

# Closing the gaps

## A framework for understanding policies and actions to address losses and damages

Global failures to mitigate and adapt to the climate crisis are causing massive losses and costly damages to the lives, livelihoods, and futures of communities around the world.<sup>1</sup> This is not just a future problem: this year, for example, Pakistan suffered a heatwave that pushed the limits of human liveability, peaking at 49.5°C in May, followed by catastrophic flooding that damaged or destroyed more than a million homes and countless acres of crops, causing an estimated US\$30 billion in losses and damages, more than 10% of the country's GDP.

It is becoming all too evident that the climate crisis is causing human, cultural, economic, and ecological devastation. Much of this is avoidable; some is irreversible. While much more evidence is needed at national, subnational, and community level to fully understand the scale and scope of losses and damages, it is urgent to mobilize concrete, practical action, and to formulate effective policies in the face of rising climate-related risks and impacts.

Global efforts to *avert and minimize* losses and damages, including through mitigation and adaptation, have been woefully inadequate. Efforts to *address* resultant losses and damages are highly insufficient, and national and international humanitarian response systems are already overstretched and underfunded.

As a result, a vast proportion of losses and damages is borne by vulnerable households and communities; and these same communities have the least capacity to cope. There is a moral imperative to act in solidarity with those who are suffering now, and to develop an approach that will protect generations to come.

The international community must agree to scale up action, and to resource a comprehensive approach to averting, minimizing, and addressing losses and damages. It must also identify new and additional financing sources – as is currently being discussed under the Glasgow Dialogue – as well as operationalize the Santiago Network.<sup>2</sup>

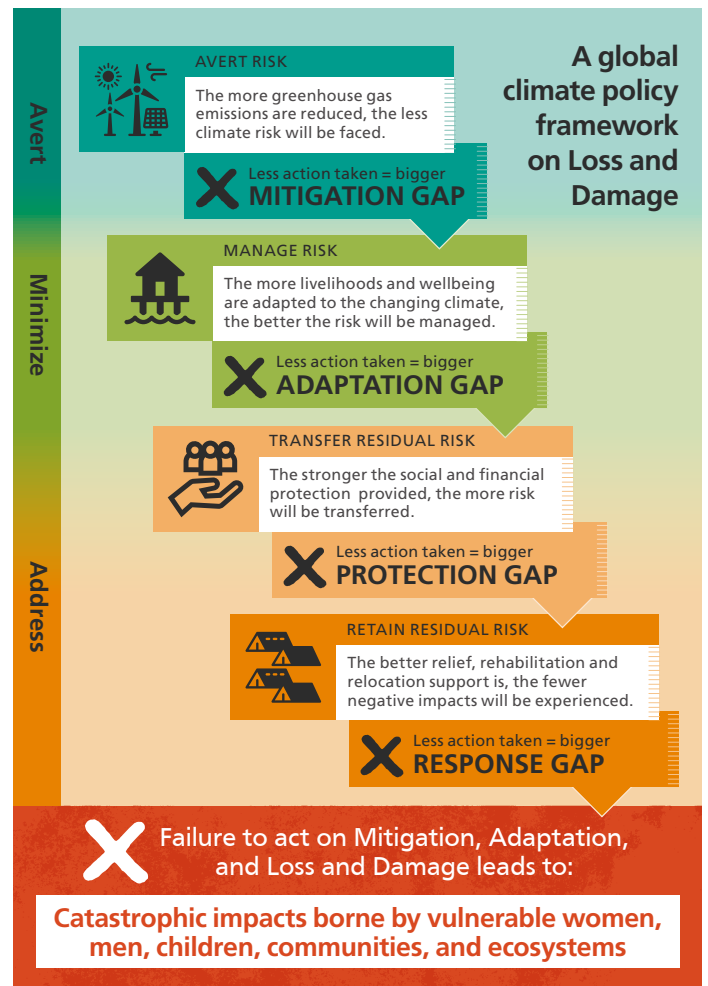


Figure 1. The global climate policy framework on Loss and Damage<sup>3</sup>

- 1 The IPCC defines 'losses and damages' in lower case as (observed) impacts and (projected) risks from climate change. The capitalized 'Loss and Damage' refers to political debates and activities under the UNFCCC following the creation of the Warsaw International Mechanism for Loss and Damage in 2013.
- 2 The Santiago Network, endorsed at COP25, aims to facilitate the provision of technical assistance for the implementation of approaches for averting, minimizing, and addressing loss and damage at the local, national, and regional level in vulnerable developing countries.
- 3 This diagram summarizes the Loss and Damage policy debate, impacts, and gaps; it is simplified to increase clarity, recognizing that it does not capture the full nuance of the negotiations.

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## Evidence from Bangladesh, Indonesia, and Nepal

To better understand the realities for frontline communities, the Zurich Flood Resilience Alliance explored flooding impacts and risks in Bangladesh, Indonesia, and Nepal. In all three countries, flooding and associated losses and damages are already increasing, whether from coastal, riverine, and pluvial floods in Bangladesh; glacial lake outbursts and flash floods in Nepal; or storm surges in coastal areas of Indonesia.

### Vulnerable countries and households are shouldering the economic costs of climate change

The economic costs of climate change are alarming: by 2050, economic losses in Nepal and Bangladesh are estimated to be up to 2.2% and 2.0% of annual GDP respectively; by 2100, economic losses in Indonesia could be 2.5–7% of GDP.<sup>4</sup> While some of these costs are covered by international assistance or by local and national authorities, the lion's share is borne by affected households. For example, in 2015, rural households in Bangladesh spent an estimated \$2 billion on climate and disaster risk management – double what was spent by the government and more than 12 times what was received from multilateral institutions.<sup>5</sup> To do this, households living in poverty had to divert money away from basic needs, such as food, education, and health, to repair damage to their homes, replace animals or destroyed crops, and implement disaster risk management measures, such as raising their houses above flood levels. These costs hit female-headed households much harder – while absolute amounts spent were similar to male-headed households, as a percentage of income they spent three times more.

### Climate change is undermining human well-being and planetary health

Non-economic losses and damages include human pain, suffering, and casualties; loss of cultural heritage and social and cultural identity; and loss of biodiversity and damage to natural ecosystems. Our research found:

- In Bangladesh, in the aftermath of floods, there is a rise in child labour and the marriage of underage girls as households are unable to afford education for their children.
- In Indonesia, floods are causing coastal erosion, damage to coral reefs, migration of fish stocks, and biodiversity loss – all of which can have irreversible and damaging effects far beyond Indonesia's borders.

- In Nepal, after the 2014 floods, people reported higher levels of illness and effects on children's growth and development, as well as high levels of stress and anxiety, reportedly leading to higher rates of depression and increased risk of suicide.

### Affected countries cannot avert, minimize, and address losses and damages alone

The governments of Bangladesh, Indonesia, and Nepal are attempting to avert, minimize, and address losses and damages in various ways. For example, in the policy sphere, Nepal recently approved a national framework on climate change-related losses and damages; Bangladesh is discussing establishing a national Loss and Damage mechanism; and Indonesia is setting up institutional architecture for observing, reporting, and responding to climate change-related disasters.

However, countries are facing escalating challenges, particularly a lack of resources to cover the full range of activities needed to keep populations and ecosystems safe. Thus, while protection schemes do exist in Bangladesh, Indonesia, and Nepal, social protection programmes are not shock-responsive. Insurance is often inaccessible to those most affected by climate change-related disasters, and it is rarely affordable: for example, only 0.16% of the Bangladeshi population is covered by non-life insurance.<sup>6</sup> Given these many challenges, both financial resources and additional capacity are needed for national authorities to establish and implement effective policies to avert, minimize, and address losses and damages.



A member of Mercy Corps' response team in Indonesia surveys the damage caused by the Seroja Tropical Cyclone in 2021, which destroyed vital infrastructure and displaced over 10,000 people.  
**Photo:** Mercy Corps

<sup>4</sup> Estimates are taken from the Asian Development Bank (Nepal), IPCC (Bangladesh), and World Bank (Indonesia).

<sup>5</sup> Eskander, S. and Steele, P. (2019) 'Bearing the climate burden: how households in Bangladesh are spending too much', International Institute for Environment and Development (IIED) Issue Paper, <<https://pubs.iied.org/sites/default/files/pdfs/migrate/16643IIED.pdf>>

<sup>6</sup> LightCastle Analytics Wing (2021) 'Can climate risk insurance shield Bangladesh from environmental perils?' [online], <<https://www.lightcastlebd.com/insights/2021/09/can-climate-risk-insurance-shield-bangladesh-from-environmental-perils/>>



## Mind the gaps: adaptation, protection, and response

How did we get to a situation where climate change is causing damage, destroying homes, infrastructure, agriculture, biodiversity, and ecosystems, and leading to the loss of lives, livelihoods, dignity, and hope?

Insufficient global action on mitigation has led to a certain amount of global warming being ‘baked into’ the climate system, making it impossible to avert the risks and impacts being observed today. Consequently, the global community must now also focus on efforts to *minimize* climate-related impacts through adaptation and disaster risk management. Yet, inadequate funding and ineffective policies mean that adaptation in the global South is often ‘fragmented, small in scale, designed to respond to current impacts and near-term risks’<sup>7</sup> As such, it is ill-equipped to comprehensively manage and address the consequences of crises today and in the future. This in turn creates a significant and growing climate ‘**adaptation gap**’ (see Figure 1). Adaptation costs in developing countries could reach an annual figure of \$300 billion in 2030, yet international public finance amounts to barely 10% of this.

Insufficiently effective adaptation and the fact that some physical processes associated with the climate crisis – such as rising sea levels – are now *unavoidable* have led to countries and communities around the world experiencing large-scale losses and damages. Efforts to address these failures through, for example, financial and social protection, and through the provision of assistance and support for rehabilitation are falling short due to inadequate investment, resulting in the ‘**protection gap**’ and ‘**response gap**’.

## Data matters: a key ingredient for better policy design

All country case studies emphasize the need for better and more comprehensive data about losses and damages in order to be able to design more effective policies.

First, policymakers need better measurement tools so that they can understand the full scope of losses and damages, and estimate the financial requirements needed to address them. To enhance the comparability of estimates, these tools would ideally be systematized globally.

Second, as not all losses and damages can be quantified, policymakers need a better understanding of the impacts of hazards on people’s lives and on the well-being of communities and their environments in order to understand people’s needs. Indigenous and local knowledge, narratives of lived experience, and qualitative insights on where community well-being is being disrupted are key to understanding these non-economic impacts.

Third, policymakers need a better understanding of how community resilience can be improved. More data is needed to understand the causes and consequences of climate risks and impacts, as well as the resilience of communities to overcome these impacts, based on local understanding and knowledge. The FRMC and PERC tools (see Box 1) could help fill these information gaps. For example, in Nepal, the FRMC tool has been used to identify locally applicable good practices to address community resilience priorities. As a result, Practical Action and Mercy Corps flood resilience practices, such as bio-dykes, raised granaries, and safe shelters, are being implemented and financed by local government.

### Box 1. Strengthening community resilience through innovative, evidence-based tools from the Zurich Flood Resilience Alliance

#### Flood Resilience Measurement for Communities (FRMC):

The FRMC allows users to generate evidence about the ways in which a given area or community is already resilient to floods, and provides a guide to develop that resilience further. So far, it has been applied to more than 300 communities in some 30 countries.

**Post-Event Review Capability (PERC):** Following large floods, the PERC reviews flood resilience, flood risk management, and post-flood interventions. It summarizes lessons learned, opportunities for improvements, and recommendations for future flood resilience measures.



Heavy monsoon rains that hit Bangladesh in May 2022 caused widespread displacement and destruction, as well as injuries, illness and death.  
Photo: Rubel Talukder, Concern Worldwide

<sup>7</sup> IPCC (2022) Summary for Policymakers, Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change

## Policy recommendations

**Cover the adaptation gap:** *massive investments are needed now to prevent and manage avoidable losses and damages for the most vulnerable people. Adaptation investments reduce the irreversible harm that otherwise cannot be recovered through risk transfer or response mechanisms.*

- At a minimum, developed nations should make good on the commitment to provide \$100 billion of climate finance per year, with 50% for adaptation.
- Losses and damages should be included in the Global Stocktake<sup>8</sup> as evidence of the limits to adaptation and the failure to mitigate.

**Close the protection gap:** *major investments are needed in all climate-vulnerable countries to increase protection as well as boost adaptation to unavoidable risk.*

- The lessons from shock-responsive social protection, weather-indexed insurance, and similar schemes should be assimilated and used by national and international agencies to create or strengthen comprehensive and shock-responsive social protection programmes and, where appropriate, well-designed insurance schemes.
- Support for comprehensive protection schemes should be provided through global climate funds.

**Address the response gap:** *new approaches are urgently required to ensure that the most vulnerable women, men, and children do not suffer the costs of the climate crisis where the means to adaptation are exhausted.*

- New and additional finance for addressing losses and damages, such as financial and social protection, relief and rehabilitation, alongside effective tracking and accountability mechanisms should be generated urgently, together with the development of harmonized and comprehensive ways to assess losses and damages.

- Loss and Damage should be included in discussions on the New Collective Quantified Goal,<sup>9</sup> in addition to mitigation and adaptation finance.

**Enhance policymaking and implementation capacity:** *systems need to be strengthened at all levels so that increased funding can be delivered effectively.*

- Vulnerable countries should establish comprehensive and effective national and subnational policies, institutional frameworks, strategies, mechanisms, and programmes that support adaptation and address losses and damages in a way that is holistic rather than incremental, focuses on vulnerable locations and ecosystems, and meets the needs of the most vulnerable people.
- The Santiago Network should be operationalized swiftly and funded to provide the extensive technical assistance that is required.

**More and better data:** *investment is required to build evidence on the scope of risks and impacts – economic, human, ecological – and on the effectiveness of the policies and programmes designed to minimize and address them.*

- National agencies for disaster risk management, climate adaptation, social protection, etc. need to be helped to coordinate better and to share data and tools, with national Loss and Damage contact points established across sectoral mandates.
- More data and evidence are needed, developed in collaboration with the local community, to better prepare communities against climate change-related hazards.

**Scale up successful locally led response mechanisms**

- Global and national funds should finance the expansion of measures to address losses and damages that have proven to be effective, are locally led, and meet the specific needs of the communities they support.

<sup>8</sup> The Global Stocktake is a process for taking stock of the implementation of the 2015 Paris Agreement, with the aim to assess the world's collective progress towards achieving implementation and the Agreement's long-term goals.

<sup>9</sup> The Paris Agreement stipulates setting a New Collective Quantified Goal for Climate Finance prior to 2025. This goal is to be built on the foundation of the commitment to provide \$100 billion per year by 2020, and must consider the needs and priorities of developing countries

**The Zurich Flood Resilience Alliance** is a multi-sectoral partnership which brings together community programmes, new research, shared knowledge, and evidence-based influencing to build community flood resilience in developed and developing countries.

We help people measure their resilience to floods and identify appropriate solutions before disaster strikes.

Our vision is that floods should have no negative impact on people's ability to thrive. To achieve this we are working to increase funding for flood resilience; strengthen global, national, and subnational policies; and improve flood resilience practice.

**Find out more: [www.floodresilience.net](http://www.floodresilience.net)**

The Zurich Flood Resilience Alliance is made up of the following organizations:

