

CONTRIBUTIONS AND CHALLENGES OF DISASTER RISK FINANCING AS A RESPONSE TO CLIMATE CHANGE INDUCED LOSSES AND DAMAGES



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● INTRODUCTION

Human-induced climate change will continue to cause losses and damages, with vulnerable developing countries and communities that have contributed least to the climate crisis bearing the brunt of its consequences. This is driven both by their greater exposure to risks and their greater vulnerability once risks materialise. The science is clear, that the frequency and intensity of both climate-related slow-onset events and extreme weather events will increase (IPCC, 2018, 2019a, b) and research has projected that between 32 million and 132 million people could be pushed into poverty by the impacts of climate change by 2030 (Jafino et al., 2020).

In recognition of this reality, Loss and Damage (L&D) has been included as a formal agenda item in climate negotiations through the United Nations Framework Convention on Climate Change (UNFCCC) negotiations since 2010, becoming a third pillar of the international climate regime in the 2015 Paris Agreement,¹ alongside mitigation and adaptation.

Despite this recognised status, there has been little progress in creating dedicated financial commitments and instruments for addressing Loss and Damage. This is largely due to the political controversies surrounding how

Loss and Damage is defined and how it can and should best be addressed (Calliari et al., 2020). In this evolving and sometimes contentious policy environment, instruments associated with Disaster Risk Finance (DRF), specifically insurance, are increasingly framed as a practical means to address losses and damages.

In order to play a well targeted and effective role, it is important to understand the applications and limits of DRF as a response to climate-induced losses and damages. DRF actors must be mindful of the political positions and reasoning of key actors and negotiating blocs within the Loss and Damage policy context. The objective of this paper is to explore how DRF instruments are being framed and understood within the panorama of Loss and Damage policy and finance agendas, highlighting areas of contention and sensitivity.

¹ Article 8.1 of the Paris Agreement notes that “Parties recognize the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, and the role of sustainable development in reducing the risk of loss and damage.” (UNFCCC, 2015).

The paper is structured as follows. **Section One** presents an introduction to the Loss and Damage agenda. **Section Two** situates Loss and Damage in the UN climate change regime and describes the positions of key actors in the UNFCCC debate. **Section Three** provides an introduction to Loss and Damage finance and explores the challenges facing DRF with respect to addressing losses and damages. **Section Four** presents concluding remarks and recommendations for the DRF community seeking to engage with this agenda.

The paper draws on grey literature - including outcome statements and reports from the UNFCCC negotiations on

Loss and Damage finance, the work of the Warsaw International Mechanism, and discussion papers and reports produced by governments, NGOs and think tanks in relation to the UNFCCC process.

For the purposes of this paper, ‘Loss and Damage’ refers to political negotiations under the UNFCCC and the wider connected policy agenda, and lowercase ‘losses and damages’ refers to the residual effects from (observed) impacts and (projected) risks from climate change which were not, are not, or cannot be avoided, either by adaptation or mitigation efforts.²

List of acronyms

AOSIS - The Alliance of Small Island States

CCA - Climate Change Adaptation

COP - Conference of the Parties

CVF - The Climate Vulnerable Forum

DRF - Disaster Risk Finance

DRR - Disaster Risk Reduction

EU - European Union

G7 - The Group of Seven

G77 - The Group of 77 - a coalition of 134 developing countries

LDCs - Least Developed Countries

NGO - Non-Governmental Organisation

SIDS - Small Island Developing States

UNFCCC - The United Nations Framework Convention on Climate Change

WIM - Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts

² Based on the approach to terminology outlined in IPCC (2022) “The concept of Loss and Damage (with capitalized letters, L&D) refers to discussion point under the UNFCCC, which is to “address loss and damage associated with impacts of climate change, including extreme events and slow onset events, in developing countries that are particularly vulnerable to the adverse effects of climate change.” Lowercase letters of losses and damages refer broadly to harm from (observed) impacts and (projected) risks.

2

● HISTORY AND POLITICS OF LOSS AND DAMAGE

This section explains how the concept of Loss and Damage has evolved in the UNFCCC process, outlines different perspectives held by the major negotiating blocs and other

key stakeholders, and tracks how these discussions have evolved over time.

Box 1: The United Nations Framework Convention on Climate Change

The UNFCCC entered into force on 21 March 1994. The ultimate aim of the Convention is to stabilise greenhouse gas concentrations “at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system.” The Convention states that “such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner.” 198 parties including all United Nations member states have ratified the Convention.

The Convention clearly identifies industrialised nations (known under the UNFCCC as Annex I Parties) as the source of most past and current greenhouse gas emissions, and therefore expects these countries to do the most to cut emissions.

The Kyoto Protocol, which came into force on 16 February 2005 operationalises the UNFCCC's

aspirations to reduce greenhouse gas emissions by committing industrialised countries and economies in transition to specific agreed individual emission reduction targets. Currently, there are 192 Parties to the Kyoto Protocol.

The Paris Agreement, which entered into force on 4th November 2016, is a legally binding treaty in support of the goal of limiting global warming to well below 2 and preferably 1.5 degrees Celsius compared to pre-industrial levels.

The UNFCCC is supported by annual formal meetings known as the Conference of the Parties (COP). The purpose of the Conference is to review the implementation of the Convention, the Kyoto Protocol and the Paris Agreement, and to adopt decisions to further develop and implement these instruments.

Source: UNFCCC, 2022

2.1 What is Loss and Damage?

There is currently no universally agreed and uncontested definition of Loss and Damage. However, some aspects of the agenda have been relatively widely accepted:

- UNFCCC documentation consistently states that Loss and Damage refers to climate-related impacts and risks from both **sudden-onset extreme weather events**, such as flooding and cyclones, and **slow-onset processes**, including sea level rise, glacial retreat, desertification, and others (UNFCCC, 2013, 2015).

- Losses and damages are experienced through **economic** and **non-economic impacts**. Economic losses, such as those to property, infrastructure, income and businesses, can be quantified in monetary terms. Non-economic loss and damage cannot easily be quantified and may impact individuals (e.g., loss of life, health, mobility), society (e.g., loss of territory, cultural heritage, indigenous or local knowledge, societal or cultural identity) or the environment (e.g., loss of biodiversity, ecosystem services).

- Another useful distinction, adopted by many academics and practitioners, is between **avoided**, **unavoided** and **unavoidable losses and damages** as defined in Box 2 below (Verheyen and Roderick, 2008; Mechler et al, 2018).

- Some consensus is emergent that the Loss and Damage discourse must deal with climate-induced losses and damages deemed “**beyond adaptation**” that is, unavoidable or unavoidable impacts beyond adaptation potentials (Verheyen and Roderick, 2008; van der Geest and Warner, 2015). As a result of historical and current greenhouse gas emissions, some degree of climate change impacts are already “locked in”. Thus, even after the best

possible mitigation and adaptation action, societies worldwide will still face some “residual loss and damage”. Adaptation limits can be soft or hard. Soft limits recognise that although requisite technology or finance may not be available, there may be potential for overcoming limits in the future through technological innovation. Limits are hard when adaptive technologies and actions are not feasible. This “beyond adaptation” perspective is reflected in UNFCCC decision 2/CP.19 where Parties state that Loss and Damage “includes, and in some cases involves more than, that which can be reduced by adaptation” (UNFCCC, 2014).

Box 2: Typology of climate-related losses and damages

Avoided losses and damages are risks and impacts that have been and can further be avoided and reduced by climate change mitigation, adaptation and Disaster Risk Reduction (DRR). For example, if a farmer has planted drought-resistant crop varieties that yielded well in a season of extremely low rainfall, he or she has avoided adverse effects of drought.

Unavoided losses and damages are risks and impacts that could in theory have been avoided but have not been, due to socio-economic constraints and trade-offs (finance, governance, political economy). For example, a small island developing state may be unable to afford large-scale beach renourishment needed to guard against the impacts of high sea level rise. The impacts associated with the inability to conduct beach

renourishment can be considered unavoidable losses and damages. The costs of the impacts of some unavoidable risks can be met through Disaster Risk Finance (DRF), including risk transfer such as insurance.

Unavoidable losses and damages are risks and impacts that cannot be avoided and adapted to through further mitigation and/or adaptation measures due to locked in climate change impacts. For instance, impacts from slow onset processes already underway such as sea level rise and melting glaciers. Curative finance is considered by some as the appropriate response for addressing unavoidable losses and damages and may include compensation, such as for forced migration and displacement.

2.2 Overview of negotiating sub groups

Broadly speaking, the main groups active in the Loss and Damage dialogue - including but not limited to the negotiations of the UNFCCC - include those representing developing and climate vulnerable countries, including regional groupings and those with a shared type of risk exposure; developed countries; and non-governmental actors. Within the UNFCCC process, this includes a grouping of small island developing states (SIDS) under the banner of the Alliance of Small Island States (AOSIS); the Least Developed Countries (LDCs) grouping of 46 low-income countries that are particularly vulnerable to climate change; the African Group of Negotiators on Climate Change (AGN or African Group) and the 134-strong Group of 77 and China.

Developed country actors are referred to as ‘Annex I’ countries, in reference to their listing in Annex I of the 1997 Kyoto Protocol to the UNFCCC, which listed those 40 countries (plus the European Union) whose level of industrialisation and wealth meant they committed to

emissions cuts under the Protocol. In the intervening 25 years, within the UNFCCC the term has stuck (and by contrast, developing countries are often referred to as ‘non Annex-I’ countries). Key Annex I groupings include the European Union (EU) which negotiates as a single entity at the UNFCCC, and the (loosely grouped) Umbrella Group, which includes the US, Australia, Japan, Canada and Norway, with members free to speak individually rather than as a bloc.

2.3 Loss and Damage and the UNFCCC

In 1991, the recognition that losses and damages might result from human-induced climate change was conceptualised in a proposal to address impending sea-level rise by the AOSIS to the Intergovernmental Negotiation Committee, the body tasked with drafting the UN Framework Convention on Climate Change (UNFCCC).

While the proposal was not accepted, the concept of Loss and Damage entered the mainstream of UNFCCC policy discussions and has remained highly politically charged.

In 2013, the COP established the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts (WIM), following sustained advocacy over decades on behalf of the G77, AOSIS and LDC blocs. As the primary mechanism under the UNFCCC addressing Loss and Damage, the WIM aims to advance i) knowledge generation ii) coordination and iii) action and support, including finance, technology and capacity-building, to address loss and damage.³ So far, the work undertaken has focused on enhancing understanding and awareness of the issue and promoting collaboration with relevant stakeholders. The WIM has been criticised for making little progress to enhance action and support on the ground in vulnerable developing countries (Niyitegeka, 2022). In the two reviews of the WIM, which took place in 2016 at COP22 and in 2019 at COP25, developing countries repeatedly called for a stronger focus on enhancing action and support.

In 2015, at COP21, Loss and Damage was included as a distinct article (Article 8) in the Paris Agreement, enshrining Loss and Damage as a ‘third pillar’ under the UNFCCC, alongside mitigation and adaptation. This represents an important milestone in formally acknowledging climate change impacts that are ‘beyond adaptation’. A key demand of Annex I Parties, in particular the US, was the inclusion of Paragraph 52 which states that Article 8 “does not involve or provide a basis for any liability or compensation”.

In 2017, at COP23, the Fiji Clearing House for Risk Transfer was launched (following decision 1/CP.21, paragraph 48 at COP21 in 2015). The purpose is to serve as a repository for information on insurance and risk transfer, to facilitate the efforts of Parties to develop and implement comprehensive risk management strategies (UNFCCC, 2016a). To date, this clearing house has acted as a platform for discussion and the sharing of stories among stakeholders. It has supported learning around risk transfer, rather than acting to enhance support to developing countries (Chhetri et al., 2021).

In 2021, Annex I Parties (including the EU and US) blocked the proposal by G77+China at COP26 to establish a Glasgow Facility for Financing Loss and Damage. This resistance stems from concerns that the creation of such a facility may be construed as an admission of legal liability, triggering litigation and compensation claims on a major

scale. Instead, as a weak compromise, COP 26 established the Glasgow Dialogue between Parties (Glasgow Dialogue) as a platform for furthering the discussion of the arrangements for funding to avert, minimise and address Loss and Damage. Clear milestones and outcomes are yet to be defined. Developing countries have clearly articulated their expectation that the Glasgow Dialogue must result in the establishment of a Loss and Damage finance facility.

At the time of writing financing for Loss and Damage has not been included in the formal agenda for COP27. However, it is expected to be a prominent topic of discussion. Notably, the G7 proposal for a Global Shield against Climate Risks⁴, with support from the The Vulnerable Twenty (V20) Group of Ministers of Finance of the Climate Vulnerable Forum, aims to significantly expand pre-arranged financing against climate risks. It is framed as a response to Loss and Damage and will be presented at COP27.

2.4 Financing for Loss and Damage

There is no specific financial commitment for addressing Loss and Damage. Loss and Damage has historically and intentionally been separated from finance discussions, sitting outside the commitments for developed countries to collectively mobilise \$100 billion per year for adaptation and mitigation by 2020. While some financing for mitigation and adaptation will help to avert and minimise losses and damages (FCDO, 2021; L&D Collaboration, n.d.), there is very little available international finance to explicitly address climate change impacts that are beyond the limits of adaptation, i.e., climate change impacts that have already occurred, are unavoidable or are highly likely to be unavoidable (Addison et al., 2021). Moreover, financing for adaptation and mitigation has consistently fallen short of the \$100 billion annual target and remains skewed towards mitigation.

With the exception of early voluntary commitments by developed countries to support insurance mechanisms tailored to respond to losses and damages (e.g., through the InsuResilience Global Partnership), it remains an open question what kind of existing funding schemes could be accessed, or which additional funding windows should be established. Creating a newly dedicated multilateral fund for losses and damages is not currently viewed as politically feasible (Pandit Chhetri et al., 2021).

The necessary finance associated with averting, minimising and addressing losses and damages is not explicitly tracked and reported as a distinct category alongside adaptation

3 <https://unfccc.int/topics/adaptation-and-resilience/workstreams/loss-and-damage/warsaw-international-mechanism>

4 <https://www.bmz.de/en/issues/climate-change-and-development/global-shield-against-climate-risks#:~:text=Poor%20and%20vulnerable%20people%20and,Global%20Shield%20against%20Climate%20Risks>

and mitigation finance commitments (UNFCCC, 2019). There is considerable ambiguity over what is meant by addressing losses and damages that are not averted or minimised. While Annex I Parties, negotiators may argue that early warning systems or adaptation measures reduce losses and damages, developing country negotiators may argue that such measures may ‘avert’ or ‘minimise’, but that financing is not forthcoming to ‘address’ the impact of losses and damages already occurring, such as the soil salinisation of farmland.

Further complicating matters is the recognition that financial flows for mitigation and adaptation contribute to averting and minimising losses and damages. The greater mitigation and adaptation efforts, the fewer losses and damages there will be (Eckstein et al., 2021; CSO Equity Review, 2019; Achampong and Roberts, 2022).

Political framings of Loss and Damage operate across a spectrum (see Table 1), with some stakeholders expressing elements of more than one, and the potential for opinions to shift between them. The table below, adapted from Boyd et al. (2016), gives a sense of some of the differently held political positions on Loss and Damage within UNFCCC

negotiations. Disaster Risk Finance typically sits somewhere across the middle two framings (B and C) with the ‘comprehensive risk management’ perspective typically held by those coming from a disaster risk management background; and the ‘beyond the limits to adaptation’ perspective held by developing country negotiators.

At one end of the spectrum, some parties (largely Annex I Parties’ negotiators) have historically tried to subsume losses and damages under the adaptation framework, as something that can be avoided or at least substantially alleviated, including through risk management or insurance mechanisms. In other words, this group tends to not see the need for a new and separate mechanism for addressing losses and damages after they have occurred, on the basis that losses and damages may be averted in the first place.

These negotiators have generally rejected compensatory language (e.g., “rehabilitation”, “compensation” and “liability”) for fear of creating a legal liability. This was most recently apparent in the context of the US and EU’s opposition to the G77+China proposal at COP26 for a separate and dedicated facility to fund Loss and Damage.

TABLE 1: Framings of Loss and Damage

Framing of L&D	Role of finance	Advocates
A. Equivalent to adaptation and mitigation	Tends to be held by developed countries’ negotiators	L&D does not require additional funding since existing mechanisms for mitigation and adaptation are sufficient to prevent L&D
B. Case for comprehensive risk management	Tends to be held by developed countries’ negotiators, and DRR experts	Do not believe it is useful to distinguish between adaptation and L&D but rather to take a holistic approach to addressing climate change. Emphasis on insurance schemes and private sector finance
C. Climate-related impacts beyond limits of adaptation (i.e. already occurred, unavoids or highly likely to be unavoidable)	Tend to be held by LDC negotiators and adaptation experts	Emphasis on risk transfer, social safety nets, micro insurance, innovations in livelihoods (early warning)
D. An existential and irreversible threat due to unavoidable harm as a result of climate change	Tends to be held by developing countries’ negotiators, specifically SIDS, and climate justice campaigners	The focus is on non-economic losses and damages, irreversible losses, justice and responsibility and compensation as a response, but not exclusively

Source: Adapted from Boyd et al., 2016

At the other end of spectrum, some negotiators from developing countries have treated Loss and Damage as an issue of liability, implying that those states that have historically emitted most greenhouse gases have a moral and legal obligation to compensate poor and highly impacted states. Their demands usually focus on the need for new financing for a set of actions to address loss and damage that are not currently covered by adaptation finance and DRR finance and in line with a climate-justice oriented and human-rights based approach (see Sharma-Khushal et al., 2022).

Vanuatu, on behalf of the Association of Small Island States (AOSIS), first campaigned for the inclusion of Loss and Damage in climate change negotiations in the early 1990s. In 2012, the AOSIS argued that the absence of a mechanism under the UNFCCC to provide a comprehensive response to Loss and Damage is a “gaping hole in the international climate change regime” (AOSIS, 2012). More recently, the LDC group argued that a dedicated financing facility with significant additional resources is “absolutely essential to ensure a full and effective implementation of Article 8 of the Paris Agreement” (LDC Group, 2022). And as noted above, the G77+China tabled a proposal to establish such a facility at COP26 in 2021.

Increasingly groups including the Climate Vulnerable Forum (CVF) are invoking the concept of global solidarity and moral obligations in supporting those most vulnerable but least responsible. The underlying tension between these framings has hindered progress by turning the policy debate into a zero-sum game. However, there are variations in positions. Notably, recent research indicates that different actors also have different perspectives on what “compensation” entails. Some representatives of vulnerable developing countries see compensation as simply meaning providing support (finance, capacity building and technology) to allow vulnerable developing countries to address losses and damages centred without any reference to legal liability (Calliari et al., 2020).

At COP26, Scotland broke ranks with developed countries to pledge £2 million for losses and damages, explicitly describing it as “an act of reparation” rather than “an act of charity” based on the recognition of the climate debt that developed countries owe to developing countries for historical and current emissions. These resources will go to a Climate Justice Resilience Fund, which supports victims of climate change. This is a small sum, but significant in two ways: firstly, it breaks the resistance of the richer nations to explicitly compensate poorer nations for losses and damages and secondly, its operationalisation seeks to bypass the UN system. The Government of Wallonia, representing the Walloon Region of Belgium, also committed €1 million for addressing losses and damages. The Government of Denmark has become the first developed country to pledge \$13million to loss and damage funding at the 77th session of the United Nations General Assembly.

Non-state actors are also influencing the agenda and private foundations announced the creation of a new fund for Loss and Damage in 2021. The Children’s Investment Fund Foundation and the Open Society Foundation committed funding to an international funding mechanism for victims of climate disasters being set up by a coalition of vulnerable countries (V20-Climate Vulnerable Forum fund).

International NGOs including ActionAid, GermanWatch, WWF and Oxfam have been highly supportive of the efforts of developing countries to create a mechanism that provides new financial support to developing countries to address Loss and Damage. This support is rooted in climate justice considerations. In addition, NGOs are increasingly emphasising that the utilisation of Loss and Damage finance needs to be locally driven, with decision-making and implementation on the most local level possible (Sharma-Khushal et al., 2022).



● LINKAGES BETWEEN LOSS AND DAMAGE AND DISASTER RISK FINANCE

In this section we explore how Disaster Risk Finance (DRF)⁵, and particularly risk transfer instruments, are currently positioned in existing conceptual framings of responses to Loss and Damage and identify a range of potential challenges and tensions in pursuing DRF as a response.

3.1 DRF as a response to Loss and Damage

Losses and damages resulting from human induced climate change are wide-ranging in scope and DRF is one among a relatively long list of potential actions with potential to avert, minimise and address them⁶.

A recent UNFCCC technical paper presents a general typology of comprehensive risk management approaches to address Loss and Damage that includes risk assessment, risk reduction, risk transfer, risk retention, social protection, recovery and rehabilitation, and transformational measures (UNFCCC, 2019). Notably, this typology does not include actions to address unavoidable losses and damages (Mechler & Deubelli, 2021).

An alternative and broader framing situates DRF within a comprehensive climate risk management approach (see Figure 1). This framing creates clear distinctions between financing for risk management to reduce climate related risks, risk financing (for risks that could but have not been reduced), and ‘curative’ finance for losses and damages which are beyond adaptation and cannot be avoided (Wallimann-Helmer et al., 2018; Mechler & Deubelli, 2021).

5 According to the Centre's definition, DRF “covers the system of budgetary and financial mechanisms to credibly pay for a specific risk, arranged before a potential shock. This can include paying to prevent and reduce disaster risk, as well as preparing for and responding to disasters.” In practice, this includes a wide range of potential financing instruments. In the context of Loss and Damage, we acknowledge that a narrower focus on risk transfer, and particularly insurance is more commonly expressed.

6 For example, Article 8.4 of the Paris Agreement lists areas for cooperation and facilitation to enhance understanding, action and support for Loss and Damage. These are: early warning systems; emergency preparedness; slow-onset events; events that may involve irreversible and permanent loss and damage; comprehensive risk assessment and management; risk insurance facilities, climate risk pooling and other insurance solutions; non-economic losses; and resilience of communities, livelihoods, and ecosystems.

3.2 Challenges and tensions

This section explores the challenges and tensions surrounding the perceived dominance of DRF, particularly insurance, within the Loss and Damage finance discourse.

CHALLENGE 1: There are clear limits to the application of DRF as a response to climate induced losses and damages

DRF has an important role to play in managing the impacts of climate hazards, however, its benefits do not apply to the full range of potential climate-induced losses and damages.

- **Insurance is not an appropriate measure for all types of risks**

Future losses from slow-onset processes, such as sea-level rise, desertification and the loss of glaciers and other cryospheric water sources, are expected to

be substantial (Schinko et al., 2020). For low-lying developing countries and Small Island Developing States (SIDS) effects will be severe and in some cases existential.

For insurance to be viable it needs to cover events that are sufficiently random and infrequent in their occurrence and is therefore not appropriate for slower-onset, climate-induced impacts, (Linnerooth-Bayer et al., 2018).

More appropriate curative measures include support for setting up or scaling up social protection measures and support for involuntary climate-induced displacement and forced migration. Examples of transformative measures include support for voluntary migration and support in building up alternative livelihood provisions.

Figure 1: Alternative Loss and Damage financing framework

DRR&CCA and Loss and Damage Finance → Slow and sudden-onset risks becoming increasingly intolerable and irreversible		
Avoidable but unavoided losses and damages		Unavoidable losses and damages
Risk Management Finance Finance sources for supporting incremental and transformational risk assessments, risk reduction and risk financing measures	Risk Finance Risk financing mechanisms that transfer or retain residual risks	Curative Finance Finance for dealing with unavoidable risks
• National Budgets • Interantional donor assistance and aid • Resilience-themed bonds • Ecosystems & livelihood restoration & rehabilitation	National and regional riask pooling and financing (incl. catastrophic risk insurance) • Catastrophe bonds • Social protection schemes • National and regional reserve/contingency funds	National, regional and global loss distribution and compensation mechanisms
• National contingency finance with risk reduction provisions, e.g. in contingency trust funds (resolving funds) • National and regional risk pooling & risk transfer with built-in risk reduction incentives/requirements		

Source: Mechler and Deubelli, 2021

- **Insurance cannot cover all types of losses**

Insurance is not well suited to addressing non-economic losses and damages that do not have a market price and cannot be easily given a monetary value. These include lives lost, the loss of species, cultural and psychological losses, temporary or permanent impairment of people's mobility and lost opportunities for children and future generations (Tschakert et al., 2019).

The role of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts (WIM) in promoting instruments to address non-economic losses and damages is still evolving. However, responses under consideration include financing active remembrance (e.g., through museum exhibitions, school curricula), counselling or issuing official apologies.

- **Climate change may make some risks uninsurable**

As climate change will increase the intensity and frequency of extreme weather events, some risks become so severe or frequent that they are uninsurable. An increased risk for currently insurable damages, such as to crops and livestock, will lead to higher premiums, which might ultimately make the product too expensive for the poor and the actors who pay premiums on their behalf. The size of insurance pay-outs may also be reduced. Globally linked weather events may also become more difficult to diversify (Herweijer, Ranger and Ward, 2009; Boers et al., 2019).

Strategies to build community resilience, such as social protection schemes, livelihood diversification, and, in extreme cases, migration, may be more cost-effective ways to address these impacts.

- **Insurance may not be the best option for very poor people facing multiple risks**

DRF tends to focus on hydrological, meteorological, climatological and geophysical hazards.

Climate insurance is typically aimed at one, or perhaps two, risks and does not take into account the fact that climate change exacerbates multiple kinds of risk, in increasingly unpredictable ways. Particularly in complex risk environments, a narrow approach to single risks may be too limiting.

Insurance may not be accessible to or calibrated to benefit the poorest. There is evidence to indicate that constraints to demand for insurance are higher among poorer households, notably due to liquidity

constraints, financial literacy and knowledge (Hill et al., 2021). For example, the R4 Rural Resilience Initiative in Senegal provided loans and insurance to members of producer organisations as a way of reducing transaction costs, thereby excluding farmers in the informal sector who are not members (OECD, 2021). Similarly, the Index Based Livelihoods Insurance programmes in northern Kenya and southern Ethiopia were found to be of least benefit to the poorest, for whom social protection is likely to offer greater benefit and value for money (Fisher et al., 2019).

CHALLENGE 2: DRF provides a range of options, not a solution, to the political questions of “who pays?” and on “what basis?”

DRF instruments provide different potential payment plans to meet the costs of disasters over time. They may provide clarity around who is ‘on the hook’ for meeting the costs (risk ownership), but they cannot answer the politically contentious question in the context of Loss and Damage, of who ought to pay.

Consistent with the ‘accountability’ payment principle outlined in Box 3, the AOSIS proposal for an international insurance scheme in 1991 envisaged an international insurance scheme funded by mandatory contributions from industrialised parties (Annex I Parties to the UNFCCC) partly on the basis of their relative greenhouse gas emissions as one acceptable form of compensation (INC, 1991).

Though the proposal has gradually expanded to include other components, the basic concept of the 1991 AOSIS proposal for a dedicated international mechanism to assist countries affected by climate change is still regarded as valid (AOSIS, 2019). More recently AOSIS supports the Glasgow proposal for a Loss and Damage Finance Facility, of which historical responsibility and the ‘polluter pays’ principle are among the guiding principles (AOSIS, 2022).

In contrast, negotiators from developing countries tend to perceive the comprehensive risk management approach and the focus on risk transfer mechanisms like insurance, as an attempt by Annex I Parties to shift the discussion away from the notion of Loss and Damage as ‘harm’ which they largely caused and for which developing countries therefore need to be compensated to the less contentious notion of ‘risk’ that can be addressed through pre-arranged solutions before events happen (Richards and Schalatek, 2018).

Shifting the narrative underlying international support for pro-poor insurance instruments from ‘solidarity-based assistance’ to ‘accountability’ would be necessary if

insurance instruments were to function as a compensatory response to climate-attributed losses and damages. There is already some evidence that the insurance discourse may be changing in this direction with the Munich Climate Insurance Initiative, a close advisor to The InsuResilience Global Partnership for Climate and Disaster Risk Finance and whose members include insurers, NGOs and climate experts, highlighting the need to ground financial support in ethical claims of accountability (Linnerooth-Bayer et al., 2018).

It is also important to note that whatever basis international financial support is provided on, it should be predictable and sustained.

CHALLENGE 3: Differentiating DRF for Loss and Damage from DRF for other purposes is not straightforward, creating risks that donors re-package existing commitments rather than providing new money

Distinguishing DRF funding for Loss and Damage from DRF funding for adaptation is not straight forward. Activities and actions associated with adaptation potentially overlap with those for Loss and Damage. Bilateral funding and funding via the UNFCCC financial architecture (i.e., Adaptation Fund, Green Climate Fund, Least Developed Countries Fund, and Special Climate Change Fund) does not differentiate and report on financing for Loss and Damage as distinct from financing for mitigation and adaptation (Schäfer et al., 2021; UNFCCC, 2019). There are therefore definitional issues around the boundaries of adaptation finance as well as new reporting modalities that would need to be resolved before DRF targeting losses and damages could be properly classified and tracked.

From the perspective of developing country negotiators, there are concerns that re-labelling existing donor support to insurance schemes or other DRF instruments as ‘Loss and Damage finance’ would allow for double-counting and detract from demands for new and additional financing commitments for Loss and Damage (Sharma-Khushal et al., 2022).

CHALLENGE 4: The preference for insurance may be ideologically motivated rather than evidence-driven and demand-led

Insurance solutions have figured prominently in discussions, dating back to the AOSIS proposal for a global insurance fund in the early 1990s and more recently in the workplans of the WIM executive committee (UNFCCC, 2016a, 2016b, 2019). The WIM and development partners however have been criticised for overemphasising insurance at the expense of other more cost-effective, appropriate, equitable or sustainable solutions to address

losses and damages (Gewirtzman et al., 2018; Richards and Schalatek, 2018; Stamp Out Poverty et al., 2021; Sharma-Khushal et al., 2022; Carty and Walsh, 2022).

Although there are some positive examples that highlight the benefits of insurance, there is a major evidence gap regarding whether climate insurance is the most appropriate or most sustainable risk management mechanism to address losses and damages (Richards and Schalatek, 2018; Prabhakar et al., 2017; Schaeffer and Waters, 2016), particularly in comparison with other approaches such as investing in informal savings schemes, social safety nets, or cash transfer programmes.

Given the absence of robust evidence to support the arguments in favour of insurance, the continued enthusiasm displayed by some donor governments for these mechanisms to address losses and damages is seen by some as ideologically motivated, particularly the emphasis on looking to the private sector and public-private partnerships as a financing solution (Richards and Schalatek, 2018; Gewirtzman et al., 2018). In this narrative, international public finance is primarily seen as a means to “leverage” or bring in the private sector.

Donor-driven solutions potentially undermine country ownership. For some developing countries, donors earmarking scarce climate funds for insurance-based solutions to address losses and damages may serve to prevent them from using these funds to set their own agendas and design context-appropriate solutions. For example, when ActionAid conducted consultations in Malawi regarding the role of African Risk Capacity insurance in drought recovery, none of the responses on how to spend US\$5 million favoured insurance (Richards and Schalatek, 2018). Given the option, developing country governments might prefer direct access to highly concessional climate finance that is passed on to local actors in the form of small support grants or as subsidized small loans with lower interest rates to build resilience and livelihood alternatives.

This does not mean that insurance and other risk finance instruments are not important. However, developing countries and communities must have the space to articulate their needs, weigh the options, and decide how they want to deal with the impacts of climate change.

CHALLENGE 5: DRF instruments are unlikely to provide incentives to reduce risk or target the most vulnerable unless explicit incentives or requirements are intentionally built in

In theory, insurance can go beyond enabling ex post relief, reconstruction and recovery, to be an ex ante tool for promoting risk reduction. For example, parametric systems are notable for the absence of moral hazard

Box 3: Three principles for organising insurance

Mutuality is the primary principle underlying private, market-based insurance; clients enter the pool usually voluntarily and pay according to the best estimate of the risk they bring with them. In a mutuality-based system the policyholders themselves can expect (in the long term) to pay premiums that are approximately equivalent to their received claim payments plus significant additional costs. In other words, there is no reimbursement to the victims of disasters (on average) outside of what they, themselves contribute in premiums.

Solidarity is based on the concept of voluntary transfers for humanitarian or other grounds; there is no underlying notion of culpability on the part of those

providing support for insurance instruments. Losses are paid according to need and contributions to the pool are not made fully in accordance with the risks that the applicants bring with them. Examples include subsidised or cross-subsidised premiums, or other forms of assistance that reduce premiums paid by the most vulnerable.

Accountability mirrors the polluter-pays principle and is motivated by a perceived ethical responsibility or legal obligation for compensating those experiencing climate-attributed losses and damages.

Source: Adapted from Linnerooth-Bayer et al., 2018

compared to traditional indemnity-based insurance products for which claims are paid based on assessments of loss through on-site verification. Since parametric insurance disbursements are not based on actual losses, the insured should be motivated to reduce their losses and damages. However, this is unlikely to happen automatically. According to the Intergovernmental Panel on Climate Change (IPCC), insurance can “directly provide incentives for reducing risk, yet the evidence is weak and the presence of many counteracting factors often leads to disincentives...” (Chambwera et al., 2014).

In addition, DRF instruments can be designed to help ensure that the benefits are directed to those who are least able to withstand shocks. For example, the African Risk Capacity (ARC) Group regional insurance pool requires member governments to develop disbursement plans to ensure that the most vulnerable members of the population benefit from the scheme. Pre-agreeing finance in this way directly enables a more equitable response to crises.

These benefits do not result automatically. Donors or governments need to carefully design interventions to ensure that the potential benefits of DRF are unlocked.

This might involve incentivising risk reduction behaviour, for example by making it a prerequisite for reducing premiums or providing the option for people to work for their insurance cover by engaging in community identified projects to reduce risk and build climate resilience. The latter was successfully done for the R4 Rural Resilience Initiative that offers micro-insurance for drought risk to food-insecure communities in Ethiopia, Senegal, Malawi and Zambia. In lieu of paying a premium, farmers can opt to participate in an insurance-for-assets (IFA) plan, whereby they pay the premium through their labour on projects that reduce risk in the community, such as field irrigation projects and tree planting. Ultimately, donor support is likely to be critical in improving the ability of the most vulnerable people to reduce their own risk and to change their behaviour.

4

● CONCLUSION AND RECOMMENDATIONS

- **Be aware that words matter.** Key terms and concepts used widely such as “losses and damages”, “addressing loss and damage” and “compensation” lack precise definitions and can be used and interpreted differently by different stakeholders. DRF actors need to be conscious of the political and historical underpinnings behind these terminologies and the broader Loss and Damage agenda. As explained in this briefing, representatives of vulnerable developing countries are highly critical of the framing of “addressing the *risk* of loss and damage” on the grounds that it diverts attention and resources from measures to address losses and damages already incurred or locked in, as well as bypassing questions of accountability. Given these political sensitivities, the more inclusive phrasing “addressing loss and damage” can help to avoid inadvertently supporting a narrowed scope of application. It is important to note that this should not exclude talking about risk management or risk financing. As shown in Figures 1 and 2, this framing is consistent with a comprehensive risk management approach.
- **Be mindful that “who pays” for DRF is a highly politically contentious matter.** The question of who can and should ultimately pay for DRF falls squarely in the highly charged political debate centred around climate justice. In this instance, the usual logic of DRF helping to clarify risk ownership is not straight forward and there are risks that DRF places vulnerable country governments and communities ‘on the hook’ for long-term costs that they might argue should be held by those responsible for generating that risk. Concessional finance (e.g., premium and capital support) is being discussed globally as an important tool to expand the use of climate and disaster risk finance and insurance (CDRFI) by directly or indirectly reducing the costs of insurance for beneficiaries. DRF actors must be mindful of the potential political risks and consequences of supporting DRF solutions that place the responsibility to pay on climate vulnerable communities and governments. There is however, considerable potential for premium support to provide opportunities for DRF to support Loss and Damage on the basis of accountability. How this could work and what the nature and scale of costs might look like warrants serious consideration and DRF actors can play a key practical facilitating role in this debate.
- **Recognise that insurance has clear limitations for addressing Loss and Damage.** Insurance has a specific role and, as with all things, must be used in the right way to maximize benefit. Insurance is not suitable for all disasters and cannot provide financial protection against all losses and damages from climate change, particularly those from slow-onset processes and non-economic losses and damages. Instead, non-insurance solutions should be prioritised in these areas. For example, concerning sea level rise, measures could include support for setting up or scaling up financial protection measures and support for involuntary climate-induced displacement and forced migration, along with recognition of loss and active remembrance for cases of non-economic losses and damages.
- **Position insurance as part of a wider risk-layering approach to address Loss and Damage.** There is no single solution to Loss and Damage and insurance is best viewed as part of a holistic climate risk management approach. While the DRF literature looks more specifically at layering multiple DRF instruments that can support responses to specific events, layering frameworks in the Loss and Damage space have taken a broader perspective that combines a variety of mechanisms, of which DRF is one (as shown in Figure 1 above).

This is motivated by the fact that DRF cannot and should not address all Loss and Damage impacts, particularly unavoidable risks, and therefore needs to be complemented by other instruments and approaches such as curative finance.

- **Continue to build evidence, undertake research and focus on learning** to stimulate an informed and nuanced debate and improve the design of instruments to better catalyse risk reduction and adaptation. As explained in Section 3.2 the lack of robust evidence on the effectiveness of DRF instruments to address losses and damages is problematic. The research agenda should include work to identify those for whom insurance is an effective and cost-effective option (and those for whom it is not), assessing opportunity costs, alternatives and complementarities. It should also seek to identify and address gaps in the current evidence base that policy practitioners and decision makers draw on, to generate the evidence and actionable information required to inform decisions about the extent of – and limits to – the role that DRF instruments can play in responding to losses and damages and the impacts of climate change more broadly.

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Cover image: A boy walks beside a water-stained wall of a house, following rains and floods during the monsoon season in Nowshera, Pakistan September 4, 2022.
Image: Reuters/Fayaz Aziz

