

An aerial photograph of a coastal village, likely in a tropical region, showing numerous small houses built on stilts over a body of water. The houses have various roof colors, including red, white, and grey. The water is a deep blue, and the sky is clear. The overall scene suggests a community that is highly vulnerable to sea-level rise and coastal erosion.

REPORT

Addressing Loss and Damage:

What can we learn from countries'
National Adaptation Plans?



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ABOUT THE NAP GLOBAL NETWORK

The NAP Global Network was created in 2014 to support developing countries in advancing their NAP processes, and help accelerate adaptation efforts around the world. To achieve this, the Network facilitates South-South peer learning and exchange, supports national-level action on NAP formulation and implementation, and generates, synthesizes, and shares knowledge. The Network's members include individual participants from more than 155 countries involved in developing and implementing National Adaptation Plans. Financial support for the Network has been provided by Austria, Canada, Germany, Ireland, the United Kingdom and the United States. The Secretariat is hosted by the International Institute for Sustainable Development (IISD). For more information, visit www.napglobalnetwork.org.

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The Executive Committee of the Warsaw International Mechanism for Loss and Damage (WIM ExCom) is pleased to endorse this report as a contribution to the plan of action of its Technical Expert Group on Comprehensive Risk Management (TEG-CRM). The plan of action of the TEG-CRM is available at https://unfccc.int/sites/default/files/resource/TEG-CRM_PoA.pdf.

Executive Summary

“Loss and damage” refers to the observed impacts and projected risks of climate change that go beyond what countries, communities, or ecosystems can adapt to. With increasing global warming and more frequent and intense natural disasters, climate change represents an existential threat to some of the most vulnerable countries. Averting, minimizing, and addressing loss and damage is about protecting and strengthening the resilience of communities, livelihoods, and ecosystems in the face of climate change, ensuring they are safeguarded for future generations.

These actions to respond to loss and damage exist along a spectrum—a layering of approaches to manage the risks of climate change impacts. These approaches include preparing for and dealing with actual losses and damages through disaster risk management (DRM) and humanitarian response, as well as preventing and reducing risks associated with climate change through adaptation and disaster risk reduction. The National Adaptation Plan (NAP) process is fundamentally about minimizing loss and damage through adaptation action. NAP documents are relevant to conversations about loss and damage because they

- Contain information and analysis that facilitates an understanding of country-specific losses and damages.
- Provide insights into countries’ understanding of the relationships between adaptation and disaster risk reduction and DRM.
- Include concrete actions to minimize losses and damages.

Key Findings

Through a systematic review of NAP documents and interviews with key informants, this report showcases the role of NAP processes in minimizing and addressing loss and damage. It provides insights into how loss and damage information is presented in relation to adaptation efforts and how adaptation priorities identified in the NAPs have the potential to respond to loss and damage. The key findings of the analysis are as follows:

Nearly half of NAP documents make direct reference to loss and damage. Countries are referencing loss and damage in discussions of risks and vulnerabilities, in their adaptation actions, and in dedicated sections of their NAP documents.

Almost all of the NAP documents submitted to date include elements of disaster risk management (DRM). This includes mentions of all of the elements of DRM, including understanding and reducing risks, as well as disaster preparedness, response, and recovery.

DRM-related actions in NAPs tend to focus on understanding and reducing risks; fewer documents include specific actions for disaster preparedness, response, and recovery. The most common actions identified include early warning systems and insurance.

All NAP documents refer to slow-onset events. One or more specific slow-onset events—such as increasing temperatures, sea level rise, and loss of biodiversity—are mentioned in all of the NAPs submitted to date.

Less than half of NAP documents refer to human mobility in a more permanent sense. Most NAPs refer to human mobility in one form or another, but fewer refer to more permanent types of mobility beyond seasonal or economic migration.

Very few NAP documents address non-economic losses. Among the few documents that do, loss of cultural heritage is the most commonly identified issue.

Recommendations

The following recommendations target governments and international actors engaged in discussions on financing arrangements for loss and damage:

- 1. Recognize the contribution of NAP processes in minimizing loss and damage.** Essentially, NAPs are countries' plans for minimizing losses and damages. Continued and increased investment in NAP processes is critical if countries' efforts to minimize loss and damage are to be realized in an equitable and sustainable manner.
- 2. Build on the extensive work that has already been done by countries to assess risks and vulnerabilities through their NAP processes.** Existing vulnerability and risk assessments should be the starting point for the assessment of loss and damage in particular countries.
- 3. Support countries in assessing the potential for irreversible impacts.** NAP documents contain limited information on scenarios beyond the limits of adaptation. Countries may need support to assess existential threats associated with climate change as a basis for identifying appropriate actions to respond to loss and damage.
- 4. Allow flexibility for countries to leverage their NAP processes for planning to address loss and damage.** Countries may choose to capture and communicate their loss and damage needs through their NAP processes, and/or they may opt to conduct additional assessments and/or planning processes for loss and damage—both options should be made possible, particularly in accessing funding.
- 5. Focus efforts to address loss and damage on the impacts of climate change that go beyond adaptation limits.** Efforts to address loss and damage must not replicate or take resources away from adaptation action. Instead, they should tackle the impacts that go beyond the limits of adaptation.
- 6. Collaborate and coordinate with the humanitarian system to avoid parallel systems and duplication of efforts.** It is important for efforts to respond to loss and damage associated with climate hazards to be undertaken in collaboration not only with adaptation actors but also with humanitarian actors, both within countries and at the international level.

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Acronyms

CRM	comprehensive risk management
DRM	disaster risk management
DRR	disaster risk reduction
IPCC	Intergovernmental Panel on Climate Change
MEL	monitoring, evaluation, and learning
NAP	National Adaptation Plan
UNDRR	United Nations Office for Disaster Risk Reduction
UNFCCC	United Nations Framework Convention on Climate Change
WIM	Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts

1

Introduction

From the devastating floods in Pakistan in 2022 to the multi-year drought in East Africa, the impacts of climate change have caused significant losses and damages around the world, especially in developing countries. The concept of loss and damage has been present in the United Nations Framework Convention on Climate Change (UNFCCC) negotiations for more than a decade, where there is a recognition that some impacts of climate change cannot be managed through adaptation and that there is potential for irreversible harm to occur. At the 27th UNFCCC Conference of the Parties (COP 27), parties agreed to establish new funding arrangements to assist developing countries in responding to loss and damage (UNFCCC, 2022b), a move that was viewed as momentous for progress on climate justice (Climate Action Network International, 2022).

Despite the growing attention within and outside of UNFCCC negotiations, there remains a lack of consensus as to where climate change adaptation ends and where efforts to respond to loss and damage begin (Siegele, 2017). In practice, actions to avert, minimize, and address loss and damage exist along a spectrum. While it is clear that mitigation efforts serve to avert harm, it is more difficult to distinguish between efforts to adapt to climate change impacts, actions to respond to losses and damages resulting from these impacts—which often fall within the framework of disaster risk management (DRM)—and measures to address the irreversible harms associated with climate change impacts.

Countries are actively planning to manage the impacts of climate change, including through National Adaptation Plan (NAP) processes. These strategic processes focus on medium- and long-term priorities for adapting to climate change. Through NAP processes, countries assess current and future climate risks, identify and prioritize adaptation actions, implement their adaptation priorities, and track progress and results (Hammill et al., 2019). Adaptation efforts contribute to minimizing losses and damages, making NAP processes an important foundation to build on in identifying what else is needed. Further, some countries are already explicitly referencing loss and damage in their NAP processes, recognizing the synergies between these two topics.

As the global community moves forward in operationalizing the new loss and damage funding arrangements (including a fund for responding to loss and damage), it is important to understand what is already in place within countries' plans to adapt to the impacts of climate change, where the overlaps are between measures to minimize and address loss and damage, and how efforts to respond to loss and damage are complementary to, and build upon, adaptation efforts that are already underway. This report contributes to this understanding through a review of the NAP

documents submitted to the UNFCCC,¹ wherein we analyze the extent to which countries have integrated information and actions on loss and damage into their NAPs. It showcases the role of NAP processes in minimizing and addressing loss and damage and provides insights on how loss and damage information is presented in relation to adaptation efforts and how adaptation priorities identified in the NAPs could have the potential to respond to loss and damage.

The report begins with an introduction to the concept of loss and damage and the NAP process, setting the context for this exercise. It then outlines the conceptual foundation, showing that actions to minimize and address loss and damage exist along a spectrum, which underpins the methodology for the analysis. The results and key findings of the review are then presented and discussed, along with recommendations on strengthening the complementarity of adaptation efforts and measures to respond to loss and damage. The report will be of interest to governments, adaptation and DRM practitioners, and negotiators working on adaptation and Loss and Damage negotiations.²

¹ This report is based on a review of the 41 multisectoral NAPs submitted by parties to the NAP Central platform of the UNFCCC (<https://napcentral.org/submitted-naps>) as of March 1, 2023. It does not include the sector-specific NAP from Uruguay.

² In this brief, the capitalized term “Loss and Damage” refers specifically to negotiations on efforts to avert, minimize, and address loss and damage associated with the impacts of anthropogenic climate change within the UNFCCC processes. The lowercase term “loss and damage” refers to the harms of the impacts and risks of anthropogenic climate change. See Box 1 of the report for their full definitions.

2

Background

This section briefly introduces key concepts related to loss and damage and the relevant UNFCCC decisions, as well as the NAP process and where it fits into conversations on loss and damage.

2.1 What Is Loss and Damage?

Though it is not officially defined under the UNFCCC, loss and damage is generally understood to refer to the impacts of climate change that go beyond what countries, communities, or ecosystems can adapt to (Bhandari, Warszawski, Cogan et al., 2022). The Intergovernmental Panel on Climate Change (IPCC, 2022) defines loss and damage as the “harm from (observed) impacts and (projected) risks” (p. 2,914) of anthropogenic climate change. This harm includes economic and non-economic impacts as a result of extreme weather events (rapid-onset events) and slow-onset events.³ A glossary of relevant terms and their detailed definitions can be found in Box 1.

The IPCC *Sixth Assessment Report (AR6)* states with high confidence that the hard limits to adaptation have been reached in some ecosystems and with additional warming, “loss and damages will increase, and additional human and natural systems will reach adaptation limits” (IPCC, 2022, SPM C.3). However, long-term adaptation planning and resilience building, as well as ensuring sufficient investments in adaptation and DRM, help countries overcome the soft limits to adaptation and minimize loss and damage (IPCC, 2022, SPM C.3.1–3.2).

Averting, minimizing, and addressing loss and damage is about protecting and strengthening the resilience of communities, livelihoods, and ecosystems in the face of climate change, ensuring they are safeguarded for future generations. Critically, it is also about achieving climate justice, as the most vulnerable and marginalized countries and communities are often disproportionately impacted by climate change. In some cases—on small islands in particular—losses due to climate change represent an existential threat (Huggel et al., 2022; Magnan et al., 2021).

³ Decision 1/CP.16, paragraph 25 recognizes that the impacts related to extreme weather events and slow-onset events may include, among other things, sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity, and desertification (UNFCCC, 2010).

Box 1. Glossary of terms relevant to loss and damage

Economic losses: Economic losses include the “loss of resources, goods and services that are commonly traded in markets” (UNFCCC, 2013a, para. 3). They can often be quantified through, recorded by, and reflected in national accounting systems and valued using market prices.

Limits to adaptation: The hard limit to adaptation refers to a point beyond which no adaptive actions are possible to avoid intolerable risks. The soft limit to adaptation refers to a situation where adaptation options exist but are currently not available to avoid intolerable risks due to a variety of factors, including financial and technical constraints and resource challenges (IPCC, 2022, p. 2,898).

Loss and damage (lowercase): According to the IPCC (2022, p. 2,914), the lowercase “loss and damage” or “losses and damages” refer to the “harm from (observed) impacts and (projected) risks” of anthropogenic climate change and could be economic or non-economic. These harms are unavoidable—beyond what countries, communities, or ecosystems can adapt to. They are often intolerable and “fundamentally threaten a private or social norm – threatening public safety, continuity of traditions, legal standard or a social contract – despite adaptive action having been taken” (Dow et al., 2013, p. 305). They may be permanent or irreversible, such as in the case of the loss of human lives, territories, habitats, or species (Huq, 2014).

Loss and Damage (capitalized): IPCC (2022, p. 2914) uses the capitalized “Loss and Damage” to refer specifically to the political debates and negotiations under the UNFCCC following the establishment of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts (WIM) in 2013.

Non-economic losses: Non-economic losses are not easily quantifiable in financial terms and are not commonly traded in markets (UNFCCC, 2013a, para. 4). They may affect private individuals (such as loss of life and human mobility due to climate change-induced migration), society (such as the loss of territorial sovereignty, cultural heritage, local and Indigenous Knowledge, or societal or cultural identities), or the environment (such as the loss of biodiversity and ecosystem services) (Jackson et al., 2022; UNFCCC, n.d.).

Rapid-onset events: A rapid-onset event could be “a single, discrete event that occurs in a matter of days or even hours” (UNFCCC, 2012a, para. 20). They are also called “shock,” “acute,” or “sudden onset” hazards. These hazards, irrespective of anthropogenic climate change, may happen anyway, but climate change may increase their severity and frequency, as well as extend their geographical range (IPCC, 2022; Siegele, 2012).

Slow-onset events: A slow-onset event “evolve[s] gradually from incremental changes occurring over many years or from an increased frequency or intensity of recurring events” (UNFCCC, 2012a, para. 20). Sometimes referred to as “chronic” hazards, their impact is gradual, cumulative, and unfolds over time (Siegele, 2012, p. 6). Examples include sea level rise, increasing temperatures, loss of biodiversity, land and forest degradation, glacial retreat, desertification, ocean acidification, and salinization (UNFCCC, 2012a).

2.2 Loss and Damage in the UNFCCC Process

The concept of “loss and damage” has been around the negotiation halls within the UNFCCC process for more than three decades. In 1991, the term first appeared in a proposal by the Alliance of Small Island States during the initial negotiations of the UNFCCC (Alliance of Small Island States, 1991). The proposal sought to establish an international insurance pool that would, among other things, compensate for the losses and damages caused by sea level rise in low-lying developing states.

However, parties to the UNFCCC did not reach a consensus on an outcome for loss and damage until 2010, when the Cancun Agreements were adopted. Parties agreed to establish a work program to consider approaches to address loss and damage in countries that are particularly vulnerable to climate change impacts through the Cancun Adaptation Framework (UNFCCC, 2010). This work program evolved into two important decisions: the first on the role of the UNFCCC in addressing loss and damage in 2012 and the second on the establishment of the WIM in 2013 (UNFCCC, 2012b, 2013b).

Parties to the UNFCCC recognize the devastating and intolerable losses and damages that the most vulnerable countries face as climate change worsens. Therefore, the WIM was established in 2013 under the Cancun Adaptation Framework to address loss and damage associated with the impacts of climate change through enhancing knowledge and an understanding of comprehensive risk management approaches; strengthening dialogues, coordination, coherence, and synergies among relevant stakeholders; and enhancing action and support, including finance, technology, and capacity building (UNFCCC, 2013b).

The Paris Agreement, adopted in 2015, saw a stand-alone article focused on loss and damage, acknowledging the urgent need for enhanced action and support to help the most vulnerable developing countries respond to loss and damage. Article 8 of the Paris Agreement affirmed “the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change ... and the role of sustainable development in reducing the risk of loss and damage” and decided the WIM would serve the Paris Agreement (UNFCCC, 2015, art. 8). Despite early proposals that would combine adaptation and loss and damage into one article under the agreement, the outcome in Paris signalled parties’ acknowledgement that loss and damage is a reality that requires dedicated and direct attention under the new global climate regime (Siegele, 2017).

2.2 What Is the NAP Process?

The NAP process is a strategic, government-led process that “enables countries to identify and address their medium- and long-term priorities for adapting to climate change” (Hammill et al., 2019). Established under the Cancun Adaptation Framework, the objectives of the NAP process are to “reduce vulnerability to the impacts of climate change, by building adaptive capacity and

resilience” and “facilitate the integration of climate change adaptation, in a coherent manner, into relevant new and existing policies, programmes and activities, in particular development planning processes and strategies, within all relevant sectors and at different levels, as appropriate” (UNFCCC, 2011, p. 80). It is guided by the technical guidelines developed by the UNFCCC Least Developed Countries Expert Group in 2012 (UNFCCC, 2012c). In 2015, the Paris Agreement recognized the NAP process as a key mechanism for achieving the global goal on adaptation (UNFCCC, 2015, art. 7). So far, 139 of the 154 developing-country parties have NAP processes underway (UNFCCC, 2022a), while 42 countries had already developed and communicated NAP documents to the UNFCCC as of March 1, 2023.

In practice, the NAP process is an ongoing, iterative cycle of planning, implementation, and monitoring, evaluation, and learning. These are not distinct phases—often, countries are “undertaking elements of each phase concurrently throughout the NAP process” (NAP Global Network, 2023). As countries advance their NAP processes, they are assessing vulnerabilities to the impacts of climate change, identifying options, and implementing priorities to minimize these vulnerabilities, all while systems and capacities are put in place to make climate change adaptation a part of regular decision making across sectors and levels of governance (Hammill et al., 2019). Monitoring, evaluation, and learning is both a phase in the process and a set of activities that occur throughout the other phases. The NAP process is enabled by six key factors: leadership; institutional arrangements; engagement; data, knowledge, and communications; skills and capacities; and financing (NAP Global Network, 2023).

The NAP process is typically led by the ministry responsible for climate action (often the environment ministry), but it engages a wide range of other actors. These actors include government institutions across sectors and levels, as well as civil society organizations, the private sector, academia, and communities. NAP processes are guided by principles of participation, transparency, gender-responsiveness, and consideration of vulnerable groups, communities, and ecosystems (UNFCCC, 2011).

3

Conceptual Foundations

After more than three decades of research and negotiations, divergent views persist in how loss and damage is defined and understood, as do perspectives on its implications and the solutions required to respond to it. This section discusses the different framings of loss and damage found in the literature and unpacks the concepts and approaches that are relevant to loss and damage discussions. Building on this, we propose a spectrum of actions that avert, minimize, and address loss and damage, forming the conceptual foundations upon which the NAP review and analysis were based.

3.1 The Different Framings of Loss and Damage

When the concept of loss and damage was proposed in 1991, it mainly focused on the existential threats posed by climate change and the need for ways to address its irreversible and intolerable harms in light of equity and justice. Nevertheless, the framing of loss and damage continued to evolve over the years. Boyd et al. (2016) mapped the different viewpoints of loss and damage and proposed four typologies that summarize the current theoretical landscape of the discussion:

- **Adaptation and Mitigation Typology:** This typology posits that the current mitigation and adaptation regimes under the UNFCCC are the primary vehicles for avoiding loss and damage from climate change and are sufficient to deal with loss and damage. This typology implies that loss and damage could be avoided through appropriate mitigation and adaptation actions.
- **Risk Management Typology:** This typology focuses on using comprehensive risk management (CRM), including disaster risk reduction (DRR), adaptation, and humanitarian response (see Box 2 for key definitions), to address both impacts that can be adapted to and impacts beyond the limits to adaptation. This typology calls for the integration of climate change considerations in DRM and focuses on both ex-ante (adaptation and DRR) and ex-post (emergency and disaster management and humanitarian response) measures.
- **Limits to Adaptation Typology:** This typology emphasizes that loss and damage occurs when climate change impacts exceed the limits of adaptation and that actions to address loss and damage involve both actions to manage climate risks and actions to address irreversible impacts.

- **Existential Typology:** This typology highlights the “existential” (permanent, unavoidable, irreversible, and intolerable) threats of climate change for vulnerable countries, populations, cultures, ecosystems, and habitats. This typology focuses on actions that aim to address unavoidable future losses with an emphasis on non-economic losses and calls for justice and accountability.

All typologies agree that loss and damage is a result of inadequate mitigation and adaptation actions (Boyd et al., 2021; Scottish Government, 2023). But the different framings carry with them diverging implications for the actions that should be prioritized to respond to loss and damage—or, in the case of the existential typology, whether the current institutional arrangements and available options have the capability to deal with observed and projected loss and damage (Richards, 2022). Therefore, some actors tend to focus on strengthening mitigation actions to avert potential loss and damage. Some argue that greater attention to DRM and adaptation is needed to minimize and address loss and damage (Wouter Botzen et al., 2019). Others, meanwhile, call for financial arrangements to deal with the existential losses the most vulnerable countries are already experiencing or will face in the future due to climate change—losses that reflect the inequity between historical emissions and their implications (Bhandari, Warszawski, & Thangata, 2022; Kempa et al., 2021; Scottish Government, 2023; Verheyen & Roderick, 2008).

This report takes into consideration the four typologies described above and adopts a more holistic framing, suggesting that actions to respond to loss and damage exist along a spectrum. Our framing is based on the understanding that managing the risks of climate change impacts requires a multipronged approach to not only prepare for and deal with actual losses and damages but also to prevent and reduce risks associated with climate change.

Box 2. Definitions for key terms of the loss and damage spectrum

Comprehensive risk management (CRM): CRM is “a multifaceted approach to dealing with risk. It includes multiple components, which progressively build on one another to foster a holistic approach to risk management. The components include risk assessment, reduction, transfer and sharing, retention, and transformational approaches” (Executive Committee of the Warsaw International Mechanism for Loss and Damage, 2019).

Disaster risk management (DRM): DRM involves “processes for designing, implementing and evaluating strategies, policies and measures to improve the understanding of current and future disaster risk, foster disaster risk reduction and transfer, and promote continuous improvement in disaster preparedness, prevention and protection, response and recovery practices, with the explicit purpose of increasing human security, well-being, quality of life and sustainable development” (IPCC, 2022, p. 2,906). DRM comprises both ex-ante and ex-post actions.

Disaster risk reduction (DRR): DRR, both as a policy objective and as a strategic and instrumental measure, aims to prevent new or future disaster risks and to reduce existing exposure, hazard, or vulnerability while managing residual risk (IPCC, 2022, p. 2,906; United

Nations Office for Disaster Risk Reduction [UNDRR], n.d.). DRR tends to focus on ex-ante actions.

Climate change adaptation: “In human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects” (IPCC, 2022, p. 2,898).

Humanitarian response: In the context of loss and damage, humanitarian response, or humanitarian aid, involves post-disaster actions that intend to “save lives and alleviate suffering in a manner that respects and restores personal dignity” (UN High Commissioner for Refugees, n.d.) during and after disasters caused by natural hazards. These actions include, among other things, emergency food and shelter, search and rescue, emergency public health interventions, post-disaster relief and assistance, reconstruction, and rehabilitation (van den Homberg & McQuistan, 2019).

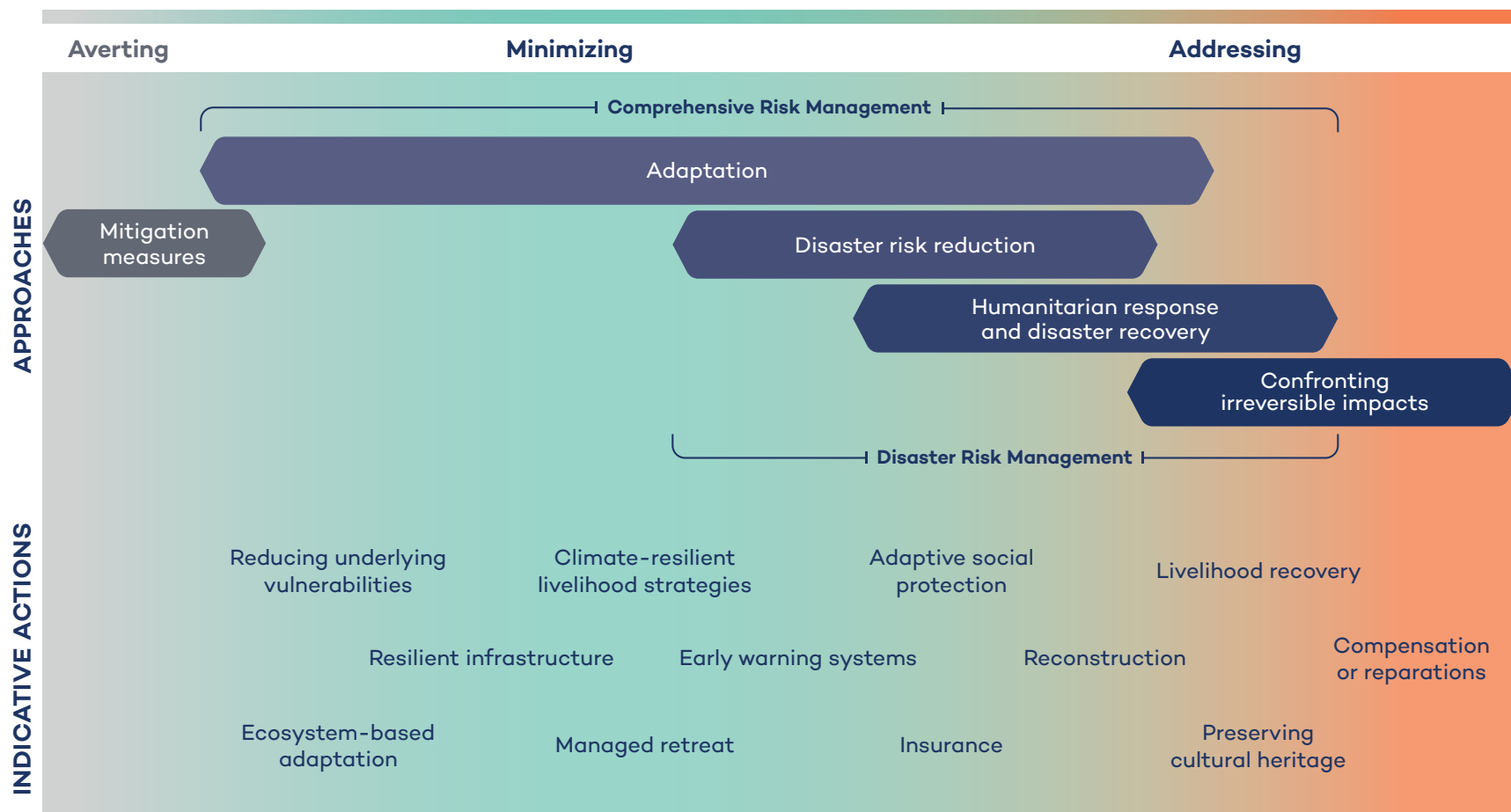
Risk retention: Risk retention means that “a country, community, or organization explicitly or implicitly chooses to absorb the impacts of a (climatic) hazard if it occurs ... [involving] accepting risk” (Executive Committee of the Warsaw International Mechanism for Loss and Damage, 2019, p. 49). Some risk retention measures include setting up contingency financing mechanisms and reserve funds; strengthening social protection to support individuals, households, and communities in better managing risks and providing financial support to the poor; and undergoing contingency planning.

Risk transfer: Risk transfer or financial risk transfer is the process of “formally or informally shifting the financial consequences of particular risks from one party to another whereby a household, community, enterprise or state authority will obtain resources from the other party after a disaster occurs, in exchange for ongoing or compensatory social or financial benefits provided to that other party” (IPCC, 2022, p. 2,921). Common risk transfer mechanisms include insurance, regional risk pooling, catastrophe risk bonds, climate bonds, and risk-linked securities (Executive Committee of the Warsaw International Mechanism for Loss and Damage, 2019).

3.2 The Loss and Damage Spectrum

As mentioned before, despite the diversity of thoughts on the different framings, in practice, actions to prevent and respond to loss and damage rarely fall squarely within the delineations of theoretical perspectives. As Calliari and Vanhala (2022) note, managing actions on loss and damage “constitutes a complex governance system with competencies and responsibilities diffused across different national actors and multiple governance scales.” Similarly, loss and damage governance involves different tools, strategies, and approaches to assess vulnerabilities and risks, adapt to expected climate and its effects, prepare and manage risks, respond to and recover from disasters, and address irreversible impacts (Boyd et al., 2021).

Figure 1. The spectrum of approaches to respond to loss and damage



Note: Figure 1 is an initial attempt to represent the complexity of averting, minimizing, and addressing loss and damage. This is a working version that will be updated and refined over time.

It is important to note that the spectrum does not entail a linear time trajectory—in practice, the different approaches are implemented concurrently, requiring coordination and collaboration among different actors and across sectors.

Actions to respond to loss and damage exist along a spectrum—a layering of approaches inside and outside of the climate regime. Different conceptualizations of a loss and damage continuum exist (Richards, 2022; Scottish Government, 2023), but the Paris Agreement uses the language of *averting, minimizing, and addressing* loss and damage, which serves as a good foundation for visualizing the spectrum of approaches that countries and communities may employ to minimize and address loss and damage (see Figure 1).

On the left of the spectrum is the concept of *averting* loss and damage. Loss and damage associated with climate change impacts could be “averted” or avoided through mitigation measures that curb greenhouse gas emissions, thus slowing down anthropogenic climate change (Roberts, 2022; Verheyen & Roderick, 2008). It is beyond the scope of this report to fully explore the nuances of the relationship between loss and damage and the variety of mitigation measures.

The middle of the spectrum situates approaches that could *minimize* loss and damage. While mitigation is still relevant here, this part of the spectrum also comprises pre-emptive actions that help communities and ecosystems adapt to, and prepare for, observed impacts and projected risks (Bhandari, Warszawski, Cogan et al., 2022; IPCC, 2022, sec. 1.4.4.2). On the right of the spectrum are measures to *address* the loss and damage associated with climate change that has occurred, as well as anticipatory actions to address the observed and projected irreversible impacts of slow-onset events associated with climate change, including existential threats.

Overlying the concepts of averting, minimizing, and addressing loss and damage are a range of approaches that use different entry points for dealing with risks associated with climate change. It is important to note that the spectrum does not entail a linear time trajectory—in practice, the different approaches are implemented concurrently, requiring coordination and collaboration among different actors and across sectors. Iterative planning, implementation, and learning are at the core of all of these approaches to dealing with loss and damage.

The different approaches presented in Figure 1 can be understood as follows:

- **Adaptation:** Adaptation is fundamentally about minimizing loss and damage through pre-emptive and preparatory actions to manage climate risks. Adaptive actions build the resilience of communities, ecosystems, and economies in the face of increasing risk and uncertainty due to climate change. Examples include strengthening climate information services, ecosystem-based adaptation, diversification of livelihoods to reduce dependence on climate-sensitive resources, and promoting climate-resilient agriculture and fisheries. Adaptation actions can also contribute to addressing loss and damage through measures that reinforce response capacities, such as better institutional coordination, social safety

nets, and stronger community resilience. However, soft and hard limits to adaptation exist, where sometimes the observed impacts and projected risks are beyond what can be adapted to, as in the case of existential threats.

- **DRR:** DRR helps to improve preparedness for adverse events, reduce the exposure of people and properties to hazards, and minimize the impacts of hazards when they do occur (UNDRR, 2021); as such, it can contribute to minimizing loss and damage. In this context, we are focusing on actions that reduce risks associated with climate hazards, but DRR may also address non-climatic hazards. DRR actions include strengthening early warning systems, implementing structural measures such as retrofits, establishing contingency funds and plans, and improving building codes and standards to increase resilience. DRR can also contribute to addressing loss and damage, for example, through risk retention measures and risk transfer mechanisms that contribute to disaster response and recovery efforts.
- **Humanitarian response and disaster recovery:** Humanitarian response and disaster recovery are actions in response to the fallout of disasters. The humanitarian system is an integral part of addressing loss and damage, including funding and supporting post-disaster search and rescue efforts; providing shelters, public health services, and emergency supplies; and aiding reconstruction, rehabilitation, and medium- to long-term recovery (Siegele, 2012; Webster et al., 2009). Some aspects of humanitarian response and disaster recovery may also contribute to minimizing loss and damage, for example through the “build back better” approach, which aims to increase resilience to future hazards through disaster response and rehabilitation efforts (Hallegatte et al., 2018; UN General Assembly, 2016; UNDRR, 2015;), as well as anticipatory action and shock-responsive safety net programs, which are receiving increased attention and investment (Anticipation Hub, 2022; Bowen et al., 2020; International Federation of Red Cross and Red Crescent Societies, 2022).
- **Actions to address irreversible impacts:** Risks associated with climate change may be existential, going beyond a country, a community, or an ecosystem’s ability to adapt, plan, or even respond. These could include non-economic losses involving lives, livelihoods, territories and ecosystems, a sense of belonging and cultural identity, and Traditional and local knowledge and practices. Such losses and damages could occur due to slow-onset events or rapid-onset events. Actions to address these irreversible impacts may include relocation, compensation or reparations,⁴ memorials, mental health support, or other actions that address the new and evolving threats associated with the most severe impacts of climate change.

As shown in Figure 1, adaptation, DRR, and humanitarian response and disaster recovery fall under the broader umbrellas of DRM and CRM. Though each has different entry points, they overlap in a few ways. They aim to manage climate risks (though not exclusively in all cases), and they are underpinned by risk and vulnerability assessments, climate scenarios and models, and

⁴ It is important to note that parties to the Paris Agreement “[agree] that Article 8 of the Agreement does not involve or provide a basis for any liability or compensation” (UNFCCC, 2015, para. 51). The new funding arrangements referred to in Decision 2/CP.27 (UNFCCC, 2022b) also do not imply a basis for any liability or compensation.

hazard mapping. Importantly, all of these approaches require multilevel and inclusive governance systems to be effective. As well, some specific actions may fit within more than one approach—for example, early warning systems are typically considered to be a DRR action but are often included in adaptation plans. Similarly, financial solutions such as insurance, risk pooling, and sovereign bonds have been prioritized both in the context of DRM and of adaptation to climate change. Further, some actions that address irreversible impacts have also been discussed in the context of adaptation—for example, managed retreat⁵ is a pre-emptive response to loss of territory but may also be considered an adaptation strategy.

These overlaps can create challenges in discussions about adaptation and loss and damage because there are no clear delineations between actions to minimize losses and damages and actions that address them. However, these distinctions are less important than ensuring that actions in both areas are well coordinated and mutually reinforcing. This should be the priority when considering how adaptation and loss and damage relate to each other.

3.3 The NAP Process and the Loss and Damage Spectrum

NAP processes are fundamentally about minimizing loss and damage through adaptation action. Consequently, countries' NAP documents are relevant to the conversations on loss and damage for a number of reasons:

- NAPs contain information and analysis that facilitate an understanding of country-specific loss and damage, including information on vulnerabilities and risks, as well as on the hard and soft limits to adaptation.
- They provide insights into countries' understanding of the relationships between adaptation and other approaches to managing climate risks, including DRR and CRM.
- NAP documents include concrete actions to minimize loss and damage. This can help in understanding where opportunities to support these efforts exist and where the gaps are.
- In some cases, NAP documents also include actions that address loss and damage that can inform discussions on the allocation of resources.

⁵ Managed retreat is “the voluntary movement and transition of people and ecosystems away from vulnerable coastal areas” (Georgetown Climate Center, n.d.).

4

Methodology

The aim of the review is to understand how NAPs are already vehicles for information relevant to countries' efforts to minimize and address loss and damage.

A literature review was first conducted to explore definitions of loss and damage, as well as how definitions relate to adaptation and DRM are framed by different actors. This literature review informed the conceptual foundations of the NAP review, providing a basis for understanding how loss and damage may be addressed in NAP documents, as well as how NAP processes may contribute to responding to loss and damage.

The findings of this report are based on a review of the 41 multi-sector NAP documents that were submitted by parties to the UNFCCC as of March 1, 2023 (excluding the sector-specific NAP from Uruguay), focusing on the following key aspects:

- References to DRR and/or DRM and related concepts, as well as the inclusion of specific adaptation actions that address aspects of DRR or DRM.
- Direct references to loss and damage.
- Indirect references to loss and damage, including references to slow-onset events, non-economic losses, human mobility and displacement, limits to adaptation, and UNFCCC mechanisms, such as the WIM and the Santiago Network.
- References to existential losses and/or justice in relation to loss and damage.

The analysis focused on identifying trends in NAP documents, looking at the inclusion of different measures that fall on the loss and damage spectrum in countries' adaptation planning, and the incorporation of loss and damage considerations in countries' NAP processes. It also sought to identify illustrative examples of the different ways in which NAP documents consider loss and damage. To complement the literature review and the review of NAP documents, key informant interviews were conducted. A group of government and civil society stakeholders from both developing and developed countries, who are familiar with the NAP process and the loss and damage discussion, were selected to explore how they view the relationship between NAP processes and loss and damage.

It is important to note the distinctions between NAP processes and NAP documents. Though only 42 countries have communicated NAP documents to the UNFCCC (including the sector-specific NAP from Uruguay), 139 countries have NAP processes underway (UNFCCC, 2022a). This analysis utilized information available in the submitted NAP documents, which may not

be comprehensive in addressing all aspects of the processes that have been undertaken so far or the details of the planned next steps. Consequently, findings are based on available evidence, recognizing that some aspects of countries' NAP processes may not be captured in the documents reviewed and that the documents are only a snapshot of the efforts countries are making to advance their NAP processes.

5

Loss and Damage in NAP Documents

This section summarizes the key findings from the review of NAP documents.

Nearly half of the NAP documents make direct reference to loss and damage.

Among the NAP documents submitted to date, 49% have direct references to the concept of loss and damage.⁶ More than half of these were submitted in 2021 or 2022, and 37% are NAPs from Small Island Developing States. Saint Lucia’s NAP has a dedicated section that explains the concept and describes potential loss and damage in specific sectors. It then identifies actions for the country to address loss and damage, emphasizing the need for a CRM approach. Actions identified include the establishment of contingency funds with rapid and flexible disbursement mechanisms, continued membership in the Caribbean Catastrophe Risk Insurance Facility, and the development of micro-insurance schemes at the local level. The NAP also notes the challenges of putting these actions into practice, which include data gaps, capacity limitations, and inadequate institutional arrangements (Department of Sustainable Development, 2018).

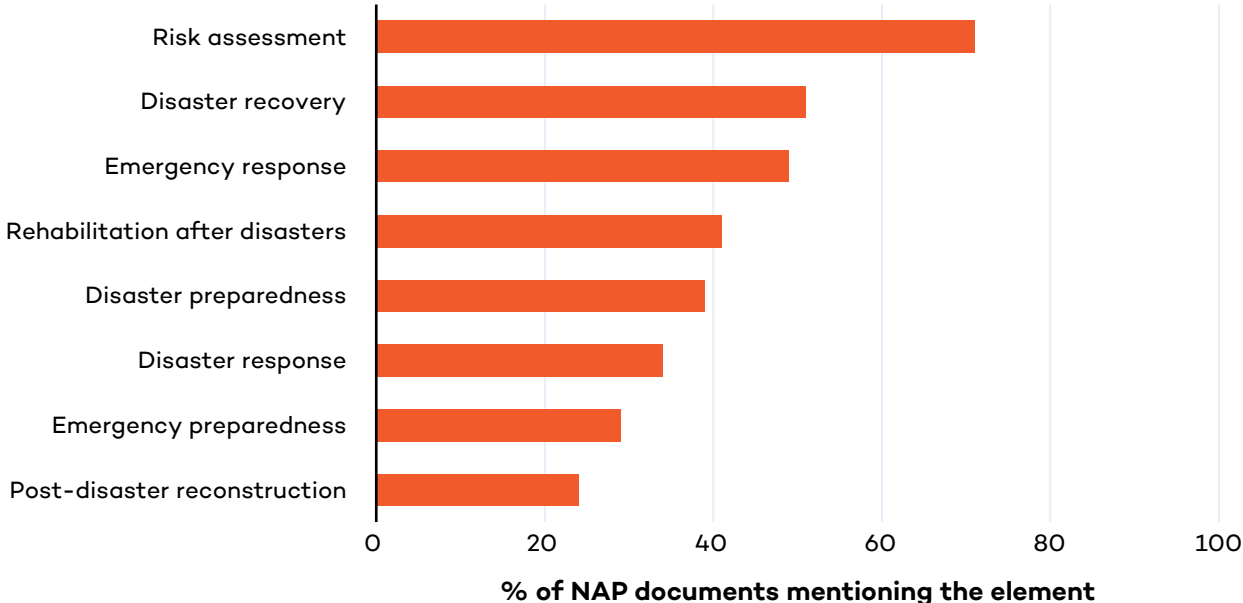
In another example, Suriname highlights the role of insurance in reducing the impact of loss and damage resulting from climate change (Government of Suriname, 2019). Other documents have more passing references—for example, Tonga highlights losses and damages already experienced as a factor exacerbating the country’s vulnerability to climate change (Department of Climate Change, Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications, 2018). Still others include related activities among their adaptation actions—for example, Timor-Leste intends to conduct studies on loss and damage (Secretariat of State for Environment, Coordinating Minister for Economic Affairs, 2021), while Kiribati plans to collect data on losses and damages, conduct assessments, and establish information systems for improved decision making (Government of Kiribati, 2019). Interestingly, Kenya has included monitoring of loss and damage as a way of tracking progress on its theory of change for the NAP: specific indicators aim to track losses and damage at the national and sectoral levels (Government of Kenya, 2017).

⁶ Note that the review focused on references to the phrase “loss and damage” (singular and plural), not individual references to “loss(es)” or “damage(s).”

Almost all of the NAP documents submitted to date include elements of DRM.

Among the NAP documents reviewed, 95% directly mention DRM and/or DRR. In some of the documents, both terms are used, seemingly interchangeably, and there are only a few documents that define what they mean by these approaches. One exception is Madagascar, where the definition of DRM from the IPCC is provided (see Box 2). Among the NAP documents, there are mentions of all of the elements of DRM, including understanding and reducing risks, as well as disaster preparedness, response, and recovery, as shown in Figure 2. Only 10% of the documents refer to CRM.

Figure 2. Elements of DRM mentioned in NAP documents



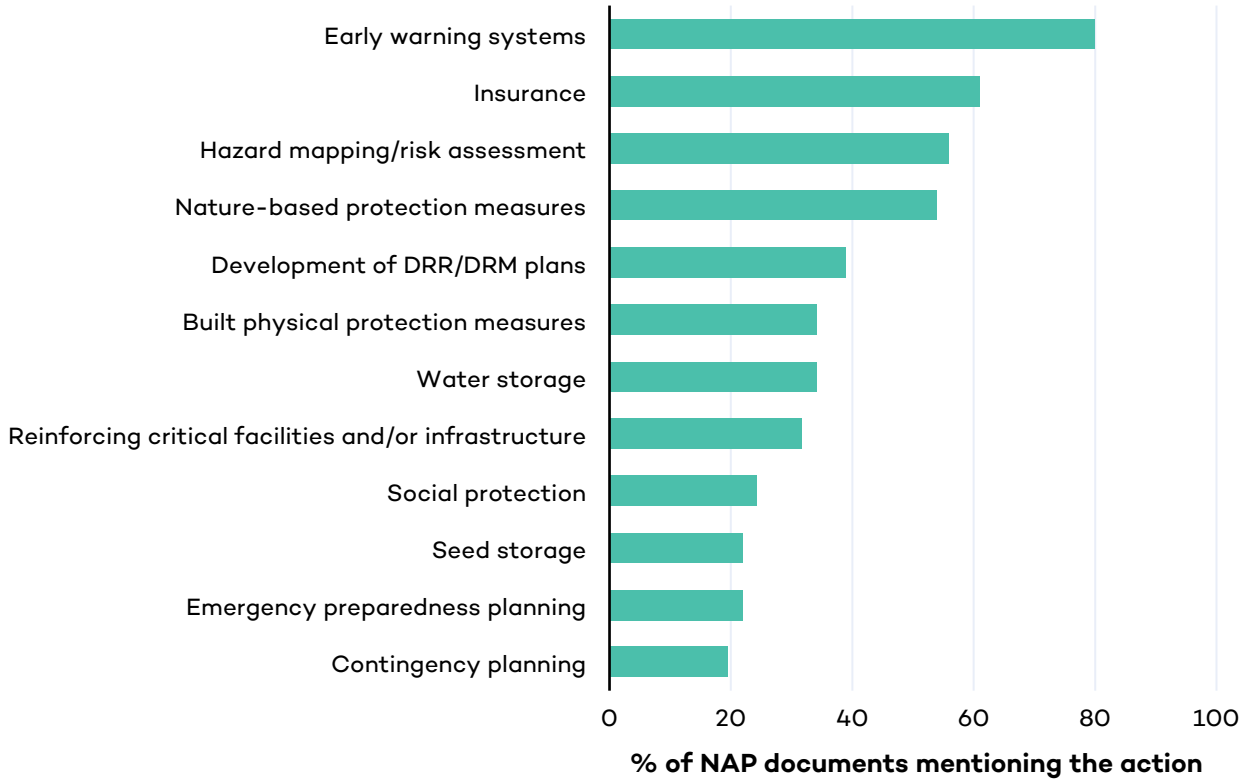
The context for the references to DRM differs across the documents. Approximately 12% identify DRM among the priority sectors for adaptation—one example is Sierra Leone, which includes disaster management as a priority sector alongside health, infrastructure, and agriculture and food security, among others (Government of Sierra Leone, 2022). A number of documents (20%) address DRM among the adaptation priorities. For example, one of Albania’s adaptation priorities is to increase the capacity of its emergency management department to prevent and respond to climate-related disasters (Republic of Albania, 2021).

Approximately half (51%) include references to DRM among the adaptation actions identified to implement the priorities. For example, Cabo Verde’s NAP includes an activity to prepare disaster recovery plans for sectors with critical infrastructure (Ministério da Agricultura e Ambiente, 2021), while Sri Lanka aims to map and collect information on hazards and develop DRM plans for vulnerable water management facilities (Climate Change Secretariat of Sri Lanka, 2016).

DRM-related actions in NAPs tend to focus on understanding and reducing risks; fewer documents include specific actions for disaster preparedness, response, and recovery.

Although all of the elements of DRM are mentioned in NAP documents, when looking at specific adaptation actions that address aspects of DRM, the most commonly identified activities focus on understanding and reducing risks. Figure 3 shows the specific actions identified in at least 20% of the NAP documents reviewed. However, there are a few examples where NAPs aim to improve capacities for disaster response. Peru, for example, will advance planning for emergency shelters meeting minimum sanitary requirements (Ministerio del Ambiente, 2021), while Bosnia and Herzegovina aims to build the capacity of emergency departments (Government of Bosnia and Herzegovina, 2021). As well, more than half of the NAP documents refer to a separate national plan for managing disasters.

Figure 3. The most common DRM-related actions in NAP documents (mentioned in 20% or more of documents)



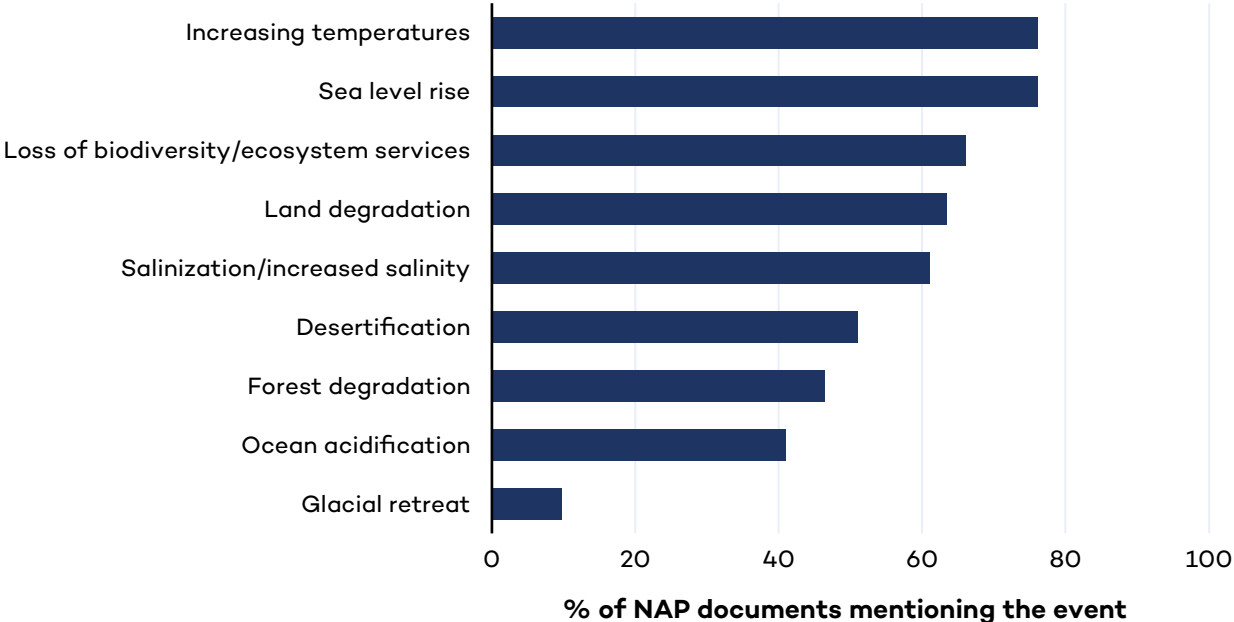
All NAP documents refer to slow-onset events.

Though few countries (17%) refer to the specific term “slow-onset events,” all of the NAP documents mention one or more specific slow-onset events, as shown in Figure 4. These events

are often mentioned in sections describing risks and vulnerabilities—for example, the NAP from Liberia highlights the impacts of ocean acidification on the marine environment, noting the effects on specific species, including coral and mollusks (Environmental Protection Agency of Liberia, 2021), while the Central African Republic identifies loss of biodiversity as the result of a number of climate change impacts, including extreme temperatures, floods, and droughts (République centrafricaine, 2022).

Other countries treat these more as cross-cutting concerns, such as in Togo’s NAP, which highlights the need for alignment with efforts to combat land degradation and desertification as a guiding principle for implementation (République Togolaise, 2018). In other cases, slow-onset events are targeted by specific adaptation actions—for example, Brazil’s NAP aims to establish systems and structures for long-term monitoring of the impact of ocean acidification (Ministry of Environment, 2016). Cameroon’s adaptation actions in the urban and infrastructure sectors aim to address sea level rise, among other climate change impacts—for example, by discouraging construction and urban encroachment in vulnerable areas (Republic of Cameroon, 2015).

Figure 4. Slow-onset events identified in NAP documents



Less than half of the NAP documents refer to human mobility in a more permanent sense.

Though most NAPs refer to human mobility in one form or another,⁷ only approximately 40% refer to mobility in a more permanent sense, beyond seasonal or economic migration. This includes references to displacement, relocation, and resettlement in different contexts within the documents. For example, Sierra Leone’s NAP document analyzes strengths, weaknesses, opportunities, and threats in relation to its adaptation efforts, and the development of a national resettlement policy is identified as an opportunity in the infrastructure sector (Government of Sierra Leone, 2022). The NAP from Saint Vincent and the Grenadines defines adaptation actions as including the resettlement of people in safer locations (Government of St. Vincent and the Grenadines, 2019). Some NAPs include actions addressing human mobility—for example, Benin includes an adaptation action that aims to identify climate migrants and organize their relocation (Ministère du Cadre de Vie et du Développement Durable du Bénin, 2022), while Sri Lanka aims to develop contingency plans for gradual relocation and the development of alternatives in response to sea level rise (Climate Change Secretariat of Sri Lanka, 2016).

Very few NAP documents address non-economic losses.

Only 29% of the NAPs refer to non-economic losses. Among these, loss of cultural heritage is the most commonly identified issue, mentioned in 15% of the 41 documents reviewed. For example, the State of Palestine highlights the sensitivity of the cultural and religious sites in the West Bank to climate extremes (Environment Quality Authority of the State of Palestine, 2016). In another example, Nepal’s NAP has a priority thematic sector focusing on tourism, nature, and cultural heritage, with associated adaptation actions. These actions include efforts to “identify, conserve, and restore cultural, historical, and archaeological sites that are at risk of damage because of climate impacts” (Government of Nepal, 2021, p. 29). Another type of non-economic loss mentioned is Indigenous Knowledge: Saint Lucia highlights this in its loss and damage section (Department of Sustainable Development, 2018). In another example, Timor-Leste explicitly addresses the impacts of climate change on social capital, noting that climate change has the potential to exacerbate social inequities (Secretariat of State for Environment, Coordinating Minister for Economic Affairs, 2021).

⁷ A recent analysis of 40 NAPs found that more than 80% reference forms of human mobility (SLYCAN Trust, 2023).

6

Recommendations

Based on the review of NAP documents, as well as the literature review and perspectives from key informants, we recommend the following strategies to ensure that efforts to respond to loss and damage build on and complement the considerable investment that countries are making in advancing their NAP processes. These six recommendations are aimed at governments and international actors engaged in discussions on financing arrangements for loss and damage.

1. Recognize the contribution of NAP processes to minimizing loss and damage.

NAP documents contain concrete actions that—if implemented effectively and at the appropriate scale—will help to minimize loss and damage. These actions include a range of approaches that address different aspects of climate risk management, from risk mapping and assessment to establishing early warning systems to protecting vital ecosystems and infrastructure from the impacts of climate change. Essentially, NAPs are countries' plans for minimizing losses and damages. NAP processes also establish institutional arrangements and put in place systems and capacities (Hammill et al., 2019) that can be leveraged to respond to loss and damage.

Continued, increased investment in NAP processes is therefore essential if countries' efforts to minimize loss and damage are to be realized in an equitable and sustainable manner.

2. Build on the extensive work that has already been done by countries to assess risks and vulnerabilities through their NAP processes.

As the findings of this analysis show, countries are already thinking about loss and damage in the context of their NAP processes, either directly or indirectly. NAP documents typically contain an overview of risks and vulnerabilities, which provides some useful insights into potential or actual losses and damages. In many countries, this overview is based on extensive work that has already been done to analyze the impacts of climate change in different sectors, geographic locations, and ecosystems, in some cases also identifying vulnerable communities and social groups. Other countries are undertaking more detailed vulnerability and risk assessments to build on the overview information presented in the NAP to better target activities, as well as implementation strategies. Regardless of the approach, existing analyses should be the starting point for the assessment of loss and damage in particular countries. This means that NAP

teams must be engaged in conversations about loss and damage from the outset. Where feasible, more comprehensive and integrated assessments could be conducted to clarify options for both minimizing and addressing loss and damage, which may require specific guidance. In cases where adaptation-focused assessments have already been completed, methodologies for any additional loss and damage analysis should focus on filling gaps in the existing information.

3. Support countries in assessing the potential for irreversible impacts.

Though a considerable amount of work has been done by countries to understand how climate change will affect different sectors, livelihood strategies, and geographic areas, the NAP documents contain limited information on scenarios beyond the limits to adaptation. The potential for such impacts—including the loss of biodiversity, the need to relocate communities, and the loss of cultural heritage—is acknowledged, but there is limited analysis of the extent or the implications. Countries may need support to assess existential threats associated with climate change as a basis for identifying appropriate actions to respond to loss and damage. This could take the form of guidance for assessing non-economic losses, scenarios of relocation, and other irreversible impacts that require dedicated attention. Additional resources may also be needed to undertake these assessments, ensuring that they build on and complement the work already done to assess risks and vulnerabilities in the context of NAP processes. The results of these assessments can inform both NAP processes—optimizing efforts to minimize losses and damages—and efforts to address loss and damage that exceeds adaptation limits.

4. Allow flexibility for countries to leverage their NAP processes for planning to address loss and damage.

As the spectrum shows, while adaptation efforts primarily focus on minimizing losses and damages, they may also serve to address them. The review of NAP documents reflects this dynamic, with some countries positioning their adaptation actions as efforts to minimize loss and damage and others directly confronting the harms resulting from climate change. This reality suggests the importance of a flexible approach to capturing and communicating loss and damage needs. In other words, countries can choose to use their NAPs to articulate their needs, recognizing the number of NAP processes already underway and the urgency of addressing loss and damage without creating an undue burden. At the same time, some countries may find it necessary to conduct additional assessments and/or planning processes to determine how loss and damage may be addressed in their context. Both options should be made possible, particularly in accessing funding for loss and damage.

5. Ensure that efforts to address loss and damage focus on the impacts of climate change that go beyond adaptation limits.

The adaptation priorities communicated by countries through their NAPs represent essential investments to minimize loss and damage. Supporting their implementation is increasingly urgent and requires significant scale-up of adaptation finance (UN Environment Programme,

2022). However, in the NAPs submitted to date, there are some climate change-related risks that are not covered by the adaptation priorities, notably actions to address the irreversible impacts, which threaten biodiversity, cultures, and in some cases, the very existence of countries. These represent additional needs that could be addressed through the new loss and damage funding arrangements, complementing ongoing investments in adaptation.

Efforts to address loss and damage must not replicate or take resources away from adaptation action. Instead, they should tackle the impacts that go beyond the limits of adaptation.

6. Collaborate and coordinate with the humanitarian system to avoid parallel systems and duplicating efforts.

Disaster-related actions in NAP documents tend to focus on reducing risks, and this makes sense, given that climate change is causing increased and changing risks associated with extreme weather, changing weather patterns, and slow-onset events. However, most countries also have DRM plans and mechanisms in place, which address the response and recovery elements that are less present in NAPs. These are linked to the international humanitarian system, which provides support in the event of a disaster. The degree to which DRM actors are engaged in the NAP process may differ depending on the country, despite the clear linkages between adaptation and disaster management. To avoid duplicating efforts and establishing parallel systems, it will be important for efforts to respond to loss and damage associated with climate hazards to be undertaken in collaboration and coordination not only with adaptation actors but also with humanitarian actors, both within countries and at the international level.

7

Looking Forward

Though NAP documents are only one milestone in a country’s adaptation journey, they do provide insights into how countries understand climate risks and strategies for minimizing and, in some cases, addressing loss and damage. This rapid analysis has demonstrated the usefulness and importance of NAP processes as a basis for assessing and responding to loss and damage. However, more engagement of in-country actors—including NAP teams, but also DRM actors and loss and damage negotiators—would provide a fuller picture of the perspectives on these issues in vulnerable countries. Further, other vehicles, such as Adaptation Communications and biennial transparency reports, may offer additional insights.

Going forward, it could be useful to review the more detailed vulnerability and risk assessments completed by countries to understand the extent to which they are capturing loss and damage, and where the gaps are. This could form a basis for the guidance on assessing irreversible impacts that we have suggested above. It is clear that non-economic losses and damages need additional attention. More research in this area would help to inform the ongoing discussions on addressing loss and damage, ensuring that these are grounded in a full understanding of the implications of climate change.

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