), climate-related extreme weather events drive desertification, biodiversity loss, deforestation and soil erosion and degradation (SPARC, 2024: 18).

Loss and damage policy, institutions and response

This section provides an overview of the main policies, institutions and praxis in relation to loss and damage in Somalia. Overall, the government of Somalia is already burdened beyond its capacity by climate impacts alongside conflict and fragility and is highly dependent on humanitarian assistance and international donor finance (SPARC, 2024: 21). Government capacity is limited by a very small budget, over half of which is financed by donor grants (ibid.). Further, Somalia receives very little climate finance from the global climate funds despite being a highly vulnerable country (SPARC, 2023: 3). The government has taken some important steps to begin building a capacity for addressing losses and damages, outlined below; however, existing efforts are under-implemented with weak enforcement and sectoral integration.

Policies

National Climate Change Policy 2020 (updated 2023) A central landmark in the development of climate policy in Somalia is the National Climate Change Policy from 2020, which was updated in 2023. Although this policy does not have a concrete section on loss and damage, many outlined issues and ambitions are relevant. The section 'Disaster Preparedness and Response' includes, for instance: Establishing an early warning system, improving hydro-meteorological observation networks for climate data, improving institutional and technical capacity for disaster risk response, constructing infrastructure for reducing flooding and more (MoECC, 2023: 36).

National Adaptation Plan (NAP) Somalia's NAP is led by the Ministry of Environment and Climate Change and was supplemented by the NAP Readiness Project with funding from

the Green Climate Fund and support from UNDP. The NAP approach includes integrating adaptation and peacebuilding; science and local knowledge; and gender-responsiveness, inclusion and participation (NAP GN, 2022).

Nationally Determined Contribution 2025 In the most recent NDC from 2025, the government outlines a concrete set of ambitions for advancing action to address loss and damage (MoECC, 2025: 29). They include establishing systems for reporting and quantifying loss and damage, developing a financing strategy and a fund, lobbying for the simplification of access mechanisms in international funding, and integrating mechanisms for addressing losses and damages from both sudden and slow-onset climate events in national climate policies. However, an outline of what these actions will cost and how they will be financed and implemented has not yet been developed (ibid.).

Institutions

Ministry of Environment and Climate Change (MoECC) MoECC was established in 2022 and is the central authority on climate change (SPARC, 2023: 8-10). A central priority for advancing climate action in Somalia is the strengthening of the MoECC, which is limited by severe capacity and budget constraints (ibid.). Although there has been concrete progress in the shape of the development of overarching climate policies, a lot of work is still ahead in order to develop and realise these policies across sectors and government levels (ibid.: 6-7). Recently, the government has expressed heightened interest in accessing international funding for addressing loss and damage (SPARC, 2024: 21). Developing the capacity of the MoECC is important especially in relation to accessing these funds and the Vertical Climate Funds more broadly, since the ministry currently struggles with fulfilling their complex access requirements, hindering their access (SPARC, 2023: 4-5; SPARC, 2024: 22).

Somali Disaster Management Agency (SoDMA) SoDMA was established in 2011 during the 2010-11 Somali famine and is Somalia's federal agency responsible for disaster response disasters. In 2022, SoDMA took over the legal roles and responsibilities of the Federal Ministry for Humanitarian Affairs and Disaster Management, which was then abolished (SoDMA, 2025). It works in both disaster prevention and response, in close collaboration with international actors.

Many other ministries also work with sectors impacted by climate loss and damage. These include the Ministry of Agriculture and Irrigation, Ministry of Energy and Water Resources, Ministry of Livestock, Forestry and Range and more.

Practice

Somalia currently does not have a robust system for forecasting weather events or systematically accessing and quantifying losses and damages, which is also an obstacle for accessing international funding (SPARC, 2024: 21-22). There are especially gaps in assessing non-economic losses and damages and impacts on the local level (IGAD CAEP, 2023: 9-10; SPARC, 2024: 22).

Most of the international climate-related funding comes from INGOs, multilateral agencies and bilateral donors (ibid.: 4). Humanitarian actors, for instance the World Food Programme, play a vital role in providing relief in situations of crisis (SPARC, 2024:

21; WFP, n.d.). The large Somali diaspora population is also central in providing remittances and timely relief in emergency situations (Kleist et al., 2024: 1-2).

The major role of international humanitarian and development actors also raises challenges. According to SPARC, these actors have often worked in silos, competing instead of collaborating, with focus on short-term needs and crises over slow-onset events and long-term societal developments, which do not necessarily contribute to creating long-term climate resilience (SPARC, 2023: 4; SPARC, 2024: 21). Further, humanitarian actors also struggle with accessing necessary funding. In 2025, the Humanitarian Needs and Response Plan for Somalia outlined a need for 1.42 billion USD but had only obtained 12.4% of this by the end of February (Mishra, 2025).

Vanuatu

Development and climate profile

Vanuatu is a Small Island Developing State located in the western Pacific Ocean (UNCTAD, 2020). The country declared its independence from the joint British and French colonial administration in 1980 and established itself as a constitutional representative democracy (Foster and Adams, 2025; World Bank, 2021: 2). Its 83 islands are home to around 310,000 people, who speak over 120 indigenous languages and live predominantly in small villages along the islands' coastlines (MoCC, 2025: 5). The country's annual GDP stands at 1.16 billion USD, and in 2021, the service sector made up the highest percentage of GDP (67%), followed by agriculture (22%) and industry (11%) (World Bank, 2021: 2; World Bank, n.d.).

Environmental vulnerability

As a result of steady economic growth since mid-2000, Vanuatu graduated from least developed country status in December 2020 (UNCTAD, 2020). However, the country's economic and environmental vulnerability to climate change and other shocks is very high (ibid.). Additionally, most ni-Vanuatu depend heavily on the subsistence livelihoods of rain-fed agriculture and near-shore fishing, both of which are very vulnerable to the impacts of climate change (World Bank, 2021: 2; MoCC, 2025: 5).

Resilience-building is, therefore, still the country's main priority, which necessitates continued international support (UNCTAD, 2020). In its overarching development plan for 2016-2030, The government of Vanuatu (2016: 3) highlights the overwhelming challenges of addressing and adapting to the effects of climate change, which threaten to erode achieved development gains and hinder further progress. They highlight ambitions to continue their advocacy for mitigation and assistance in global fora, while also working at home to enhance adaptive capabilities by drawing on traditional knowledge and practices of risk reduction (ibid.: 6).

Climate Change

Vanuatu has a tropical climate with annual average temperatures ranging between 23.5-27.5°C, varying between a cooler dry season from May to October and a warm wet season from November to April (VMGD, BoM and CSIRO, 2015: 2). The South Pacific Convergence Zone affects rainfall, moving south and bringing heavy rainfall and tropical cyclones during the wet season (ibid.).

Vanuatu is already experiencing the increasingly catastrophic effects of climate change (MoCC, 2025: 5). The country 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: 3). For example, the most recent Climate Risk Index place Vanuatu as 9th in the world in terms of climate risk exposure (Adil et al., 2025: 13).

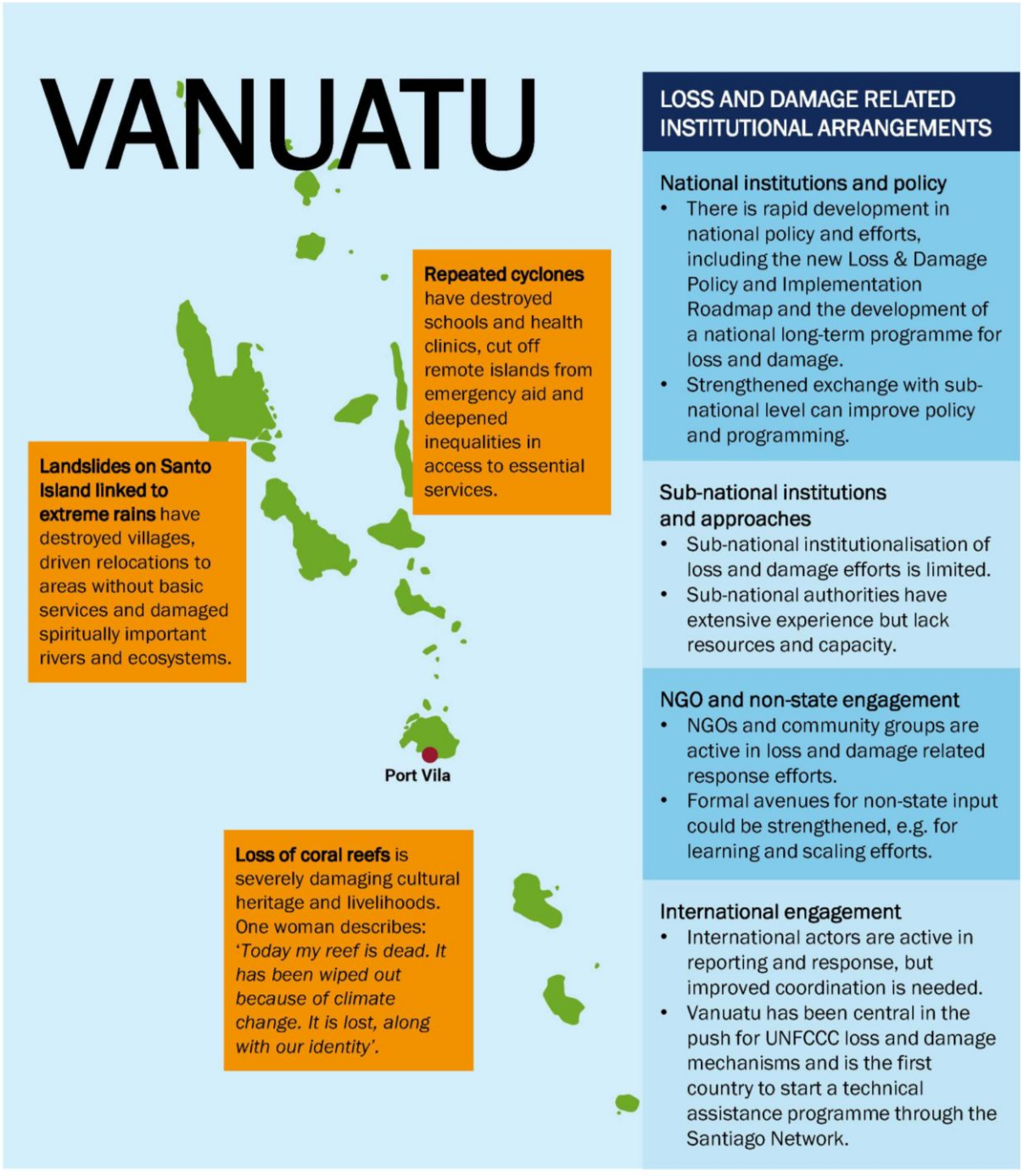
Observed climate changes include the following:

- Temperature Warming in Vanuatu is already documented: from pre-industrial levels (1850-1900) up to the average from 2011-2020, 0.7 °C of warming has been observed, with likely increases in the last few years (CSIRO and SPREP, 2021a: i).
- Rainfall Because of poor data, there are no reliable estimates of overall existing changes (CSIRO and SPREP 2021a, i). However, abnormally extreme rainfall has been observed locally in recent years (Bartlett, 2023: 71).
- Ocean warming and sea level rise The surface temperature of the sea around Vanuatu has been rising, especially evident in much warmer waters during the cool season (25 °C+) and longer marine heatwaves (UoH, CSIRO and CC, 2023: 10). Further, the sea near Vanuatu has risen on average 6 mm annually between 1993 and 2015 (VMGD, BoM and CSIRO, 2015: 5).

Future projections indicate the following changes and related extreme and slow-onset events:

- Temperature and heat waves Depending on emission scenario, Vanuatu will experience a temperature increase ranging between 0.7 and 2.0 °C by 2070 relative to a 1986-2005 baseline (CSIRO and SPREP, 2021a: i). Days with extremely high temperatures are expected to rise (VMGD, BoM and CSIRO, 2015: 7).
- Drought Future droughts are projected to potentially become more extreme (Van-KIRAP, n.d.: 4)
- Rainfall Whether the climate will become wetter or drier depends on how the South Pacific Convergence Zone changes, which is uncertain (CSIRO and SPREP, 2021a: i.). More extreme rainfall is expected (VMGD, BoM and CSIRO, 2015: 8).
- Sea level rise and ocean acidification Projections show that under a high emission scenario, sea level rise will range from 0.5 m to 1 m in 2090, with projections for a lower emission scenario not much different (CSIRO and SPREP, 2021a: ii). This sea level rise is expected to result in saltwater intrusion into aquifers as well as coastal inundation and erosion (CSIRO and SPREP, 2021b: 67). Further, continued ocean acidification is expected (VMGD, BoM and CSIRO, 2015: 7).
- Cyclones While tropical cyclones might decrease in numbers over this century, they are likely to become more intense with more devastating impacts due to heavier rain and more coastal inundation due to sea level rise (CSIRO and SPREP, 2021a: ii).

Figure 2. Losses and damages and institutional developments in Vanuatu



Sources: UNCTAD, 2020; UNICEF, 2023b; Bartlett, 2023; Waiwai et al., n.d. pp. 3. See also this DIIS Working Paper.

Loss and damage status and projections

This section outlines Vanuatu's main previous and projected losses and damages.

Economic losses

UN ESCAP estimates that Vanuatu will incur losses amounting to on average about 200 million USD every year from cascading risks under a moderate emission scenario (UN ESCAP, 2022: 7). This makes it the Pacific small island state that is estimated to incur losses amounting to the highest percentage of its GDP at about 22% (under RCP 4.5) (ibid.). A severe example is Cyclone Pam in 2015, which is estimated to have caused almost 580 million USD in damage, equivalent to approximately 60% of the country's GDP (Adil et al., 2025: 13).

- Agriculture Agriculture is very important for both subsistence and export (UNCDF, 2020: 10; World Bank, 2021: 2, 14). Much of the cultivated area is coastal, and therefore sea level rise and saltwater intrusion are significant threats (UNCDF, 2020: 11; World Bank, 2021: 2, 14). Reduced freshwater availability, changes in growing seasons and increases in pests and diseases are also projected to harm agricultural production (UNCDF, 2020: 11). Further, cyclones cause significant losses: In March 2023, two cyclones caused over 120 million USD of damage to agriculture and related subsectors (FAO, 2023: 1).

- Reef resources and fisheries Projected changes to coastal environments include coral reef deterioration and ocean acidification (UNCDF, 2020: 11). Severe coral bleaching events have already occurred and are projected to occur across the reefs of Vanuatu (Maynard et al., 2018: 8-14,16-17). This may have drastic consequences since reef resources, including fish, are critically important for communities' livelihoods and attract tourists (ibid.: 3). Further, increased extreme weather is also projected to negatively impact fisheries (ibid.: 11).

- Tourism Tourism and travel are important and growing industries in Vanuatu, making up 35-45% of GDP (UNCDF, 2020: 11). However, they are very dependent on ecosystems both on land and in sea, and therefore highly vulnerable to extreme weather events, coastal erosion and damage to marine ecosystems (ibid.). An example is the significant diving sector, which is threatened by loss of reefs and coastal erosion (World Bank, 2021: 16). Damage to accommodation facilities due to cyclones are also a threat, as exemplified by cyclone Pam which caused 87 million USD of damage to the tourism sector, mostly to accommodation (UNCDF, 2020: 11).

- Infrastructure Since a very high proportion of settlements and infrastructure in Vanuatu is situated within a kilometre of the coast, sea level rise is expected to cause drastic and costly losses and damages to infrastructure and housing (CSIRO and SPREP, 2021b: 67).

Non-economic losses

Climate change has already had negative effects across the following non-economic areas:

- Cultural heritage and traditional knowledge There are extensive losses to cultural heritage, including ways of life, customs, and traditional knowledge and

practices. An example is loss of traditional weaving materials, which undermines the reproduction of cultural practices (Stephens et al., 2022: 3)

- **Sense of place and home and social cohesion** Cyclones and sea level rise ruin houses and community infrastructure and force people to abandon their homes and communities leading to a loss of a sense of place and home. Further, disasters have ruined traditional landmarks which has led to land disputes and thereby a loss of social cohesion (Stephens et al., 2022: 3).
- **Territory, environment and biodiversity** Loss of reefs, coastal lands, biodiversity and more lead to a loss of knowledge about and connectedness with land and ocean. These are very severe losses for communities organised around subsistence agriculture and fishing, where identity, culture and environment are deeply linked (Stephens et al., 2022: 3-4; Waiwai et al., n.d.: 3-4).

Loss and damage policy, institutions and response

This section provides an overview of the main policies, institutions and praxis in relation to loss and damage in Vanuatu.

Loss and damage is an important and rapidly evolving policy area in Vanuatu. The small island state has been a key player in the effort to pursue compensation for climate-induced loss and damage from the start of international climate negotiations (Wewerinke-Singh and Salili, 2020: 683-86). Alongside the country's international efforts, Vanuatu has also been developing domestic loss and damage policies and institutions.

Policies

Loss and Damage Policy and Implementation Roadmap In mid-2025, the government released its first overarching policy on loss and damage. The policy outlines priorities across areas of governance, assessments, programmatic approaches, actions to address economic and non-economic impacts and extreme, rapid and slow-onset events, climate mobility and more (MoCC, 2025). Further, it includes an overarching roadmap that outlines whether and how a specific policy priority has or will been financed and the responsible authority (ibid.: 124-145). Importantly, the policy also outlines measures to both increase domestic financing for loss and damage and to attract further international finance (MoCC, 2025: 90-92).

CCDRR Policy An important policy that has advanced work on loss and damage is the Climate Change and Disaster Risk Reduction Policy (CCDRR Policy) updated in 2022, which includes a section on loss and damage with specific policy goals (MoCCA, 2022: 27-28.). Overall, these include developing a loss and damage implementation framework, promoting assessment efforts and quantifying losses, determining key sectoral issues, mainstreaming loss and damage into land and relocation policies and more (MoCCA, 2022: 27-28). In the policy, the government emphasises the importance of integrating disaster and climate work across governance areas and levels as an important part of their decentralised approach (MoCCA, 2022: 4).

NDC Vanuatu's updated NDC from 2022 also includes specific targets related to loss and damage (Government of Vanuatu, 2022: 35-37). These overlap quite a bit with the priorities outlined in the CCDRR policy. They include commitments on assessing

potential and actual loss and damage; ensuring climate-resilience when constructing infrastructure and designing development projects; implementing climate insurance; addressing needs of people affected by or at risk of displacement and more (ibid.). However, 8 out of 12 targets are set at 100% conditionality and the rest at 90%, indicating an overwhelming need for international financing to actualise these commitments (ibid.).

Vanuatu has also developed policies on disaster- and climate-related displacement, social protection and financing of disaster risk (MoCC, 2025: 29), all showcasing the rapid advancement of loss and damage policy in the highly exposed country.

Institutions

The National Advisory Board on Climate Change and Disaster Risk Reduction
Policymaking on and governance of disaster risk reduction and climate change are integrated under one governing body, the National Advisory Board on Climate Change and Disaster Risk Reduction (NAB), established in 2016 (MoCC, 2025: 26). The NAB includes representatives from civil society and the private sector and officials from different areas of government, including the director responsible for area and sub-national government across provinces (ibid.). Under the NAB, there is an Informal Working Group on Loss & Damage, also composed of diverse members, which oversees the development of all policies, programmes and projects related to loss and damage. Decisions from this group must be endorsed formally by the NAB (ibid.).

Department of Climate Change The Department of Climate Change was established in 2016 under the Ministry of Climate Change and Natural Disasters. It is responsible for implementing and coordinating all work on adaptation, disasters risk management and mitigation (DoCC, n.d.), and is thus a central authority on work related to loss and damage.

Practice

Currently, loss and damage efforts are mostly linked to disaster assessments and response, as well as climate change adaptation and resilience. National establishment of a dedicated loss and damage policy has yet to be reflected in dedicated sub-national institutions and efforts. However, there are extensive local initiatives and response efforts, both through state structures, community-led efforts and those supported through international and domestic NGOs. There is thus a great diversity of actors involved in loss and damage related efforts in practice.

Institutional diversity and fragmentation are evident in assessment of climate impacts and risks. These are carried out by diverse actors, often lack complementarity, and are not compiled centrally or systematically (MoCC, 2025: 55). To more effectively plan across sectors, a centralised national system for monitoring and reporting on disasters and climate-related loss and damage is a key priority of the government (ibid.: 58-59). Recent efforts include a 2025 Memorandum of Agreement for climate data sharing across government agencies including the Department of Climate Change, the Vanuatu Bureau of Statistics, the Civil Aviation Authority Vanuatu and the Department of Energy. It will support Vanuatu's Measuring, Reporting and Verification (MRV) system and integrated data commitments for National Sustainable Development Plan (NSDP), the National Adaptation Plan (NAP) and UNFCCC reporting commitments (DoCC, 2025b).

International engagement

Vanuatu has been very active in international climate negotiations. Despite lengthy processes with highly diverging stances across countries and negotiating groups, it has recently led to a concrete result for Vanuatu. In 2024, a technical assistance programme was established for Vanuatu under the Santiago Network and embarked upon in late 2024 (Roberts, 2024). Vanuatu is the first country ever to start this process. The amount of 330,000 USD has been reserved for the design of a nationally determined loss and damage programme intended to be the basis for an application for funding through the FRLD (ibid.).

Vanuatu has also been engaged in efforts to further climate action and compensation through legal measures under the International Tribunal for the Law of the Sea (ITLOS), the UN International Court of Justice (ICJ) and the International Criminal Court (ICC) (MoCC, 2025: 9).

Donors and international organisations play a large role in supporting work on loss and damage and on climate change more broadly in Vanuatu. In Vanuatu's overarching loss and damage policy from 2025, New Zealand, Germany, Canada and the UK are listed as donors on loss and damage work which is already underway (MoCC, 2025: 100-101). Further, international organisations like the UNDP provide important relief after disasters (Khan, 2025).

Vietnam

Development and climate profile

Vietnam is a rapidly developing low-middle income country (World Bank, 2025a) and is often classified as highly vulnerable to climate change (UN ESCAP, 2025b; WBG and ADB, 2021). The country has undergone significant socio-economic transformations over the past decades, transitioning from one of the poorest countries globally to a middle-income economy in mere decades (World Bank, 2025a). GDP was over 476 billion USD in 2024, compared to some 147 billion USD in 2010, and per capita income increased from roughly 1,680 to 4,720 USD in the same period (World Bank, 2025b).

Rapid development

In 1975, the economy was centrally managed with limited international trade and a domestic non-market socialist system. At this time, after decades of war, the population experienced widespread poverty and food insecurity. Reforms towards a 'socialist-oriented market economy' in 1986 marked a turning point and included trade liberalisation, deregulation and substantial investments in human and physical capital (World Economic Forum, 2018). From 1989 to 2023, more than 40 million people were lifted out of poverty against a current population of some 100 million (QDND, 2024; World Bank, 2025b). In recent years, economic growth and poverty reduction have continued, though temporarily slowing under COIVID-19 (World Bank, 2022). Gains are projected to continue in the coming years, and the country aspires to attain high-income status by 2045 (Nguyen and Espagne, 2024).

Vietnam has employed a resource-intensive development pathway and now faces significant environmental challenges, including deforestation, resource degradation, biodiversity loss and air and water pollution, as well as heightened emissions (World Bank, 2025a). This has prompted a policy shift towards sustainability and renewable

energy, which is carried through in sector planning, for example in agriculture including low-emissions production, reduction in pesticides and a focus on quality rather than quantity.

Climate change

Vietnam spans both tropical and temperate climate zones and experiences an annual monsoon season of heavy rains which varies by region: from May to October in the north and south, and from September to January in central areas (WBG and ADB, 2021). Annual rainfall is quite high, in some provinces reaching over 2200 mm annually, concentrated in the monsoon season. Temperatures also vary by region and elevation. In the north, annual mean temperatures reach some 25°C, while in the south they are over 30°C (ibid).

Vietnam is subject to far-reaching current and projected climate impacts. Current impacts include:

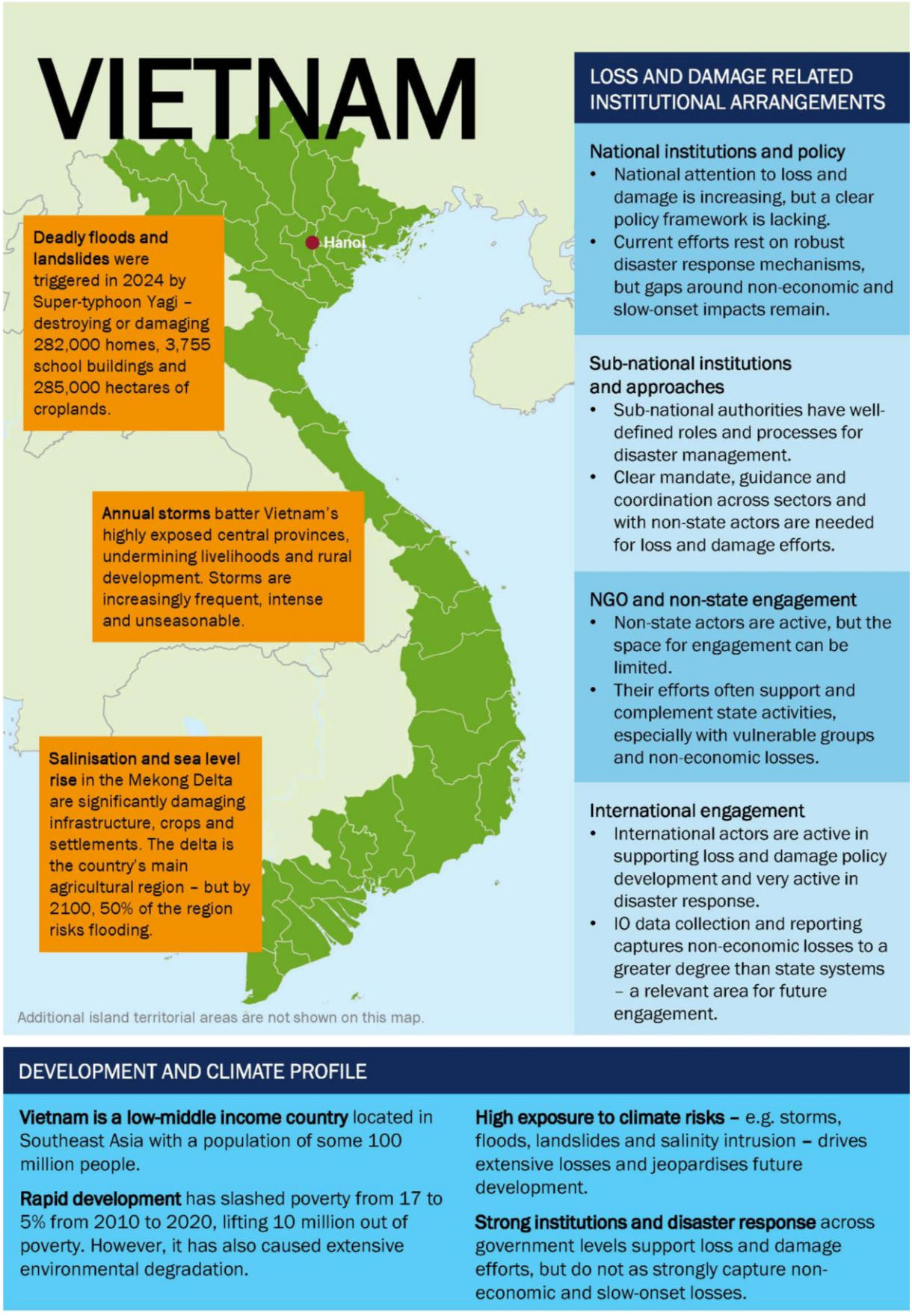
- **Extreme weather events** Typhoons, floods and droughts – the most destructive climate hazards in Vietnam – are becoming more frequent and intense (UNDP, 2025).
- **Rising sea levels, salinisation and coastal erosion** These have far-reaching impacts in Vietnam, with extensive coastal and low-lying areas. The latter two can also be shaped by local drivers such as sand mining and high groundwater use (Hai et al., 2025).
- **Intensifying rains** Extreme rains contribute to flash floods and landslides, especially in mountainous areas (see e.g. VMSA 2024).
- **Temperature, rainfall and seasonal fluctuations and extremes** These are also increasingly common and can be highly disruptive in sectors from agriculture and rural livelihoods to human health (Tran-Anh et al., 2022).

By 2100, Vietnam could see temperature rise by up to 4.2°C under high emissions scenarios and notable increases in annual rainfall, with significant seasonal shifts (Tran-Anh et al., 2022).

The country's existing climate, geography and development enhance exposure and vulnerability to climate change. Vietnam's extensive coastline and concentration of population, investment and production in coastal and lowland areas entails severe exposure to a variety of climate events. Additionally, already high temperature and rainfall mean that further extremes can be difficult to adapt to and manage. For vulnerability, some lower income groups are highly affected by climate change due to their reliance on agriculture and natural resource-based livelihoods. This includes in marginal highland areas where there are extensive ethnic minority groups that remain among the poorest in the country. Further, the country's deltas, coastlines, lowlands and mountainous areas all face diverse risks.

Climate changes will thus intensify existing vulnerabilities and necessitate comprehensive adaptation efforts (World Bank, 2022) tailored to diverse regional and sector-based needs. Ultimately, Vietnam's target of attaining high income status by 2045 is jeopardised by intensifying climate impacts (Nguyen and Espagne, 2024).

Figure 3. Losses and damages and institutional development in Vietnam



Sources: World Bank, 2025a and 2025b; Viet Nam News 2024; Phuong et al. 2024. See also this DIIS Working Paper.

Loss and damage status and projections

This section outlines Vietnam's main previous and projected losses and damages.

Economic losses

Vietnam faces severe economic impacts from climate change, costing up to 1.5% of its GDP annually (CFE-DM, 2025). Disasters alone are estimated to cost 2.4 billion USD annually (WBG and ADB, 2021), with a year-on-year increase of almost 13% (GoV NDC, 2022). Typhoon Yagi in 2024 caused 3.3 billion USD in economic damages, affecting industrial hubs, farmlands, homes and infrastructure (UNDP, 2025). Future projections suggest climate change could slash Vietnam's GDP by over 14% annually by 2050 without robust adaptation measures (World Bank, 2022).

These costs are increasing as climate change, Vietnam's development level and exposed assets and infrastructure all increase.

- Agriculture and fisheries Agriculture is often identified as the most affected sector in Vietnam in relation to economic losses and damages (GoV NDC, 2022). Droughts, floods, storms, salinity intrusion and increasingly irregular seasons are disrupting agriculture across regions – including crop and livestock production, fisheries and aquaculture (UNDP and FAO, 2021; WBG and ADB, 2022). The economically significant Mekong Delta (World Bank, 2022) is particularly affected in total losses, while other regions, for instance the Red River Delta and North Central Coast, suffer a high share of losses in total production and incomes.

- Infrastructure Infrastructure in Vietnam is highly affected by climate change, including transport, energy, schools and health infrastructures. Extreme weather events lead to costly rebuilding, repairs and maintenance, with coastal areas particularly affected (GoV NDC, 2022; UNDP, 2025). Potential future losses are expected to be severe, even after adaptation efforts. For transport, a one-meter sea level rise would inundate 9% of national highways and 12% of provincial roadways (GoV NDC, 2022), causing major initial losses as well as cascading losses.

- Tourism Tourism is a rapidly growing sector in Vietnam. It is important for economic growth and local livelihoods but is also highly affected by climate change and loss and damage related to storms, damage to coastal infrastructure, coastal erosion and environmental degradation, for instance of coral reef ecosystems (GoV NDC, 2022; Ngoc, 2019).

Non-economic losses

Beyond economic tolls, Vietnam suffers extensive non-economic losses including loss of life, health, cultural heritage and displacement (UNDP, 2018). The government updated its first Nationally Determined Contributions (NDC), including integrating loss and damage (UNDP, 2018). The updated NDC states: 'Although it is difficult to quantify non-economic losses, they are likely to be higher than economic losses' (GoV NDC, 2022).

- Health Physical and psychosocial health impacts are diverse and widespread. Hundreds die annually due to disasters, and projections include tripling heat and increasing disease-related deaths linked to climate change in the near future. The poorest segments of the population will likely be most affected (WBG and ADB, 2021). Vietnam's major cities of Hanoi and Ho Chi Minh City are among the

highest risk cities globally in terms of deadly heat (ibid). Persistent disaster risk and tangible losses of homes and livelihoods place enormous strain on families and their mental health (GIZ, 2022).

- **Education** School attendance is affected by evacuations and loss and damage to school buildings and infrastructure from extreme climate events. For example, Hurricane Yagi in 2024 disrupted school for 830,000 students, with over 2,000 schools destroyed (VMSA, 2024). Climate-related pressure to livelihoods may also contribute to decisions among poorer families to withdraw children from school to support income-generating activities. Marginal areas and ethnic minority groups may face particular challenges (Weng et al., 2020).

- **Human mobility** Vietnam has already undertaken relocations away from coastal areas, moving entire villages (Lindegaard, 2020), and millions are likely to be affected by projected sea level rise (WBG and ADB, 2022). Additionally, evacuations and displacement due to extreme events are common and can be of large scale – in 2024, 130,000 were pre-emptively evacuated ahead of Typhoon Yagi (VMSA, 20204). Repeated evacuations or displacements are highly disruptive for communities. Further, climate change can influence proactive migration as well as immobility (GIZ, 2022).

- **Cultural heritage** Climate change is affecting cultural heritage sites, including major sites such as Hoi An on Vietnam's coast (Thinh et al., 2019) as well as local temples and shrines. Additionally, traditional knowledge and practices are affected, for instance traditional agricultural practices (GIZ, 2022).

- **Environmental degradation** Environmental degradation and biodiversity loss are not well-measured but thought to be widespread. Some coastal and coral ecosystems are clearly documented as acutely depleted, with climate change as one main driver (Ngoc, 2019).

Loss and damage policy, institutions and practice

This section provides an overview of the main policies, institutions and praxis in relation to loss and damage in Vietnam.

Losses and damages in Vietnam are extensive but have not been prioritised as a stand-alone policy area. Instead, they are incorporated into climate and especially disaster policy and response efforts, which are well-developed in Vietnam, with strong institutions from national to village levels. These institutions build on extensive experience with disaster response in a country that experiences several extreme events annually, as well as on extensive donor support to the development of climate change policy since the 2000s (Zink, 2013). Policy direction is set by the national level, while area-specific planning and implementation are decentralised to sub-national levels.

Policies

Law on Natural Disaster Prevention and Control (2013) Until recently, losses and damages were largely assessed and addressed through natural disaster institutional frameworks, specifically through this law, with more specific guidance through the Joint Circular 43/2015/TTLT-BNN-BKHDT from the Ministry of Agriculture and Rural Development and the Ministry of Planning and Investment's Guide for statistics and

evaluation of disaster damage. These provided guidance for Vietnam's extensive disaster reporting systems. Changes to these processes are underway in connection with state restructuring in 2025.

Law on Environmental Protection (2020) This law marks the first explicit mention of losses and damages in Vietnamese law and includes specific focus on assessing impacts. Loss and damage is subsumed under adaptation, so is not currently developed as its own policy area. This law is supplemented by the **Circular Detailing the Implementation of a Number of Articles of the Law on Environmental Protection (2023),** which provides implementation guidance, though still at a fairly general level. This includes a qualitative assessment of losses and damages at sub-national levels.

National Strategy on Climate Change to 2050 (2022) The strategy prominently features loss and damage in its overall target: "to adapt and mitigate the losses and damages from climate change proactively and effectively reduce greenhouse gases" (GoV PM 896, 2022: 2).

Updated NDC (2022) Vietnam's updated NDC includes a description of losses and damages, which was not mentioned in the original version. The 2025 NDC has not yet been published.

Viet Nam NAP Vision to 2050 (2023) Vietnam's NAP also mentions loss and damage, including the need to train government staff to respond to losses and damages.

Institutions

Ministry of Agriculture and Environment This is a newly created ministry combining the Ministry of Agriculture and Rural Development (previously with a major role in relation to disasters) and the Ministry of Natural Resources and Environment (previously responsible for climate change). The MAE therefore combines these areas of responsibility, and it is expected this will improve alignment between disaster and climate-related efforts, with relevance for loss and damage.

National Civil Defence Steering Committee This high-level inter-ministerial national level body is the main decision-making body on disaster and civil defence. It was established in July 2025 as part of recent government restructuring, combining the former National Committee for Disaster Prevention and Control, the National Committee for Disaster Response and Search and Rescue and the National Civil Defence Steering Committee, and is under the Ministry of Agriculture and Environment.

Sub-national Committees for Civil Defence (previously Committees for Flood and Storm Control) at provincial and municipal levels are similar to the national committee, with a broad representation of line ministries and government agencies. These committees are responsible for coordinating disaster preparedness, reporting and response at their levels and reporting upwards to higher levels.

Mass organisations are socio-political organisations in Vietnam that link state and citizens, mobilising the population in line with government efforts. These include the Women's Union, Youth Union and Farmers' Union, [1] which are active in disaster preparedness and response across levels, including in Committees for Civil Defence.

[1] From 1 July 2025, socio-political organisations and mass associations entrusted with specific mandates by the Party and the State were integrated into the Vietnam Fatherland Front following Resolution 60/NQ-TW dated 12 April 2025,

International engagement

Domestically, Vietnam engages with international organisations in the development of knowledge, policy and programming related to loss and damage. This is particularly through collaborations with GIZ and UNDP Vietnam.

Internationally, Vietnam's climate diplomacy has previously not focused heavily on loss and damage or climate impacts, but to a greater extent on mitigation. However, Vietnam may have experience that could be relevant to share with other country governments.

Practice

In practice, Vietnam's loss and damage assessment, reporting and response efforts remain closely tied to disaster response efforts. In addition, both disaster management and climate resilience efforts are integrated into sector planning and socio-economic development planning, though this varies in quality and effectiveness. However, aspects of loss and damage not clearly captured in disaster, adaptation or resilience efforts are not well assessed or addressed. This is true of slow-onset impacts, and especially for non-economic losses.

Government restructuring has entailed changes in institutions and responsibilities, including a reframing of the disaster committees across government levels to broader civil defence committees. This entails a broadening of their responsibilities to include non-environmental disasters. The importance of disaster management efforts have also been emphasized during the restructuring, and the change may improve coordination (VMSA, 2024).

Finally, while non-state actors are active in loss and damage related efforts in policy and on the ground, there is limited space for non-state engagement or input mechanisms to formal processes. Some of the needs in terms of loss and damage, particularly non-economic losses and damages, could benefit from civil society engagement with highly vulnerable groups and aspects of culture, knowledge and traditional practice outside of typical state purviews.

ASSESSMENT: LOSS AND DAMAGE INSTITUTIONAL DEVELOPMENTS

Institutional developments related to assessing and addressing loss and damage are occurring rapidly in different country contexts, reflecting needs on the ground, developments at international level and developments in domestic contexts.

This section provides insights into institutional developments in Somalia, Vanuatu and Vietnam, including: (1) status of institutional arrangements and praxis; (2) data and reporting systems; (3) capacity status and gaps; and (4) learning and scaling successful practices. It is based on original primary data, specifically interviews with and written questionnaires from key state and non-state stakeholders from local to international levels.

the 11th Plenum of the 13th Central Committee of the Communist Party of Vietnam. That integration gives the Vietnam Fatherland Front the central responsibility for resource mobilisation and coordination of support for loss and damage among these organisations.

Somalia

Status of institutional arrangements and praxis

Respondents describe that loss and damage governance in Somalia generally remains at an early stage in its development, reflecting the general weak institutional architecture and capacity problems that characterise governance in Somalia. Loss and damage has been included in some important policy documents, for example the most recent NDC, but there is no stand-alone policy on loss and damage.

Work related to loss and damage is currently centred around disaster management due to the frequency and severity of droughts and floods, which have led to some important efforts to improve forecasting systems, early warning systems and anticipatory action by the government with significant donor support. However, critically low levels of funding, especially at the state and local level, are seen to hinder effective institution building, leaving significant gaps in both technical and human resources at these levels. Disaster response and preparedness remain heavily reliant on international actors and donor support.

A significant barrier to effective government response is weak links and coordination mechanisms between state levels, especially between the federal government and state governments. There is large variation in how this coordination is described by officials from different state-level ministries, which indicates that relations between the levels vary quite a lot from state to state with strong links between some states and the federal level, and weaker links elsewhere.

NGO representatives and experts highlight the negative influence of volatile funding streams, shifting political leadership and for some states, conflict between the federal level and state level, on coordination across levels. Further, according to IO representatives, NGO representatives and experts, existing institutional mechanisms for coordination across state levels typically do not lead to real bottom-up influence on national policies and planning. According to them, most work on loss and damage happens at the federal level without influence from and coordination with state ministries, which lack technical knowledge and capacity on the area, although they hold significant understanding of local contexts and challenges.

Officials from across government levels and non-government actors (NGO, IO, experts), express a common call for significant capacity development at the state level and creation of linkages between levels so that roles and responsibilities are clearly defined and feedback mechanisms are created. Currently, the Federal Somali Disaster Management Agency is working to advance coordination by establishing a national coordination platform with both key ministries and civil society. However, this still leaves significant technical capacity gaps and funding gaps at the state and local level, as elaborated further below.

Regarding participatory governance, significant gaps also remain, even though efforts to further inclusion are being made. Officials at the federal and state levels highlight that vulnerable groups and local actors are oftentimes consulted and included in policy and planning processes, while there is also some focus on including traditional and indigenous knowledge. However, officials also highlight that this inclusion is not consistent across different areas and sectors and is limited by resource constraints and often does not reach the most remote communities. From the perspective of NGO representatives, government engagement with local communities and vulnerable groups

is very limited. They point out that consultation processes do occur, but insights usually do not travel across governance levels and do not influence policy processes in significant ways. Institutionalisation of inclusion processes as well as capacity building and training with vulnerable groups are proposed as central avenues for advancing participatory governance.

Regarding engagement with non-state actors, interviewees from NGOs, government agencies and international organisations agree that there is a strong presence of and collaboration with international organisations, especially UN organisations. However, engagement with NGOs and CBOs is reported to be less prominent, although the new Area-Based Coordination Committees (ABCs) initiative is improving coordination with civil society. The UN has also supported the establishment of a cluster system, where actors working on a specific sector (e.g. food security, health) coordinate. Still, a general issue raised by interviewees is a lack of coordination and communication among actors, sometimes leading to duplicated, parallel efforts and a lack of government oversight. Further, some initiatives by international actors, even when well-coordinated, can perpetuate aid dependence, since they in many cases do not contribute to building the capacity of state institutions.

BOX 1. SOMALIA STAKEHOLDER PERSPECTIVES: STATUS OF INSTITUTIONAL ARRANGEMENTS AND PRAXIS

In theory, they're [government efforts across levels] integrated. But in practice, they're not. Because federal institutions don't have the capacity to ensure enforcement…and then this is further complicated by conflict between federal and state structures. Already, two of the federal states have called off collaboration with the national government all together. So, the federal level cannot dictate anything to the state, and this creates a big problem. – *National non-state actor*

It's there, but it's not well-coordinated because you can see a number of international organisations and national organisations who implement projects directly without even consulting the government. And the government has its own challenges. Rather than welcoming civil society representatives, they will say that 'this is my work' and question what they are trying to do, so this brings lots of challenges. – *National non-state actor*

This capacity development has to be more than just donor-driven. And they have to look at the long run. It's not just about implementing this policy now, but what will this look like 10 years from now, 15 years from now? Because that is where the biggest fragility is. If the World Bank pulled out today, for example, then the policies will just gather dust, because at the moment, the government and government institutions do not have the capacity to be able to, you know, to align and actually implement any of these policies and plans. So, for me, the biggest recommendation would be capacity building, and not just building capacity at a national level, but making sure that that is mirrored at the sub-national and local level. These systems feed off each other and support each other. – *National non-state actor*

Data and reporting systems

Government-led data collection related to loss and damage in Somalia is currently centred on Post-Disaster Needs Assessments (PDNAs) after large-scale disasters. After a

major drought or flood has occurred, the Somali Disaster Management Agency (SoDMA) requests technical assistance from the World Bank, the EU and the UN. SoDMA then carries out a PDNA with their assistance, using a specific loss and damage tool (supported by the World Bank and EU) to assess and quantify economic losses in crops, livestock, livelihoods and infrastructure, as well as 'critical infrastructure', such as damages to hospitals, schools, etc. For non-economic losses, the PDNAs include some data collection on health and displacement, but there are significant gaps, for instance mental health, biodiversity/ecosystem services, as well as cultural heritage. After more local, limited disasters have occurred, respondents indicated that only limited data is collected. This indicates a lack of comprehensive loss and damage data for smaller, local disasters. Further, the government also regularly conducts drought needs assessments which include some loss and damage relevant information.

Interview responses indicate that partners such as the WFP, WHO and IOM also collect data relevant to their mandates and share it with the government, and that data is shared within the clusters, which is also shared with the government. However, representatives from IOs point out that there is a lack of a systematic data sharing system with clearly defined data pipelines from the local to the national level.

Interviews with officials at the state level indicate major variation in data collection capacity across states. Some lack technical and human capacity for detailed loss and damage assessment, while others have stronger capacity and more adequate tools. A common issue, however, is the lack of well-developed infrastructure or processes for information sharing between state levels.

BOX 2. SOMALIA STAKEHOLDER PERSPECTIVES: DATA AND REPORTING SYSTEMS

For loss and damage, you sort of need a comprehensive dataset, but that is something that is not there. – *National non-state actor*

When a major flood or drought occurs, SoDMA writes an official letter to its partners requesting that a PDNA be conducted and then the World Bank, European Union and UN respond to this call by providing technical assistance with the assessment. Then data collection is conducted using the loss and damage assessment tool so that the resulting report captures the loss and damage across different sectors, including economic/cost estimates. Typically projects are then developed on the basis of the information provided by the PDNA. – *National state actor*

I have not seen a structured reporting system or platform that could be used, e.g. where you could log in and input your data. It's more reactionary, when a disaster has occurred. We have clusters, like the food security cluster, logistics cluster. There is a level of reporting that occurs within the clusters. This is also submitted to the government. Whilst there is a reporting system, it needs more structure, more building up to become robust, and more channeled, so clear channels of how the data flows from the local level until it reaches the government.
– *International actor*

Capacity status and gaps

Overall, interviews indicate significant gaps in technical capacities for forecasting, early warning, anticipatory action and climate data sharing, especially at state and local levels. Work is still underway to create a national meteorological agency as a central authority on the area, which should reduce current fragmentation in observing systems (for meteorology, climatology and hydrology). Recently, there has been significant donor engagement and IO support to improve forecasting and create early warning systems and improve anticipatory action, which has led to better capacity in this area, though mostly at the national level. Officials at the state level indicate varying capacities, for instance one state official highlighted the limited coverage and functionality of existing early warning systems. Expert sources indicate that early warning systems are not sufficiently localised, with data generated mostly at the national level with limited accuracy at the local level. Another state official highlighted a lack of essential tools for weather forecasting, climate monitoring and more. This underlines the need for investment in technical capacity for forecasting and early warning at the state and local levels. Another significant issue is a lack of sharing of climate data across sectors due to ministerial silos and a lack of technical capacity.

Regarding human resources, efforts have been made to build institutional and staff capacity, yet notable gaps remain across government levels. Gaps are most severe at local (district) and state levels, while the national government receives more funding and therefore has better capacity. At the national level, a lack of expertise on turning knowledge into robust policy (expert policy advisors) was highlighted. At the district and sub-national level, human resource capacity constraints stem from severely low levels of funding, which result in a lack of ability to hire expert staff, to retain staff and to offer the relevant training, knowledge and tools.

The same tendency for lower capacity at more localised levels exists in the NGO sector, where international NGOs in general have more funding, expertise and staff in comparison with domestic NGOs, who often rely on international NGOs for support. At both local NGO and local government levels, general knowledge about climate change and more specifically loss and damage is often lacking. In terms of sector, almost all sectors were mentioned by interviewees as suffering from human resource capacity constraints. Still, Natural Resource Management was highlighted by multiple interviewees as the sector most lacking in adequate capacity.

BOX 3. SOMALIA STAKEHOLDER PERSPECTIVES: CAPACITY STATUS AND GAPS

Not only agriculture but other sectors also need consistent climate data. But with us, the problem is that we don't have meteorology agents. So sectors which need specific climate data have to install some stations to capture it. So most of them lack these data sources. As such, climate data is not well integrated at all in Somalia. It's only now that we are thinking about establishing a stand-alone agency that deals with meteorology. – *National state actor*

Capacity comes to whoever accesses the funds. – *National non-state actor*

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*

Learning and scaling successful practices

Insights from interviews on scaling successful practices within the government mirror insights from earlier sections. Resource and funding constraints and a lack of bottom-up governance generally limit communication and scaling of successful practices from local to national level, despite national government ambitions to build on local experiences. There are many positive examples of local programmes or community-led initiatives, but they are rarely scaled. However, due to the frequency of disasters and a rise in climate change assessments (conducted in collaboration between government and external actors), there is some learning occurring over time, with learnings from previous disasters influence responses to the next.

Some positive learning and scaling practices have been driven by UN agencies, who have worked to promote the replication of successful local practices, as elaborated in the first quote below. However, a domestic non-state actor highlights that changing and diverging donor agendas often hinder the replication of successful practices, since programme approaches promoted by one donor might not fit with the priorities of others despite positive outcomes. Further, there is a lack of collaboration between humanitarian and development groups (SomReP and BRCiS), who share learnings internally but not with each other, as elaborated in the last quote in the box below.

BOX 4. SOMALIA STAKEHOLDER PERSPECTIVES: LEARNING AND SCALING SUCCESSFUL PRACTICES

Over the years, several UN agencies have played a crucial role in supporting the institutionalisation and replication of successful local practices. Notably, UNDP has been instrumental in capacity building and governance support, particularly in Somali national disaster management policy at regional levels. OCHA has facilitated coordination and information sharing among humanitarian actors, which has helped streamline effective practices across different regions. Additionally, FAO and WFP have supported livelihood and resilience programmes that have been scaled from local pilots to broader areas. These collaborations have allowed us to adopt and adapt models that are proven to work in the Somali context. – *National state actor*

You know, even if a pilot project is introduced, then there needs to be a component of education and awareness raising on loss and damage for its value to be understood. Only then will other actors and entities be interested in scaling it. But so far, I haven't seen this. – *National state actor*

We are very good at piloting. But when it comes to documenting the successes from the pilots and then scaling, maybe not so much. – *National non-state actor*

I feel like there is a lot of lost opportunity for them (i.e. SomReP and BRCiS) to collaborate and build. If you look at what each of them have done, there are success stories, some of which are really great. But if they had, you know, collaborated or built together, you can just imagine how much bigger they would

be. Maybe instead of having both SomReP and BRCiS, we can have just one and be able to scale up from there. – *National non-state actor*

Somalia: Key takeaways

- **Relations between government levels** in Somalia are highly diverse, with functioning collaboration between some state governments and the federal government, and conflict and disconnect between other state governments and the federal level. In some cases, strained relations lead to a lack of consistent collaboration, policy alignment and integration across government levels.
- **Bottom-up loss and damage governance** is hindered by severe funding and capacity gaps at the state and district levels as well as weak and diverse collaboration mechanisms between government levels. These factors contribute to governance remaining centred at the federal level, despite valuable insights sub-nationally.
- **Technical capacity building at state and district levels** is urgently needed. Loss and damage efforts can be impeded by sub-national capacity gaps, linked to unreliable and inadequate funds, which limit technical and human resource capacity development, including staff attraction, retention and training. For instance, limited sub-national technical capacity hinders effective and coordinated forecasting and early warning efforts, which have been supported extensively at national level.
- **International organisations and donors** play a vital role in disaster response and preparedness in Somalia, and their contributions are important for addressing basic needs in many areas. Yet, their central role at times results in limited alignment with local actors, including community organizations, local NGOs, and government institutions, leading to parallel structures and reduced local ownership of interventions. Government-led capacity development across scales is needed to reduce dependence on outside actors and to promote more coordinated, long-term efforts to address losses and damages and create climate resilience.
- **Data collection on losses and damages** is currently centred on large-scale disasters and on economic losses, with significant gaps related to non-economic losses and smaller, localised disasters. Further, while some data sharing does occur both between government levels and with non-governmental actors, a more structured system for data sharing across actors and levels is needed, especially in a context where external actors are highly active in disaster-related data collection, reporting and response.

Vanuatu

Developments in institutional arrangements and praxis

Loss and damage is receiving extensive attention in national institutions in Vanuatu, reflecting the severe and existential nature of loss and damage. This is for instance under the government Department of Climate Change and dedicated programming

(DoCC, 2025a: 1). However, in practice, loss and damage efforts are still developing. Existing efforts are generally integrated into disaster management and climate change adaptation processes, entailing silos and gaps. Respondents indicate that current legal and institutional frameworks remain underdeveloped and insufficiently targeted to address loss and damage as a stand-alone issue; they point to the need for greater clarity, dedicated legislation and financial mechanisms for loss and damage specifically.

Going forward, Vanuatu is developing loss and damage as an independent policy area, rather than subsuming it under disaster or adaptation institutional arrangements and processes. This is through an effort to 'Identify novel institutional arrangements that take the nation beyond siloed systems of disaster and humanitarian response, climate change adaptation or development planning' (DoCC, 2025a: 1). It will include development of a long-term nationally determined programme to address loss and damage. Work on this began in 2025 with technical assistance facilitated through the Santiago Network (ibid.). Overall, the support has four key aims: developing a vision for addressing loss and damage; identifying capacity gaps; developing ways to share knowledge; build skills and raise awareness; and preparing a request for funding to the FRLD (MFA Denmark, 2025). An important step in developing new institutional arrangements is the new Loss and Damage Policy and Implementation Roadmap, established in 2025.

Coordination across levels of government is seen as fairly weak by state actors from different levels and also non-state actors, particularly regarding communication and coordination downward from national to sub-national levels. Respondents describe how sub-national levels send information or provide input upwards, without subsequent communication or insight into whether or how this information is used. Some actors indicate that national and sub-national levels at times actively work toward differing goals, rather than merely experiencing breakdown in communication or coordination. Respondents suggest establishing mechanisms downwards to communities to communicate decisions and policies as well as upwards to formalise and strengthen pathways for sub-national input into national policies and review. There are strong partnerships between state and non-state actors, including donors, IOs, NGOs and CBOs across levels.

Regarding participatory government, vulnerable groups or community representatives can formally engage in various ways through NGO-led consultations, the National Advisory Board on Climate Change and Disaster Risk Reduction (NAB), sectoral planning processes, Area Councils, Provincial Disaster Committees, and during assessments by the NDMO or donor agencies. However, this input is often informal with limited policy impact. Further, geographic and socio-economically marginal communities, youth, women, displaced and those with disabilities are not seen as well-integrated into planning and response efforts by community representatives. Local and traditional knowledge are not consistently integrated into state-led loss and damage efforts, but more often those of non-state actors. Respondents highlight the relevance of boosting engagement forms for marginal or under-represented groups and also communicating accessibly, e.g. through local languages.

BOX 5. VANUATU STAKEHOLDER PERSPECTIVES: STATUS OF INSTITUTIONAL ARRANGEMENTS AND PRAXIS

We can provide feedback through Provincial Disaster Committees, but often these suggestions are not reflected in final policies or actions. – *Sub-national state actor*

Local communities, especially in remote islands…are the first to face climate shocks. We need meaningful inclusion in decision-making, funding to build resilience, and clear support to preserve our traditional knowledge alongside modern solutions. – *Sub-national state actor*

Chiefs and elders still contribute, especially through church and custom groups. But their role is less visible in urban decision-making, and women's knowledge is undervalued…Engagement often goes through chiefs, municipal councils and NGOs. – *Sub-national non-state actor*

While emergency response coordination is comparatively well-developed, other areas, especially long-term loss and damage monitoring and policy feedback loops need significant improvement for effective multilevel governance. – *International actor*

Data and reporting systems

In Vanuatu, loss and damage data and reporting is integrated within disaster response and climate change adaptation reporting systems. These include National Disaster Management Office (NDMO) assessment processes, Post-Disaster Needs Assessments (PDNAs) and reporting through the Climate Division under the Ministry of Climate Change. Reporting occurs across all levels, from local, to sub-national and national, though respondents indicate that consistency and integration vary.

Respondents especially point to disaster-related data collection, specifically PDNAs, as the main data collection related to loss and damage. This data is collated and sent upwards: local and provincial-level disaster assessments feed into national reporting systems through the NDMO and sectoral ministries. However, data collection and integration is seen as reactive and event-based, rather than ongoing or systematised. In addition, long-term loss and damage trends are less consistently documented, as these are not well-captured in disaster-focused PDNAs. Losses and damages linked to slow-onset climate impacts are thus not well-captured.

Also, while the data collected includes data on both economic and non-economic losses and damages, economic data is more robust. Non-economic data collected includes on mobility and displacement; environments, ecosystems and biodiversity; health; and cultural heritage and traditional knowledge and practices. This suggests that while data collection may not be well-systematised, there are emerging efforts to capture non-economic losses to a greater extent than in other country contexts.

In order to strengthen data collection and reporting, respondents suggest the establishment of clearer protocols, an integrated monitoring and reporting tool accessible across levels, and data sharing frameworks that connect local assessments to national systems. For data coverage and quality, they point to the need for

strengthened capacity of sub-national provincial governments and Area Councils in documentation and reporting.

BOX 6. VANUATU STAKEHOLDER PERSPECTIVES: DATA AND REPORTING SYSTEMS

Economic data is more systematically collected, particularly following disasters. However, gaps remain in real-time tracking, verification and integration across agencies… Non-economic data collection is still evolving and often overlooked or inconsistently documented. There is a need for more structured tools and cross-sector collaboration… – *International actor*

There's a lot of data collected, but it's not clear how local stories or lived realities affect national climate decisions. – *Sub-national non-state actor*

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*

Capacity status and gaps

Regarding technical capacity, existing systems have been built up largely around disaster response. There are strengths in national early warning systems as well as post-disaster needs assessments, though these continue to be improved. Gaps exist in assessing losses and damages linked to slow-onset climate changes, and respondents indicate the lack of systems for inter-agency or cross-sectoral data sharing, real-time and locally specific data collection, and anticipatory action. In addition, there are limited technical capacities to analyse gathered data for subsequent planning and decision-making. This severely limits the utility of data collected.

Regarding human resource capacity, respondents describe stronger capacity nationally and on more central islands. Outer islands especially lack trained staff and have limited resources for response and coordination. However, dedicated staff are lacking across government levels. IOs and donor engagement on a project basis may also limit their understanding of and alignment with national systems and priorities. Particularly critical sectors highlighted by respondents were health, food security, agriculture, natural resource management and infrastructure. Respondents describe that human resource issues are linked to intertwined governance and financial resource issues, including lack of clear roles and resources for local response. There is also some dependence on NGOs to fill some of these gaps, resulting in patchy capacity and response.

BOX 7. VANUATU STAKEHOLDER PERSPECTIVES: CAPACITY STATUS AND GAPS

There are competent individuals, but systemic capacity gaps limit effective loss and damage governance and implementation. – *International actor*

We've improved speed of assessment after disasters, but communities still need help with preparedness. Anticipatory systems are not in place… [Technical systems are] decent during emergencies, but underdeveloped for prevention and resilience. – *Sub-national state actor*

[There are] few trained staff in rural areas. NGOs lead but can't reach everywhere. – *Sub-national non-state actor*

Learning and scaling successful practices

Respondents indicate limited opportunities as well as barriers to learning and scaling. Positive examples of learning and scaling often involve collaborations between state and non-state actors. For instance, respondents report that NGO-led community-based adaptation approaches and traditional knowledge integration have been supported in provincial development planning and scaled through government policies such as the National Adaptation Plan. These instances seem to be the exception rather than the rule.

Positively, there is much to build on. Respondents describe numerous community-based models and projects within adaptation and disaster response that showcase strong local leadership and innovation and could be relevant for loss and damage efforts. Further opportunities for institutionalisation and scaling include through provincial climate/disaster planning or DoCC guidelines and inclusion in the National Advisory Board (NAB) Portal to replicate these practices across islands.

Respondents also highlight limitations including lack of standardised frameworks for learning and scaling, limited decentralisation of authority and resources, and weak coordination between line ministries and local authorities. Lack of formal mechanisms to recognise and integrate traditional knowledge and community-led initiatives into national policies was also highlighted as a particular problem, even within current options for learning and scaling. Respondents also suggest introducing funding frameworks that allow direct access by communities or local organisations to scale up successful models.

BOX 8. VANUATU STAKEHOLDER PERSPECTIVES: LEARNING AND SCALING SUCCESSFUL PRACTICES

Some mechanisms exist, but greater institutional support, funding and formal pathways for scaling are needed. – *International actor*

There is no national structure for recognising or replicating community-led innovations. Support is inconsistent. – *Sub-national state actor*

Some villages share good practices through churches or youth groups, but these are not scaled up formally… [There is] lack of funding, no clear support system to grow inclusive community programmes. – *Sub-national non-state actor*

To make real progress, there needs to be better coordination between sectors, clear roles for who does what, and stronger systems to manage loss and damage at both the national and local levels. – *International actor*

Vanuatu: Key takeaways

- **Vanuatu is taking a unique approach** to developing new institutional arrangements for loss and damage. This is through the development of a national programme, including a visioning process; active efforts to develop dedicated institutional arrangements fit to domestic values and needs; and an aim to avoid a siloed approach to loss and damage determined by existing fields and institutional arrangements. It also provides an example of new forms of support facilitated by the Santiago Network. These efforts will likely be instructive for other countries.

- **Loss and damage disconnects between national and sub-national levels** are present despite strong national and international engagement with loss and damage. This disconnect undermines loss and damage-related institutional coordination and transparency. It can be improved by strengthening sub-national responses and vertical coordination, communication and feedback mechanisms between sub-national and national levels.

- **Gaps in data systems and their application** pose challenges to informed response efforts. Data collection overall is fairly robust and includes non-economic losses to a greater extent than in the other two country contexts. However, lack of systems and technical capacities, e.g. for inter-agency or cross-sectoral data sharing and for data analysis, severely limits the utility of data collected.

- **Marginal groups and locations** are not always strongly represented in decision-making or feel that their needs are adequately addressed. This includes geographical marginalisation of some islands and areas, which is an important and challenging contextual aspect of loss and damage impacts and response in Vanuatu.

- **Scaling and learning** will be important to institutionalise when developing loss and damage institutions and approaches. Currently, respondents describe extensive local experiences and efforts but limited formal mechanisms for expanding these, supporting uptake at higher levels or sharing learnings across localities and sub-national institutions.

Vietnam

Developments in institutional arrangements and praxis

Overall, loss and damage institutional arrangements in Vietnam are robust, but remain focused on disaster preparedness and response, as well as responding to tangible economic losses including to homes, infrastructure and livelihoods. Gaps remain in relation to non-economic losses and slow-onset impacts.

Coordination across state levels for disaster-related institutional arrangements is highly structured. There are explicit roles and responsibilities at each level of government for disaster preparedness and response, including the new Civil Defence Committees (including disaster) at national, provincial and commune levels, as well as local rapid response teams. These committees are also well-integrated into main decision-making

bodies; for instance, at provincial level, the head of the committee is typically the Vice Head of the province.

However, there are also silos between sectors and limited cross-sectoral coordination; for instance, climate-related health and social impacts and responses are not well-integrated into existing disaster response systems. Non-economic losses such as psychosocial, social and cultural impacts, in addition to biodiversity loss, are thus currently not well-captured, despite being increasingly recognised, including by local officials and international organisations (see e.g. GIZ, 2022). Further, respondents highlight the need to further strengthen integration of disaster-, adaptation- and particularly loss and damage-related activities into overall development planning.

Current developments in institutional arrangements include the combination of two key ministries dealing with disaster and climate change into the single Ministry of Agriculture and Environment, as well as the restructuring of disaster committees into joint Civil Defence Committees with broad responsibility for environmental and non-environmental disasters, e.g. pandemics, nuclear disaster, etc. Also, there is a decentralisation of responsibility to new, larger communes after the elimination of the district level and the merging of communes in 2025. The implementation of this restructuring is ongoing.

Regarding participatory governance, current institutional arrangements do not include strong, formalised non-state participation outside of the state's Mass Organisations (Women's Union, Farmers' Union, Youth Union, etc.). Engagement with minority and vulnerable groups is not systematised, though there are efforts to include women and people with disabilities by both state and non-state actors. Input from non-state actors at sub-national levels, e.g. NGOs, research institutions or community groups, takes place informally on an ad hoc basis and limited scale. Such actors can provide relevant input that is often welcomed by government officials, for instance NGO-led community-based pilots of new approaches or activities otherwise outside of local budgets and resources.

Nationally, there are some organised forms of exchange between the government and international organisations. This is for instance directly with major organisations, e.g. UNDP, GIZ, CARE and Oxfam, as well as through an umbrella group which includes diverse organisations and which has been active in supporting climate and loss and damage related policy and implementation efforts. However, some actors indicate that these forms of engagement are declining.

BOX 9. VIETNAM STAKEHOLDER PERSPECTIVES: STATUS OF INSTITUTIONAL ARRANGEMENTS AND PRAXIS

In the past, coordination between national and sub-national levels, both vertically and across sectors, has been a challenge when it comes to climate change issues. With the recent government restructuring, including the merging of MONRE and MARD and the merging of many provinces, I hope coordination will improve. These changes could help align efforts better, both for overall climate response and for addressing loss and damage in particular. – *International non-state actor*

In Vietnam, engagement between national/sub-national loss and damage bodies and non-state actors – including NGOs, research institutions, community groups,

and international organisations and individuals – is emerging, either by ad hoc, project-dependent, co-operation arrangements, etc. – *National state actor*

When invited, these groups [ethnic minority groups] do participate – but the level of participation and the strength of their voices depend on many factors, including how local officials document the discussions. Their voices are sometimes overshadowed by stronger or more dominant groups. They themselves don't take notes, as no written forms existing in their native languages, and their way of speaking can be unclear or fragmented… [one project] designed a separate interview process specifically for ethnic minority participants. Otherwise, it is very difficult to accurately and adequately document losses and damages of ethnic minority communities. However, such customisations are not obligatory in official data collection procedures conducted by local authorities. – *Non-state actor*

Data and reporting systems

Data and reporting systems linked to disaster impacts are well-established in the Damage Assessment and Needs Assessment (DANA) that have been developed over recent decades with support from international actors (Government of Vietnam, 2016). Their coverage is extensive within economic and material impacts, including to infrastructure, homes and livelihoods, as well as number of people killed, injured, evacuated or in flooded areas. Regarding slow-onset climate changes, there is also some data and reporting on areas affected by salinisation or coastal change. However, respondents note that there may be issues with data quality; while there is a form for reporting, the numbers may sometimes be estimates or local officials may report losses and damages differently. Levels of damage (e.g. partial or total destruction of a house) can be subjective; also, reporting is often undertaken in challenging circumstances during disasters, which may also affect data quality. Respondents underline that better and consistent training of local officials collecting data and clearer response criteria would improve data quality.

Regarding the content of data collected, there are gaps in relation to non-economic impacts, such as health, education, biodiversity, psychosocial or cultural impacts, as well as some forms of slow-onset impacts, e.g. erratic and extreme weather such as heat spells. Respondents indicate that data on non-economic impacts (beyond loss of life and evacuation/displacement) are typically collected by major international organisations, when they are involved in disaster response (see e.g. VMSA 2024). The lack of systematised data on NELD prevents informed efforts to respond to such impacts. Respondents also describe that additional data on non-economic losses and damages would need to be supplemented by specific policy and training for informed efforts to address detected losses.

Finally, respondents across organisations suggest collected data could be better utilised. Currently, collected data informs local response efforts, including disaster response and compensation to affected households, e.g. for livestock killed in a storm, as well as national support. However, the data could be proactively applied to future policymaking, planning, projections and awareness-raising to a greater degree.

BOX 10. VIETNAM STAKEHOLDER PERSPECTIVES: DATA AND REPORTING SYSTEMS

The law is there, the system is there from the central to local level is there, everything is there already. But the point is does it function properly? And how do they use the data, for what purpose? Actually, for the current loss and damage data collection, at least for the provincial level, it's mostly just to provide compensation for people, rather than using that data to translate into the policy, into the action plan, or to inform people and increase their resilience. – *International non-state actor*

Official tools for assessment, education and training are lacking. Loss and damage assessment is very important for disaster management and risk reduction. If you have data, it can support you better in planning. If you don't have data, you don't know how to use your resources best. – *Non-state actor*

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*

They have a template to collect the data. That's why damages related to crops or human beings or houses or roads can be documented and collected. But loss, spiritual, emotional, other things, it may be different. I don't see any template to collect those. Sometimes someone is missing or is killed. That impact lasts longer. – *Sub-national non-state actor*

Capacity status and gaps

Regarding technical capacities, Vietnam has well-established forecasting and early warning systems, but respondents across institutions indicate that these could be strengthened, e.g. the technology modernised, or applied better (see quote below). Respondents also highlight that digital reporting tools, including mobile phone applications and reporting systems, could better facilitate disaster reporting and communication, including through citizen engagement. Some efforts have been made in this direction already. In addition, respondents suggest that databases with functionalities beyond data storage could better enable the use of collected data in future planning.

Regarding human resource capacity, respondents indicate the need for loss and damage training and awareness raising among state officials, especially at sub-national levels, as this is a new area of policy, planning and implementation. This would be supported by a clear definition of loss and damage in Vietnamese law and institutional mandates and areas of responsibility. Capacity development is especially relevant regarding non-economic and slow-onset impacts; actors describe their concern that these impacts are increasingly emerging, but that they lack tools and training for how to respond. Respondents also highlight complementary capacities among state and non-state actors at different scales, indicating the value of increased exchange and collaboration for successful loss and damage efforts.

Within disaster response, there are also issues of limited capacity and resources. The previous disaster committees at sub-national levels were comprised of officials from

various departments, meaning that committee members allocate limited time to disaster-related tasks. This structure supports integration across sectors, but limits dedicated capacity to disaster efforts. Further, officials lack time and resources for regular training.

BOX 11. VIETNAM STAKEHOLDER PERSPECTIVES: CAPACITY STATUS AND GAPS

Regarding the capacity of people of different levels, especially commune level or even province, there should be someone that is in charge because annually they change the staff and there is high turnover. There should be someone dedicated over longer time. – *Sub-national state actor*

In terms of human resource in general…we have a great tradition for supporting each other and are living with natural disasters; it happens every year. Because of limited resources, the ability for all to have training is limited, but from our experience, it can be very good… At lower levels of government, they may only have training once a year, and maybe only one representative per organisation, that's not enough. – *Sub-national non-state actor*

The information [forecast] they have is right, but they send out warnings for a larger area to be cautious. They risk, though, that people no longer respond if they experience that the warnings and evacuations aren't warranted. And especially with evacuations, covering a larger area than needed is very disruptive. – *Non-state actor*

Learning and scaling successful practices

Respondents indicate the need to further develop opportunities to share and scale successful loss and damage related efforts. A main issue is the lack of explicit institutional roles and responsibilities regarding loss and damage, specifically non-economic and slow-onset impacts. This limits formalised engagement and learning.

Also, multiple respondents describe gaps and challenges across provinces. Existing learning and scaling efforts most often take place along vertical reporting lines from national to local levels, limiting cross-provincial efforts. For international actors, activities can be limited to co-operation within specific provinces, limiting their ability to scale efforts and effectively distribute resources to most affected areas even in disaster situations.

There are also opportunities to develop learning and scaling of successful efforts. For national disaster policies, respondents describe avenues for provincial input to National Target Plans and Five-Year Action Plans. There are also examples of successful efforts being integrated into higher level planning, including efforts by sub-national non-state actors. Institutional complementarities could also be further harnessed; for instance, more formalised input from non-state actors would be valuable as they can pilot new approaches, provide localised insight and application, and connect with vulnerable populations.

Finally, current institutional changes in Vietnam offer new opportunities. This includes the shift from a more narrowly disaster-focused Committees for Flood and Storm Control to Civil Defense Committees, which may support greater cross-sectoral exchange and

learning. It also includes devolution of greater responsibility to the commune level. A greater role for communes may boost input from local levels as well as offer additional opportunity for local non-state engagement.

BOX 12. VIETNAM STAKEHOLDER PERSPECTIVES: LEARNING AND SCALING SUCCESSFUL PRACTICES

In Vietnam, I think the biggest gap is usually in implementation. Loss and damage involves many sectors and levels of government, so challenges often come from weak coordination, lack of policy harmonisation, and limited capacity for planning and execution on the ground. – *International non-state actor*

We have guidelines and law, but to be effective it has to be based on more than that…The disaster is more frequent, and sometimes we coordinate, but it's not really effective. – *Sub-national state actor*

[Steps to strength loss and damage efforts could include:] Assign responsibilities to each level; strictly comply with measurement, reporting and appraisal work; strengthen the development and implementation of inter-regional policies.
– *National state actor*

Vietnam: Key takeaways

- **Vietnam's extensive experience and capacity with disaster response** provides opportunities as well as gaps for loss and damage efforts. There are extensive institutional structures and reporting systems already in place for disaster management. However, these generally employ a technocratic approach focused on tangible impacts; they will need to be further developed if they are to capture non-economic losses and diverse experiences and needs linked to losses and damages.

- **Legal definitions, responsibilities and guidance** on loss and damage are currently lacking in Vietnam. Without this, sub-national authorities lack explicit institutional roles and responsibilities, and it is more difficult for external actors to support or complement state efforts. Developing a stronger legal basis will be an important step enabling engagement as well as coordination among actors.

- **Strong sub-national capacity** has been essential for disaster management and can potentially support loss and damage. Current changes in sub-national state structure towards larger and better capacitated communes may support this. However, strong, localised loss and damage responses will require more tailored approaches than in disaster management. Explicit mandate, capacity and support from higher levels will be necessary for sub-national authorities to tailor responses to their localities to a greater degree. Non-state actors may be able to provide valuable, complementary inputs and efforts.

- **Improved integration across sectors and actor types** is needed. Some sectors – particularly social sectors such as health and education – have not been deeply integrated into disaster and climate response, especially in relation to non-economic losses and slow-onset climate change. Yet, these can be critical in

relation to loss and damage. Further, establishing formal avenues to integrate experience and efforts from non-state actors would allow their complementary competencies to better support state efforts. This could include, e.g., IOs, NGOs and research organisations.

- **Improved data coverage and use** will be critical for an accurate understanding of and responses to loss and damage. This particularly includes expanding data collected on non-economic and slow-onset climate change impacts, which are currently not well-captured. Additionally, data systems should support analysis in addition to managing aggregated data of local impacts. This can strengthen the utility of data for policy and planning but will require additional human and technical resources.

REFLECTIONS AND WAYS FORWARD

Emerging across Somalia, Vanuatu and Vietnam are challenges and possibilities as countries seek to assess and address intensifying losses and damages – and develop the institutional set-ups to do so. In this section, we draw out key reflections and considerations on how to move forwards.

These are initial reflections, based on findings across three country contexts. Subsequently, these will be combined with data from Zambia, Mauritius and India to more fully explore governance and institutional developments across contexts, with full findings and recommendations.

Cross-cutting reflections and ways forward are presented in Box 13 and explored in depth below.

BOX 13. CROSS-CUTTING REFLECTIONS AND WAYS FORWARD

Reflections

(1) Some strong institutional foundations exist, but further development and integration across sectors, levels and actor types are needed.
(2) Gaps in data collection, analysis and application undermine loss and damage knowledge and response.
(3) Learning and scaling are limited, linked to institutional fragmentation, lack of integrated data systems and weak feedback mechanisms.

Ways forward

(1) Context-specific loss and damage visioning will be important to understand climate-related impacts in relation to local contexts, values and sense of loss.
(2) Loss and damage data and reporting systems and institutions should be inclusive, integrated and resourced, with a roadmap for development.
(3) Forward-looking approaches should be institutionalised, with loss and damage assessment and response as a learning process.

Additionally, many common challenges in relation to development and climate response are also relevant in relation to institutional development for loss and damage. These are

not discussed in depth in this working paper but are part of the context shaping loss and damage response. They include fragmented institutional landscapes; challenges in accessing funding due to institutional constraints; and major institutional capacity gaps that affect fragile and least developed countries most. These make it both more likely that countries struggling with such challenges will experience loss and damage due to contextual vulnerability and make it more difficult for them to respond. High levels of climate vulnerability are often tied not only to biophysical changes but also the institutions present to prevent and address climate impacts.

Cross-cutting reflections

(1) Some strong institutional foundations exist, but further development and integration across sectors, levels and actor types are needed.

Vertical disconnects Respondents across country contexts describe notable disconnects across government levels, particularly from national level downwards. Despite reporting and input shared upwards in the system, diverse actors describe a dearth of downwards communication and engagement.

This is a transparency and communication issue. Interviews indicate it limits sub-national actors' understanding of national loss and damage approaches and priorities and undermines trust in national level decision-making. Stronger linkages between national and sub-national levels are very much needed, also to respond to highly localised losses and damages within national level frameworks.

Horizontal fragmentation Respondents describe fragmentation of loss and damage data, reporting processes and response across sectors, agencies and state and non-state institutions. This is to be expected in a new cross-cutting field but is clearly a main challenge to be addressed for successful loss and damage assessment and response.

(2) Gaps in data collection, analysis and application undermine loss and damage knowledge and response.

Loss and damage data gaps As often found in loss and damage assessments, there are major gaps in relation to NELD, slow-onset events and frequent small-scale shocks. This is because many impact and needs assessments are within disaster response, which is geared towards large-scale or sudden extreme events. Our assessment also documents major data and input gaps for marginal groups and geographical areas. For example, minority groups, women, youth, migrants and displaced persons – many of whom are more susceptible to experiencing losses and damages – are often not as well-represented in data and reporting. Culture, language and geography are also barriers.

Finally, there are data quality issues, which will require clear national guidance, systems and tools, and sub-national awareness and trainings. Further work to strengthen systems to assess and report on such losses and damages will necessarily be hazard- and context-dependent, and urgently need to consider uneven coverage across groups.

Lacking data systems, analysis and application Once data is captured locally, it is often collated and sent upwards. Resulting datasets are typically used for the hazard at hand and are often not necessarily widely accessible across sectors and government levels.

Additionally, because diverse state and non-state actors are involved in data collection, not all data collected is reported through state channels. This is particularly true for data on NELDs and on vulnerable groups, which is more often captured by non-state actors. Finally, collected data is often not analysed to understand trends and developments in losses and damages or integrated into future planning and policy development. This is typically because of multiple barriers in data systems, capacity and resources.

(3) Learning and scaling are limited, linked to institutional fragmentation, lack of integrated data systems and weak feedback mechanisms.

Limited formal avenues The combined challenges outlined above undermine opportunities for learning and scaling. Across the three country cases, there are many examples of successful local practices and learnings, but respondents consistently note that formalised avenues for learning and scaling are limited or lacking. Here, scaling is not to be understood as replication, but as transferring experiences and approaches both vertically and horizontally, to help inform efforts in other areas and contexts. While there are examples of successful scaling, these are the exception rather than the rule. Strengthened learning and feedback mechanisms will be critical.

International and non-state support International organisations, donors and domestic non-state actors often have a key role in learning and scaling, not only through piloting but also through supporting and sharing community-based efforts. However, there are also examples where international co-operation creates pitfalls, for instance, due to lack of alignment with state institutions or efforts or limited mandates contributing to uneven loss and damage response and scaling efforts.

Capturing diversity Because losses and damages are experienced differently by different groups and at different scales (e.g. individual, family, community, etc.), it will be essential to capture diverse perspectives to ensure relevant response efforts. Ideally these would be able to be linked to existing data and analysis to support robust learning, entailing the need for disaggregated and localised data, which is sometimes lacking.

Ways forward

(1) Context-specific loss and damage visioning will be important to understand climate-related impacts in relation to local contexts, values and sense of loss.

Loss and damage visioning Losses and damages are context-based and diverse, relating to specific cultural and environmental settings, as well as differing values and sense of loss. At the same time, international loss and damage working definitions and typologies are indicative. It will therefore be relevant on a country-by-country basis, and even sub-nationally, to conduct a loss and damage 'visioning' like the one to be carried out in Vanuatu's technical support programme facilitated by the Santiago Network. (see MFA Denmark 2025).

Such a process has multiple benefits. First, it can gather diverse input and assess what aspects of loss and damage may be particularly acute or challenging, where, and for whom, linked to the cultural and developmental context. Findings can then feed into the development of tailored policies, programmes and institutional processes. Second, a visioning process can link local contexts with national and international frameworks. It

therefore simultaneously provides international and contextual anchoring for national loss and damage institutional and policy development.

Open, flexible frameworks Because losses and damages are diverse, emergent and shifting, open and flexible frameworks for data and response will likely be most effective to address contextual losses and damages; however, this must be balanced with structure and clarity needs of both populations and state actors. In data and reporting, this can entail non-exclusive lists or typologies of losses and damages, with quantification supplemented by qualitative data. In institutional frameworks, this can be supported through cross-sectoral engagement and structures to ensure diverse input and flexibility over time. Cross-sectoral bodies may need to be supplemented by a dedicated institutional home to ensure consistent institutional resources and anchorage.

(2) Loss and damage data and reporting systems and institutions should be inclusive, integrated and resourced, with a roadmap for development.

Capacity and development roadmap Strengthening loss and damage arrangements in a particular context entails attention to policy and legal frameworks, coordination and feedback mechanisms, technical, capacity and financial resources, and data and reporting systems. This is in addition to the diverse needs across actors and sectors at different levels. Developing these will be a lengthy and complex process, and sequencing and prioritising institutional development needs will be essential, also to coordinate efforts and support.

This could, for instance, be done through a capacity and development road map, ideally drawing on a loss and damage visioning process and based on an assessment of needs, existing strengths and opportunities, and gaps. Approaches to strengthening loss and damage arrangements will necessarily be context-dependent, linked to existing institutions and capacities, as well as resources for further development.

Data, diversity and integration Development of loss and damage efforts should build on existing data, tools and loss and damage specific assessments where possible, also to address gaps in existing data and methodologies. These can draw on existing loss and damage assessment tools (e.g. Van der Geest and Schindler 2017) and experience-sharing across countries or sub-national authorities. Simultaneously, data and responses should be designed to capture and address diverse perspectives and needs. Finally, efforts should be integrated institutionally and in practice across sectors, agencies and actor types as possible.

Institutional coordination and feedback mechanisms One of the main takeaways from respondents across country cases is the need for better coordination and feedback mechanisms across sectors, actor types and levels. In the context of loss and damage, institutional diversity is typical and provides many benefits as well as challenges. Efforts should thus consider how to facilitate benefits while managing complexity.

Examples of horizontal integration include clusters and cross-sectoral working groups or committees. However, respondents also point out that these constellations sometimes lack dedicated staff and anchorage.

Additionally, strengthening coordination both upwards and downwards across government levels requires strengthening institutional linkages, reporting and feedback across levels; it would also greatly benefit from a degree of decentralisation, where sub-national actors have the mandate and capacity to actively engage with loss and damage locally, and support higher levels with data, feedback and implementation experience. Without this, national efforts will lack critical grounding in experienced-based needs and knowledge.

Resourcing assessment and response The steps above require dedicated resources to plan, develop and institutionalise new arrangements – even when these are integrated into existing institutions or processes – and sustain them over time. A plan for technical, capacity and financial support would be an important tool, also to coordinate input and support from international funds and actors, and would complement to the roadmap mentioned in point 2 above.

(3) Forward-looking approaches should be institutionalised, with loss and damage assessment and response as a learning process.

Forward-looking institutions and approaches As losses and damages intensify, and our understanding of them continues to develop, it will be essential to foster proactive and forward-looking institutions. Respondents highlight that existing institutions are typically reactive, that existing data systems and capabilities do not support analysis of trends and developments, and that avenues to integrate learnings or loss and damage response into development efforts are limited. Addressing these bottlenecks and explicitly shifting towards proactive, forward-looking institutions and processes would greatly benefit loss and damage efforts going forward.

Institutionalised learning and revision processes There are many uncertainties in developing loss and damage reporting and response systems and efforts, and it will necessarily be a learning process. Institutionally, it will be essential to de-risk learning processes to more rapidly build and improve loss and damage related systems and responses. This can include explicitly recognising uncertainty and treating unsuccessful efforts as sources of insight and learning, feeding into institutionalised review and revision processes. This can, for instance, be done through scaling and systems approaches, which acknowledge complexity and explicitly integrate learning processes (see OECD DAC 2024).

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

Bartlett, C. (2023). Ode to the Benahaj River: How a climate-fuelled landslide and subsequent ecosystem loss forced an Indigenous tribe in Vanuatu to relocate. In R. Bharadwaj, and T. Mitchell (Eds.), Living in the shadow of loss and damage: uncovering non-economic impacts (pp. 69-77). International Institute for Environment and Development (IIED).

Bhatti, Z. K., Watanabe, M., Jama, M. Y, and Davies, F. (2023). Local Government and Federalism in Somalia. World Bank. https://documents1.worldbank.org/curated/en/099031224022529372/pdf/P171974130 8f0a0851875a1d476daf78217.pdf

CFE-DM. (2025). Vietnam 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

CSIRO and SPREP. (2021a). 'NextGen' Projections for the Western Tropical Pacific: Current and Future Climate for Vanuatu (Technical Report). Commonwealth Scientific and Industrial Research Organisation (CSIRO) and Secretariat of the Pacific Regional Environment Programme (SPREP). https://www.rccap.org/uploads/files/2c538622-72fe-4f3d-a927-7b3a7149e73f/Vanuatu%20Country%20Report%20Final.pdf

CSIRO and SPREP. (2021b). UNFCCC COP26 Pacific 'NextGen' Projections Digital Digest. Commonwealth Scientific and Industrial Research Organisation (CSIRO) and Secretariat of the Pacific Regional Environment Programme (SPREP). https://library.sprep.org/sites/default/files/2021-11/UNFCCC-COP26-Pacific-nextgen-project-digital-digest.pdf

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

DoCC. (2025b). Government of Vanuatu Signs Groundbreaking Memorandum of Agreement (MOA) to Strengthen Climate Data-Sharing. Government of Vanuatu, Department of Climate Change (DoCC). https://docc.gov.vu/index.php/resources/news-events/news/156-government-of-vanuatu-signs-groundbreaking-moa-to-strengthen-climate-data-sharing

DoCC. (n.d.). The new DoCC in Vanuatu. Government of Vanuatu, Department of Climate Change (DoCC). https://docc.gov.vu/index.php/about-us/the-new-docc-in-vanuatu

EEAS. (2024). 2Somalia needs US $230m to support post-flood recovery and reconstruction for 2.5m affected people." European External Action Service (EEAS) EU Delegation to Somalia. https://www.eeas.europa.eu/delegations/somalia/somalia-needs-us-230m-support-post-flood-recovery-and-reconstruction-25m-affected-people_en?s=153

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

Foster, S. and Adams, R. (2025, September 16). Vanuatu. Encyclopaedia Britannica. https://www.britannica.com/place/Vanuatu

GoV. (2016a). Vanuatu 2030. The People's Plan. National Sustainable Development Plan 2016 to 2030. Government of Vanuatu (GoV). https://www.gov.vu/images/publications/Vanuatu2030-EN-FINAL-sf.pdf

GoV (2022). Vanuatu's Revised and Enhanced 1st Nationally Determined Contribution. Government of Vanuatu (GoV). https://unfccc.int/documents/578782

GoV. (2016b). Rapid Flood Damage and Needs Assessment. Government of Vietnam. https://www.gfdrr.org/sites/default/files/publication/Vietnam%20Rapid%20Damage_FinalWebv3.pdf

GoV PM 896. (2022) Decision of the Prime Minister Approving the National Strategy on Climate Change up to 2050. July 26, 2022. Government of Vietnam Prime Minister Decision 896 (GoV PM 896).

GoV NDC. (2022). Nationally Determined Contribution of Vietnam, Updated 2022. Government of Vietnam NDC (GoV NDC).

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

Human Rights Watch. (n.d.). Somalia. Events of 2024. https://www.hrw.org/world-report/2025/country-chapters/somalia

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

IISD. (2025). GPDRR2025 Bulletin. International Institute for Sustainable Development (IISD). gpdrr2025_summary.pdf

Jayte, M. (2025). Climate Change and the Rising Burden of Vector-Borne Diseases in East Africa: A Comprehensive Review. Preprints. https://doi.org/10.20944/preprints202505.1983.v1

Khan, I. (2025, August 5). Rebuilding with Purpose: How Vanuatu is Leading the Pacific in Climate Action. United Nations Development Programme Pacific Office. https://www.undp.org/pacific/blog/rebuilding-purpose-how-vanuatu-leading-pacific-climate-action

Kleist, N., Albrecht, P., Hassan, M. A., and Kanyinga, K. (2024). Diaspora aid is crucial for emergency relief in the Somali regions (DIIS Policy Brief). Danish Institute for International Studies (DIIS). https://www.diis.dk/en/research/diaspora-aid-is-crucial-emergency-relief-in-the-somali-regions

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

Lindegaard, L. S. (2020). Lessons from climate-related planned relocations: the case of Vietnam. Climate and Development, 12(7), 600-609.

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

MFA Denmark. (2025). Santiago network on loss and damage. Ministry of Foreign Affairs of Denmark. https://um.dk/en/-/media/websites/umen/danida/about-danida/danida-transparency/public-consultations/pk-11-03-25/draft-santiago-network-on-loss-and-damage.ashx

MoCC. (2025). Vanuatu Loss and Damage Policy with an Implementation Roadmap. Government of Vanuatu, Ministry of Climate Change (MoCC). https://drive.google.com/file/d/1jX0mXSB_UL9FjGicZIqt41zvUnPWLBb_/view

MoCCA. (2022). Vanuatu Climate Change & Disaster Risk Reduction Policy 2022-2030 (second edition). Government of Vanuatu, Ministry of Climate Change and Adaptation (MoCCA).https://www.nab.vu/sites/default/files/documents/National%20CCDRR%20Policy%202022-2030.pdf

MoECC. (2023). Somalia National Climate Change Policy. Federal Government of Somalia, Ministry of Environment and Climate Change (MoECC). https://moecc.gov.so/wp-content/uploads/2024/10/Somalia-National-Climate-Change-Policy-EN.pdf

MoECC. (2025). Somalia's Third Generation Nationally Determined Contribution (NDC 3.0). Federal Government of Somalia, Ministry of Environment and Climate Change (MoECC). https://unfccc.int/sites/default/files/2025-06/Somalia%20NDC%203.0_Submitted_to_UNFCCC_Final.pdf

Mishra, V. (2025, February 26). Somalia faces escalating crisis amid drought, conflict and price hikes. United Nations News. https://news.un.org/en/story/2025/02/1160521

NAP GN. (2022). Somalia National Adaptation Plan 2022. NAP Global Network. napgn-en-2022-somalia-nap-process-poster.pdf

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

Nguyen, T. T. H., and Espagne, É. (2024). Climate Impacts and Institutionalization in Viet Nam. International Journal of Political Economy, 53(1): 4–20.

Notre Dame Global Adaptation Initiative (ND-GAIN). (n.d). Rankings. https://gain.nd.edu/our-work/country-index/rankings/

OECD DAC. (2024). Best Practices in Development Co-operation Series: OECD Development Assistance Committee Guidance on Scaling Development Outcomes. Organisation for Economic Co-operation and Development's Development Assistance Committee (OECD DAC).

https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/12/dac-guidance-on-scaling-development-outcomes_97d114d5/621810cc-en.pdf

Phuong, T. T., Vien, T. D., Son, C. T., Thuy, D. T., & Greiving, S. (2024). Impact of climate change on agricultural production and food security: A case study in the Mekong River Delta of Vietnam. Sustainability, 16(17), 7776.

Roberts, A. (2024). Vanuatu becomes first country to partner with UN's new Santiago Network on Loss & Damage. Vanuatu Daily Post. December 7, 2024. https://www.dailypost.vu/news/vanuatu-becomes-first-country-to-partner-with-uns-new-santiago-network-on-loss-damage/article_39427e6a-9931-50e5-ad3d-414a7e6c64ca.html

SoDMA. (2025). About us. Somali Disaster Management Agency. Government of Somalia. https://sodma.gov.so/eng/about-us/

SNBS and MoLSA. (2024). Multidimensional Poverty Index (MPI) for Somalia (Report). 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

SPARC. (2023). Financing Climate Adaptation in Fragile States. A case of Somalia (Policy Brief). Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises (SPARC). https://www.sparc-knowledge.org/sites/default/files/documents/resources/financing-climate-adaptation-in-fragile-states-a-case-of-somalia-policy-brief.pdf

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

SRCS Climate Centre. (2022). Country-level Climate fact sheet. Somali Red Crescent Society. https://www.climatecentre.org/wp-content/uploads/RCCC-Country-profiles-Somalia_2022-V2-Final.pdf

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

The Vanuatu Klaemet Infomesen blong Redy, Adapt mo Protekt (Van-KIRAP). (n.d.) Current and future drought climatology for Vanuatu. Explainer https://vanclimatefutures.gov.vu/assets/docs/Drought.pdf

Thinh, N. A., Thanh, N. N., Tuyen, L. T., and Hens, L. (2019). Tourism and beach erosion: Valuing the damage of beach erosion for tourism in the Hoi An World Heritage site, Vietnam. Environment, Development and Sustainability, 21(5): 2113–2124.

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

UN ESCAP. (2022). Pathways to Adaptation and Resilience in Pacific SIDS. Subregional Report. United Nations Economic and Social Commission for Asia and the Pacific. https://www.unescap.org/sites/default/d8files/knowledge-products/Pathways%20to%20adaptation%20and%20resilience%20in%20the%20Pacific_22050-IDD-APDR21-Pacific-SIDS-report-v1-6.pdf

UN ESCAP. (2025a). Climate risks threaten Vietnam's economy. United Nations Economic and Social Commission for Asia and the Pacific. https://en.mae.gov.vn/Pages/chi-tiet-tin-Eng.aspx?ItemID=8800

UN ESCAP. (2025b). 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

UNCTAD. (2020, December 4). Vanuatu graduates from least developed country status. UN Trade and Development (UNCTAD). https://unctad.org/news/vanuatu-graduates-least-developed-country-status

UNCTAD. (n.d.). UN list of least developed countries. UN Trade and Development (UNCTAD). https://unctad.org/topic/least-developed-countries/list

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

UNICEF. (2023a). New study finds that 43,000 'excess deaths' may have occurred in 2022 from the drought in Somalia. United Nations Children's Fund (UNICEF). https://www.unicef.org/press-releases/new-study-finds-43000-excess-deaths-may-have-occurred-2022-drought-somalia

UNICEF (2023b) Breaking the Cycle of Devastation by Recurring Cyclones in Vanuatu, Humanitarian Response for Climate Resilient Social Services, Cyclone Lola November 2023. https://www.unicef.org/media/147376/file/Vanuatu-Humanitarian-Response-Cylone-LOLA-November-2023.pdf

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

UNDP. (2025). Vietnam Explores Financing Solutions for Climate Loss and Damage. United Nations Development Programme (UNDP). https://www.undp.org/asia-pacific/news/vietnam-explores-financing-solutions-climate-loss-and-damage

University of Hawaii, Commonwealth Scientific and Industrial Research Organisation (CSIRO) and Climate Comms. (2023). Vanuatu's Climate: Current and future variability and change. Explainer (Technical Report). A report to the Van-KIRAP project.

Commonwealth Scientific and Industrial Research Organisation (CSIRO). https://www.vanclimatefutures.gov.vu/assets/docs/ENSO%20and%20Variability.pdf

Van der Geest, K. and Schindler, M. (2017). Handbook for assessing loss and damage in vulnerable communities. United Nations University. https://www.preventionweb.net/files/57350_onlineno21handbook170510w.pdf?startDownload=true

Vanuatu Meteorology and Geo-hazard Department (VMGD), Australian Bureau of Meteorology (BoM) and Commonwealth Scientific and Industrial Research Organisation CSIRO. (2015). Current and future climate of Vanuatu. Pacific-Australia Climate Change Science and Adaptation Planning Program (PACCSAP). https://content.vmgd.gov.vu/wp-content/uploads/2024/08/Current-and-future-climate-of-Vanuatu.pdf

Viet Nam News. (2024). "Typhoon Yagi killed 318 people, damage reaches $3.3billion." https://vietnamnews.vn/society/1663938/typhoon-yagi-killed-318-people-damage-reaches-3-3-billion.html

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

Waiwai, M., Basil. P., Stephens, S., William, L., Lautu, F., Koran, G., Missack, W., Bartlett, C., Gurung, P., Banjade, P., Bhattarai, B., Ojha, H., and Huq, S. (n.d.). Case Study on Non-Economic Loss & Damage to Vanuatu's Coastal Ecosystems and Community Livelihoods from Slow Onset Events to support the design and operationalization of the Loss & Damage Fund. https://unfccc.int/sites/default/files/resource/Vanuatu%20TC%20Workshop%20Case%20Study%20on%20NELD%20from%20SOEs%2025%20April%202023.pdf

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

Weng, B. C., Morooka, R., Mujtaba, R. S., and Shitong, Y. (2020). Climate Change Impact on Education. Research report done for Aide et Action On selected ASEAN Countries (Cambodia, Vietnam, Laos PDR). Aide et Action (AEA). https://action-education.org/sea/wp-content/uploads/sites/40/2022/12/Climate-change-impact-on-education-in-Southeast-Asia-1.pdf

Wewerinke-Singh, M. and Salili, D. H. (2020). Between negotiations and litigation: Vanuatu's perspective on loss and damage from climate change. Climate Policy, 20(6): 681–692.

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

World Bank. (2022). From the last mile to the next mile: Vietnam poverty and equity assessment. https://documents1.worldbank.org/curated/en/099115004242216918/pdf/P176261155e1805e1bd6e14287197d61965ce02eb562.pdf

World Bank. (2025a). The World Bank in Viet Nam. https://www.worldbank.org/en/country/vietnam/overview

World Bank. (2025b). Viet Nam. https://data.worldbank.org/country/VN

World Bank. (n.d.). GDP (current USD) – Vanuatu. https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=VU

World Economic Forum. (2018). Geographies in depth: The story of Viet Nam's economic miracle. https://www.weforum.org/stories/2018/09/how-vietnam-became-an-economic-miracle/

World Food Programme. (n.d.). Somalia. https://www.wfp.org/countries/somalia

World Weather Attribution (WWA). (2023, April 27). Human-induced climate change increased drought severity in Horn of Africa. https://www.worldweatherattribution.org/human-induced-climate-change-increased-drought-severity-in-southern-horn-of-africa/

Zink, E. (2013). Hot science, high water: Assembling nature, society and environmental policy in contemporary Vietnam. Copenhagen: NIAS Press.