# Briefing

#### Climate change; Policy and planning

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## Policy pointers

#### Decision makers and

others seeking to address loss and damage must consider the range of risks and impacts that will affect different people over different timescales, as well as the unequal distribution of risks and impacts due to vulnerability and marginalisation.

#### Addressing loss and

damage requires a holistic and comprehensive response by decision makers where complementary interventions are 'layered' to establish a suite of contextually relevant actions to support populations on the frontline.

#### Actors working across

adaptation, development, disaster response, humanitarian aid and disaster risk reduction must collaborate to share knowledge, explore innovative solutions and deliver layered and coordinated approaches that address loss and damage.

Measures to tackle loss and damage should be guided by the ten guiding principles for good practice outlined here to ensure they are sustainable, effective and socially impactful.

## Practical action to tackle loss and damage risks: ten guiding principles

The need for practical action to address loss and damage caused by the climate crisis is now urgent. Climate change impacts not only occur over a wide range of time horizons, they are also increasing in intensity and frequency, happening consecutively, overlapping, and interacting with underlying causes of vulnerability and marginalisation. In addition, the distribution of risk is unequal between households, communities and regions. In this briefing, we outline the complex and multidimensional nature of loss and damage risks and explain why addressing them requires a 'layering' of interventions. We also outline ten guiding principles that can help governments, decision makers and other stakeholders to deliver a suite of layered, practical, effective and sustainable measures that address loss and damage risks and impacts at national and local levels.

The impacts of climate change are increasing in intensity and frequency across the globe. This includes both rapid-onset climate shocks such as cyclones and floods alongside slow-onset climate stressors such as sea-level rise and drought. These impacts are being felt disproportionally by communities and ecosystems across the global South, incurring both economic and non-economic types of loss and damage. While effective climate change adaptation will limit the harm to ecosystems, people, communities and countries, these measures have their limits. It is increasingly likely that these limits will be reached and breached and that many at-risk communities and countries will be unable to adapt quickly enough to overcome the loss and damage risks they face.1

However, taking action is made challenging by the complex nature of loss and damage risks, which are not only impacted by the increasing intensity and frequency of individual climate shocks. They are also multidimensional, occur over a wide range of time horizons, and are exacerbated by climate change impacts that are compounding, occurring consecutively and overlapping. Residual risks (the remaining risk of loss and damage despite having adaptation and mitigation measures in place) also intersect with underlying causes of vulnerability, while new risks can emerge in the wake of an event (Box 1).

In the face of these challenges, practical action is needed now to address loss and damage and support communities to respond to, recover from and reduce the number of different risks they face over time. But most importantly, these actions must be effective, sustainable and socially impactful.

#### What struggles do decision makers face?

To address loss and damage effectively, decision makers must consider a number of important issues. How will different types of loss and damage affect different people in different places over time? Where and when will the limits of adaptation be reached in different locations? How does vulnerability to loss and damage vary based upon social, political, geographic, environmental

Without good practice principles, interventions can become ineffective, unsustainable, or harmful and economic factors?
And how do intersecting factors — such as vulnerabilities and marginalisation — create an unequal distribution of risks within households, communities and regions?

Decision makers need to take a holistic and comprehensive approach that considers all these factors. A number of solutions already exist that have the potential to do this effectively. However, no individual measure will be sufficient on its own. The diverse nature of the challenge demands an equally diverse range of appropriate solutions: ones that are contextually relevant, take the particular characteristics of loss and damage risks and impacts into account, and tackle both short-term shocks and longer-term risks.

#### Why 'layering' is key to delivering effective measures

The concept of 'layering' actions can help decision makers tackle the complexity of loss and damage risks. 'Layering' refers to designing a layered suite of contextually relevant interventions that are implemented in parallel and over different timescales.<sup>3</sup> This layering approach can support vulnerable communities and households to address the range of different climate impacts and risks that they might face over time. It also ensures that as the limits to adaptation are reached, the inadequacy of one measure can be offset by other complementary measures. Box 2 illustrates what layering might look like in practice.

Tools such as climate risk assessments<sup>4</sup> and vulnerability mapping<sup>5</sup> can play a useful role in supporting decision makers to understand the

## Box 1. An example of multidimensional loss and damage risks and impacts

Subsistence farmers in Jamaica are not only impacted by the increasing frequency and intensity of extreme weather events such as seasonal hurricanes, but by the consecutive and compounding impacts of unprecedented droughts and flooding, and by overlapping slow-onset climate processes such as saline intrusion, coastal erosion and sea-level rise. While impacts such as hurricanes and droughts may be short-term events, they undermine the ability of households and communities to cope with shocks. This increases their risk of future loss and damage and leaves them even less prepared. In attempting to rebuild and recover after these experiences of loss and damage, these farmers may be pushed further into poverty and forced to consume all remaining assets and savings.

types of measures best suited to tackling specific forms of loss and damage that affect different people in particular contexts. These tools can also help to inform when and where particular risk thresholds have been or may soon be reached and which corresponding measures to use.

Layering also requires actors from different networks — humanitarian aid, disaster response, disaster risk reduction, development and adaptation — to draw on their expertise to implement a range of interventions. Once a suite of 'layered' interventions is chosen that is best placed to address the particular types of loss and damage a community is already facing or is likely to face, all stakeholders must come together to share their knowledge, explore innovative solutions, design and deliver coordinated responses, and begin applying the concept of layering.

## Ten guiding principles for decision makers

Layering a suite of interventions is critical for addressing loss and damage effectively. But how these measures are implemented and delivered can hugely affect their impact. Without good practice principles to guide them, interventions can become ineffective, unsustainable, or — at worst — harmful. Based on our research with partners in countries who are already working with the impacts of loss and damage, we recommend that decision makers are guided by the following good practice principles.<sup>1</sup>

#### 1. Map multidimensional vulnerabilities

It is critical that decision makers identify different vulnerabilities across and within populations. Vulnerability mapping plots exposure, sensitivity and coping capacity area, and can provide crucial information when developing plans<sup>5</sup> and identifying gaps or opportunities to address loss and damage. Decision makers must focus on highly vulnerable people and places by seeking support from grassroots organisations to generate bottom-up evidence. This will help them to better understand the actual loss and damage incurred by communities, including non-economic loss and damage, as well as including communities that may be excluded from official databases such as Indigenous communities or people living in informal settlements.

## 2. Communicate climate risks effectively

Climate risk communication is important for both rapid- and slow-onset hazards. Measures such as early warning systems are unsuccessful if the appropriate communication of climate risks does

not flow readily from forecasters to decision makers to the people most at risk.<sup>6</sup> Climate risk communication is most effective when it is communicated to those who need the information most, in a bottom-up manner. It must be made appropriate for the intended audience by removing jargon and translating it into local languages or dialects, and packaged with clear advice on what to do and the support services that are available.

#### 3. Act early, before risks become disasters

Where possible, measures must promote prevention and preparedness: pre-hazard interventions that actively shift the narrative from reactive emergency management to disaster risk reduction. Felicate shows that several measures are most effective when implemented pre-emptively. For example, pre-emptive evacuation, Pelocation and cash transfers have shown to be more far-reaching, cost-effective and successful.

## 4. Empower communities to lead local responses

Local community members are the first responders in any disaster situation.<sup>12</sup> They also hold a vast amount of location- and context-specific knowledge and skills to deal with climate stressors. Communities can not only play a critical role in risk-reduction efforts, but they can operate as first responders in the aftermath of rapid-onset events. Local and national governments should, alongside nongovernmental organisations (NGOs), consider creating and training community-based teams for disaster management, disaster risk reduction and emergency response. These teams will bring with them locally specific and often innovative knowledge, skills and solutions. With adequate empowerment, education, and financial and technical support, communities can lead local responses to tackle loss and damage.

## 5. Ensure measures address locally defined priorities

Before deciding on a suite of layered measures to tackle loss and damage, it is vital to ensure that those measures have been designed to meet the needs identified by affected communities or vulnerable social groups. Many risk-reduction and response and recovery measures will have direct impacts on the communities for whom their benefit is intended. If community needs are not considered, it will limit their sense of ownership and thus the long-term sustainability of initiatives. It can also cause negative social impacts, maladaptation and additional economic and

#### Box 2. How layering could work in practice

- Where the increasing intensity and frequency of climate shocks have rendered one adaptation measure ineffective (such as saline-tolerant rice cultivars to combat saline intrusion), measures such as social protection programmes can act as a social safety net to help households better absorb shocks and recover from loss and damage.
- In addition, measures such as community-based disaster risk reduction, emergency response and recovery can address immediate and residual loss and damage facing households in the aftermath of extreme and rapid-onset events such as hurricanes.
- Interventions such as nature-based solutions and floodproofing infrastructure can help address compounding risks such as flooding or landslides.
- Index-linked insurance or forecast-based financing can deliver anticipatory support to households who might be struck by climate shocks in the near future.
- More long-term interventions such as planned relocation or livelihood diversification can be implemented where limits to adaptation are reached (such as when certain locations become uninhabitable or unsuitable for particular livelihoods).

non-economic losses and damages. Participatory processes and approaches in planning can help determine the loss and damage needs of vulnerable communities.<sup>13</sup>

## 6. Address the underlying causes of vulnerability

Climate change interacts with diverse social, economic and political processes.14 The impacts of climate change are thus exacerbated by place-based vulnerabilities and their sociopolitical causes. In addition, the impacts of climate change-related events can be exacerbated by non-climatic drivers that become underlying risk factors. 15 Because of this, in highly exposed or highly vulnerable communities, loss and damage risks are likely to remain, no matter what forms of adaptation action are taken. Communities that hold this residual risk are still likely to experience loss and damage if structural issues are not addressed. Action should address chronic drivers of vulnerability such as poverty, food insecurity and poor infrastructure, alongside response, recovery and risk-reduction measures. Short-term action to address loss and damage must be linked to long-term resilience-building.16

## 7. Take a whole-of-government approach

Tackling climate change is often the remit of specific government agencies or departments, many of which work in siloes. However loss and damage impacts all sectors of society. Ministries of finance, transportation and agriculture must all address loss and damage in different ways. Climate risk must be mainstreamed into all sectors and requires collaboration and

coordination across ministries and between different levels of government. Local governments must be empowered and financed to address loss and damage in locally appropriate ways to ensure that the suite of layered measures selected to tackle loss and damage risks in a particular place are chosen and implemented effectively.

#### 8. Include the whole of society

Addressing loss and damage requires effective collaboration and partnerships across the whole of society. This requires effective coordination of planning and action by multiple agencies and organisations from local to national and international levels, including government, community representatives and community-based organisations, national and international NGOs, donors and finance providers, the media, and the private sector. For example, as trusted organisations who work closely with local communities, local NGOs and CBOs are often well placed to work alongside governments to increase community resilience, communicate and reduce risk, and coordinate and carry out response and recovery measures.

#### 9. Be ecologically sound and harness the role of nature

The poorest people in least developed countries and small island developing states depend upon nature for food, resources and other ecosystem services. To Some communities also hold cultural and/or spiritual connections with nature. Efforts to address loss and damage should aim to be ecologically sound: avoiding ecological damage and leaving ecosystems stronger than before. Nature can also protect communities against climate change impacts — for example, intact coastal ecosystems can reduce the energy of

storm surges. Well-designed nature-based solutions offer cost-effective ways to build resilience and address challenges such as food and water security.

## 10. Always account for non-economic forms of loss and damage

Different types of non-economic loss and damage (NELD) are not easily quantified in monetary terms and are often invisible and difficult to address. However, when considering appropriate measures to use, decision makers must ensure that NELDs are considered. National governments must be aware of cultural practices and value systems to ensure policies and practices not only recognise and address NELDs, but support communities in building resilience to avoid NELDs — and to ensure measures do not incur further loss and damage. 13

#### Working together is key to success

There are no 'off-the-shelf' solutions for tackling loss and damage. Some measures may be scalable, and countries and regions can learn from one another. But a one-size-fits-all solution does not exist. Some actions will be more appropriate in one context than another, and different measures will work in different contexts and enabling environments. The key to success is to create a layered suite of complementary interventions. This requires all stakeholders — including decision makers, local communities and their organisations, NGOs, and actors across different networks — to work together to share knowledge and explore innovative solutions to support populations on the frontline of the climate crisis.

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## Knowled

#### Knowledge Products

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#### Notes

¹ Addison, S, Bharadwaj, R, Carthy, A, Gallagher, C, More, C, Nisi, N and Shakya, C (2022) Addressing loss and damage: practical insights for tackling multidimensional risks in LDCs and SIDs. IIED, London, pubs.iied.org/21046iied / ² Selvaraju, R (2013) Climate change and agriculture in Jamaica: agriculture sector support analysis. FAO, Rome. https://bit.ly/3RAADn2 / ³ The concept and practice of 'layering' a suite of interventions is discussed in more detail in Chapter 5 of note 1. / ⁴ UNFCCC Executive Committee of the Warsaw International Mechanism for Loss and Damage (2019) Compendium on comprehensive risk management approaches. https://unfccc.int/documents/200759 / ⁵ Mohanty, A and Wadhawan, S (2021) Mapping India's climate vulnerability — a district level assessment. Council on Energy, Environment and Water, New Delhi. / ⁶ Bharadwaj, R, Gallagher, C, Carthy, A, Nisi, N, Shakya, C and Addison, S (2021) Climate change loss and damage: 1st deliberative dialogue report. IIED, London. pubs.iied.org/20346iied / ⁵ UNFCCC (2020) Policy brief: technologies for averting, minimizing and addressing loss and damage in coastal zones. https://bit.ly/3RzXoXR / ⁶ Victoria, LW (2003) Community based approaches to disaster mitigation. Center for Disaster Preparedness, Philippines. / ⁶ IPCC (2012) Managing the risks of extreme events and disasters to advance climate change adaptation. https://bit.ly/3KOtxc3 / ⁶ Pople, A, Hill, RV, Dercon, S and Brunckhorst, B (2021) Anticipatory cash transfers in climate disaster response. Centre for Disaster Protection, London. / ¹¹ Resilience Hub (10 November 2021) Creating resilient cities amidst climate change, informality and migration. https://bit.ly/3wVeilo / ¹² Briones, F, Vachon, R and Glantz, M (2019) Local responses to disasters: recent lessons from zero-order responders. *Disaster Prevention and Management* 28(1) 119–112. / ¹³ Roberts, E and Andrei, S (2015) The rising tide: migration as a response to loss and damage from sea level rise in vulnerable communities. *International J* 

