

CLIMATE CALAMITY

Journey to Justice for Loss and Damage



Gopal Krishna Siwakoti, PhD

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Dedication

To the defenders of our planet - past, present, and future

This book is dedicated to the communities most affected by climate change, whose resilience and courage inspire us to demand justice and create solutions. It is also dedicated to the scientists, advocates, and policymakers who work tirelessly to combat the climate crisis. And it is dedicated to the generations yet to come, in the hope that this work contributes to a world where thriving ecosystems and equitable futures are not a dream but a reality.

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Message from the Prime Minister (Nepal)



Prime Minister

Kathmandu, Nepal

Message

In a world defined by the ever-more overwhelming dilemmas of the climate crisis, this research-grounded publication is a starting point in the pursuit of justice, accountability, and human rights in the global climate discourse. In this context, the questions discussed in this book—litigation, justice, the Loss and Damage Fund, and the role of the COP series—have monumental significance.

The establishment of the Fund for responding to Loss and Damage under the UNFCCC agreement at COP27 was a watershed moment in acknowledgment of the irreversible harms perpetuated by climate change. However, as this book rightly underscores, actual forward movement is not measured by the existence of such a fund but through its implementation—ensuring that it is equitably managed, utilized effectively, and transparently monitored to benefit the most affected communities suffering from climate-enabled loss and displacement.

Justice is the heartbeat of this work, presented as a principle to be brought to action in climate policy, governance, and practice. This book, by interweaving hard analysis and lived experience, invites us to take up the challenge of addressing the power imbalance and responsibility that defines our climate world. Least Developed Countries of the world, normally least responsible for greenhouse gas production, continue to bear the greatest burdens. For this purpose, the book supports accountability-based justice, ethical duty, and centrality of human rights in responses to climate change.

Perhaps most interestingly, the book has some discussion of climate litigation as a tool of systemic change. By mapping the evolving terrain of climate litigation, this book provides essential insight to scholars, policymakers, and advocates who wish to construct a world where environmental responsibility and human dignity are safeguarded equally. This book challenges the transformation of these historic events from spaces of promises and talks to spaces of concrete, doable action. It is a call to move beyond promises and embrace responsibility so that climate justice is not an illusion but a reality. For all those committed to advancing climate justice and advocating for the rights of the most vulnerable amid the crisis, this book is both a source of inspiration and guidance. This book can serve as a significant resource to enhance the discourse on loss and damage in preparation for the upcoming Sagarmatha Sambad (Everest Dialogue), which the Government of Nepal is hosting in Nepal in May 2025 under my stewardship.

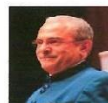
19 April, 2025

K P Sharma Oli

Message from the President (Timor Leste)



Presidente da República

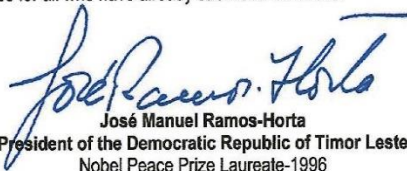


Climate change is exacerbating extreme weather events, rising sea levels, and ecosystem collapse, disproportionately harming vulnerable communities least responsible for the crisis. Its impacts—from food and water scarcity to displacement and economic losses—threaten human rights, global stability, and the survival of future generations. Rising temperatures, apocalypse-scale storms, and long-term environmental ruination are not only environmental disasters; they're human rights catastrophes, perpetuating injustice and robbing people of their rights today, tomorrow, and the day after tomorrow. It is here, at this decisive junction, that the policy, the demand for climate justice, the recourse to litigation, and increasing demands for liability in loss and damage converge that they now occupy the action at the international level. The book presents itself as an urgent analysis of what policy, campaigns, and law can be used in opposition to the injustice of the climate problem.

Climate lawsuits have become an even more potent tool, forcing governments and corporations to answer for their complicity in creating the crisis and inaction. From milestone cases and embracing the right to a healthy environment to innovative legal strategies that are spearheading reparations for loss and damage from climate change, the courts are now a struggle for justice. At the center of this conflict lies the climate justice ethic—that those most innocent to be blamed for the climate crisis are most affected negatively.

From tiny island nations on the verge of extinction as a result of sea-level rise to vulnerable groups devastated by drought, flood, and displacement, the voice for justice is calling louder. The worldwide debate regarding loss and damage funding represents this moral obligation, though much still has to be done before politics' promises are actualized in the form of reparations. The book provides an in-depth analysis of these pressing matters, combining law, case studies, and creative policy thinking.

It's a campaigners' readymade tool, lawyer's handbook, policymaker's guide, and blueprint for all who yearn for a green and equitable future. As the struggle over climate justice accelerates at increasingly faster speeds, the book dispels pitfalls and possibilities of transformation in using campaigning and litigation to meet demands for accountability by actors on center stages of the crisis. The future is fraught with challenge, but it is also fraught with hope. By engaging with and listening to the legal and ethical paradigms sitting atop these pages, we can be engaged participants in a movement that both reduces harm but demands justice for all who have already sacrificed too much.


José Manuel Ramos-Horta
President of the Democratic Republic of Timor Leste
Nobel Peace Prize Laureate-1996

Foreword

This is a timely and much-needed contribution to the climate justice debate on loss and damage through this book titled "Climate Calamity: Journey to Justice for Loss and Damage." In its investigation of the intricacy of loss and damage due to climate change, it not only does it calls for urgent global action, but also maps the route to fair solutions. The author has perfectly blended academic research and field experience in turning this book into a resource for policymakers, researchers, and activists around the world. It is a heartfelt appeal to a world imperiled by the irreparable damage wrought by climate change.



This book examines the intersection of climate justice and litigation as a response to disaster displacement and its implications, thus offering a critical examination of how legal systems and the judiciary are being used in tackling the climate crisis. The book addresses the climate action requirements in all the major international human rights treaties and regional human rights mechanisms, and possibilities of international activism.

The book also reveals the evolving role of courts in holding governments and business corporations to account for their role in climate change, and in safeguarding the rights of vulnerable populations disproportionately affected by its impacts. Under climate justice, the book invokes the moral and equity dimensions of climate change for just treatment and meaningful participation of all, particularly poor individuals, in climate decision-making. Litigation trends contain a very comprehensive overview of trends in climate litigation globally, from milestone cases to new legal strategies and the growing prominent role of human rights law in climate litigation. Similarly, using in-depth case studies, the book demonstrates how litigation has been utilized to force action on bad climate policy, combat greenwashing by corporations, and obtain compensation for loss and damage.

The book also discusses climate litigation's impact on global climate governance, showing the usefulness of legal action in driving system change and facilitating global climate ambition. By converging rigorous research and practical assessment of the loss and damage fund and its modalities, the book is essential reading for policymakers, lawyers, researchers, and activists. It showcases the world-altering possibilities of climate litigation as a tool of climate justice and a sustainable and more equitable world.

A handwritten signature in black ink, appearing to read 'W. Kaelin'.

Prof. Walter Kaelin

Envoy of the Chair

Platform on Disaster Displacement

Geneva, Switzerland

April 2025



The climate crisis has transitioned from a distant warning to an urgent reality. Around the world, climate disasters are causing unprecedented harm to lives, economies, and ecosystems, manifesting as floods, droughts, rising seas, and fierce storms. Least Developed Countries, Landlocked Developing Countries, and Small Island Developing States face the gravest impacts despite minimal contributions to the problem. This book sheds light on the critical yet often overlooked topic of loss and damage in climate-related justice realm.

Justice serves as the foundation of the book—not merely as a moral idea but as a practical principle guiding equitable, inclusive, and historically aware climate strategies. As climate-induced displacement and forced migration surge, millions face disruption of cultural identities and uncertain futures. The book urges policymakers to transcend reactive humanitarian aid by incorporating human rights frameworks into climate responses. It argues that those most affected by climate change are rights-holders entitled to dignity, inclusion, and restitution.

A notable focus of the book is climate litigation as an accountability tool. Courts worldwide are addressing cases that challenge environmental and human rights obligations, making litigation a powerful driver for systemic change. The book analyzes this evolving legal landscape, offering valuable insights for scholars, activists, and legal practitioners aiming to hold governments and corporations accountable. It also critiques existing frameworks and advocates for stronger international cooperation to empower vulnerable communities.

The establishment of the Loss and Damage Fund under the UNFCCC framework signifies recognition of irreversible climate impacts. However, the book warns that funding alone cannot ensure justice—it must be managed transparently and effectively to reach marginalized populations in vulnerable nations. It calls on industrialized countries, global institutions, and private entities to fulfill their moral and political obligations to create a shared global future.

This book is not merely a diagnosis of a crisis—it is a call for bold, interdisciplinary solutions tailored to the realities of the most affected. With sharp analysis and ethical commitment, it confronts inertia in loss and damage discussions, making it essential reading for advocates of a just climate future.

Prof. Md. Shahidul Haque
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Prologue

This cursory reflection on the impact of climate change on loss and damage (L&D) and the quest for justice reflects on the current global situation and approach towards securing climate justice. We have attempted to unveil dynamics, challenges, instruments, obligations, and the future course of direction in addressing the ever-challenging issue of climate change and securing justice regarding L&D. Climate litigation is one of the core components of the research with emblematic case examples from across the globe.



Climate change means the long-term modification of the earth's climate, weather, and temperature. Climate change occurs because of the actions of humans such as the burning of fossil fuel, coal, and gas ever since the Industrial Revolution period during the 1880s which hastened the prevailing changes of climate. The cause of this is that these human activities emit greenhouse gases, which are the culprits that trap the solar heat in the atmosphere and, in doing so, raise the earth's temperature.

Greenhouse gases in the atmosphere are at 2 million-year highs and the Earth's temperature is 1.1°C (2°F) above that of 1880. Hundreds of millions of humans worldwide already feel the impacts of increased temperature, sea-level rise, greater storms, and more variable precipitation, and it has substantial impacts on livelihoods. These effects will only increase, and therefore, for the sake of a safer and more secure world for all, one has to halt global greenhouse gas emissions immediately and invest generously to protect vulnerable communities. The scientists and policymakers agreed that an optimal increase of 1.5°C in temperature is the only way to provide a habitable world. However, based on trends, the global temperatures are likely to increase by 2.8°C. A need to improve our lives, to dominate and overcome nature, has increased temperature that, if above a certain threshold, causes irreversible and dangerous change in the natural processes of the Earth.

One of the largest issues in combating global warming is the disparity between the nations/companies/communities/individuals that produce most of the greenhouse gases and the nations/companies/communities/individuals that are most impacted. 10 countries and the 100 lowest emitting countries are responsible for 60% of the greenhouse gas (GHG) emissions and the 100 lowest emitting countries account for just 3%; one country, Bhutan, is CO₂ negative, and just 100 companies account for 70% of the GHG Emissions since 1988. The 10 highest emitting countries are also better prepared to cope with the impacts of climate change, while the developing nations are more exposed to the impacts of climate change as they lack the same. Climate justice was therefore a people's justice movement acknowledging that the effects of climate change were not being fairly felt throughout the globe.

Even with universal global measures for greenhouse gas emissions mitigation, the pace and extent of climate change accelerated and resulted in continuously rising stockpiling

of irreversible L&D. L&D are the non-recoverable economic and non-economic damages of sudden onset extreme weather phenomena such as hurricanes, heatwaves, wildfires and droughts, and slow onset climate disasters such as glacial melting and sea-level rise. It's about convincing the world's biggest fossil fuel emitters to fund the collective and cumulative damage already caused by the climate crisis so that they can use climate finance for adaptation and mitigation in a way that can equip developing countries for what's coming. It's been in the headlines in United Nations climate change negotiations and elsewhere regarding how countries are going to address this L&D.

The economic damage is the loss of lives, livelihoods, homes, food security, and lands irretrievably, whereas the non-economic damage is more difficult to measure and comprises loss of culture, identity, sovereignty, human dignity, biodiversity, and mental health. The worst of the L&D falls on the poorest countries of the world – in most, the least guilty of climate change. On this subject, L&D finance was a rallying concept in calls for climate justice or at least climate action to respond to the injustices propelling the climate crisis. Island states and other climate-risk nations first gathered to discuss the issue of L&D about 30-some years ago but more so in the past decade or so as the beat, pace, and cost of global warming were made real.

The UN climate talks have leaped in recent years on the issue of L&D. Climate L&D is based on scientific and ethical reasoning. Above all, it is an issue of asymmetrical burdens on the developing or less developed world that victimize poor nations that have contributed least to increasing the collective inventory of greenhouse gases emitted. The imbalance calls for justice to balance the asymmetries. Second, the principle of justice is the fault of the historical era of the industrial age that has produced the majority of the greenhouse gases up till now and therefore must bear the lion's share of blame for the issue of the problem of today's climate crisis. Justice calls on such nations to help correct the harm caused to the population that is the lowest contributor but bears the greatest detriment. Third, the extent of L&D caused is irreversible such as loss of biodiversity or culture. It requires a paradigm and not adjustment and adaptation, substituting remedial and compensatory justice.

The second cardinal agenda of the claim is the safeguarding of human rights as L&D leads to the erosion of fundamental human rights such as the right to development, food, and housing. Paradigms of justice work to maintain such rights and provide facilitative equity to the individuals affected. Before that having been formulated based on scientific facts because facts conjure up those physical impacts of climate change such as weather extremities and rise in sea level that are intensifying. They are heterogeneously distributed and they most heavily affect the geographically disadvantaged as well as the marginalized communities. Justice systems apply this science when they distribute resources and duties equally.

Research Objectives

Research on climate justice concerning L&D focuses on ensuring that those most affected by climate change receive fair compensation, support, and recognition with a proper accountability process. Here are the key objectives of this research:

1. Equity and Responsibility

- Establish the historical responsibility of high-emission nations for climate-related damages.
- Assess disproportionate impacts on vulnerable countries and communities
- Advocate for fair financial contributions from developed nations based on the polluter pays principle

2. Legal and Policy Frameworks

- Examine the role of international climate law (e.g. Paris Agreement, Warsaw Mechanism) in L&D
- Explore the potential for litigation against major polluters and states failing to meet climate commitments.
- Assess national and regional policies to integrate L&D measures into legal frameworks.

3. Financial Mechanisms and Compensation

- Evaluate the effectiveness of the FRLD and other climate finance tools
- Identify alternative funding sources, such as carbon taxes, climate levies, and debt relief
- Ensure direct access to funding for affected communities without excessive bureaucracy

4. Ethical and Social Dimensions

- Highlight the human rights implications of climate-induced displacement, food insecurity, and health crises
- Document Indigenous knowledge and local adaptation strategies to inform just solutions
- Address gender and social inequalities in L&D policies

5. Climate-induced displacement and Migration

- Assess the scale of forced migration due to climate disasters and slow-onset events
- Develop frameworks for climate refugee recognition under international law
- Promote fair resettlement policies and protection for displaced populations

6. Implementation and Governance

- Analyze how funds are distributed and whether they reach the most affected
- Promote transparent governance structures to avoid corruption and inefficiency
- Inspire policy/decision-makers to explore avenues for climate justice at all levels

B. Research Rationale

Although there is no official definition for “L&D” under the UN, it is a widely used term in climate negotiations to refer to the consequences of climate change that cannot be adapted to. The term also refers to situations where, although the consequences could be adapted to, a community lacks the resources or finances to do so.

There are a variety of causes for L&D. It can result from extreme weather events like cyclones, droughts, and heat waves, or the effects of slow-onset climate change, like sea level rise, desertification, glacial retreat, land degradation, ocean acidification, and salinization. In both cases, the L&D caused profound, and in some cases, permanent consequences on the lives of those who are affected. For instance, the droughts that shrink freshwater resources turn once-productive farmland into barren land. L&D can be divided into two overlapping categories, economic and non-economic losses. Economic loss refers to the negative impact of climate change at either a national or local scale on resources, goods, and services commonly traded in markets, damage to critical infrastructure and property, and supply chain disruptions. Economic loss can impact individuals or communities at large, whereas non-economic losses refer to non-tradable and, in monetary terms, less measurable negative impacts such as loss of culture, displacement, and ecosystem services.

The subject of L&D has been fraught with contention, both within and outside UN climate negotiations. This is because the effects of climate change disproportionately harm vulnerable communities, making it an issue of 'climate justice', as well as an environmental one. Accordingly, in 2022, at the COP27 UN Climate Summit, developed countries agreed to create a fund for addressing L&D in particularly vulnerable nations. The Fund for responding to L&D (FRLD) was officially operationalized at COP28 in Dubai, marking a historic step in climate finance. At COP29 in Baku, the FRLD took significant steps forward, building upon its establishment at COP28. The fund, designed to assist countries severely impacted by climate change, became operational, with contributions from various nations. The FRLD is now fully functional and ready to accept contributions, marking a pivotal moment in addressing climate-induced losses and damages.

LDF is designed to provide financial assistance to vulnerable countries suffering from the irreversible impacts of climate change, such as rising sea levels, extreme weather events, and desertification. Although this was a step in the right direction, many questions remain about the feasibility of the fund, including how much money these nations will provide.

Gopal Krishna Siwakoti, PhD

May 2025, Kathmandu, Nepal

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I am grateful to Japan NGO Center for International Cooperation (JANIC) for initial commissioning this report and for recognizing 'L&D', an integral component of our collaborative research, as a major issue of critical concern worldwide. We would also like to extend our deepest gratitude to all JANIC-associated national and international thematic researchers from the region. Their insight and information sharing throughout the research endeavor added enormous value to this work and have helped develop research conducted in connection with the previous DDSCA series. I thank Aoi Horiuchi for providing continuous mentoring, guidance, and direction to make the research a coherent, authentic, and realistic product.

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Representatives of various institutions working on climate action and experts in COP Process Negotiation deserve my highest appreciation for their deep insight into relevant literature to harmonize the final product as per the prescribed table of contents. Informants and regional experts who took the time to share their perspectives, expertise, and feedback on this report also deserve our due appreciation and recognition.

I would like to gratefully acknowledge ActionAid Nepal, Lutheran World Federation Nepal, and the Human Rights Film Center (HRFC) for providing partial financial support for the publication of this research, without which it would have remained just a soft version.



Gopal Krishna Siwakoti, PhD
May 2025, Kathmandu, Nepal

Acronyms and Abbreviations

ACHPR	African Charter for Human and Peoples' Rights
ADP	Ad hoc Working Group on the Durban Platform
AEPC	Alternative Energy Promotion Centre
AICHR	ASEAN Intergovernmental Commission on Human Rights
AOSIS	Alliance of Small Island States
APGF	Asia Pacific Greens Federation
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CESCR	Covenant on Economic, Social, and Cultural Rights
CFSC	Climate Finance Steering Committee
COP	Conference of the Parties
CRC	Convention on the Rights of the Child
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
DAE	Direct Access Entities
DCCEEW	Department of Climate Change, Energy, Environment, and Water
DoFSC	Department of Forests and Soil Conservation
DHM	Department of Hydrology and Meteorology
DoMG	Department of Mines and Geology
DRR	Disaster Risk Reduction
ECHR	European Convention on Human Rights
EPA	Environmental Protection Agency
FRLD	Fund for responding to L&D
GCF	Green Climate Fund
GCM	Global Compact for Migration
GCR	Global Compact on Refugees
GGA	Global Goal on Adaptation
GLOF	Glacial Lake Outburst Flood
GoN	Government of Nepal
GST	Global Stock Take
IACHR	Inter-American Commission on Human Rights
ICCPR	Covenant on Civil and Political Rights
ICJ	International Court of Justice
IECCD	International Economic Cooperation Coordination Division
IMCCC	Inter-Ministerial Committee on Climate Change
ITLOS	International Tribunal for the Law of the Sea
IOM	International Organization of Migration
IPCC	Intergovernmental Panel on Climate Change
IYCN	International Union for Conservation of Nature

LDCs	Least Developed Countries
L&D	Loss and Damage
MoFE	Ministry of Forests and Environment
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
NDRRMA	National Disaster Risk Reduction and Management Authority
NTNC	National Trust for Natural Conservation
OECD	Organization for Economic Cooperation and Development
PDD	Platform on Disaster Displacement
PPP	Public Private Partnership
SBI	Subsidiary Body for Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
SMEs	Small and Micro Enterprises
SIDS	Small Island Developing States
UDHR	Universal Declaration of Human Rights
UNCLOS	UN Convention on the Law of the Sea
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
UNHCR	United Nations High Commissioner for Refugees
UNISDR	United Nations International Strategy for Disaster Reduction
UNOCHA	United Nations Office for Coordination of Humanitarian Affairs
UNOPS	United Nations Office for Project Services
WIM	Warsaw International Mechanism
WFP	World Food Program

1. PREAMBULAR SPHERE



Image: Pexels/Kelly

Contextual Scene Setting

According to the Intergovernmental Panel on Climate Change (IPCC), “[s]ince systematic scientific assessments began in the 1970s, the influence of human activity on the warming of the climate system has evolved from theory to fact”. Climate change disrupts the normal patterns of our environment, which affects “our health, energy sources, and food production systems”.¹

Today, climate change is the most significant challenge we face as a global community. Since industrialization, humans have mistreated and neglected the planet's needs in the name of development, and the consequences of this are being seen all over the world. From extreme weather events to disruptions to markets, these effects demonstrate the world’s interconnectedness and our capacity as a global community to either conserve or destroy the Earth.

Although no one is safeguarded from the consequences of climate change, it is the poor and vulnerable who are the first and worst hit. The UN Blog has expressed that ‘the impacts of climate change will not be borne equally or fairly, between rich and poor, women and men, and older and younger generations.’ That is, climate change has ‘differing social, economic, public health, and other adverse impacts on underprivileged populations’² and exacerbates the social conditions of the poor and vulnerable. Thus, according to the Environmental Protection Agency (EPA), the goal of environmental justice is ‘to ensure all peoples, regardless of race, national origin, ethnic background or income, are protected from disproportionate impact of environmental hazards’³. A

¹ Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2021: The Physical Science Basis* (Cambridge Uni Press, 2021)

² United Nations, ‘Climate Change: A Threat to Human Rights’, UN Blog, 25 February 2020

³ Environmental Protection Agency (EPA), *Environmental Justice*

sound environment is also a precondition for the full exercise of human rights such as the right to self-determination, cultural rights, the right to health, or the right to live among other human beings.

It has become clear that climate justice is directly connected to human rights. To ensure environmental justice, it is imperative to safeguard our civil rights, and vice versa. That is, 'free press, rights to information, right to speak and write freely, free election and right to participate in any organization or group are preconditions for environmental justice'. These preconditions must be met for affected communities to raise their voices and protest against environmental degradation, so, the climate justice movement must work in tandem with other social movements.

2023: Breaking of Climate-Weather Record

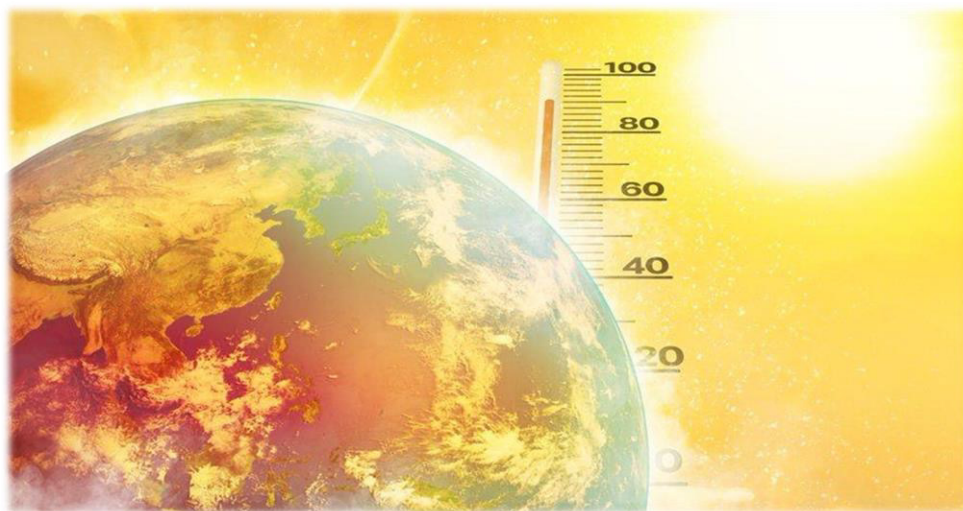


Image: The Wall Street Journal (Middle East) 2023-11-4 (Saturday 04/11/2023)

Additionally, people all around the world are hoping for the next round of climate talks to yield a binding international agreement. It is becoming apparent that the decisions made by world economic and political powers have a direct impact on the daily lives of local inhabitants. Despite this, locals are unable to participate in the decision-making process, and decision-makers are unaware of the local impact of their policies. Thus, to make effective and lasting change, decision-makers must consider the experience and expertise of those who are affected by climate change and integrate this into their policies.

L&D, which was first brought to light by the Alliance of Small Island States (AOSIS)⁴, which proposed compensation for sea-level rise, yet was dismissed at that time, was finally taken up by the UNFCCC in the last decade. In 2013, at COP19, the Warsaw

⁴ Alliance of Small Island States (AOSIS), Submission to the UNFCCC on Loss and Damage (1991)

International Mechanism (WIM) and its Executive Committee were established to address “L&D associated with impacts of climate change” (Warsaw, 2013).⁵ Two years later, Art 8 of the Paris Agreement recognized the importance of averting (climate mitigation), and minimizing (climate adaptation) whilst addressing L&D. However, neither the UNFCCC nor the Paris Agreement gave a precise definition of the term 'L&D' and what it encompassed.

In the following years, several steps were made to progress the issue of L&D, including the launch of the Fiji Clearing House for Risk Transfer (at COP23), the establishment of the Santiago Network (at COP25), and the definition of its functions (at COP26). Here also the push for a dedicated FRLD has been renewed, whilst delaying discussions. After the formal establishment of the FRLD at COP27, it was finally established at COP28. Although many important steps have been taken, the lack of an internationally recognized definition of 'L&D' remains a key issue. This has resulted in, among other things, no consensus on liability or compensation and made the task of establishing a finance flow dedicated to L&D difficult.

Addressing this topic has been at the top of the COP27 agenda in November 2022 in Sharm El-Sheikh.⁶ The first Global Stocktake, whose learnings have been published in 2023 is a welcome opportunity to analyze global progress on L&D-related issues. The SBSTA and the SBI are mandated to frame how to assess such progress.

The enormity of climate change, both now and in the future, will result in significant loss and harm, particularly to those who are most vulnerable, least fortunate, and least responsible. By 2030, in developing countries alone, the impacts of climate change are estimated to cost \$400 billion per year, and by 2050, these costs are expected to rise to \$1 to \$1.8 trillion⁷. The UNFCCC’s ‘common but differentiated responsibilities’ principle claims that the most resourceful actors should carry a fair share of the costs from climate change and support the least resourceful. Similarly, as in the Glasgow Climate Pact, the UNFCCC expects actors to provide greater support for activities addressing L&D.

Despite this, the Global North resisted calls from the Global South at COP26. This is where WBA, as the accountability mechanism, could help drive action. Guided by the right standards and practices, companies can better manage their climate impacts and drive positive change.

⁵ UNFCCC, Warsaw International Mechanism for Loss and Damage, Decision 2/CP.19 (adopted 23 November 2013)

⁶ UNFCCC, COP27 Sharm El-Sheikh Implementation Plan (2022)

⁷ UNFCCC, Glasgow Climate Pact (adopted 13 November 2021)

Climate Impacts: Futuristic Prediction

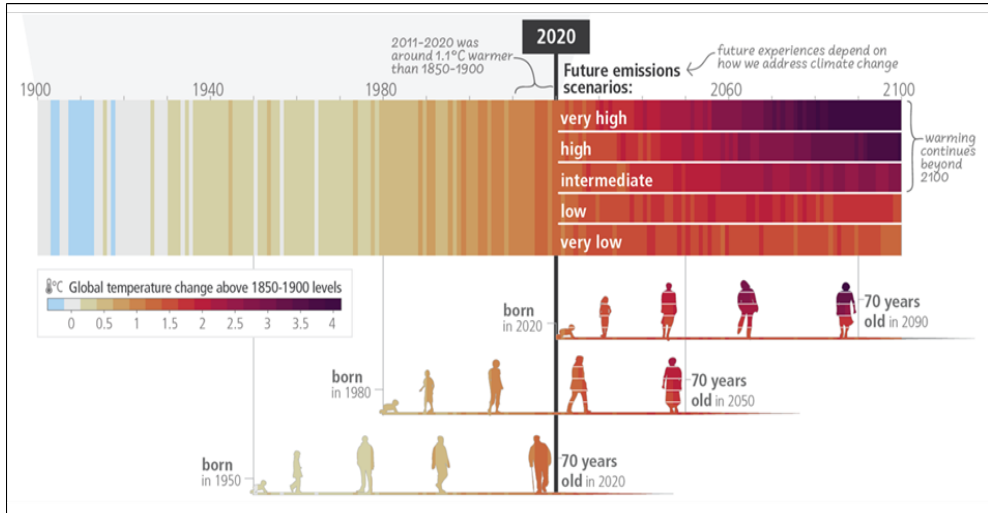


Image: UN IPCC, March 2023

Connecting Climate Injustice

We have moved past the period of mitigation and adaptation and are now in a new era of loss and devastation. This is largely due to the inactivity of affluent nations and insufficient climate change mitigation in the past. If drastic and immediate measures are not implemented, the amount of L&D sustained globally and catastrophic risk will continue to rise unabatedly.

Nations are not equally affected by loss and destruction. It is the poorest nations that are most vulnerable to the effects of the global climate catastrophe. They are experiencing, among other things, rising sea levels, hotter temperatures, ocean acidification, glacier retreat, deforestation, loss of biodiversity, salinization, and desertification.⁸ These processes substantially erode chances for attaining sustainable development by overloading their response capabilities and escalating challenges already presented by the increased intensity and frequency of catastrophic events.

The permanent loss and destruction from slow-onset disasters and catastrophic events are widespread and far. They go much beyond financial losses; livelihoods will be disrupted, territories will have to be abandoned, and migratory populations from climate-affected regions will lose their homes, cultures, and communities. This is possibly the worst climate injustice of our time. Therefore, responses to climate change should also include supporting the most vulnerable nations to build their resilience and make reparations for the permanent loss and harm already caused by the lack of mitigation efforts by responsible parties.

⁸ UNFCCC, Report of the Conference of the Parties on its nineteenth session (2013)

Moral and Statutory Responsibilities



Image: Mustard fields, Ladakh – India | By Alex Treadway/ICIMOD

States are required by international law to implement measures to stop climate change and mitigate its negative impacts. These obligations are explicitly stated in the UNFCCC, the Kyoto Protocol, and the United Nations Framework Convention on Infrastructure, as well as in international human rights law and the no-harm principle found in customary law.⁹ However, rich nations continue to fall short of their obligations and contribute disproportionately to global greenhouse gas emissions. This endangers the very survival of smaller states that have frequently made minimal contributions to climate change.

According to the UNFCCC and the Paris Agreement, industrialized states take the lead in decreasing global emissions and supporting poorer states with financial assistance, capacity-building, rehabilitation assistance, and technology transfers for L&D mitigation and adaptation brought on by both their actions and those of others. These duties are founded on the idea of 'shared but distinct responsibilities'¹⁰ for tackling climate change.

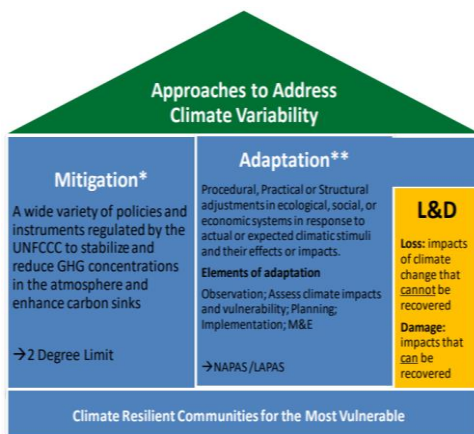
Despite this, the affluent nations of the world are egregiously failing to uphold their moral and legal commitments. Regardless of making significant contributions to climate change, they are failing to help the most vulnerable nations strengthen their adaptability and scope with the growing effects of climate change. Consequently, potentially avoidable L&D in some of the world's most vulnerable areas continues to occur. This predicament should be corrected and remedied immediately.

⁹ UNFCCC, 1992, art. 2; Kyoto Protocol, 1997, art. 3; International Court of Justice, *Pulp Mills on the River Uruguay (Argentina v. Uruguay)* (2010) ICJ Reports 14.

¹⁰ United Nations Framework Convention on Climate Change (UNFCCC), Paris Agreement (adopted 12 December 2015), Article 4.4

UNFCCC and L&D Scoping

The ability of states to limit risk and adjust to changing climate conditions is being outpaced by extreme weather occurrences and slow-onset effects. Therefore, to adequately address L&D caused by climate change, new institutional structures are required under the UNFCCC.¹¹ That is, there is a need for new strategies for financing, compensating, and rehabilitating L&D. As the climate drastically changes, locally, regionally, and globally, people will lose their families, homes, communities, cultures, and means of subsistence. Thus, these innovative strategies must consider the difficulty of correcting non-economic losses, such as migration, displacement, and planned relocation. The IPCC's A1fi emissions scenario assumes very rapid economic growth, a mid-century population peak, and subsequent population decline, and the quick adoption of new, more effective technologies, with a focus on fossil-intensive (fi) technologies.¹²



*IPCC (http://www.ipcc.ch/pdf/assessment-report/ar5/wg3/wg3_ar5_summary-for-policymakers.pdf)
 ** UNFCCC Website (<http://unfccc.int/focus/adaptation/items/6999.php>)

Parties to the UNFCCC should build a thorough framework on L&D with two goals to address permanent L&D using the new strategies mentioned above methodically:

- To develop risk reduction and other risk management strategies that can stop and prevent loss and harm more easily; and
- To offer compensation in the event of L&D. The framework must also allow for coordination across all its components on a local, national, and international scale.¹³

The following three crucial tasks of Convention bodies relating to L&D would consequently be ensured and provided consistency by a comprehensive structure under the UNFCCC:

- Prevention through methods of catastrophe risk reduction, climate change mitigation, and adaptation, backed by sufficient implementation tools including funding, technology, and capacity-building;
- Via the possibility of the creation of an international mechanism for compensation and rehabilitation; and
- Taking the lead and coordinating efforts at the regional and worldwide levels to address L&D beyond the scope of the Convention in a coherent manner, including those involving migration, displacement, and planned relocation, as well as international funding.¹⁴

¹¹ UNFCCC, *Approaches to Address Loss and Damage Associated with Climate Change Impacts* (Technical Paper, 2012)

¹² Intergovernmental Panel on Climate Change (IPCC), *Special Report on Emissions Scenarios* (2000)

¹³ UNFCCC, *Approaches to Address Loss and Damage Associated with Climate Change Impacts in Developing Countries* (2012)

¹⁴ Center for Climate and Energy Solutions (C2ES), *The Potential Coordination Role of the UNFCCC on Loss and Damage* (Technical Paper, 2023)

International Compensation and Rehabilitation Mechanism

The creation of an international mechanism for compensation and rehabilitation is the key component of any comprehensive framework on L&D. There should be four different permanent loss and harm addressed by the Mechanism¹⁵:

- Damage and loss that may be covered by insurance or other risk-transfer methods;
- Extreme occurrences and slow-onset processes that cause economic loss and destruction are not covered by risk-transfer mechanisms;
- The economic loss is hard to measure; and
- Non-economic costs such as the destruction of ecosystems, cultural heritage, values, and indigenous knowledge.

With the assistance and direction of a Board made up of Party members and with the cooperation of stakeholders, the Mechanism would be located under the auspices of the Convention and headquartered inside the UNFCCC Secretariat, where administrative support could be offered.

Future Direction

In conclusion, a thorough plan for dealing with L&D under the UNFCCC would consist of:

- An international compensation and rehabilitation Mechanism was developed with the Conference of the Parties' advice
- International coordination and direction were provided by the Adaptation Committee
- Ongoing work on L&D by the SBI, which is actively coordinated in conjunction with the Adaptation Committee and the SBSTA
- As a result, to address the reality of catastrophic climate change harm and the existing lack of adequate mitigation action, COP28 is expected to:¹⁶
 - ☞ Reaffirm prior commitments to take the lead in combating climate change and its negative effects, including through mitigation action and the provision of new, additional, and predictable financial resources, capacity, and technology transfer, based on the principles of equity and common but differentiated responsibilities
 - ☞ Provide an international mechanism for L&D compensation and rehabilitation
 - ☞ Agree on a process to develop the rules and guidelines of the International Mechanism, which will be run by the COP and become effective by the COP20 decision
 - ☞ Develop a second phase of the SBI's L&D work program to specify the final components of the all-inclusive framework on L&D

¹⁵ UNFCCC, *Approaches to Address Loss and Damage Associated with Climate Change Impacts in Developing Countries* (Technical Paper, 2012)

¹⁶ UNFCCC, *COP28 UAE Presidency: Elements for a Political Outcome – Reflections Note* (2023)

Rationale for Climate Action

The pace of climate change is increasing, as is the frequency of extreme weather events. These events already impose L&D, which is difficult to deal with by policy and decision-makers at multiple levels and by the vulnerable communities they represent due to uncertainty and volatility associated with the increasing pace of such change. In the future, increasing impacts from combinations of extreme weather and slow-onset events are expected to induce more L&D.

As the rate of climate change increases, the frequency and intensity of extreme weather occurrences and gradual onset disasters are also rising. This means that we are living in an uncertain and volatile environment, where policy and decision-makers at many levels (and the vulnerable groups they represent) find it difficult to respond and manage the subsequent L&D caused by the accelerating rate of climate change.¹⁷

Impacts on the Himalayas

Climate change has profound impacts on the Himalayas, leading to significant losses and damages:

- ☞ **Glacial Retreat:** Himalayan glaciers are melting at an accelerated rate, threatening freshwater supplies for millions of people downstream.
- ☞ **Glacial Lake Outburst Floods (GLOFs):** The melting glaciers have formed unstable glacial lakes, which can burst and cause catastrophic floods. For instance, a major flood in October 2023 devastated areas along the Teesta River in Sikkim, India.
- ☞ **Biodiversity Loss:** The region's unique ecosystems are under threat, with species struggling to adapt to changing temperatures and habitats.
- ☞ **Water Scarcity:** Shifts in precipitation patterns and reduced snow cover are affecting water availability, impacting agriculture and livelihoods.
- ☞ **Infrastructure Damage:** Extreme weather events, such as floods and landslides, have destroyed roads, bridges, and hydroelectric facilities.
- ☞ **Human Toll:** Communities face displacement, loss of life, and economic hardships due to climate-induced disasters.

Thamey GLOF Catastrophe

The devastating flood in Thame, Nepal, caused by a glacial lake outburst from Thyanbo glacial lake on August 16, 2024, wreaked havoc on the village. The flood destroyed homes, hotels, a school, a health post, and a hydropower plant, displacing over 100 people¹. Fortunately, there were no reported fatalities, as the flood occurred during the day, allowing residents to evacuate. This incident highlights the growing risks posed by GLOFs in the Himalayas due to climate change.¹⁸

¹⁷ IPCC, *Special Report on Climate Change and Land* (2019)

¹⁸ International Centre for Integrated Mountain Development, *GLOF from Thyanbo Glacial Lake Sweeps Away Thame Village* (17 August 2024)



Image: The Rising Nepal, 5 October 2024

Several glacial lakes lie upstream of Thame. Satellite images of the area dating back to 2017 obtained by ICIMOD from the European Space Agency’s Copernicus Earth observation programme show these lakes constantly changing in size. Researchers at ICIMOD confirm that some of them frequently expand and contract, making them susceptible to breaches. These lakes lie near the popular trekking destination of Tashi Lapcha Pass. The neighboring valley holds one of the region’s most potentially dangerous glacial lakes, Tsho Rolpa.

ICIMOD scientists are further investigating the causes of GLOF and its impact downstream, including seeking pre- and post-satellite images, to complement the efforts of national and local agencies, including Nepal’s Department of Hydrology and Meteorology. ICIMOD’s 2023 Assessment on Water, Ice, Society, and Ecosystems in the Hindu Kush Himalaya, stated that the glaciers, snow, and permafrost of the Hindu Kush Himalaya are “undergoing unprecedented and largely irreversible changes over human timescales, primarily driven by climate change” and “are some of the most vulnerable to these changes in the world.”¹⁹

At least 260 million people live in the mountains of the HKH, and these mountain communities are already living with the impacts of the accelerated melting of glaciers, changing snowfall patterns, growing variability in water availability, and increasing incidences of cryosphere-related hazards [posing] a direct impact on their lives and livelihoods. It warns floods and landslides are projected to increase, with climate the key driver in many of the water- and cryosphere-related disasters already recorded in recent years, through meltwater, larger and more potentially dangerous lakes, unstable slopes from thawing permafrost and increasing sediment loads in rivers.²⁰ The retreat of mountain glaciers has increased the size and number of glacial lakes, and a three-fold increase in glacial lake outburst flood risk across the HKH is projected by the end of the twenty-first century, and it is predicted we will reach ‘peak GLOF risk’ by 2050. There are 25,000+ glacial lakes in the Hindu Kush Himalaya region, of which 47

¹⁹ ICIMOD, *Water, Ice, Society, and Ecosystems in the Hindu Kush Himalaya* (2023)

²⁰ ICIMOD, *Hindu Kush Himalaya: Impact of Climate Change on Water Resources and Glacial Hazards* (2023)

potentially dangerous glacial lakes (PDGLs) lie within the Koshi, Gandaki, and Karnali river basins of Nepal, the Tibet Autonomous Region of China, and India. High Mountain Asia is a global hotspot for the risk of GLOFs, with approximately one million people living within 10km of a glacial lake according to a new glacial lake inventory report²¹. The growth in the number and size of glacial lakes is set to continue.

The science is clear: G20 economies must cut their ties with fossil fuels, accelerate the use of renewables, and ensure adaptation and loss and damage funds reach those communities impacted. World leaders need to believe in making the change with the collective global effort to control what they can change. Mountain communities have not contributed to global temperature rise. According to Miriam Jackson, Cryosphere lead for ICIMOD, climate change is a crime scene. The glaciers are making it visible. We cannot look the other way.

In May 2012, several organizations produced a joint report, 'Into Unknown Territory', in recognition of the severe issues caused by climate change. According to the authors, who joined a plethora of voices in raising the alarm, "The planet is currently not on track to limit dangerous climate change; in fact, it's rapidly heading towards a world that will be 4 to 6°C warmer by the end of this century compared to pre-industrial levels²²." This increase "is incompatible with any reasonable characterization of an organized, equitable, and civilized global community... beyond what many people think we can reasonably adapt to... devastating for many if not most, ecosystems".

The study explored the implications of a rise in global temperatures by 4°C, namely, 'L&D'. This was the first contribution to the discussion of 'L&D' as the study emphasized the restrictions on adaptation and the actuality of loss and harm caused by climate change. The research presented that some nations may incur a permanent loss, even with successful measures to reduce and adapt to climate change repercussions. In severe circumstances, environmental catastrophes may cause states to lose their territory forever, thus severely disrupting communities and ecosystems and making it impossible to return to normalcy.

This study offers both a solution and a continued call to action on the issue of climate change, its subsequent 'L&D', and climate injustice. The politicians and policymakers who choose the climate negotiation positions for their nations are the primary audience for this paper, together with UNFCCC negotiators. The study will, however, also be very helpful to other individuals and organizations engaged in or interested in climate-related activities and who are uncertain of the future of our shared planet.

²¹ High Mountain Asia, *Glacial Lake Inventory and Projections*, 2024

²² CARE, Germanwatch, ActionAid, and WWF, 'Into Unknown Territory: the limits to adaptation and reality of loss and damage from climate impacts' (May 2012)

Ken Saro-Wiwa: Agony of Ogoni

Ken Saro-Wiwa was the lead of the Ogoni upheaval against Royal Dutch Shell, whose oil drilling activities led to environmental disaster and destruction, including air pollution, contamination of water, destruction of farmland in the densely populated Niger Delta, gravely affecting the Ogoni people's livelihoods. Especially at the – by some called–“Ogoni-day” 300,000, a stunning fifth of the population protested against Shell pointing out the company's grave human and Indigenous people rights violations.²³



Image: Ken Saro-Wiwa | BBC

The Nigerian government and the military, whose power heavily depended on contracts with Shells, aimed to suppress the upheaval. In October 1993, four conservative Ogoni leaders were killed by a mob of people. According to Human Rights Watch, “These men were reportedly attacked by a mob and beaten and hacked to death, but the precise chain of events leading to the murders is a source of great controversy”, whilst good reasons suggest, that agent provocateurs were used to stir up the mob, giving the government reasons to send more troops and to finally arrest Saro-Wiwa, Ledom Mitee and several others, connecting with the death, although not formerly charged. Meanwhile, soldiers killed hundreds of Ogoni people, beat and intimidated them, raped females, and looted hundreds of villages, calling it a “sanitizing” operation. (Civil) Actors from all around the world joined the protests and condemned Shell and the Nigerian state's activities likewise in public protests, petitions, or blockage of Shells gas Stations.²⁴

The military tribunal against Ken Saro-Wiwa and others started in 1995 when the men were finally allowed to see their lawyers. In May 1995, Saro-Wiwa smuggled a letter out of a military hospital writing: “For two nights I have not slept a wink.

I am being intimidated, harassed, and dehumanized, even though I am supposed to be receiving medical attention. I am like Ogoni, battered, bruised, brutalized, bloodied and almost buried”. Chief prosecution witnesses were bribed by Shell to testify against Saro-Wiwa, leading finally to his death on the 10th of November 1995.

Saro-Wiwa wrote for his closing testimony at the trial: “I and my colleagues are not the only ones on trial. Shell is here on trial, and it is as well that it is represented by

²³ Movement for the Survival of the Ogoni People (MOSOP), *Ken Saro-Wiwa and the Ogoni Struggle* (1993)

²⁴ Royal Dutch Shell Plc .com, 'Nigeria Should Not Do to Ogonis Today, What Was Done to Ken Saro-Wiwa' (14 January 2018)

counsel said to be holding a watching brief. The Company has, indeed, ducked this particular trial, but its day will surely come, and the lessons learned here may prove useful to it for there is no doubt in my mind that the ecological war that the company has waged in the Delta will be called to question sooner than later and the crimes of that war be duly punished. The crime of the Company's dirty wars against the Ogoni people will also be punished."

International condemnation and outrage against the state of Nigeria including limited sanctions, and the country's suspension from the Commonwealth followed, whilst deeply affecting Shell's public image. Ken Saro-Wiwas protested a corporate that caused serious loss, and damage was one of the first of them. His cruel and unlawful death, and the following international condemnation yet, strengthened global attention on human rights and showed that a company's human and environmental rights crimes have legal, public, and political consequences.

Adaptation Interfaces L&D

Adapting to 2°C warming will be far more difficult than 1.5°C and it might not even be possible to do so to 4°C. As the climate is changing rapidly, adaptation efforts will never be sufficient, but rather a continuous learning process to stay within ever-shifting boundaries.

When the abatement of greenhouse gas emissions by responsible nations is insufficient to "prevent dangerous anthropogenic interference with the climate system", nations are required to implement catastrophe risk reduction and adaptation measures to stop irreparable L&D. Even with these measures, there are limits to how much L&D can be mitigated by catastrophe risk reduction and adaptation.

As the climate changes, certain disasters will become more frequent and severe. This will overwhelm risk reduction efforts and the capacity of many developing countries to deal with the consequences of those disasters. Additionally, losses and damages from catastrophic disasters go beyond the immediate destruction of property and loss of life. Hurricane Tomas caused damage in St. Lucia equal to approximately 34% of the country's GDP²⁵. Thus, such catastrophic effects significantly disrupt long-term chances for sustainable development.

Inequality in socioeconomic infrastructure also influences how a nation can respond to the repercussions of climate change. Similarly, a country's ability degree of development will also influence how its people endure loss and harm. As global temperatures rise, there will be less assistance for adaptation like finances, technology, and ability. However, a nation's level of development (or lack thereof) should not be used as a justification by the international community for not assisting a nation in responding to extreme climatic L&D.

²⁵ International Monetary Fund (IMF), *St. Lucia: Hurricane Tomas and the Economic Impact* (13 November 2010)

Inability to Adjust to Gradual Disasters

There are significant limits to how human systems and ecosystems can adapt to the slow-onset processes mentioned in UNFCCC Decision 1/CP. This is especially true for climate change-related issues, including sea level rise, ocean acidification, biodiversity loss, salinization, and desertification. This is because these processes develop over time and operate at a broad scale, and accordingly, adaptation gradually becomes less feasible.

The territory will become inhospitable and unproductive as temperatures and sea levels rise. The amount of soil moisture will drop to the point that entire regions cannot support agricultural cultivation. Groundwater resources near the shore will eventually become too salty to be used for drinking. On low-lying islands, in towns that are near to the water, and in the driest areas, adaptation will be impossible. As a result, there will be permanent loss of lands, livelihoods, and cultural resources.²⁶

Extreme Events and IPCC SREX Report

The most recent report from the IPCC, 'Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation' (also referred to as the SREX Report), provides a summary of recent climate predictions which is useful in the context of L&D. A few of the report's most relevant conclusions are mentioned below. These are calculated with the usual IPCC conservative restraint about future impacts of climate change.

By the end of the 21st century, it is virtually certain that there will be an increase in the frequency and magnitude of warm daily temperatures over most land areas²⁷. Additionally, there will be an increase in heavy precipitation in some areas, including those associated with tropical cyclones, while a decrease in other areas. As a result, there is medium confidence that droughts will intensify in some seasons, also due to increased evapotranspiration²⁸. This primarily applies to regions in southern Europe, the Mediterranean, Central Europe, Central North America, Central America, Mexico, Northeast Brazil, Southern Africa, and to some extent South Asia.

That means sea level rise will likely contribute to upward trends in extreme coastal high-water levels in the future. There is high confidence that locations currently experiencing adverse impacts such as coastal erosion and inundation will continue to do so in the future due to increasing sea levels, all other contributing factors being equal. The very likely contribution of mean sea level rise to increased extreme coastal high-water levels, coupled with the likely increase in tropical cyclone maximum wind speed, is a specific issue for tropical small island states.

²⁶ UNFCCC, *Decision 1/CP.21: Adoption of the Paris Agreement* (2015)

²⁷ IPCC, *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation* (SREX Report), 2012.

²⁸ Intergovernmental Panel on Climate Change (IPCC), *Sixth Assessment Report: Climate Change 2021: The Physical Science Basis* (2021)

Climate Change Impacts in the HKH—Third Pole

Glaciers in the HKH are melting 65% faster than in the previous decade, with projections indicating up to 80% loss of glacier volume by the end of the century under current emissions trajectories. This rapid melting is leading to the formation of glacial lakes, increasing the risk of glacial lake outburst floods (GLOFs), which can devastate downstream communities. The region's glaciers are a critical water source for major rivers like the Indus, Ganges, and Brahmaputra. Reduced snow and ice cover threaten water availability for nearly 2 billion people who rely on these rivers for drinking, agriculture, and hydropower¹. The melting cryosphere is disrupting ecosystems, leading to species extinction and loss of biodiversity. Climate change is intensifying natural hazards such as landslides, floods, and extreme weather events, posing significant risks to infrastructure and human lives.

Damage to infrastructure, agriculture, and hydropower systems due to floods and landslides and increased costs for disaster response and adaptation measures are issues of critical concern. Loss of cultural heritage and traditional knowledge is tied to the region along with displacement of communities and loss of livelihoods. Health impacts due to water scarcity and exposure to natural disasters is another crucial matter warranting immediate and appropriate response. In such a context, the situation in the HKH underscores the urgent need for international cooperation, regional adaptation strategies, and financial support to mitigate the impacts of climate change.

Source: nationalobserver.com

2. DISPLACEMENT DYNAMICS



Image: Water forms under Nepal's Khumbu glacier as the ice melts. Photo: Alex Treadway/ ICIMOD

Status and Response

In the context of loss and damage caused by disaster displacement, it is critical to explore how hazards, disasters, and climate change influence human mobility, which is categorized into displacement, migration, and planned relocation.

Displacement describes forced movements due to hazards or disasters, within a country or across borders. Internally displaced persons (IDPs) stay within their home country, whereas cross-border disaster displacement involves movement to another country. Evacuation is typically short-term displacement, but extended challenges can lead to protracted displacement. Planned relocation, however, involves organized movement—whether voluntary or enforced—due to risks from disasters or environmental changes. These distinctions between voluntary and forced relocation are often blurred, as participants generally move because of forces beyond their control. Displaced individuals and those left homeless by disasters share vulnerabilities, such as needing shelter, food, and aid. However, displaced persons face unique challenges, like difficulties accessing basic services or employment due to their non-resident status. Estimating displacement often uses proxy measures, such as the number of homes destroyed.²⁹

²⁹ International Organization for Migration (IOM), *Disaster Displacement: The Role of Migration in Adaptation and Risk Management* (2020)

Migration primarily involves voluntary movement, often as a strategy for risk management or adaptation to slow-onset hazards. Migrants, including diaspora communities and labor migrants, contribute significantly to disaster risk reduction (DRR) by transferring knowledge, skills, and financial support to their places of origin. Migration as adaptation helps individuals build resilience, but distinguishing it from displacement can be complex, as motives can overlap.³⁰

Additionally, entrapped populations are those unable to leave hazard-prone areas despite wishing to do so. Human mobility is dynamic, evolving from temporary evacuation to permanent displacement. Slow-onset environmental changes may turn voluntary migration into forced permanent displacement, as some locations become uninhabitable.

The 21st-century crisis of increased cyclone intensity and frequency, drought, flood, and wildfires is climate change. Climate disaster and forced migration are concurrent processes characterizing human population exposure to environmental stress. Neither is an atmospheric process; they are reasons for human displacement, population movement, and sudden humanitarian crises. The L&D in displacement can be succinctly attributed as follows:

- **Livelihood Loss:** The greatest figures affected by climate are the poorest communities most reliant on farming, fishing, or residing in the forest. Climate-driven ecological deterioration and subsequent floods, droughts, and soil erosion reduce their ability to support livelihood, pushing human beings toward economic well-being.
- **Demolition of Homes and Infrastructure:** Sea level rise and hurricanes flatten homes, roads, and state infrastructure overnight. Island nations like Tuvalu and the Maldives are threatened with annihilation, and their people are reduced to climate refugees.
- **Health and Hunger Consequences:** Natural disasters are followed by water-borne illnesses, hunger, and mental disease. Combined with decimated food production and delivery, these make places uninhabitable.
- **Social Dislocation and Loss of Culture:** Climate migration dislocates people and deprives the source country of its culture and subject to recipient countries' social cohesion. Global pacts such as the Global Compact for Migration and Sendai Framework for Disaster Risk Reduction emphasize safeguarding displaced persons. Tools pressure states to accept migration as climate adaptation. Climate migrants are not legally recognized by the 1951 Refugee Convention, unlike classical refugees.

Demands are increasing for new legal arrangements to fill the gap, with top priority. Arrangements like the FRLD will grant funding to most-affected vulnerable nations devastated by climatic disasters. The funding must function in a manner to pre-empt displacement and assist recovery. Local-level construction of community capacity, i.e.,

³⁰ United Nations Framework Convention on Climate Change (UNFCCC), *Loss and Damage: An Overview of Human Mobility and Climate Change* (2016)

mangrove or water management, can offer a way of adapting to climate risk and cushioning migration pressure. International and regional cooperation is essential. Nation-states must harmonize policy, share resources, and open up secure migration channels for the displaced.

Climate migration is obstructed by political lethargy, underinvestment, and disjointed governance. However, growing concern over climate justice offers an opportunity to rethink global responsibility, making historically emitting states accountable in an attempt to help vulnerable states. Effective climate litigation, representative decision-making, and equitable financing agreements can provide just and effective responses.

Statistical Connection

Disasters accounted for 56% of 47 million new internal displacements in the world in the year 2023. It is a sign of the huge extent to which climate events have led individuals to move out of their homes. There will be 200 million climate migrants by 2050 in the world³¹. It is the estimate of expanded human movement that has been triggered by climate change. Low-lying island nations and semi-arid nations are highly susceptible. Pakistan alone was inundated by catastrophic monsoon floods displacing more than 20 million people. Such projections point towards an international policy reaction and international consensus regarding the reasons for climate migrations.

In a typical scenario, Bangladesh and Cyclone Aila is a fine one to examine the impact. In 2009, during the time of Cyclone Aila, the residents of the Bangladeshi coastline moved because their homes were destroyed, they lost their income from their livelihood activities, and fertile agricultural lands became saline. The migration was seen to enhance the resilience of the families, but while doing so, the issue of unplanned displacement gained prominence.³²

Mexico and climate migration are one of the most important case studies. Climate change in Mexico, especially in the countryside, has worsened water scarcity and drought. This has led to huge internal migration where individuals relocate to urban areas in search of a living. The economic and social effects of climate migration are covered in the case study. Pakistan and flood displacement are common in South Asia. Pakistan was greatly hit by floods in 2022, which left approximately 8.2 million individuals displaced. The event talks of the role of extreme weather in triggering mass-scale internal displacement and efficient disaster management systems.³³

These case studies demonstrate the different ways climate change is displacing people and requiring particular responses to the distinct needs of the displaced. Climate migration can only be addressed by an inter-sectoral response of environmental management, policy-making, and humanitarian action. Through the virtuous intersection of these components, the international community can turn climate migration into a force for resilience, equity, and shared prosperity.

³¹ Internal Displacement Monitoring Centre (IDMC), *Global Report on Internal Displacement 2024* (May 2024)

³² United Nations High Commissioner for Refugees (UNHCR), *Bangladesh: Cyclone Aila and Its Impact on Displacement* (2009)

³³ International Organisation for Migration (IOM), *Climate Migration and Displacement in Mexico* (2022)

Impacts on 'Climate Refugees'

Climate refugees suffer a high degree of loss and damage due to displacement owing to the impacts of climate change. They may be categorized into economic and non-economic impacts:

1. Economic Losses

Loss of livelihood: The majority of climate refugees lose their principal source of livelihood, i.e., agriculture or fisheries, because of environmental degradation.

Property damage: Infrastructure and structures usually get lost due to negative climatic factors like floods, hurricanes, or increases in sea level.

Additional expenditure: Refugees usually pay a huge amount when they get displaced, i.e., transport, transit camp accommodation, and other necessities.

2. Non-Economic Damages

Loss of heritage: Displacement keeps an individual distant from his/her native country and culture, due to which there is a loss of heritage and identity.

Health effects: Refugees are physically and mentally ill, malnourished, stressed, and exposed to disease in unhygienic or overcrowded environments.³⁴

Social breakdown: Societies are fragmented into dispersed social structures and support systems.³⁵

Abuses of human rights: Displacements may be discriminated against, denied their rights under the law, and limited in their access to basic services.

These losses and harms are in comparison to the requirement for adequate policies and finance systems, like the FRLD, to assist vulnerable individuals.

- **Ioane Teitiota of Kiribati:** Ioane Teitiota, a citizen of Kiribati, applied for asylum in New Zealand on the basis that environmental degradation and global warming in his nation had made his nation uninhabitable for him. The ruling was rejected but established a precedent by associating human rights and global warming.³⁶
- **Lake Chad Basin:** Lake Chad Basin has lost the other half of the lake due to climate change and displaced millions. Under dire circumstances, people have been displaced to have to move due to livelihood activities such as fishing and agricultural loss.
- **Kenya's Turkana County:** Kenyan Turkana people have been forced out by chronic drought as well as resource depletion. It has also produced extensive non-economic damage, such as loss of culture and starvation.

These examples confirm the need for the establishment of international regimes on managing 'climate refugee' issues.

³⁴ United Nations High Commissioner for Refugees (UNHCR), *The Refugee Crisis and Health Challenges* (2023)

³⁵ World Health Organization (WHO), *Displaced Populations and Social Breakdown* (2022)

³⁶ Ioane Teitiota v New Zealand [2020] CCPR/C/127/D/2728/2016 (UN Human Rights Committee)

Protection Mechanisms

There is no definite international law so far that specifically deals with the status and rights of climate refugees. However, the following are some observations on their legal status:

- 1 1951 Refugee Convention: The Refugee Convention considers refugees to be individuals who are fleeing persecution based on race, religion, nationality, political opinion, or belonging to a particular social group. Climate displacement is not covered under it, and climate refugees are not legally admitted based on these criteria.
- 2 Human Rights Law: International human rights law, such as the Universal Declaration of Human Rights, does provide some protection for displaced individuals, i.e., the right to life, food, and shelter. There are no provisions in the laws for climate displacement.
- 3 Proposed New Frameworks:
Strengths: Works towards filling the gaps in the existing legislation by directly addressing the climate-induced displacement.
Weaknesses: Demands international conventions and robust political will for its implementation.

In general, current frameworks are doing some protection, but not to the extent of addressing the particular issues of climate refugees. New frameworks are in the pipeline, but are being delayed in application and implementation. Some of the case studies of the viability and applicability of legal frameworks for climate refugees are elaborated below:

1. South Asia and the Principle of Loss and Damage
Warsaw International Mechanism (WIM) on Loss and Damage within the South Asia region has been envisioned as a vehicle for securing the rights of climate refugees. The policy is aimed towards compensation and support for those suffering due to extreme meteorological shocks and slow-onset climatic variations.
2. Kampala Convention by the African Union
The Kampala Convention, with continental coverage in the African continent, covers displacement due to natural disasters and the environment. Legal protection and recognition of internally displaced persons, including climate change, have been achieved through it.³⁷
3. European Union Initiatives:
The EU has followed policies that have been directed towards integrating climate-induced migration into overall migration and asylum policy. They have granted temporary protection and relief to environmentally displaced persons.

³⁷ African Union, *Kampala Convention on Displacement* (2009)

3. LITIGATIONAL REALM



Image: www.assabifa.com

Prelude for Litigation

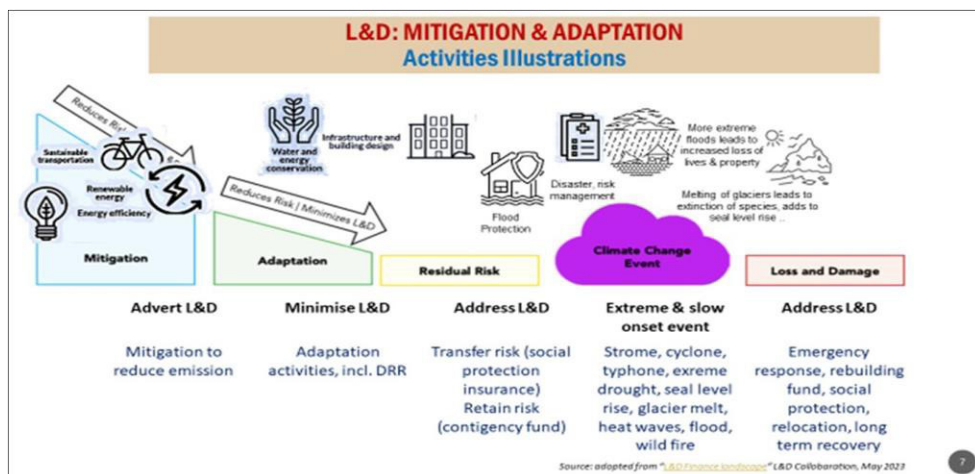
In 2010, Resolution 1/CP.16 of the SBI of the UNFCCC created the work program on L&D to "take into account...strategies to address L&D associated with climate change impacts in developing countries that are particularly vulnerable to the harmful effects of climate change." In Decision 7/CP.17 (2011), it was acknowledged that there is a "need to explore a range of possible approaches and potential mechanisms, including an international mechanism to address L&D". Parties are required to elaborate on the potential work program components listed below when making recommendations on L&D to COP18 (in December 2012).³⁸

Since 1991, when the Alliance of Small Island States (AOSIS) proposed the notion of an International Insurance Pool and an International Climate Fund during talks towards the UNFCCC, the topic of how to manage L&D came up for discussion.³⁹In AOSIS member states, slow-onset temperature rise and subsequent sea level rise will cause permanent L&D that cannot be avoided by disaster risk reduction or adaptation in the absence of sufficient mitigation efforts by those primarily responsible for anthropogenic greenhouse gas emissions. Unfortunately, this bleak future prognosis is increasingly becoming a reality due to large emitters' inactivity and L&D issues have only gotten more acute since 1991.

³⁸ UNFCCC, Decision 7/CP.17: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, 2011.

³⁹ Alliance of Small Island States (AOSIS), *Proposal for an International Insurance Pool and International Climate Fund* (1991)

In the last century, the average surface temperature has increased by 0.74°C worldwide. The temperature rise expected for the next century is predicted to range between 1.1 and 6.5°C, depending on decisions made in the upcoming years⁴⁰. So far, the mitigation measures taken by actors have been woefully insufficient and/or delayed in taking effect. As a result, the negative impacts of human-caused greenhouse gas emissions are manifesting themselves far more severely and frequently than experts had anticipated.



The wealthier nations are primarily to blame for both the current and anticipated future warming, have consistently failed to significantly reduce their emissions, thereby evading historical liability for the issue they have created and avoiding their legal responsibilities under the Convention, including under Article 3.1: "The Parties should protect the climate system for the benefit of present and future generations of humankind, based on equity and following their common but differentiated responsibilities and respective capabilities". Therefore, due to their greater capacities, developed nations should take the initiative to tackle climate change and its negative repercussions.

Despite the seemingly minuscule global temperature rise of 0.74°C, the effects of climate change can be observed worldwide⁴¹. In South America and Asia, devastating monsoon floods have resulted in landslides and ruined crops. In low-lying nations like Bangladesh, rising sea levels and storm surges have exacerbated the salinization of land and aquifers, forcing people to migrate from now-unproductive coastal areas. In Australia, East and West Africa, and the US, severe droughts are taking place. Additionally, in the US, Hurricane Sandy slammed the East Coast, bringing with it a storm surge estimated to cost

40 Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: The Physical Science Basis* (Cambridge University Press 2007)

41 Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: Synthesis Report* (IPCC 2007)

at least US\$50 billion in L&D.⁴² In all of these cases, the lives and livelihoods of populations are being severely disrupted. With the onset of dangerous impacts that were predicted to occur far later, Kevin Anderson, Deputy Director of the Tyndall Centre for Climate Change Research, argues that we must begin to refer to 2°C as the threshold between "dangerous" and "extremely dangerous" climate change.

Understanding Climate-Induced L&D: Challenges and Path Forward

The United Nations Framework Convention on Climate Change (UNFCCC) has highlighted the critical need to address future loss and damage (L&D) resulting from climate change. As global warming intensifies, both slow-onset climate phenomena and abrupt disasters pose significant risks.⁴³ These risks, compounded by the intricate web of global interconnectedness, may lead to future L&D of unimaginable scales, especially in terms of non-economic impacts. The gradual process of climate change could lead to increased atmospheric threats, such as the intensification of heat waves. Recognizing and addressing tipping points within societal, environmental, and climatic systems becomes pivotal in mitigating potential L&D.⁴⁴

Climate-Induced Displacement: A Growing Concern

One of the profound consequences of climate change is the displacement of populations. Climate-induced disasters, whether sudden-onset events such as hurricanes, floods, and wildfires, or slow-onset phenomena like sea-level rise, desertification, and droughts, disrupt livelihoods and render regions uninhabitable. This duality forces millions to migrate in search of safety and sustenance.

As per various study reports produced by Geneva-based Platform on Disaster Displacement (PDD), formerly known as Nansen Initiative, the drivers of such forced migration are multifaceted as under:

1. **Sudden-Onset Disasters:** Events like cyclones and floods displace communities without warning, often leaving individuals unprepared. For example, recurring extreme monsoon rains in South Asia have affected millions.
2. **Slow-Onset Changes:** Gradual environmental shifts, including rising sea levels and expanding desertification, compel long-term displacement. Coastal regions and small island nations are particularly vulnerable to these changes.
3. **Resource Scarcity and Conflict:** As climate change exacerbates shortages in vital resources like water and arable land, tensions rise, triggering conflicts that further drive migration.

⁴² H. H. Shalizi and A. A. R. Islam, *Climate Change and Displacement: A Global Review of Policy and Practice* (International Organization for Migration, 2013).

⁴³ United Nations Framework Convention on Climate Change (UNFCCC), *Loss and Damage: The Need for Immediate Action* (UNFCCC, 2022)

⁴⁴ Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2021: The Physical Science Basis* (Cambridge University Press 2021)

Impacts of Displacement on Migrants and Host Communities

Displacement due to climate disasters imposes severe challenges on both migrants and host communities. Migrants often encounter violations of their human rights, limited access to basic services, and discriminatory practices. Additionally, host communities face economic and social strains due to increased demands on resources and infrastructure. The loss of cultural heritage and community ties, particularly for indigenous populations, is another profound and irreplaceable impact of displacement.

Gaps in Policy and Legal Frameworks

Despite the alarming scale of climate-induced migration, international frameworks remain insufficient. Climate migrants are not formally recognized under the 1951 Refugee Convention, leaving them without adequate legal protections. Although efforts have been made to address these gaps—through proposals for new legal instruments and integration of climate-related considerations into migration policies—significant progress is yet to be achieved.

A Comprehensive Path Forward

Climate change-induced displacement is a pressing global issue that necessitates immediate and coordinated action. The intersection of climate-induced loss and damage with displacement underscores the need for international collaboration. Financial support, robust legal frameworks, and forward-looking policies are essential to safeguard the rights and dignity of affected populations.

Addressing the challenges of climate-induced migration requires a holistic and multifaceted approach. Key strategies include:⁴⁵

- **Mitigation and Adaptation:** Reducing greenhouse gas emissions and enhancing climate-resilient infrastructure to minimize displacement.
- **Legal Protections:** Establishing international legal frameworks to ensure the rights and safety of climate migrants.
- **Community-Based Solutions:** Strengthening local communities' capacities to adapt to climate impacts, thereby reducing the need for migration.

Ensuring the Protection of Displaced Populations

The rising numbers of displaced populations, whether internally or across borders, amplify the urgency for effective protection measures. Such individuals often face acute shortages of shelter, food, and healthcare. Displacement stems from both sudden-onset events like hurricanes and slow-onset changes like sea-level rise. The protection of displaced populations requires:

1. **Legal Frameworks:** Governments must uphold their responsibilities, as emphasized by international laws like the Guiding Principles on Internal Displacement.
2. **Humanitarian Assistance:** Specialized organizations, such as the International Organization for Migration (IOM), play a vital role in delivering shelter, healthcare, and legal aid.

⁴⁵ World Bank, *The Role of Integrated Approaches to Climate Migration* (World Bank, 2022)

3. **Durable Solutions:** Facilitating the integration of displaced populations into host communities or enabling safe returns is essential. Ensuring access to education, employment, and social services is a critical aspect of these solutions.

Legal and Moral Context

Responsibility for Compensation

Countries and their inhabitants are suffering significantly because of climate change, and further harm is likely. Developed nations have a responsibility to act, including implementing mitigation measures to stop the negative consequences of climate change in other states⁴⁶. Countries that fail to uphold these duties are accountable for paying redress or reparations to victims of loss and harm brought on by their acts or inaction.

The activities of the world's "haves" will, in many cases, considerably influence the livelihood and well-being of those living in the world's "have-not" regions. In other words, the effects of other people's activities (and inactivity) will influence those who have contributed the least to climate change. This gives rise to a moral duty to repair loss and harm caused by climate change and acting quickly to correct this issue is the only logical course of action.

Under the UNFCCC, a common plan for restitution and compensation shall be sought. "A raft of complex, uncoordinated and burdensome individual legal cases by States," warn Verheyen and Roderick. The fear of legal action continues Burkett, "will not result in a remedy that is forward-looking and comprehensive." According to Lefeber, "States even have a legal duty to provide negotiated solutions where environmental damage is expected to occur."⁴⁷

Other environmental treaties provide examples of collective compensation and restitution. Two examples are the Hazardous and Noxious Substances Fund, created under the Hazardous and Noxious Substances Convention, and the International Oil Pollution Compensation Supplementary Fund established in 1992 under the Fund Convention.⁴⁸ Countries have a strong basis for legal action, and if an international mechanism on compensation and rehabilitation is not set up, there may be a proliferation of lawsuits for restitution and reparation for the negative impacts of climate change in the years to come. The UNFCCC, as the forum important to policy, must lead talks on potential actions to help nations cope with L&D.

Nevertheless, as previously stated, while developing strategies for dealing with L&D, both economic and non-economic losses must be taken into account. Supplemental compensation plans will only cover a portion of the losses suffered, much like insurance and other risk-transfer mechanisms do. Rather, it is necessary to implement a comprehensive strategy that adequately also addresses non-economic losses, such as the

⁴⁶ Intergovernmental Panel on Climate Change (IPCC), *Global Warming of 1.5°C* (IPCC, 2018)

⁴⁷ Lefeber, *State Responsibility and the Environmental Protection: A Legal Framework* (2011).

⁴⁸ International Maritime Organization (IMO), *Hazardous and Noxious Substances Convention* (IMO, 1996)

loss of culture, territory, and livelihoods. The Burkett concept of climate reparations bears additional thought in this context. Additionally, Article 3.2 of the UNFCCC states that: "The specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration."

Articles 4.1(b), 4.3, 4.4, 4.5, and 12.1 outline obligations regarding adaptation and the supply of means to execute adaptation action, including financing, technology, and capacity-building. The failure of Annex I and Annex II Parties to comply with these Convention requirements results in avoidable L&D.

The Warsaw International Mechanism (WIM)

The WIM for L&D was established at COP19 in 2013, held in Warsaw, Poland. Its purpose is to address the impacts of climate change, particularly in developing countries that are most vulnerable to its adverse effects. The mechanism focuses on three main functions:

- **Enhancing Knowledge and Understanding:** This includes promoting comprehensive risk management approaches and sharing best practices to address both extreme weather events and slow-onset climate impacts.
- **Strengthening Dialogue and Coordination:** WIM fosters collaboration among stakeholders, institutions, and initiatives to ensure coherent and integrated approaches to L&D.
- **Enhancing Action and Support:** This involves providing technical guidance, financial support, and capacity-building to help countries manage and mitigate climate-related losses and damages.

The mechanism also implements Article 8 of the Paris Agreement and is guided by an Executive Committee that develops work plans and initiatives, such as the Fiji Clearing House for Risk Transfer.

Sendai Framework Disaster Risk Reduction

The Sendai Framework for Disaster Risk Reduction (2015–2030) emphasizes the importance of addressing human mobility in the context of disaster risk reduction. It recognizes that population movements, including displacement, can both result from and contribute to disaster risks. Here are some key provisions related to the protection of displaced populations:⁴⁹

Disaster-Induced Displacement: The framework highlights the need to prepare for and manage disaster-induced population movements to minimize their impacts. This includes planning for evacuations, relocations, and the long-term needs of displaced individuals.

⁴⁹ Sendai Framework for Disaster Risk Reduction 2015-2030, *United Nations Office for Disaster Risk Reduction* (UNDRR, 2015)

Inclusion of Migrants: It stresses the importance of including migrants and displaced populations in disaster risk reduction strategies. This ensures that their vulnerabilities are addressed and their resilience is strengthened.

Building Resilience: The framework promotes the integration of DRR measures into urban planning and development to account for current and future mobility trends. This helps in reducing risks associated with displacement.

Global Cooperation: It calls for international collaboration to address the challenges of displacement, particularly in cross-border contexts, and to support affected communities in recovery and reconstruction.

The "Words into Action" guidelines under the Sendai Framework for Disaster Risk Reduction aim to provide practical advice for implementing disaster risk reduction strategies. Specifically, Objective E focuses on substantially increasing the number of countries with national and local disaster risk reduction strategies. This objective emphasizes the importance of aligning local strategies with national frameworks while tailoring them to specific local contexts and hazard profiles. In sum, the Sendai Framework represents a shift in global policy by acknowledging the complex relationship between mobility and disaster risk. It aims to reduce vulnerabilities while enhancing the resilience of displaced populations and host communities.

Global Compacts for Migration and Refugees

The Global Compact for Migration (GCM) and the Global Compact on Refugees (GCR), adopted by the United Nations in December 2018, represent significant frameworks for addressing migration and refugee issues comprehensively⁵⁰. These initiatives aim to expand the protective measures available to migrants and refugees while also acknowledging the increasingly significant role of climate change as a driving factor for displacement.

The Global Compact for Migration primarily serves as a cooperative framework designed to respect the sovereignty of states while encouraging international collaboration. Although non-legally binding, it introduces 23 objectives to manage migration effectively. These objectives encompass a range of priorities, from mitigating climate change-induced migration to safeguarding the human rights of migrants, irrespective of their legal status. The GCM explicitly recognizes climate change as a factor contributing to migration and calls for measures to lessen its effects.

The Global Compact for Refugees, meanwhile, focuses on distributing the responsibilities of refugee care more equitably among nations. It emphasizes reducing the pressures on host countries and fostering self-reliance among refugees. Although the GCR does not legally define "climate refugees," it acknowledges the need for protection mechanisms for individuals displaced due to climate-related disasters.

⁵⁰ United Nations, *Global Compact for Safe, Orderly and Regular Migration* (2018)

Provisions Addressing Climate-induced Displacement, often referred to as climate refugees, highlight existing legal and policy gaps.⁵¹ Despite the increasing urgency of this issue, international law still does not formally recognize climate refugees, leaving them without dedicated legal protections. Organizations like the UNHCR strive to incorporate displaced individuals into climate policies and safeguard their rights under current frameworks. Experts advocate for establishing a formal legal definition of climate refugees and creating international agreements to address their specific needs.⁵²

Together, the GCM and GCR underscore the growing recognition of climate-induced displacement as a pressing global challenge. However, significant work remains to close the legal and policy gaps that leave vulnerable populations without adequate protection.

Prospects for Climate Litigation

This section examines the legal avenues for addressing L&D, so-called climate litigation. As climate change further proceeds, with ever-worsening impacts, so does the climate litigation trend rise. Climate litigation is a powerful tool to intensify global struggles towards climate justice. The impact is developed even if legal intervention cases don't make it into the full hearing. Here, the legal avenues will be made available in a way that interested readers feel empowered to use climate - or L&D - Litigation.⁵³

Climate litigation plays a crucial role in addressing the challenges posed by climate change. It serves as a tool to hold governments, corporations, and other entities accountable for their contributions to climate change and their commitments to mitigate its impacts. Here are some key aspects of its significance: Climate litigation often emphasizes the ethical dimensions of climate change, addressing issues like historical responsibility, structural inequalities, and intergenerational equity. It ensures that entities adhere to their climate pledges, such as reducing greenhouse gas emissions or transitioning to renewable energy sources.

Successful cases, like *Urgenda v. The Netherlands* or *Milieudefensie v. Royal Dutch Shell*, establish legal benchmarks that can influence future climate policies and actions globally. Many cases argue that failure to act on climate change violates fundamental human rights, such as the right to a healthy environment which opens up multiple avenues for global advocacy. Litigation is also powerful in bringing public attention to climate issues, and fostering greater societal and political engagement, especially through high-profile cases.⁵⁴ The same tool can be used for challenging inadequate policies or actions, litigation can lead to stronger climate regulations and frameworks.

⁵¹ Jane McAdam, *Climate Change, Forced Migration, and International Law* (Oxford University Press 2012)

⁵² Benoît Mayer, 'The Concept of Climate Migration: Advocacy and Its Limitations' (2017) 49 *Georgetown Journal of International Law* 605.

⁵³ United Nations Environment Programme (UNEP), *Global Climate Litigation Report: 2023 Status Review*

⁵⁴ *Urgenda Foundation v. The State of the Netherlands*, ECLI:NL:HR:2019:2007; *Milieudefensie v. Royal Dutch Shell*

Litigation and Opportunities for Climate Justice

- *Raising the pressure on main Emitters and Lawgivers:*

Climate litigation exerts moral power, stimulates political debate function as a control mechanism, and provides legal grounds for regional, national, and international political institutions and actors from the private sector to consider whilst developing policies, frameworks, and business strategies, amongst which the Urgenda case, in which claimants compelled the Dutch state to a 25% emissions reduction by 2020 compared to

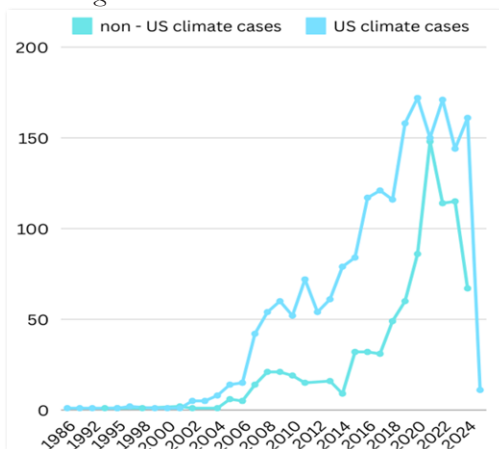


Image: Research Gate, October 2024

1990, or the Milieudefensie et al. v. Royal Dutch Shell plc. Case, which compelled Royal Dutch Shell to reduce the climate emissions by both its production and the use of its products by consumers by about 45% until 2030, although this decision was overturned on November 12, 2024, claiming the attribution lacks legal and scientific grounds.⁵⁵

- *Development of laws and policies:*

Consistent climate litigation further develops legal mechanisms and clarifies actors' legal obligations concerning climate change.⁵⁶ The interpretation of legal conventions and frameworks, as well as making use of legal measures that are originally distinct from environmental law such as human rights, covers up for the fact that most of the legal provisions have been developed under circumstances when climate change has not been an issue.

- *Strengthening of Human Rights:*

Human rights are intrinsically connected to environmental rights: Achieved improvements in the latter, therefore, affect the former and enhance human rights recognition and implementation.

- *Improvement of Climate Litigants' Strategies:*

As subsequently more climate litigation cases are submitted climate litigants gain a better understanding as to how to claim & expand climate litigation's impact.

- *Capacity Building:*

Climate litigation results in the development of independent public Institutions in the sphere of climate change and stimulates the best possible research, assessment, measurements, and innovations on how to tackle L&D.

⁵⁵ Milieudefensie et al v Royal Dutch Shell plc, District Court of The Hague

⁵⁶ Jolene Lin, *Climate Change and the Courts* (Edward Elgar 2021)

- *Positive Impacts on Civil Societies Engagement:*
Climate litigation results in the participation of civil society, stimulating public opinion and democratic procedures including green politics campaigns.
- *Obtaining Compensation for L&D:*
First and foremost, one searches for justice in court. More than that, one can ask for an adequate remedy to cover up (Remediation/Clean up or Compensation) or halt the criminal activities: Annuling Decisions, Return to re-decision, Permit or Licence withdrawal; (Environmental Impact Assessment) EIA or (Strategic Environmental Assessment) SEA Procedure, Public Consultation, Injunction, criminal liability for Corrupt or deficient process exposure, Launch of government investigation, Declaration, Other orders of the court.⁵⁷

Even more than that, climate litigation increasingly becomes a profitable business, for companies such as Nivalion, Client Earth, and Pogus Goodhead, especially if redress from fossil fuel companies or other polluting industries other than public authorities is sought, e. g. *Pari vs. Holcim* or *Lliuya vs. RWE*. Kaminski, I. (2023, 13. März). An ocean of opportunities? Climate litigation is doing so well it's now being eyed by investors.⁵⁸

As a claim on L&D generally requires the plaintiffs to make their causation by climate change (climate attribution) plausible, and as they search for a certain sort of remedy, they develop and display measures that help to mitigate and adapt to L&D, considering the best available science. Whether the court approves or disapproves of the claimant's alleged claim, it either validates and confirms the claimant's climate attribution, and assesses the value of the claimant's sought remedies, often with the best available science.

Limitations and Barriers

Climate change L&D litigants face partially interrelated and globally divergent barriers, that are economic and financial, institutional, political, social, environmental, or technological in nature. Difficulties displaying evidence, lack of knowledge, proper policies and regulations, as well as widely spread narratives and perceptions can go against climate litigation. Secondly attributing climate change as a cause to certain human rights violations can be a challenge, similar to the question on how to evaluate future impacts - 82 OHCHR (n 9) 23; International Bar Association (n 81) 68 & standing 81 OHCHR (n 9) 30; International Bar Association, *Achieving Justice and Human Rights in an Era of Climate Disruption* (2014) 68.⁵⁹

The planning of climate change takes a pivotal role, the price of a failing climate litigation might give helpful precedent for those opposed to adequate emission reduction or adverse effects to the campaign, e.g. *Juliana vs. High Court* stood not in

⁵⁷ Joana Setzer and Catherine Higham, *Global Trends in Climate Change Litigation: 2023 Snapshot* (Grantham Research Institute 2023)

⁵⁸ Isabel Kaminski, 'An Ocean of Opportunities? Climate Litigation is Doing So Well It's Now Being Eyed by Investors' (13 March 2023) *Energy Monitor*

⁵⁹ OHCHR (n 9) 23; International Bar Association (n 81) 68; OHCHR (n 9) 30; International Bar Association, *Achieving Justice and Human Rights in an Era of Climate Disruption* (2014)

any relation to a court historically grown power and influence, lack of focus on Federal Agencies, resulting rather in public and political opposition.

Standing and Emblematic

Another topic is standing. Standing, which describes the claimant's eligibility to bring a case to the court, by demonstrating to the court that you have a sufficient connection to the law, action, or omission which they are disputing, is a “critical threshold issue”: Individuals, groups, and Public Interest Groups are affected.

Whilst Australia, Canada, Brazil, Philippines, Kenya, and India, due to their liberal interpretation, enable many claimants, including NGOs, individuals, and corporations, France, Germany, the Netherlands, and the UK are rather strict, there is a need to demonstrate legitimate interest and establish direct causal links.

Legal Basis for Litigations

Reviewing past and ongoing climate litigation cases, litigants based their claims mainly on alleged violations of human rights, customary international law, and specific national legislation.

1. Human rights violations of climate-induced L&D

It is widely held that a healthy and safe environment is a prerequisite for the full enjoyment of human rights. L&D often infringes on the claimants' right to life, health, water, food, housing, property, the right to a healthy environment, the right to private and family life and an adequate standard of living, and the right to self-determination and therefore rely on human rights to substantiate their claim. This has been pointed out by the United Nations Human Rights Council, special procedures, and other bodies.

Human rights law, although the concept has been around for eons, has today mainly been established after it was codified within the UDHR after the Second World War. The UDHR has given birth to many other national and international frameworks, which nowadays make up the rich tapestry of Human rights law.

International Human Rights Instruments: Provisions for the Right to Life

For climate Litigation, claimants frequently rely on international climate change frameworks such as the Kyoto Protocol, the Paris Agreement, or the Convention, international and regional frameworks, such as the Convention for the Protection of Human Rights and Fundamental Freedoms

Right to:	Life	Health	Work	Housing	Self-determination	Healthy environment	Property	A'quate living	Private & family life	Freedom & security
ICCPR	5	2		3; 4		6, 17		2.1		
ICESCR		12	6	1	1				10	
UN Charter					2					(1)
UNCRC	6	24	32			29 1e		27		7
Rome Statute							2 a (iv)			
UNDRIP	7	21		3; 4, 21	5	29	2			7 (2)
UDHR	3	2	34	2	2	38	17 (1, 2)	25	17	14

(the ECHR), the American Convention on Human Rights (ACHR), The African Charter on Human and Peoples Rights (ACHPR), the ASEAN Human Rights Declaration (AHRD), and the Arab Charter on Human Rights. The UN Human Rights Council - 2021 Resolution Recognising the Right to a Healthy Environment is also frequently referred to.

The Right to an Adequate Standard of Living

The Right to an adequate standard of living allows people to have an adequate standard of living and protects the claimant's right to adequate food and nutrition, clothing, housing, and the necessary conditions of care when required. Also, they shall enjoy basic needs in conditions of dignity. No one should live in conditions whereby the only way to satisfy their needs is by degrading themselves or depriving themselves of their basic freedoms, such as through begging, prostitution, or forced labor. Expressed in material terms, this means that one shall be living above the poverty line of the society concerned.⁶⁰

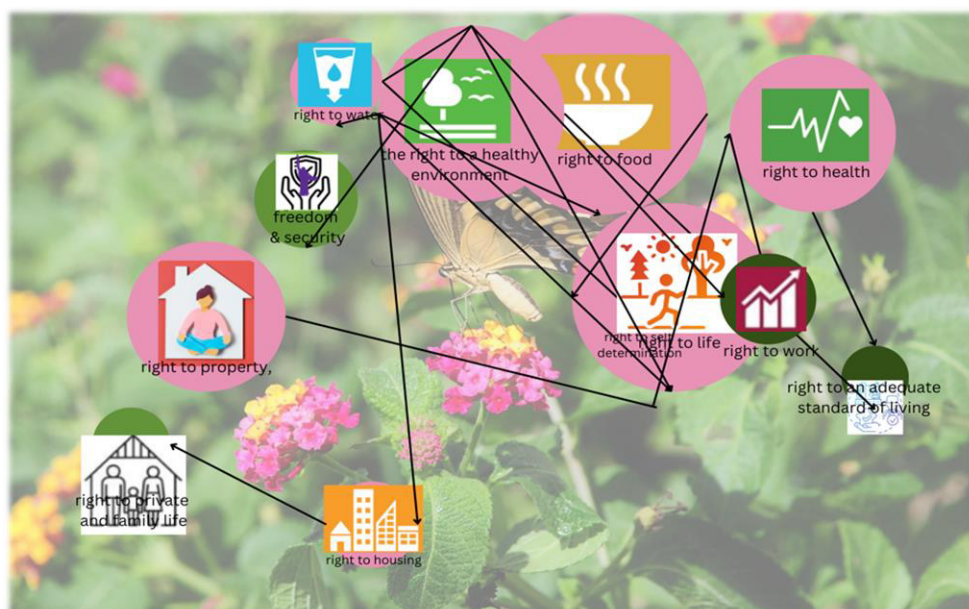


Figure: Quantity and relation of climate-related human rights in selected human rights charters and international laws

Right to Life and Dignity

The right to life with dignity inherits both negative and positive obligations on the State. Outside of exceptions such as the defence of any person from unlawful violence; the lawful arrest or the prevention of the escape of a person lawfully detained, in action lawfully taken to quell a riot or insurrection, and in some areas the imposition of the death penalty the state must refrain from taking a life, including activities such as the training of State forces to use deadly force only when necessary, to take preventive measures in the face of known risk to life, the implementation of national legislation which help to curb loss of life (such as in the regulation of hospitals and medical

⁶⁰ United Nations, "International Covenant on Economic, Social and Cultural Rights," 1966, Article 11.

professionals), the investigation and punishment of wrongful acts resulting in death and responsibility taking for the wellbeing of persons in State custody.⁶¹

Also, the right to life is violated when people no longer have access to natural resources to ensure their survival, as was held by the UN Human Rights Committee, which condemned Paraguay's failure to protect individuals from environmental degradation. (*Portillio Cáceres v. Paraguay*). It relates to the right to food and water.

It is one of the most widely and best-established human rights, embedded in international, regional, and national legislations. It has successfully been applied in the *Sawhoyamaxa Indigenous Community v Paraguay*.

The Right to a Healthy Environment

Whilst the adjective “healthy” has competition, some promote it as “ecologically sound” (draft IUCN Covenant) “a life of dignity and well-being” (Stockholm Declaration), or “adequate to his or her health and well-being” (Aarhus Convention) the right to a healthy environment refers to a right to “a healthy environment” or a right “to live” in a healthy environment, it is generally described as. It embeds certain procedural rights, such as the right to receive information, to participate in decision-making about environmental matters, and to obtain access to the justice system. Yet, it also contains a substantive component, protecting elements of the natural environment that enable a dignified life. The right to a healthy environment is embedded in the ACHPR, the AHCR, and the Arab Charter of Human Rights, whereas the former confers this right to a group. The ECHR and the EU Charter rely on the European Court’s innovative and dynamic interpretation of the Convention, which integrates broader human rights considerations, including those embedded in other legislative frameworks.

The Right to Food

The right to food is not simply a right to a minimum ratio of calories, proteins, and other specific nutrients; it is a right to all nutritional elements that a person needs to live a healthy and active life. States must respect people's existing access to food and means of obtaining food: Any measure resulting in preventing access to food (for example denying food assistance to political opponents) is prohibited. States shall also protect individuals’ enjoyment of the right to food against violations. Third parties shall be prevented from destroying sources of food by, for instance, polluting land, and water. And air with hazardous industrial or agricultural products or destroying the ancestral lands of indigenous peoples to clear the way for mines, dams, highways, or industrial agriculture. States must be proactive in facilitating people's access to and use of resources and means of ensuring their livelihoods.⁶²

61 United Nations, "Universal Declaration of Human Rights," 1948, Article 3; International Covenant on Civil and Political Rights, 1966, Article 6.

62 *Sawhoyama Indigenous Community v. Paraguay*, IACtHR, Judgment of 29 March 2012; *People’s Union for Civil Liberties v. Union of India & Ors.*, (2003) 4 SCC 399.

Firstly, embedded in the UDHR it is also recognized as an essential part of the International Covenant on Economic, Social, and Cultural Rights and other international and regional HR mechanisms. It has been successfully applied in the *Sawhoyama Indigenous Community v Paraguay* or the *People’s Union for Civil Liberties v Union of India & Ors.*

Regional Human Rights Instruments: Thematic Provisions										
Right to:	Life	Health	Work	Housing	Property	Healthy environment	Self-determination	A'quate living	Private & family life	Freedom & security
ECHR	2	2		see 2		Art.21		2,15	8	5
ACHPR	4	16	15	20, 21, 22	14	24	2		18	6
ADRDM	I	XI	XIV		XXIII				VI	
ACHR	4				21			38	17	7
AHRD	11	29	27	28	21	28		28		7
Arab Charter	5(-8)	2	34	2	31	38	2	38	17	14

Right to Food

The right to food relevant to climate litigation in human rights charters and international law and litigation ensures as a fundamental human right recognized under international law, and its enforcement through litigation has been a growing area of focus. Here's an overview:

Relating to the international legal framework, the right to food is enshrined in the Universal Declaration of Human Rights (Article 25) and the International Covenant on Economic, Social, and Cultural Rights (ICESCR, Article 11).⁶³ These documents outline the obligation of states to ensure access to adequate food for all. Accordingly, regional instruments, such as the African Charter on Human and Peoples' Rights and the Additional Protocol to the American Convention on Human Rights, also recognize this right.⁶⁴

In terms of state obligations, States have three levels of obligations: to respect (not interfere with access to food), to protect (prevent third parties from infringing on the right), and to fulfill (proactively ensure access to food). Accordingly, from litigation and justiciability perspectives, Economic, Social, and Cultural (ESC) rights, including the

⁶³ Universal Declaration of Human Rights, Art. 25; International Covenant on Economic, Social and Cultural Rights, Art. 11

⁶⁴ International Covenant on Economic, Social and Cultural Rights, Article 11; African Charter on Human and Peoples' Rights, Article 14; Additional Protocol to the American Convention on Human Rights, Article 11.

right to food, have often faced challenges in being recognized as justiciable. However, courts in countries like South Africa and Colombia have ruled on cases affirming the justiciability of ESC rights.⁶⁵ Litigation strategies often involve invoking related rights, such as the right to life or health, to address violations of the right to food. Examples of litigation include cases in India, where the Supreme Court has issued directives to ensure food distribution to vulnerable populations, and in Nepal, where courts have addressed failures to ensure freedom from hunger.

Right to Water and Sanitation

Access to safe, affordable, and reliable drinking water and sanitation services are basic human rights. Indispensable to sustaining healthy livelihoods and maintaining people's dignity. States are obliged by International human rights law to work towards achieving universal access to water and sanitation for all, without any discrimination, while prioritizing those most in need. The key elements of the rights to water and sanitation are availability, accessibility, affordability, quality and safety, and acceptability.

Right to Health

The right to health is generally defined as a “state of complete physical, mental and social well-being and not merely the absence of disease or infirmity ... [and] ... [t]he enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being”. The right to health is generally defined as Climate change affecting people's physical and mental health due to more frequent extreme weather events and changing patterns of infectious diseases. This linkage is recognized in the Paris Agreement the Human Rights Council and other UN and regional human rights treaty bodies. (...) Also, it is firmly established in international law.

Right to Self-determination

The right to self-determination enshrines individuals' and collective rights to freely determine their political status and to pursue their economic, social, and cultural development. It is one of the most profound principles in international law, embedded in various international and regional human rights mechanisms whilst embedded in national constitutions, such as the United States, Canada, or India, whilst those shall otherwise be interpreted through international law.

Right to a Private and Family Life

The Right to a private and family life protects, sexuality, body, personal identity and how they look and dress, how they form and maintain relationships with other people as well as how their personal information is held and protected (privacy) and it protects parents right to have custody and contact with their children who hold equal rights regarding their parents. It is expressed only in the ECHR.⁶⁶

Right to Property

The human right, as framed in the 1948 Universal Declaration of Human Rights, states that “everyone has a right to own property, and that “no one shall be arbitrarily deprived

⁶⁵ South Africa's Constitutional Court in *Government of the Republic of South Africa v. Grootboom* (2000)

⁶⁶ European Convention on Human Rights (ECHR), Article 8: Right to respect for private and family life, 1950.

of his [or her] property. Natural persons are free and equal.⁶⁷ It implies respect from both the public authority and other individuals, and it is this two-dimensional respect for natural persons' status as free and equal — both vertical and horizontal — which, as one can argue, is the normative core of the human right to private property. Regarding international law, it is a free-standing right nowhere else embedded, than in the EU Charter on fundamental rights and freedoms and in the UDHR. Many Western (and capitalist) states embed it in their national constitutions, other than socialist ones.

Relevance of Customary International Law

The Precautionary Principle

Principle, requiring that, in case of a threat of serious or irreversible environmental harm, scientific uncertainty cannot be used as a reason to delay action to prevent the harm, as included in the UNFCCC and many national laws.

The no-harm Principle

Principle requiring states to prevent transboundary environmental harm in other countries where the source of the harm comes from their territory.

The Polluter Pays Principle

Principle requiring responsible actors to make good and/or bear the costs of the damage it causes. This principle is contained in many national laws and environmental regulations.

International Climate Change Agreements

Provisions, although non-enforceable from the UNFCCC and the Paris Agreement can influence how national laws are applied in climate cases.

Principle of sustainable development

Principles require that actions of the present generations are balanced against the protection of the environment in which future generations' needs are not compromised.⁶⁸

Progress and Way Ahead

Future climate change litigation cases and two advisory opinions will clarify states' obligations under international law. The ICJ & IACtHR Advisory Opinion and the Müllner v. Austria at the ECtHR are expected to clarify states' obligations under International and in the 2 latter cases under Human rights law. The same logic has been applied to the International Tribunal for the Law of the Sea (ITLOS) UNCLOS and other relevant international legal obligations required to take 'all necessary measures', in line with the best available science, to reduce their GHG emissions, to the fullest possible extent, following UNCLOS and other relevant international legal obligations.

Those cases are likely to affect national policies and international treaties and further develop int. legal norms, potentially making certain climate litigations obsolete and

⁶⁷ Universal Declaration of Human Rights, art. 17; EU Charter of Fundamental Rights, art. 17.

⁶⁸ *Our Common Future* (World Commission on Environment and Development, 1987), 43

furthering climate justice. In the field of corporate climate Litigation, so-called “Greenwashing cases” are rising, e.g. in *Multnomah Country v. ExxonMobil*, *People v. ExxonMobil Corp.*, or *Texas v. Blackrock*, which generally claim the conscious misinformation by the country.

Legal Avenues for Redress

Redress can be sought at national and international courts, depending upon the admission requirements, and other strategic considerations such as possible remedies, and the scope of the courts. Court decisions impact each other.

National courts

In the past, tort/delict claims that give rise to civil liability for L&D resulting from private persons typically involve the Duty of Care, a Breach of a Duty, Causation, and Harm/ Injury have been most used in National courts.

Regional courts

Regional courts such as the ECtHR, or the Inter-American Court of Human Rights IACHR provide claimants, whose claims are not applicable at regional courts, the possibility to seek a remedy for the alleged crime.

International courts: As stated above, international courts, such as the International Court of Justice (ICJ) or the International Criminal Court (ICC), equally play an important role in litigating climate change.

Courts with International Jurisdiction: Some courts, such as the ECtHR, and in certain cases German, Swiss, or French national courts allow claimants independent of their nationality to search redress for alleged crimes of one of the members within their jurisdiction.

Case Study: Lliuya v. RWE AG

Case Info

In 2015 the Peruvian Farmer and mountain guide Saúl Lliuya, supported by the NGO German Watch, its affiliated “Stiftung Zukunftsfähig, Wayinstsik Perú, and the campaign Salvamos los Andes. Filed a lawsuit in a German district court against the German energy provider RWE AG; claiming that the danger emanating from a Glacial Lake outburst above his village endangers his property emanates from climate change to which RWE knowingly has contributed to 0,47% through the firing of coal.⁶⁹

Strategy: The claimant based his claim on the well-established law of nuisance which provides that the use of one's property should not impair other one's ability to enjoy their property.

⁶⁹ Lliuya v RWE AG [2015] Landgericht Essen, Case No. 2 O 285/15 (Germany), supported by Germanwatch, Stiftung Zukunftsfähig, Wayinstsik Perú, and Salvamos los Andes

The claimant was asking USD 20,000, which is 4,000,000 USD for the flood prevention measures as planned by the city of Huaraz.⁷⁰

Proceeding: Although the claim was found inadmissible at first hand by a German district court, a higher court reversed that decision and stated that a private company is, in principle, responsible for its share of climate damages, resulting from its emissions. A delegation from the court accompanied by experts then visited the Sauls House and surveyed the situation. The Hamm Higher Regional Court was originally set to announce its decision on April 14, 2025, but the ruling has been postponed to May 28, 2025. The delay comes after new information surfaced, prompting a review by the court and an application for alleged bias. This case is ground-breaking, as it could set a precedent for holding major polluters accountable for climate-related damage. The hearings reaffirmed the polluter pays principle, signalling a shift in climate litigation worldwide.

Key Takeaways

- Private companies can, in principle, be responsible for their share of climate damages, resulting from their emissions.
- Possible thanks to involvement in attribution science
- Can increase pressure on companies and countries to adopt green business models, and to adjust climate politics globally, to avoid litigation.
- The legal test case that will clarify responsibilities for climate change and its consequences.

It is important to examine the ethical and legal foundations for UNFCCC action. The Convention's main goal is "to stabilize greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate system, in a time frame which allows ecosystems to adapt naturally and enables sustainable development". As a result of the Convention's failure to achieve its goal, the ability to prevent harmful tampering with the climate system may have already passed. Food production and ecosystems are already in jeopardy, and the ecological systems that the poor and vulnerable depend on are being impacted. Similarly, nations that are dependent on climate-sensitive industries, like agriculture and fisheries, for their economy are being challenged. Climate change is also endangering internationally recognized human rights, such as the right to development.⁷¹

International Law's General Responsibilities

States are required by international law, namely the UNFCCC and Kyoto Protocol, to act to stop climate change and to respond to its consequences. However, it can be argued that the strongest legal basis for this obligation is found in international human rights law and the no-harm principle found in customary international law. Thus, the anticipated effects of a developed state's failure to achieve its UNFCCC mitigation responsibilities may amount to a human rights violation.

Climate change poses a threat to the realization of human rights, particularly the rights to life and food, according to the UN Human Rights Council (and other human rights

⁷⁰ *Lliuya v RWE AG* [2015] Landgericht Essen, Case No. 2 O 285/15 (Germany)

⁷¹ United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994)

organizations). Numerous human rights accords have been ratified by almost all states worldwide, which guarantees these inalienable rights, and obliges States to refrain from interfering with them and to take effective steps to safeguard them. Therefore, both international human rights laws and the UNFCCC should establish concurrent international liability for climate change damage.

The Convention specifies several significant principles and duties for Parties regarding adaptation and support towards developing nations to ensure the attainment of its purpose. Articles 3.1 and 3.2 set out the principle of accountability and the need to fully consider the requirements of developing nations which are particularly susceptible to the negative consequences of climate change.

Article 3.1 reads as follows:

"The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof."⁷²

As mentioned above, customary international law is a further legal foundation for governments' responsibility to take action to stop severe climate change. In line with the no-harm rule, states are required to "ensure that activities within their jurisdiction and control respect the environment of other States or areas beyond national control". According to Verheyen and Roderick, this obligation arises when a state can prevent or reduce the risk of transboundary environmental harm and anticipates (or is aware) that a certain action may result in such harm. If so, that state is required to implement preventative measures according to the risk. Given the transnational threat that climate change poses to the environment, the regulation would have to call for measures that are transformational in character and scope about climate change harm.⁷³

A state assumes international responsibility for every law it violates, including the no-harm rule. In violation, a state is required by the law of state accountability to stop the violation and rectify any hurt or damage it has caused. According to the International Law Commission, "after a violation has been proven, the offending state must terminate the conduct and give 'full compensation' for damages inflicted, including for 'any damage, whether material or moral'. Restitution, compensation, and satisfaction may be used alone or in combination as full reparation.

ICJ Advisory Opinion on Climate Change

The advisory proceedings of the International Court of Justice (ICJ) are anticipated to set a definitive standard for the scope of States' obligations under international law regarding climate change. Public hearings were scheduled from December 2 to 13, 2024, at the Peace Palace in The Hague, the Netherlands, shortly after the conclusion of the

⁷² United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107, art 3(1)

⁷³ Birgit Verheyen and Peter Roderick, *Beyond Dangerous Climate Change: Emission Pathways for a Sustainable Future* (WWF UK 2008)

UN Climate Change Conference (UNFCCC COP 29) in Baku, Azerbaijan. A press release from the ICJ indicates that 98 States and 12 international organizations participated in these oral hearings. (Refer to Annex 7 for additional details on the ICJ's procedure concerning advisory opinion requests.)⁷⁴

On March 29, 2023, the United Nations General Assembly (UNGA) adopted resolution A/RES/77/276, spearheaded by Vanuatu and supported by over 100 countries. This resolution requests the ICJ to provide an advisory opinion addressing two key questions:

1. *What are States' obligations under international law to protect the climate system and environment from anthropogenic greenhouse gas emissions for current and future generations?*
2. *What are the legal ramifications for States that have caused significant environmental harm, specifically concerning: a) States, such as Small Island Developing States (SIDS), vulnerable to adverse climate effects due to geographical and developmental factors, b) Individuals and communities affected by climate change, both now and in the future.*

The UN Secretary-General forwarded this request to the ICJ in a letter dated April 12, 2023. Subsequently, on April 20, the ICJ President authorized input from UN Member States and other organizations, including the International Union for Conservation of Nature (IUCN), COSIS, the European Union, the African Union, OPEC, OACPS, and several Pacific organizations. Additionally, the Cook Islands and the State of Palestine—non-UN Member States—were permitted to participate. The ICJ received 91 written statements and 63 comments from States and international organizations, according to the press release. The Court may make these documents public as per its procedural rules once oral proceedings commence.

As the UN's principal judicial body, the ICJ's advisory opinions, though not legally binding, clarify States' obligations under international law concerning climate change. These opinions can influence States to update national policies and international treaties, bolster multilateral negotiations, and hasten mitigation efforts and loss-and-damage redress.

Moreover, attention should be given to the origins of the ICJ's advisory opinion request, including the role of Pacific Island youth activism and other youth-led campaigns. Additionally, consideration must be given to the implications of proceedings before other courts, such as the International Tribunal for the Law of the Sea (ITLOS), and States' legally binding obligations regarding climate change. Discussions covered themes such as small island States' access to justice and reparations for climate-related damages under international law, climate accountability, human rights, and scientific perspectives. The ICJ proceedings were highlighted in the AOSIS Declaration on Sea Level Rise and Statehood and the communiqué of the 53rd Pacific Islands Forum, calling for stronger climate action within the framework of human rights law.⁷⁵

⁷⁴ International Court of Justice, *Press Release 2024/XX: Request for Advisory Opinion on Climate Change Obligations – Oral Proceedings Begin*, 2 December 2024

⁷⁵ Alliance of Small Island States (AOSIS), *Declaration on Preserving Statehood and Protecting the Rights of Peoples and States Affected by Sea-Level Rise*, 23 September 2023

Urgenda Case Study

The **Urgenda Foundation v. State of the Netherlands** case is a landmark legal battle in climate change litigation. It began in 2013 when the Urgenda Foundation, along with 900 Dutch citizens, sued the Dutch government for failing to take adequate action to combat climate change. They argued that this inaction violated human rights, specifically the right to life and the right to private and family life, as protected under the European Convention on Human Rights (ECHR).

In 2015, the District Court of The Hague ruled in favor of Urgenda, ordering the Dutch government to reduce greenhouse gas emissions by at least 25% compared to 1990 levels by the end of 2020. The court emphasized the government's duty of care to protect its citizens from the severe risks posed by climate change. The Dutch government appealed the decision, but in 2018, the Court of Appeal upheld the ruling, and in 2019, the Dutch Supreme Court confirmed it. This made the Urgenda case the first in the world where a government was legally required to take action against climate change based on human rights obligations.

This case has inspired similar lawsuits worldwide, highlighting the role of the judiciary in addressing climate change.

Urgenda Case-Legal Arguments

The **Urgenda Foundation v. State of the Netherlands** case presented several key legal arguments that were pivotal in its success:

1. **Human Rights Obligations:** The plaintiffs argued that the Dutch government's insufficient action on climate change violated Articles 2 and 8 of the European Convention on Human Rights (ECHR). These articles protect the right to life and the right to private and family life, respectively. The court agreed, stating that the government had a duty to protect its citizens from the severe risks posed by climate change.
2. **Duty of Care:** The court emphasized the government's duty of care to prevent harm to its citizens. This principle was rooted in Dutch civil law and international legal frameworks, including the "no harm" principle of international law.
3. **Precautionary Principle:** The court applied the precautionary principle, which mandates taking preventive action in the face of uncertainty. It argued that the government must act to mitigate climate risks even if the full extent of the harm is not yet certain.
4. **Scientific Evidence:** The case relied heavily on scientific reports, such as those from the Intergovernmental Panel on Climate Change (IPCC), which highlighted the need for developed countries to reduce emissions by 25–40% by 2020 to avoid dangerous climate change. The court used this evidence to justify its ruling.⁷⁶
5. **Fair Contribution:** The court found that the Dutch government's existing emissions reduction target was insufficient to meet its fair share of the global effort to limit temperature rise to below 2°C, as agreed under international climate agreements.

These arguments collectively led to the court ordering the Dutch government to reduce greenhouse gas emissions by at least 25% compared to 1990 levels by the end of 2020. This case has since become a cornerstone in climate litigation worldwide.

⁷⁶ *Urgenda Foundation v. The State of the Netherlands* [2015]

Other Emblematic and Impactful Cases

1. **Massachusetts v. Environmental Protection Agency (USA):** This landmark case compelled the EPA to regulate greenhouse gases under the Clean Air Act. The Supreme Court ruled that greenhouse gases are air pollutants, leading to significant regulatory actions.
2. **Milieudefensie et al. v. Royal Dutch Shell (Netherlands):** In 2021, a Dutch court ordered Shell to reduce its greenhouse gas emissions by 45% by 2030, aligning its policies with the Paris Agreement.
3. **Leghari v. Federation of Pakistan (Pakistan):** A farmer successfully sued the Pakistani government for failing to implement its climate policies. The court directed the government to take stronger action against climate change.
4. **Neubauer et al. v. Germany (Germany):** Young activists challenged Germany's climate law, arguing it was insufficient to protect future generations. The court agreed, leading to stricter climate targets.
5. **Gloucester Resources Limited v. Minister for Planning (Australia):** A court rejected a coal mine proposal, citing its contribution to climate change and the need to transition to renewable energy.

These cases demonstrate the growing role of litigation in driving climate action across diverse situations and can be replicated depending on the magnitude of the cases and their relevance in the given context.

Accountability of State and Political Actors

The discussion regarding the accountability of political actors in competitive democracies is a high-stakes conversation. This section aims to touch upon topics such as democracy and climate pledges and seeks to incorporate climate action in the election manifesto and voter education. Further, it highlights the roles of the private sector and civil society in promoting accountability of political actors, particularly in advancing and promoting climate action in the process of electoral campaign and governance thereafter.

Responding to L&D

Although responding to L&D from climate change is a considerable challenge, there are some viable steps that political parties can set in their agenda to mitigate the negative impacts. This could include:

- Increasing investment in adaptation and resilience measures, such as flood defense and early warning systems.
- Reducing greenhouse gas emissions to slow the rate of climate change.
- Supporting vulnerable communities that are most affected by climate change.
- Improving disaster preparedness and response, to minimize the impact of extreme weather events.
- Promoting sustainable development that considers the potential risks and impacts of climate⁷⁷.

⁷⁷ UNDP, *Enhancing Climate Promises through Political Party Engagement* (2022)

Emission Leaders

Current Emissions Leaders

- China: 30% of global emissions
- USA: 17%
- India: 7%
- EU (Combined): 7%¹

Historical Emissions Leaders (Cumulative emissions over time)

- USA remains the largest historical polluter.
- China follows due to rapid industrialization.
- European nations also have a high historical carbon footprint.

The debate continues whether historical emitters should be legally bound to pay for L&D, though there is no binding mechanism in international law to enforce such payments.

It's important to recognize that L&D from climate change is already happening. There are countless accounts of lives lost and entire families and communities being uprooted due to severe droughts, floods, and typhoons. People throughout the world are now looking for a strong political will, combined with legislative action, for assistance as they bear the human cost of climate change. They seek a remedy, redress, or some assurance from political parties and governments for a guarantee of non-repetition.

Environmental justice aims to ensure that all people, regardless of race, national origin, ethnic background, or income, are safeguarded from environmental risks. For impoverished groups, the effects of climate change have varying, and sometimes disproportionate, negative social, economic, and public health effects. Moreover, the consequences of climate change worsen the current socioeconomic circumstances, civil rights, and political freedom for the impoverished and marginalized. Thus, it becomes apparent that human rights and climate justice are closely related. Securing civil rights is crucial to achieving environmental justice and can be attained by enacting a strong legal framework through the parliamentary process.

Environmental justice concerning climate change is therefore contingent upon the realization of civil rights, including the freedom of the press, access to information, freedom of speech, and most importantly, electoral integrity. Political parties who spontaneously and with conscience and conviction exemplify climate action in their political doctrine and election manifesto are likely to enjoy full support from their constituents in contrary to those who don't.

Moreover, development must not come at the expense of endangering the environment or basic human rights. Therefore, to implement meaningful and long-lasting climate action, political parties and players must take a robust step through law and policy action in active partnership with their constituents. i.e. direct voters and the general public. By doing so, local constituents will not be left in the dark but instead, will be able to engage in the decision-making process⁷⁸.

⁷⁸ David Schlosberg, *Defining Environmental Justice: Theories, Movements, and Nature* (Oxford University Press 2007)

Climate Action: Where do Political Forces Stand?

The four main pillars of democracy are transparency, accountability, inclusive representation, and justice. These pillars are becoming increasingly complementary in light of the adversarial effects of global warming and subsequent climate change. This has been recognized in several international declarations, treaties, and accords.

Global public opinion on the environment, and in particular, climate change, has dramatically changed in the last few years. A UNDP study conducted in 2021 found that 64% of participants from 50 nations considered climate change to be an emergency and demanded that governments take more aggressive action⁷⁹. Consistent with this shift, there has been an increase in the quantity and political significance of Green Parties worldwide. For instance, the Global Greens Federations currently has 80 member parties and Green Parties exist in coalition governments in Austria, Belgium, Senegal, Finland, Ireland, Luxembourg, New Zealand, Sweden, and most recently, Germany (where "Bündnis 90/Die Grünen" doubled their votes from 2017 to 2021 and received 14.8 percent of all votes in the votes for the federal government). There are four Federations that constitute the Global Greens. One of these is the Asia Pacific Greens Federation (APGF), a coalition of national Green Parties (and related organizations) specifically in Asia-Pacific democracies.

Aside from a few exceptions, such as in Finland and Germany, Green Parties' aspirations are often marginalized, and there is no evidence that their efforts have robustly advanced the burgeoning climate affairs. Although a state may permit the existence of Green Parties, their ability to influence environmental policy is restricted unless they are given a statutory right to hold the government responsible for its actions or are marginalized in decision-making. This position is even worse in South Asia where there is the complete absence of an organized Green Party movement. Here, election campaigns barely mention environmental and climate concerns.

57 nation states and the EU had their climate policies appraised by the 2021 Climate Performance Index but many democratic nations saw a fall in their score.⁸⁰ Thus, voter desire for climate action does not always result in more aggressive national and international climate policies. This is worsened by the fact that many governments of the world have been shrinking the political and civic space, especially in the wake of the COVID-19 pandemic and electoral integrity has in some cases been compromised.⁸¹

Party rivalry is also a challenge to implementing new environmental policies as it unduly complicates the political processes. This is often the case in societies that are vertically divided in terms of political ideology or sharply polarized visions. Similarly, challenges are observed in societies that are dominated by the interests of powerful groups, such as transnational corporations and global business tycoons, as they steadfastly oppose strong environmental or climate change legislation.

⁷⁹ United Nations Development Programme (UNDP), "Climate Change and the Global Emergency: A 2021 Study of Public Perceptions," UNDP

⁸⁰ Germanwatch, "Climate Performance Index 2021: 57 Nations and the EU Assessed," Germanwatch

⁸¹ Germanwatch, *Climate Change Performance Index 2021: Results* (2020)

L&D: EXPLORING JUSTICE

- Climate change is a transnational problem that requires coherent, transnational solutions
- \$300 billion has been promised, but it is not in operation yet.
- L&D isn't comprehensively addressed by current financial, governance & institutional arrangements, particularly in vulnerable developing countries.
- L&D is unequally distributed across systems, regions & sectors.
- As long as there's no authoritative, global case law to define climate change-related human rights obligations, protection, equal & fair justice is a distant reality

UNHRC: Recognition of the right to a clean, healthy, and sustainable environment, universal human rights, UNGA Resolution July 2022: Game-changing development on L&D

In less democratic societies, opposition parties are frequently disregarded when designing environmental projects and allocating funds for development. This lack of all-party political agreement could put environmental commitment in jeopardy and result in policy reversals, especially during elections or leadership transitions. For this reason, attaining more ambitious policies and results requires not only bridging the gap between the major parties' perspectives on environmental issues. Rather, it requires strong, collective vigilance and advocacy from civil society regarding the environment and climate action, for which every voter should be included, aware of, educated, and empowered.

This brilliantly underscores how crucial it is for political parties of all strata to increase public knowledge and comprehension of environmental challenges. It is also crucial that there is an increase in the resources available to them to promote audacious action. To maximize their constructive influence, political parties should be included in international development programs and these programs should contain a clear environmental goal, a designed module, a timeline, and dedicated resources. Party manifestos, environmental laws, interparty dialogues on a national and international level, and other campaigns are required to promote political agreement on these matters.

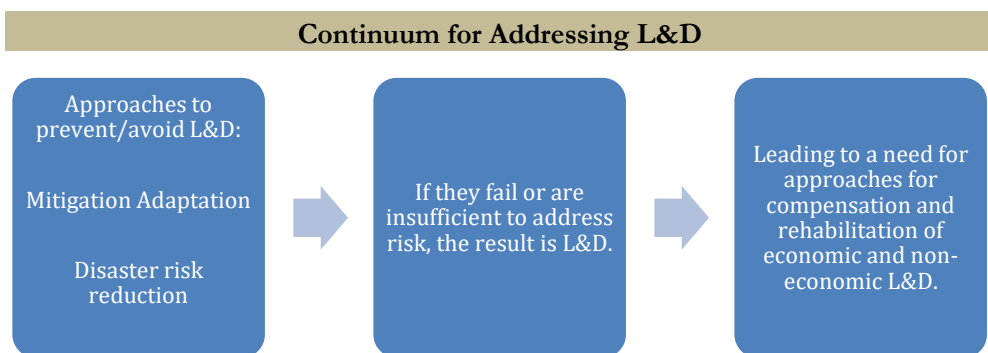
Furthermore, it is the responsibility of political parties to take stern positions and action to avoid disparity between the equitable aspects of climate change and the various negative social, economic, and health effects it has on disadvantaged people. Political parties must encourage and assist impacted communities in expressing their concerns about the unjust effects of climate change, and the adaptation measures corresponding to these effects, in local, national, regional, and global forums as and when it is appropriate. As examples of good practices, political parties in some countries have shifted their rhetoric to reflect the growing concern about climate change that activists have advocated for years.

Comprehensive Framework for Redress

By merely considering the estimated costs of Hurricane Sandy in Haiti, Cuba, and the United States, one can begin to understand the gravity of L&D caused by climate change and the scale of the effort required to undo its consequences. In the coming

decades, climate catastrophes and slow-onset disasters will only bring about further L&D, particularly in developing countries vulnerable to its adverse effects. These impacts also have the effect of undermining human rights and the right to development.

The countries most accountable for emissions causing climate change have made appallingly insufficient mitigation measures. Given the present rate of global warming and current greenhouse gas concentrations in the atmosphere, the Earth will warm by 1.5°C in the coming decades. The funding for adaptation measures has been insufficient to meet existing levels of pledged warming, much alone the additional problems posed beyond 1.5°C. The best platform for addressing the concerns of L&D is the UNFCCC. The duties of nations should be carried out methodically and within a broad framework.



A thorough framework should, in general, achieve the following goals:

- Encourage risk mitigation and other risk management techniques that can stop and prevent loss and harm.
- Provide compensation for loss and harm that cannot be prevented or avoided.
- At the regional and international levels, coordination between the various components would be a third goal. There would be coherence between these three essential duties of Convention bodies linked to L&D within a comprehensive framework under the UNFCCC:
- Prevention through methods of catastrophe risk reduction, climate change mitigation, and adaptation, backed by sufficient implementation tools including funding, technology, and capacity-building.
- Via the creation of an international mechanism for compensation and rehabilitation, compensation, and rehabilitation
- Via the creation of an international mechanism for compensation and rehabilitation, compensation, and rehabilitation
- Taking the initiative and coordinating efforts at the regional and worldwide levels to address L&D beyond the scope of the Convention in a coherent manner, particularly those involving migration, displacement, and planned relocation, as well as international funding.⁸²

⁸² UNFCCC, *Loss and Damage: A Framework for Addressing Climate Change Impacts and Vulnerability* (UNFCCC 2025)

Elements of a Comprehensive Framework

- Disaster risk reduction, climate change adaptation, and risk management frameworks to prevent or reduce L&D ex-ante.
- Research and systematic observation to understand the scope, magnitude, and character of climate change risks. Research on slow-onset events and tipping elements will be increasingly valuable in the context of predicting and addressing L&D.
- Scientific and technological advice on disaster risk reduction and adaptation measures.
- Mobilization of sufficient new and additional resources to support disaster risk reduction and adaptation measures, recognizing the stark inadequacies of current financial support.⁸³

Most disaster aid comes in the form of ex-post and ad hoc humanitarian aid. Resources through the UNFCCC process, such as through the Adaptation Fund and fast-start financing, have been trivial compared to the scale of the need. So, it is integral to increase resources to prevent L&D.

Compensation and Rehabilitation: Attainment Benchmarks

- Sub-regional, regional, and/or global catastrophe risk-transfer facilities
- Debt relief and other financial measures to lessen external financial obligations when countries are faced with catastrophic shocks
- A financial mechanism for redress, including for compensation and rehabilitation of unavoided and unavoidable L&D that cannot be compensated through traditional risk transfer facilities, such as for slow-onset events and transformational changes in state
- The means to assess and address less directly measurable economic losses such as lost sustainable development opportunities and impacts on economic growth
- The means to assess and address non-economic losses

To address L&D methodically and successfully in poor countries, a comprehensive framework under the UNFCCC must advance the following three axes:

1. Coordinating, integrating, and enhancing continuing institutional support under the SBI and SBSTA to stop and prevent loss and harm.
2. The creation of the Adaptation Committee's global coordination function to offer consistency with other regional and international activities on L&D.
3. Creation of a global compensation and rehabilitation mechanism.⁸⁴

⁸³ UNFCCC, *Elements of a Comprehensive Framework for Loss and Damage* (UNFCCC 2025)

⁸⁴ UNFCCC, *Compensation and Rehabilitation: Attainment Benchmarks* (UNFCCC 2025)

A Comprehensive Framework on L&D under UNFCCC

Operating under the guidance and authority of the Conference of the Parties:

Existing Convention bodies to address new challenges posed by L&D

SBI: implementation of approaches to address L&D, including at transfer national level through the National Adaptation Plan's process.

SBSTA: tools for assessment of L&D, research and systematic observation to increase understanding of slow-on set processes.

Adaptation Committee: coordination with regional centres and global institutions.

New International Mechanism on Compensation and Rehabilitation.

- Insurance and other risk- mechanisms
- A compensation and rehabilitation fund
- Catastrophe finance
- Measures to address on-economic losses

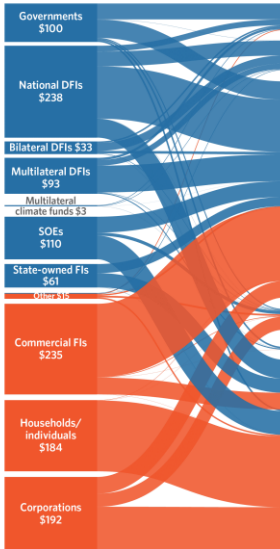
Figure ES1: Global climate finance flows in 2021/2022

LANDSCAPE OF CLIMATE FINANCE IN 2021/2022

Global climate finance flows along their life cycle in 2021 and 2022. Values are averages of two years' data to smooth out fluctuations, in USD billions.

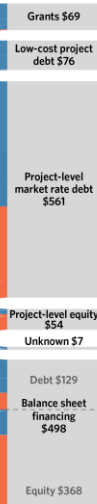
SOURCES AND INTERMEDIARIES

Which types of organizations are sources or intermediaries of capital for climate finance?



INSTRUMENTS

What mix of financial instruments is used?



1.27

TILLION USD ANNUAL AVERAGE

USES

What types of activities are financed?



SECTORS

What is the finance used for?



Public Private

"Other" public sources include export credit agencies and unknown public funds

"Other" private sources include institutional investors, funds, and unknown

"AFOLU" stands for agriculture, forestry, other land use, and fisheries. "Others & cross-sectoral" includes \$68 unknown

Source: Climate Policy Initiative

Institutional Assistance for Prevention

Coordinated assistance is required to minimize L&D. Guaranteeing risk management through appropriate and predictable funding remains a top priority. The Adaptation Committee should assume this responsibility after consulting with the other pertinent Convention organizations.

Preventing L&D might be the focus of current Convention-related initiatives, for instance, the work conducted under SBSTA in the Nairobi work programme and research concerning Article 5. The SBSTA may be given further support for the creation of suitable risk assessment and risk management tools for slow-onset processes. The SBSTA might also offer technical assistance for lowering risks connected with extreme weather occurrences in coordination with the United Nations International Strategy for Disaster Reduction (UNISDR).

Designing strategies to minimize or reduce hazards requires a scientific knowledge of the underlying causes. SBSTA might research to better understand slow-onset processes and the tools available to control and lower slow-onset risks through the work it does under Article 5.⁸⁵

L&D Transitional Committee: Key Takeaways

- Funding to be designed to focus on objectives (such as saving lives, protecting livelihoods, decreasing disease morbidity, etc.) rather than to rigidly define specific types of activity or duration of activity
- Addressing L&D at the early stages of a hazard event, rather than waiting for a full accounting of damage done
- Flexible timeframes for funding to encompass both short & longer-term activities
- Adopting a broad perspective to the consideration of L&D actions & funding
- Slow-onset events, non-economic L&D, or migration – should not be funded in isolation. A flexible, long-term approach to funding should be developed.

International Coordination and Institutional Leadership

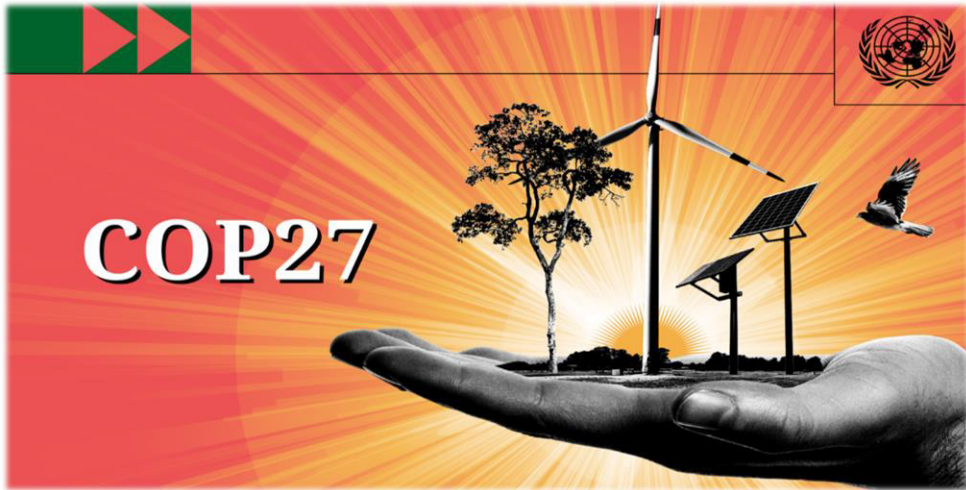
Other regional and international organizations must be involved in projects dealing with migration, planned and unplanned relocation, catastrophe risk reduction, and conflict. However, these initiatives must be successfully integrated with the UNFCCC's L&D work. Under the comprehensive framework of L&D, the Adaptation Committee should have a primary coordinating role.⁸⁶

Organizations that should be involved:

- Regional adaptation hubs
- International organizations that play a part in addressing displacement, migration, and planned relocation due to the consequences of climate change, including, the IOM and the (UN OCHA.
- Under the UNFCCC, coordination and cooperation between UNISDR, the Hyogo Framework for Action, and the planned post-2015 Disaster Risk Reduction Framework.

⁸⁵ UNFCCC, *Coordinated Assistance for Minimizing L&D: Risk Management and Funding Priorities* (UNFCCC 2025)

⁸⁶ UNFCCC, *International Coordination and Institutional Leadership for L&D: The Role of Regional and International Organizations* (UNFCCC 2025)



International Compensation and Rehabilitation Mechanism

The methods used today to stop and avert L&D caused by climate change are insufficient. This is evident through the negative repercussions observed worldwide, especially in vulnerable nations, such as the loss of lives, livelihoods, culture, and territory. Therefore, a complete framework of L&D must include an international mechanism for compensation and rehabilitation.

New International Mechanism on Compensation and Rehabilitation

Provide international oversight and coherence for risk-transfer approaches to cover insurable damage.

Address L&D not covered by risk-transfer approaches through:
A compensation and rehabilitation fund
Catastrophe finance
Measures to address non-economic losses

Four different categories of permanent loss and injury would be addressed by an international mechanism for compensation and rehabilitation for L&D:

1. Damage and loss that may be covered by insurance or other risk-transfer methods
2. Extreme occurrences and slow-onset processes that cause economic loss and destruction but are not covered by risk-transfer mechanisms
3. Economic losses that are hard to measure, such as missed possibilities for sustainable development.

Through current or future risk-transfer systems, an international framework on compensation and rehabilitation would address insurable L&D. One of the functions of the international mechanism's risk-transfer component would be to evaluate whether current risk-transfer strategies, including regional mechanisms, are adequately compensating for insurable L&D. As the rising of extreme event frequency and severity will challenge the capacity of risk-transfer institutions to pay for the ensuing L&D,

observing the range of risk-transfer strategies would also fall under this function. This component's work would encourage the diversification of effective initiatives across geographies. The system would also look at the creation of a risk-pooling system, similar to the International Insurance Pool that AOSIS has suggested. In this connection, the following progress is marked:

- Institutions that handle loss and destruction, such as regional risk-transfer facilities, have been highlighted in the activities of regional meetings, such as the Caribbean Catastrophe Risk Insurance Facility (CCRIF). If similar facilities can be reproduced in other places, more investigation could be conducted, and given that extreme climatic events are becoming more frequent and severe, it is imperative to conduct a thorough assessment of their capacity to manage L&D.
- The creation of an international insurance pool has been recommended by AOSIS: "Where there is insurance, it is expensive, and certain areas have limited access to commercial risk sharing and risk transfer solutions. The risks from all vulnerable nations should be pooled through an international structure, which requires international coordination".⁸⁷

Three methods would be used by an international mechanism on compensation and rehabilitation to deal with uninsurable L&D:

4. The creation of a global fund for rehabilitation and compensation to address the escalating negative effects of climate change, such as sea level rise, ocean acidification, and increasing sea and land temperatures. L&D will still exist and, in many situations, will be unavoidable, despite the existence of a variety of novel and inventive risk transfer methods. Nonetheless, the fund would compensate for L&D brought on by unavoidable adverse effects that cannot be otherwise compensated by a risk transfer facility. This includes extreme events that exceed the capacity of current risk transfer facilities and slow-onset events that cannot be compensated by risk transfer mechanisms.

Collective compensation plans, such as an international fund, have been developed under several international environmental responsibility regimes to offer victims an additional or alternative form of compensation. In significant part, attempts undertaken throughout time to get around insurance's limits as a compensation payment guarantee led to collective compensation agreements.

5. The creation and promotion of policies to address non-economic loss, damage, and missed opportunities for sustainable development, such as increased international funding for social protection policies in developing nations that are particularly susceptible to the negative effects of climate change. The most fundamental moral issue raised by climate change and its disproportionate effect on the most disadvantaged is addressed in this section.

⁸⁷ UNFCCC, *International Compensation and Rehabilitation Mechanism for L&D: Addressing Categories of Permanent Loss and Injury* (UNFCCC 2025)

6. The creation and marketing of financial tools that can be utilized in the event of devastating shocks to economies to help states deal with circumstances of catastrophic shock. This component will be created to proactively coordinate debt relief, donations to emergency trust funds, and other potential financial actions. Specifically creating a debt relief fund for natural disasters might be a possibility.

The International Mechanism on Compensation and Rehabilitation would be located under the auspices of the Convention and housed within the UNFCCC Secretariat, where administrative support could be offered. A Board made up of Party members would provide support and direction, and stakeholders would also be included.⁸⁸

⁸⁸ UNFCCC, *International Mechanism for Compensation and Rehabilitation: Addressing Uninsurable L&D and Promoting Global Funds and Policies* (UNFCCC 2025)

4. JURISDICTIONAL SCOPE



Image: FREEPIK

Dynamics of Climate Finance

Climate finance describes the cross-sectoral global finance for Mitigation and Adaptation techniques, excluding financial market activity. Provided by the Climate Change (UNFCCC) Standing Committee on Finance, which comes closest to an official definition: “Climate finance aims at reducing emissions and enhancing sinks of greenhouse gases and aims at reducing the vulnerability of, maintaining and increasing the resilience of human and ecological systems to negative climate change impacts.”⁸⁹

Climate Finance Landscape

Early climate finance investments can reduce the otherwise significant economic and financial costs of climate change. Equally, benefits through lower energy costs, efficiency, and employment gains can be reached.

Climate Finance is mainly provided by States, the top 5 donors are countries that alone contribute 84,6% to climate finance, whereas the top 5 countries' contribution accounts for a margin of 0.4%. Investments are also provided by international programs at around 6.2%, as well as by the private sector actors with 0,24% . Those Investments are distributed through specialized funds that can be distinguished especially due to their focus and type, impacting their deployment.⁹⁰

⁸⁹ UNFCCC Standing Committee on Finance, *2014 Biennial Assessment and Overview of Climate Finance Flows* (UNFCCC 2014)

⁹⁰ UNFCCC, *Annual Report on Climate Finance: Contribution of Annex II Countries*, 2023, p. 34

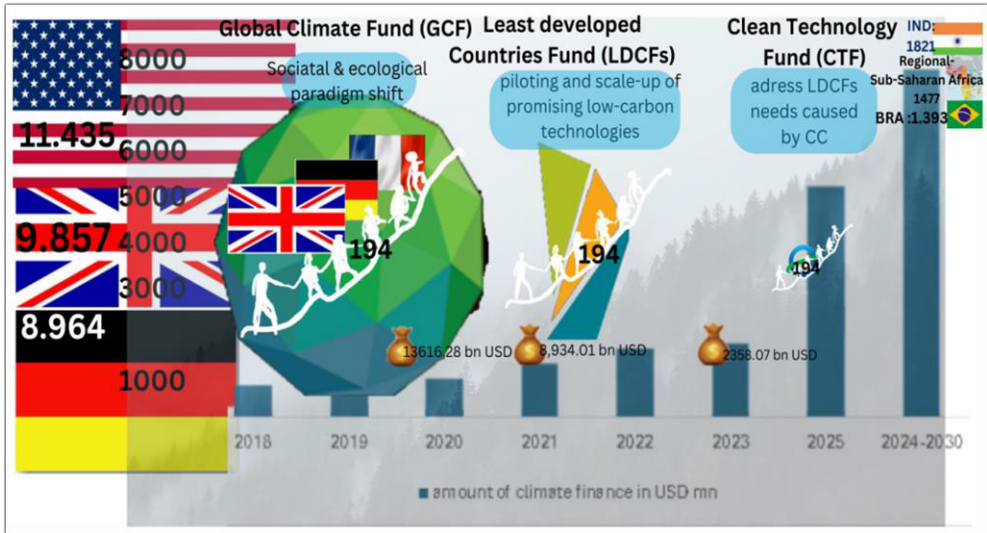


Figure: Climate Finance and Disbursement Scheme

Climate Fund Scheme: Fund, Focus, and Type

Addressing the Climate Finance Gap: The current state of climate finance falls significantly short of what is necessary to achieve the ambitious goal of limiting global temperature rise to 1.5°C. While calculations around this gap depend on various assumptions, such as underlying climate scenarios, the financial shortfall is undeniable. Most scientific estimates suggest a need for an additional \$2 billion annually to bridge this gap. To address this issue, a comprehensive approach involving both public and private sectors at national and international levels is required. The following are key recommendations and strategies to tackle the climate finance challenge:

Fund focus	Definition	by	where	for	Fund type
Adaptation	adjusts ecological, social or economic systems according to CC	2+ donors	unspecifed	2+ recipients	Multilateral
Mitigation General	reducing climate changes harm	2+ donors	Nation-state	2+ recipients	Multi-donor national
Mitigation -REDD+	reduce emissions from deforestation degradation, enhance conservation & sustainable management of forests, and carbon stocks.	2+ donors	World regions	2+ recipients	Multi-donor regional
Multiple Foci	tackles CC with diverse centers of attention				

The following are key recommendations and strategies to tackle the climate finance challenge:

Expanding Climate Finance: One critical step is to increase the overall volume of climate finance. This could be achieved through innovative mechanisms, such as international taxation. While implementing new tax systems may pose challenges, potential revenue streams include taxes on billionaires, financial transactions,

hydrocarbon producers, and a 2% levy on airfare and shipping. Another promising method is utilizing Special Drawing Rights (SDRs) following the International Monetary Fund's establishment of the Resilience and Sustainability Trust (RST) in 2022. Many countries possess surplus SDRs that can be redirected toward climate change mitigation and adaptation.

Additionally, concessional capital in climate finance must be expanded from existing resources. This involves increasing climate finance from multilateral development banks (MDBs) through general capital increases. Although such measures are cost-effective, they face obstacles like fiscal constraints and credit requirements. There is also a need to address moral hazard by ensuring companies cannot depend on authorities for support when hydrocarbon-intensive assets are rendered obsolete by technological advancements.⁹¹

Building larger and more efficient MDBs is also a priority. For example, the World Bank, under the leadership of Ajay Banga, aims to leverage hybrid capital, engage private institutions as co-investors, sell matured loans, and increase the use of guarantees. These actions can enhance private investor confidence in developing-country projects. ODA remains another essential pillar. Advocacy for higher climate-related ODA levels and expanding contributions from nations outside traditional donors, such as China and the oil-rich Gulf States, can further bolster climate finance.

Supporting Vulnerable Communities: Special attention must be given to vulnerable populations facing the harshest impacts and the challenges of transitioning to low-carbon economies. Strengthened social protection systems and resilience-building initiatives can safeguard poor and at-risk communities.

Streamlining Climate Finance Architecture: To improve efficiency, there is a pressing need for coherent and streamlined climate finance governance. Establishing robust institutional mechanisms can facilitate better coordination and fund allocation. Standardizing project approval processes across major concessional finance providers can accelerate fund access. In addition, enhancing impact metrics is crucial for evaluating its effectiveness. This includes harmonizing approaches across projects and sectors, eliminating inefficiencies, and incorporating broader SDGs. Decision frameworks and accountability mechanisms are also essential for guiding finance allocation effectively.⁹²

Encouraging Private Sector Participation: Mobilizing private finance is integral to addressing the climate finance gap. This involves improving the overall business environment and mitigating risks associated with specific projects to attract private investments.

Advancing Political Processes and Capacity Building: A realistic climate finance narrative must acknowledge the varying priorities and limitations of the public and private sectors. Public international finance should be deployed strategically, recognizing the distinctions in effectiveness between institutions and forms of finance.

⁹¹ Vivid Economics, *Greening the Financial System: Pathways to a Sustainable Future* (2019)

⁹² World Bank, *Evolving the World Bank Group's Mission and Vision: A Roadmap* (2023)

Additionally, capacity-building efforts should support developing countries in project development, risk management, and efficient fund application through technical assistance and knowledge sharing. By implementing these strategies, a more robust and equitable climate finance framework can be developed, enabling the global community to move closer to achieving the 1.5°C target.

Evolution and Contention

The evolution of the FRLD under the UNFCCC and COP process reflects decades of advocacy and negotiation, particularly by vulnerable nations. Here's a concise overview:

1. **Early Discussions (1991-2012):** The concept of addressing L&D emerged in 1991 when Vanuatu proposed an insurance mechanism for small island states. Over the years, discussions expanded to include broader impacts of climate change, culminating in the establishment of the Warsaw International Mechanism (WIM) for L&D in 2013.
2. **Warsaw International Mechanism (2013):** The WIM was created at COP19 to address L&D associated with climate impacts, focusing on knowledge-sharing, coordination, and support for vulnerable countries.
3. **Paris Agreement (2015):** L&D was formally recognized as a distinct pillar under Article 8 of the Paris Agreement, emphasizing the need for international cooperation.
4. **COP27 Breakthrough (2022):** After years of advocacy, COP27 marked a historic moment with the agreement to establish a dedicated FRLD. This fund aims to provide financial support to developing countries most affected by climate change impacts.
5. **Operationalization (2023-2024):** A transitional committee was formed to develop recommendations for the fund's structure and governance. By COP28, the fund was operationalized, with mechanisms to address both economic and non-economic losses.

The FRLD represents a significant step towards climate justice, addressing the disproportionate impacts of climate change on vulnerable nations. The issue of "L&D" in climate change negotiations is a highly contentious one, reflecting deep divisions between polluter nations (historically high emitters) and victim countries (those most vulnerable to climate impacts).⁹³

Key Points of Contention:

1. **Liability and Compensation:** Developing nations, particularly Small Island Developing States (SIDS) and LDCs, argue that industrialized nations bear historical responsibility for climate change and should provide compensation for losses. However, developed countries often resist framing this as a liability, fearing legal and financial repercussions.
2. **Funding Mechanisms:** Victim countries demand "new and additional" funding to address L&D, separate from existing climate finance for mitigation and

⁹³ UNFCCC, *The Evolution and Contention of the FRLD: From Early Discussions to COP28* (UNFCCC 2025)

adaptation. Developed nations have been reluctant to commit, citing concerns over financial feasibility and accountability.

3. **Definition and Scope:** There is no universally accepted definition of "L&D," leading to disagreements over what qualifies for funding. Some argue it should include both economic (e.g., infrastructure loss) and non-economic (e.g., cultural heritage) damages.
4. **Trust and Equity:** Developing nations view the reluctance of wealthier countries to act as a breach of trust, exacerbating historical inequities. This distrust complicates negotiations and undermines global cooperation.

Positions of Polluters and Victim Countries:

- **Polluters (Developed Nations):** These countries often emphasize risk management and insurance-based solutions rather than direct compensation. They advocate for shared responsibility and highlight their contributions to global climate finance.
- **Victim Countries (Developing Nations):** They stress the disproportionate impacts of climate change on their populations, despite contributing minimally to global emissions. They call for justice through financial support and acknowledgment of historical emissions.

The establishment of the FRLD at COP27 marked a significant step forward, but its operationalization remains a challenge. The transitional committee is tasked with addressing these contentious issues to ensure the fund meets the needs of vulnerable nations.⁹⁴

Pre-COP28 Action and Recommendations

Through UNFCCC and COP processes on the L&D response plan, the following was expected:

- A continuing work program on L&D under the SBI with active coordination and collaboration with the Adaptation Committee and the SBSTA.
- An international mechanism for compensation and rehabilitation was established under the guidance of the Conference of the Parties.
- Global leadership and coordination are carried out through the Adaptation Committee.

As a result, COP18 and beyond were expected to:

- Consent to the creation of an international mechanism for L&D compensation and rehabilitation.
- Launch a second phase of the work program on L&D under the SBI to elaborate on the remaining components of the comprehensive framework on L&D.
- Agree on a process to elaborate the modalities and procedures of the Mechanism, under the guidance of the COP, to become operational by COP20.⁹⁵

Phases of International Mechanism's Design

Initially, under the direction and control of the Conference of the Parties, the COP is

⁹⁴ UNFCCC, *Key Points of Contention in Loss and Damage Discussions: Liability, Funding, and Equity* (UNFCCC 2025)

⁹⁵ UNFCCC, *Expected Outcomes of the L&D Response Plan under the COP Process* (UNFCCC 2025)

expected to create a two-year work schedule to develop the modalities and processes of the International Mechanism. Several questions would be addressed during the first year of work, aided by submissions from Parties and technical papers created by the Secretariat. During this time, a series of workshops would also be held to assess the technical papers and submissions and offer suggestions on each of the components. Then, the organization leading the work program would report to COP19 where the progress in establishing the Mechanism's fundamental components would be evaluated. Finally, the work required to design mechanisms and processes would be elaborated upon at COP19 for a COP20 resolution to operationalize the Mechanism.

A work schedule to create the modalities and processes for the International Mechanism can be carried out by at least three institutional bodies:

- Directly under the COP, which was COP17's approach to long-term funding. Ideally, the Conference of the Parties President would name two co-chairs to continue the work.
- The Adaptation Committee can be given the responsibility of creating modalities and processes and submitting the suggestions it produces to the COP.
- The Subsidiary Body for Implementation (SBI) by the COP in combination with a second phase of the work program on L&D.

Although the period in which the Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP) is functioning, it is not optimal for delivering an operational Mechanism by COP20. Thus, a work program under Workstream 1 of the ADP provides a fourth option.⁹⁶

Issues of Concern Regarding the Work Schedule

The work program was expected to address the following issues to establish the four compensation and rehabilitation components of the International Mechanism on Compensation and Rehabilitation.

1. In some circumstances, compensation and rehabilitation money can be provided via insurance and other risk-transfer strategies, such as catastrophe bonds. It was considered essential to have a thorough grasp of the constraints of risk-transfer choices to create the Mechanism.
 - To better understand the boundaries and restrictions of conventional insurance and alternative risk-transfer strategies, the work programme must analyze the most recent trends in insurability regarding climate-related disasters. Considering this new study, the background paper from 200357 can be amended. In this perspective, other non-market tools that guarantee social protection measures should also be examined.
 - Through a technical examination of already-existing regional facilities like the CCRIF, the work program must examine risk-transfer strategies that are appropriate at the regional level. In addition to highlighting the drawbacks of

⁹⁶ UNFCCC, *Phases of the International Mechanism's Design and Work Schedule* (UNFCCC 2025)

such risk-transfer strategies for addressing economic L&D in poor nations susceptible to the negative effects of climate change, this would illustrate the obstacles to the establishment of similar facilities in other locations.

- While longer-term solutions to slow-onset disasters are being investigated, more knowledge and thought must be given to how insurance and non-insurance instruments may be used to mitigate negative consequences from slow-onset processes.⁹⁷
2. To construct the Fund for Compensation and Rehabilitation, further analysis of the current fund models, such as the Cook Islands Disaster Trust Fund and the Oil Spill Compensation Fund, is required. The evaluation should cover a variety of topics, including variations in modalities and methods, governance, financing sources, timetables, processes, and forums for making claims.
 3. Options for the evaluation, compensation, or rehabilitation of non-economic damages in the context of climate change need to be well understood. As a means of making up for non-economic losses and the negative consequences of climate change on long-term sustainable development, external funding for improved social protection measures and other risk retention strategies have been advocated. The work program should examine the breadth of financial possibilities identified, as well as how different choices may be included in an international mechanism on compensation and rehabilitation.
 4. There is a need for further knowledge on potential financial strategies that may work in the event of devastating shocks to economies. An evaluation of potential actions should take into account the viability of a special fund for debt relief from climate disasters. As part of this endeavor, the technical document from 2008 on Financial Risk Management Systems should be revised.

As mentioned above, the Secretariat should be asked to provide one or more technical papers for each of these components so that the work program can include them, and Parties should be asked to submit essays on each of the subjects as well. Prior to COP19, one or more technical expert meetings should be convened to discuss the technical papers' substance as well as national submissions to answer these issues.

The framework in which the work schedule might take into account the size of the Parties' financial contributions to the Mechanism would be provided by two further studies that are created as technical papers:

1. *A comparison between the price of the mitigation measure needed to prevent L&D and the higher price of L&D in the case that no prompt and significant mitigation measure is taken.*
2. *An analysis of historical accountability for deeds done and not done.*

Improvements to Thorough Framework

A thorough framework for L&D will be built around the existing Convention bodies. To improve their contributions to the comprehensive framework, the Subsidiary Body, the Adaptation Committee, and the SBSTA will need to put in more effort.

⁹⁷ Ibid

Branch Organization for Implementation

1. The COP should establish a second phase of the L&D work program under the SBI to continue working on the assessment of L&D at the national level, particularly regarding strategies for dealing with slow-onset events.
2. To elaborate on the research that is required on slow-onset events, tipping components, and state shifts, the SBI should host a special thematic workshop at SB38 in June 2013 in collaboration with the SBSTA through its standing agenda item on research and systematic observation.
3. The SBI shall determine the national-level requirements for incorporating slow-onset catastrophe planning into national adaptation planning and execution procedures in consultation with the Adaptation Committee.⁹⁸

Expectations from the Adaption Committee

- Examination of the sufficiency and predictability of climate funding in the context of preventable L&D.
- Working with the Standing Committee as part of its mission for coordinating money under the UNFCCC.
- Commencement of a workstream on migration, displacement, and planned relocation as part of its Nairobi work programme on effects, adaptation, and vulnerability in partnership with the SBSTA. This workstream should look at the areas where the effects of climate change have already prompted migration and intentional relocation, as well as the organizations that are promoting and planning intentional relocation. These international organizations, such as the WFP, the UNHCR, and the IOM, should be invited to work with the Adaptation Committee.
- Incorporating the duties under the comprehensive framework on L&D connected to cooperation with international and regional authorities into the adaptation committee's three-year work plan. This is to be done by coordinating efforts with regional centers to mitigate L&D in developing nations that are more susceptible to the negative effects of climate change.
- Invitation to the UN High Commissioner for Refugees, the International Organization for Migration, and the WFP to combine meetings on climate change-induced migration, displacement, and planned relocation as part of the Adaptation Committee's work plan.
- Exploration of financial measures that might help nations deal with L&D. The Adaptation Committee should confer with parties outside the UNFCCC, including, but not limited to, international financial institutions.⁹⁹

Additionally, the Subsidiary Body for Scientific and Technological Advice was mandated to work under the SBSTA to advance scientific knowledge of slow-onset effects, permanent state shifts, and tipping elements as they relate to L&D in developing countries that are particularly vulnerable to the negative effects of climate change. This

⁹⁸ UNFCCC, *Improvements to the Thorough Framework and Branch Organization for Implementation of Loss and Damage Work Programme* (UNFCCC 2025)

⁹⁹ UNFCCC, *Expectations from the Adaptation Committee under the Comprehensive Framework on Loss and Damage* (UNFCCC 2025)

work was expected to be done in the context of ongoing work under Article 5 on research and systematic observation and one of its goals was to identify early warning systems for the possible triggering of significant tipping points.

The SBSTA was mandated to advance scientific knowledge on slow-onset effects, permanent state shifts, and tipping elements as they relate to L&D in developing countries particularly vulnerable to climate change. This work was expected to align with ongoing efforts under Article 5 on research and systematic observation, with one of its goals being the identification of early warning systems for potential climate tipping points.

Structure of COP28: Dawn of a New Promise

The 28th UNFCCC Conference of Parties (COP28) took place in Dubai, UAE, coinciding with meetings of the Convention, Paris Agreement, and Kyoto Protocol. With 97,000 participants, including over 150 heads of state, the event marked the largest attendance in COP history. Discussions addressed a range of climate topics, centered on four key priorities set by the Presidency: (1) accelerating a fair and sustainable energy transition, (2) addressing climate finance, (3) prioritizing human well-being, and (4) ensuring inclusivity.

The High-Level Champions and Marrakech Partnership facilitated 40+ events, highlighting progress across sectors and fostering global collaboration for climate action.¹⁰⁰

Stocktaking at COP28

A major milestone was the first Global Stocktake (GST), underscoring that a 43% reduction in greenhouse gas emissions by 2030 (from 2019 levels) is vital to limit warming to 1.5°C. The stocktake revealed gaps in nations' commitments under the Paris Agreement and urged measures like tripling renewable energy capacity and doubling energy efficiency by 2030¹⁰¹. The GST also stressed phasing down inefficient coal power and aligning financial resources with deep emissions reductions. Simon Stiell, UN Climate Change Executive Secretary, described the GST as a pivotal moment, urging governments and businesses to transform promises into tangible results through ambitious national climate plans by 2025.

Enhancing Resilience and Adaptation

World leaders at the two-week World Climate Action Summit (WCAS) operationalized the Loss and Damage (L&D) fund, garnering initial contributions exceeding \$700 million. The fund's Santiago Network will provide technical support to vulnerable nations, housed under UN offices. Additionally, nations adopted the Global Goal on Adaptation (GGA) framework, which defines adaptation targets, resource requirements, and progress evaluations for building climate resilience.

¹⁰⁰ UNFCCC, *COP28 UAE: The United Nations Climate Change Conference – Summary and Highlights* (2023)

¹⁰¹ United Nations Framework Convention on Climate Change (UNFCCC), "First Global Stocktake Report," 2023

Scaling Climate Finance

Financing, termed the “great enabler” of climate action, was extensively discussed. Commitments included \$12.8 billion for the Green Climate Fund, \$188 million for the Adaptation Fund, and \$174 million for the LDCs and Special Climate Change Funds. Despite these pledges, the GST highlighted a vast shortfall in financial resources for renewable energy transitions, national climate policies, and adaptation measures. COP28 addressed the need for systemic changes in global financial systems and set a new financing goal to start at \$100 billion annually by 2025.¹⁰²

Inclusivity and Collaboration: COP28 fostered engagement from diverse groups, including youth, civil society, and Indigenous communities, with 85,000 attendees contributing ideas and partnerships. Key inclusivity initiatives, such as the Gender Action Plan and Action for Climate Empowerment, aimed to empower all stakeholders in climate action. Collaborative efforts under the Marrakech Partnership outlined actionable steps to halve emissions, bridge adaptation gaps, and bolster resilience by 2030.

Next Steps: The conference reinforced commitments to the Paris Agreement through enhanced transparency mechanisms to monitor progress. Countries must present new national climate targets by 2025, aligned with the 1.5°C limit. COP29 and COP30, to be hosted by Azerbaijan and Brazil respectively, will address setting new financial goals and achieving comprehensive emissions reductions. In his concluding remarks, COP28 President Dr. Sultan Al Jaber emphasized the need for continued global commitment, urging stakeholders to celebrate progress while striving for a sustainable future.

Challenges: COP28 unfolded amid efforts to reform financial institutions and generate new funding. Discussions centered on updating multilateral development banks, addressing debt restructuring, and mobilizing funds. While progress in climate financing was evident, achieving the required funding and institutional reforms remains a significant challenge. The involvement of non-party stakeholders and tracking mechanisms will be vital.

The Transitional Committee: Formed at COP27 and CMA4, the Transitional Committee was tasked with creating funding mechanisms to assist developing nations vulnerable to climate change. Recommendations adopted at COP28 and CMA5 included:

1. Setting up governance structures and terms for the fund.
2. Outlining the components of the new funding arrangements.
3. Exploring and broadening funding sources.
4. Aligning and coordinating with existing financial mechanisms.

The committee drew insights from the current financial landscape, identifying gaps like access, eligibility, and adequacy, while also addressing solutions for the most vulnerable. It concluded its work during its fifth meeting and issued a report available on the

¹⁰² UNFCCC, *COP28 UAE: Climate Finance Outcomes and Global Stocktake Summary* (2023)

UNFCCC website. The committee had 14 members from developing nations and 10 from developed ones.

Impact on Developing Countries

1. **Increased Vulnerability:** Developing nations face greater risks due to climate change.
2. **Economic Struggles:** By 2030, climate impacts could push over 130 million people in these countries into extreme poverty.¹⁰³
3. **Natural Disasters:** Frequent and severe climate-induced disasters outpace preventative measures.
4. **Displacement:** By 2050, over 140 million people in regions like Sub-Saharan Africa and South Asia may migrate internally due to climate stressors.¹⁰⁴
5. **Agricultural Decline:** Reduced yields and extreme weather events strain food security.
6. **Health Risks:** Climate-related health challenges affect millions.

Climate change disproportionately harms developing countries, necessitating further exploration of the links between climate issues, conflict, and fragile nations.

L&D Mechanism at COP28

1. The 2023 report of the Warsaw Mechanism's Executive Committee was endorsed.
2. Progress was made on technical guides using the best available science.
3. Stakeholders' contributions were acknowledged.
4. Collaboration with funding entities was emphasized.
5. A framework for the Loss and Damage (L&D) Fund was established, aimed at supporting vulnerable developing nations.
6. An initial \$700 million in commitments was announced.¹⁰⁵
7. Innovative mechanisms like taxes on fossil fuel companies and international financing were proposed.

While significant, unresolved issues, such as financing clarity, remain.

COP28 and Progress on FRLD: The fifth Transitional Committee meeting in December 2023, Dubai, resulted in a final agreement on the FRLD, with the World Bank as interim host. This was contentious due to the World Bank's inflexible policies and donor-driven approach, which contradicts the fund's objectives. Despite early resistance, developing nations proposed compromises, agreeing to certain conditions and review periods to ensure their concerns were addressed. If adopted, these safeguards will shape the FRLD's future.

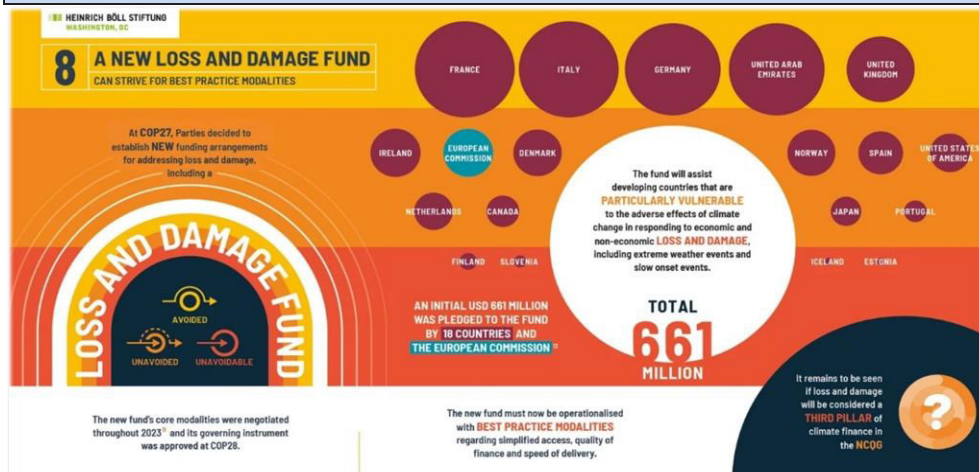
¹⁰³ World Bank, "Climate Change and Poverty: A Vicious Cycle," 2021

¹⁰⁴ International Organization for Migration (IOM), "Migration, Environment and Climate Change: Evidence for Policy," 2021

¹⁰⁵ UNFCCC, "Report of the Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts," 2023

Highlights of L&D Mechanism in COP28

1. *Report of the Executive Committee: The Conference of the Parties endorsed the 2023 report of the Executive Committee of the Warsaw International Mechanism for L&D associated with Climate Change Impacts*
2. *Work of the Executive Committee: The Executive Committee and its thematic expert groups made progress in advancing the development of technical guides informed by the best available science*
3. *Contributions: The committee expressed appreciation to the organizations, experts, and relevant stakeholders who contributed to the work reported*
4. *Collaboration: The committee was requested to consider ways to collaborate with the entities that form part of the funding arrangements, including a fund*
5. *FRLD: The framework to operationalize the FRLD was agreed on the first day of COP28. The purpose of the FRLD is to assist developing countries that are particularly vulnerable to the adverse effects of climate change.*
6. *Financial Commitments: On the first day of COP28, the adoption of those recommendations was followed by financial commitments from several countries, accounting for a total of \$700 million so far*
7. *Innovative Financing Mechanisms: Innovative financing mechanisms are being proposed, from windfall taxes on fossil fuel companies to international taxes and debt for L&D swaps*



Safeguards Proposed by Developing Nations

Existing World Bank policies could limit the Fund's operations and undermine key goals of the COP27 decision that created it. To address this, developing nations established core conditions for the World Bank to follow during the interim period. These conditions protect their interests and ensure their involvement in the Fund's governance.

The conditions stipulate that the Fund operates under the rules adopted at COP28, with its Board appointing the Executive Director rather than the World Bank. They also grant the Board authority to set policies on eligibility and access, removing the need to rely on World Bank standards. Without these safeguards, the World Bank might implement the Fund according to its model.¹⁰⁶

¹⁰⁶ UNFCCC, *Transitional Committee's Recommendations for the Operationalization of the New Funding Arrangements for Responding to Loss and Damage and the Fund* (2023)

Additionally, the conditions explicitly allow governments and non-traditional entities (outside of multilateral banks and UN agencies) to directly access the Fund. Collectively, the safeguards guarantee that all countries can oversee the Fund's design and operations. If the World Bank complies with the Committee's draft decision, it could become the Fund's permanent home after the four-year interim. However, failure to meet these conditions could lead to transitioning the Fund to an independent entity hosted by a nation, akin to the Green Climate Fund.

Triggers for the Fund's Departure from the World Bank

The final text outlines three scenarios where the FRLD could leave the World Bank:

1. **Policy Trigger:** Within six months of COP28, the World Bank must confirm its capability and willingness to meet the specified conditions. If it cannot, the Board will initiate a host country selection process and plan for a standalone fund as per COP29 guidelines.
2. **Design Trigger:** Within eight months of COP28, the World Bank must present a proposal for hosting arrangements. The Board will review it to ensure compliance with hosting conditions. If conditions are unmet, steps may be taken at COP29 to establish an independent entity. If the proposal satisfies the Board, the World Bank will host the Fund for an initial four-year period.
3. **Performance Trigger:** An independent review towards the end of the interim period (2028) will evaluate the hosting arrangement. The Board will decide whether the conditions were fulfilled. If not, countries may set up a standalone fund by COP33. Otherwise, the World Bank remains the host.

This structured process enables developing countries to test the World Bank option. Despite long-standing challenges, the recent rapid progress in L&D is remarkable.¹⁰⁷

Yet, with worsening climate impacts, the urgency grows. Evidence ties human-driven climate change to rising disasters, as seen in agricultural droughts in Syria, Iraq, and Iran. In nations grappling with displacement and loss,

“The Loss and Damage Fund must be operationalised at COP 28, a critical measure of success or failure. The scale of funds must be commensurate with the needs, and come from every possible source imaginable. And the Fund must be institutionalised in a way that really works for, and delivers to, the Pacific small island developing states. Funding our holistic national programmes, using our national systems, and with real direct access so that we are in control of our destiny.”



**Hon. RALPH
REGENVANU**
Minister of Climate Change
Republic of Vanuatu

reconstruction burdens national budgets and deepens debt crises. Although the Transitional Committee's work is complete, the critical task of establishing and operationalizing the Fund lies ahead.

¹⁰⁷ UNFCCC, *Transitional Committee Report on the Operationalization of the Loss and Damage Fund and Funding Arrangements* (2023)

COP29 and Funding Parameters

COP29 brought to light the urgent need for a revised financial framework aimed at addressing climate-related loss and damage (L&D) in vulnerable countries. Central to its discussions was the call for major polluting nations to amplify their financial contributions to developing countries. Research by IIASA and CMCC highlighted that the financial requirements for L&D alone could range from \$130 billion to \$940 billion in 2025¹⁰⁸, underscoring the gravity of the situation. Notably, these figures are supplementary to the vast resources already needed for mitigation and adaptation.

Climate action is multifaceted, encompassing mitigation, adaptation, and L&D. Mitigation refers to efforts that aim to reduce greenhouse gas emissions, while adaptation involves strategies to manage the impacts of climate change. L&D, on the other hand, addresses preventable and unavoidable impacts, especially in the world's most vulnerable regions. Preventable impacts could be mitigated through measures like emission reductions or adaptations, such as reinforcing defenses against extreme weather. Conversely, unavoidable impacts stem from escalating climate hazards, including rising sea levels & severe natural disasters.¹⁰⁹

The researchers from IIASA and CMCC emphasized that low- and middle-income countries face significant L&D needs, estimated to cost between \$128 billion and \$937 billion by 2025. These financial demands add to the already overwhelming requirements for mitigation and adaptation, projected at over \$600 billion and \$187–\$359 billion, respectively. Such figures serve as crucial benchmarks for COP29 negotiators in ensuring adequate funding for vulnerable nations.

Developing countries have persistently urged polluters from the Global North to increase their annual contributions from the current \$100 billion to an ambitious \$1 trillion by 2025¹¹⁰. While a breakthrough occurred at COP held in Egypt two years ago, leading to an agreement on establishing an FRLD, progress remains slow in defining long-term mechanisms to sustain this fund. The fund received its initial financing during COP in Dubai last year, marking a significant step forward. However, debates persist regarding the optimal use of L&D resources—whether to prioritize rebuilding after climate-related disasters or to focus on preventive measures like enhancing social protection.

Despite the challenges, the momentum for addressing L&D has notably accelerated. Previously hampered by vague definitions, limited methodologies, and policy uncertainties, discussions have now reached a turning point as financial estimates become increasingly clear. These developments pave the way for actionable strategies to address L&D effectively. Research conducted by IIASA and CMCC has contributed immensely to this discourse in two vital ways. Firstly, they propose a policy framework

¹⁰⁸ IIASA & CMCC, "Financial Requirements for Loss and Damage: A Report on Projections for 2025

¹⁰⁹ UNFCCC, *Conference of the Parties Report: Outcomes of COP29 and Funding Parameters for Loss and Damage* (2024)

¹¹⁰ UNFCCC, "Report on the Establishment and Funding of the Loss and Damage Fund," United Nations Framework Convention on Climate Change, COP27, 2022

that integrates L&D with climate mitigation and adaptation, emphasizing a holistic approach to risk management and financial planning. This framework promises to be a valuable guide for negotiations at COP29 in Azerbaijan. Secondly, their innovative methodologies provide new insights into determining financial contributions and entitlements for FRLD, offering fresh perspectives for equitable solutions.



Getty Image

In conclusion, the discourse at COP29 marks a pivotal moment in global climate action. As the world grapples with the intensifying impacts of climate change, negotiators and policymakers must ensure substantial and equitable funding to address the pressing needs of vulnerable nations. The strides made in understanding L&D requirements and methodologies offer hope for a future where resilience and adaptation are prioritized alongside mitigation efforts.

Climate Action and L&D Funding: A Critical Turning Point

Developing nations have urged industrialized countries of the Global North to significantly increase their financial contributions to address climate-related challenges. Specifically, these nations are calling for an increase in annual contributions from the current \$100 billion to \$1 trillion by 2025¹¹¹. This appeal aligns with progress made during global climate conferences (COPs), particularly the establishment of the Loss and Damage (L&D) Fund at COP in Egypt two years ago, which received initial funding at COP in Dubai last year. Despite these advancements, long-term mechanisms for sustaining the fund remain undetermined.¹¹²

A pivotal debate surrounding L&D funding continues to revolve around its strategic focus. Should efforts prioritize rebuilding after climate-related disasters, or should investments target preventive measures such as enhancing social protection and healthcare systems to build resilience? While discussions around L&D have gained momentum, challenges persist due to ambiguous definitions, limited methodologies,

¹¹¹ UNFCCC, "Establishing the Loss and Damage Fund and Climate Finance Progress," United Nations Framework Convention on Climate Change, COP27, 2022

¹¹² IIASA and CMCC, *Financing Loss and Damage: Integrating Risk, Equity, and Climate Resilience into Policy* (2024)

and uncertainties in policy. However, promising steps have been taken, including clearer financial estimates that provide a solid foundation for future action. In addressing these complexities, research by IIASA and CMCC has contributed profoundly to shaping the discourse around L&D funding. Their work emphasizes two main areas: first, a policy framework that integrates L&D with climate mitigation and adaptation through a holistic approach to risk management and finance. This framework offers valuable guidance for discussions at COP29 in Azerbaijan. Second, innovative methodologies propose mechanisms to determine potential contributions and entitlements for L&D funding.

Impacts of Climate Change and Economic Inequalities: The economic consequences of climate change vary dramatically across nations, intensifying global inequalities. Collaborative research by CMCC, IIASA, and PIK sheds light on the scope of unaddressed economic losses caused by climate change, alongside their geographical distribution. It is vital to factor in historical responsibilities for emissions since 1850, 1990, and 2015, tackling crucial questions regarding the allocation of L&D funding: who should bear the financial burden, and who should receive support? The required funding to address residual impacts—those that cannot be avoided—ranges from \$128 billion to \$937 billion annually, exceeding previous estimates. These calculations exclude impacts that can be mitigated through adaptation measures but consider those exacerbated by intensifying climate hazards. This research underscores the need for financial flows from high- and upper-middle-income countries to mid- and low-income nations, reflecting their relative responsibilities for greenhouse gas emissions.

Costs and Challenges in L&D Funding: Significant milestones have been achieved in L&D funding. At COP27 in Egypt, the establishment of the FRLD marked a critical step forward, later operationalized at COP28 in Dubai with initial contributions exceeding \$700 million. Nonetheless, questions remain about how and when the fund will be replenished and how resources will be allocated. What is indisputable is the growing cost of addressing L&D, which is poised to rise further without robust mitigation and adaptation measures. Although the FRLD cannot meet all L&D funding requirements, it aims to address gaps within the existing global, regional, and national funding mechanisms for climate-related impacts.

The Justice Imperative: COP29 introduced the first High-Level Dialogue to align the efforts of diverse stakeholders addressing L&D. Research by CMCC and IIASA highlighted ambitious targets needed for both FRLD and broader funding systems. Addressing L&D is fundamentally a matter of justice, given that the climate crisis predominantly stems from emissions by the Global North. Equally important is coherence, as mitigation, adaptation, and L&D efforts are interconnected. Shortcomings in mitigation and adaptation inevitably increase the financial burden of L&D. Therefore, integrating L&D into the New Collective Quantified Goal on Climate Finance (NCQG), set to be determined at COP29, is vital.

Looking Forward: The financial requirements for climate action could exponentially surpass the \$100 billion annual target set at COP15 in Copenhagen. COP29 must take decisive steps to prevent further delays in climate action, as inaction will result in escalating costs, impacts, and disruptions. Operationalizing the FRLD at COP28 marked a watershed moment for impoverished nations facing climate-related challenges. During a four-year interim period, the World Bank will serve as the Financial Intermediary Fund for the FRLD, providing critical financial assistance. Parties to the agreement are invited—but not mandated—to contribute financially. The fund’s Governing Instrument outlines its structure and purpose, including equitable representation, country-led strategies, and financing mechanisms through grants and concessional loans from various sources. In sum, despite ongoing challenges, the FRLD and its operationalization signify a critical step forward in climate action and justice. The urgent need for decisive action and collaboration remains paramount as the world grapples with the growing scale of climate impacts.¹¹³

Controversies and Contention

Senior climate experts and dignitaries, including a former UN Secretary-General and climate chief, have called for urgent reform of the United Nations' COP climate talks, describing them as outdated. In a letter to the UN, these leaders argue that countries not committed to phasing out fossil fuels should not host the talks. Ahead of COP29, Azerbaijan's president defended his nation's natural gas production, claiming it to be a "gift from God" and rejecting criticism over bringing it to market. This followed a BBC report accusing a senior Azerbaijani official of using their COP role to explore fossil fuel deals.

Critics say the COP process is too slow to confront the growing climate crisis, and its structure cannot deliver the necessary transformative changes quickly or effectively. The letter, signed by figures like Ban Ki-moon and Christiana Figueres, calls for a shift from negotiations to implementation. Representatives from small island nations raised concerns at COP29, fearing that changing the COP framework to forums like the G20 would exclude their voices and diminish equal representation.

Concerns intensified after a covert recording revealed Azerbaijan's COP29 chief discussing investment in the state oil and gas company. President Aliyev defended plans to boost production, referring to oil and gas as "gifts from God" and arguing against criticism of nations utilizing such resources to meet market demand. Aliyev's remarks also criticized France for alleged colonialist "crimes" and human rights abuses, a rare move for a COP host leader focused on global climate consensus. Experts further questioned COP host selection, pointing out that Azerbaijan follows the UAE, another major fossil fuel producer, as a host nation. They recommend smaller, frequent COP meetings with accountability mechanisms and suggest prioritizing hosts committed to Paris Agreement goals.

¹¹³ UNFCCC, *Governing Instrument for the Loss and Damage Fund* (2023)



Image: license Infos

Nevertheless, these achievements ensure that, by COP29, the FRLD will be fully operational as a financial intermediary capable of mobilizing global contributions and channeling them quickly to individuals most impacted by climate shocks. Reaching these milestones demonstrates the power of collective action in addressing the global climate crisis. Following the appointment of Ibrahima Cheikh Diong as the Fund’s first Executive Director, and the selection of The Philippines as the host country for the Fund’s Board, the World Bank will continue to assist with:

1. Completing the operational frameworks, including an operations manual, financial tools, budget development, and access modalities.
2. Supporting the Executive Directors in setting up the independent secretariat.
3. Creating a comprehensive 2024 work plan with milestones for the Fund’s expansion and implementation.

Decisions on resource mobilization, funding allocation,¹¹⁴ and eligibility will rest solely with the FRLD’s Board, the World Bank plays no role in decision-making.

Key Insights and Progress Graph

Understanding L&D in Climate Justice is essential in addressing the devastating effects of climate change, particularly for vulnerable communities in developing nations. L&D refers to the irreversible impacts of climate change that can neither be mitigated nor adapted to. These losses are categorized into economic impacts, such as infrastructure, agriculture, and property damage, and non-economic consequences like biodiversity loss and cultural heritage destruction.

To address L&D effectively, three key pillars have been identified. The first involves averting climate-induced disasters through significant emission reduction efforts. The second focuses on minimizing the effects of climate change by adopting measures such as enhancing infrastructure resilience, establishing early warning systems, and improving disaster preparedness. The final pillar deals with residual impacts that adaptation cannot address, necessitating financial mechanisms and global collaboration.

¹¹⁴ Governing Instrument for the Loss and Damage Fund (2023)

However, despite ongoing efforts, the persistent rise in greenhouse gas emissions has made L&D an inevitable reality.

The historical evolution of L&D in international climate policy highlights its increasing recognition over time. In 1988, Vanuatu, representing the Alliance of Small Island States (AOSIS), proposed compensation for sea-level rise—a notion dismissed as too radical. The establishment of the UNFCCC in 1992 emphasized mitigation and adaptation but omitted explicit mention of L&D. It was not until 2013, under COP 19, that the Warsaw International Mechanism (WIM) was formed to formally address L&D. The 2015 Paris Agreement's Article 8 officially recognized L&D but excluded liability and compensation due to opposition from developed nations. Subsequent COPs, including COP 26 and COP 27, saw renewed efforts to establish and operationalize the FRLD. Finally, at COP 28 in 2023, the fund was operationalized, with an initial pledge of \$800 million—a figure far below the estimated \$560 billion required annually by developing nations to address L&D fully.¹¹⁵

The responsibility for climate-induced L&D remains a contentious issue. Historically, developed nations like the United States and the European Union were the primary contributors to climate change. However, emerging economies such as China and India have since become leading emitters. Collectively, G20 nations account for 80% of global emissions, placing them at the forefront of discussions on climate finance.

The FRLD aims to provide financial support to climate-vulnerable nations but faces numerous challenges. Funding sources remain limited, with current pledges totaling only \$800 million. Governance issues persist, as the World Bank, serving as the interim trustee, has faced criticism. Furthermore, pledges are voluntary and not legally binding, and a clear roadmap for sustained contributions is yet to be developed. Disbursement criteria for the fund include provisions for countries experiencing severe climate disasters or economic losses exceeding a specific GDP threshold, such as 1%. However, legal and bureaucratic hurdles have delayed fund distribution, with only a fraction of pledged funds deposited to date.

International climate justice efforts face significant legal challenges. For example, Vanuatu and other Pacific Island nations have sought legal clarity from the International Court of Justice (ICJ) regarding state obligations for climate action. Despite their efforts, ICJ rulings are non-binding, limiting the enforceability of reparations. Additionally, Article 8 of the Paris Agreement, while acknowledging L&D, explicitly excludes compensation claims due to developed nations' fears of legal liability. Proving climate attribution remains another challenge. Though advancements in scientific research improve attribution accuracy, directly linking specific disasters to specific emissions sources remain difficult. For instance, the 2014 Koshi flood in Nepal caused a 0.8% GDP loss, yet establishing a direct causal link to global warming remains legally complex.¹¹⁶

¹¹⁵ UNFCCC, "Historical Evolution of Loss and Damage in International Climate Policy," COP28 Report (2023)

¹¹⁶ Nepal Ministry of Home Affairs, "Annual Disaster Report 2014," Government of Nepal, 2014

In summary, addressing L&D in climate justice requires global cooperation, robust financial mechanisms, and advancements in climate attribution science. As the impacts of climate change continue to escalate, the urgency to act is greater than ever.

Nepal's Climate Vulnerability and L&D Compensation: A Case Perspective

Nepal, despite contributing minimally to global emissions, faces severe climate-related disasters, including:

- Frequent floods and landslides, with an average of 200 deaths per year.
- Rapid glacial melt in the Himalayan region, leading to Glacial Lake Outburst Floods
- Erratic monsoons and prolonged droughts are affecting agriculture and food security.
- Urban flooding and infrastructure damage (e.g., recent floods in September 2023).

Disaster Management Systems

The NDRRMA has detailed disaster records since 2011, tracking human casualties, livestock losses, and economic damages. Government-led funds, such as the Prime Minister's Disaster Relief Fund, exist but are criticized for inefficient fund disbursement. Nepal has three accredited national entities under the Green Climate Fund:

- National Trust for Natural Conservation (NTNC)
- Alternative Energy Promotion Centre (AEPC)
- Nabil Bank (Private Sector)

Roadmap for Redress Ahead

☞ Develop a Comprehensive Climate Finance Plan

- Nepal should proactively prepare project proposals for accessing FRLD.
- Establish a governance framework to ensure transparent and effective fund distribution.

Strengthen Climate Data Collection & Reporting

- Expand the DRR Portal to include detailed climate impact assessments.
- Invest in climate monitoring technologies to strengthen loss documentation.

☞ Enhance Legal & Policy Frameworks

- Align national policies with international climate negotiations.
- Strengthen domestic institutions (NDRRMA, Environment Ministry) to advocate for Nepal's needs at COP summits.

☞ Engage in International Climate Diplomacy

- Nepal should collaborate with other climate-vulnerable nations (e.g., AOSIS, LDCs) to pressure wealthier countries for increased L&D funding.
- Strengthen regional cooperation with SAARC countries to push for collective climate financing mechanisms.

¹¹⁷ National Disaster Risk Reduction and Management Authority (NDRRMA), "Disaster Management Records," 2023

Challenges and Opportunities for the FRLD

The establishment of the FRLD at COP27 marked a pivotal moment in global efforts to address climate change impacts. This fund seeks to provide financial support to nations most vulnerable to climate-related challenges, aiming to alleviate both economic and non-economic losses from extreme weather events and gradual environmental changes. However, the fund faces significant challenges, including operationalization, funding mechanisms, implementation strategies, and global cooperation.

Operationalization of the fund involves representatives from 24 countries working together to decide its structure, contributors, and methods of distribution. This collaboration is crucial to ensure that the fund operates effectively and equitably. Furthermore, innovative financial tools and an expanded donor base are required to address the substantial financial demands associated with climate-induced losses. The fund's success depends on its ability to balance immediate disaster relief with long-term resilience building.

The equitable allocation of the Loss and Damage Fund is central to its objectives. Prioritizing poorer nations and societies disproportionately affected by climate change is essential. These communities, including least developed countries (LDCs) and small island developing states (SIDS), often lack the resources to rebuild after disasters. Principles of equity and historical responsibility suggest that industrialized nations, as the largest historical contributors to greenhouse gas emissions, should bear greater financial responsibility. Moreover, climate justice calls for addressing structural inequalities, focusing on marginalized groups such as women and indigenous peoples. Transparency in fund distribution, coupled with intergenerational equity, ensures that resources not only address immediate needs but also build resilience for future generations.

Despite these guiding principles, the implementation of the fund is fraught with political, economic, and practical challenges. Defining vulnerability is complex due to variations in geography, socio-economic conditions, and governance. Developing universal indicators of vulnerability risks oversimplifying diverse cases, while context-specific solutions may exclude certain countries or communities. Additionally, climate impacts often overlap across borders, creating competing priorities that complicate decision-making. Balancing historical responsibility with present economic and political realities further adds to the complexity.

Challenges within nations include unequal allocation of funds, which can disproportionately harm minorities and indigenous groups. Corruption and transparency are critical concerns, as mismanagement of funds undermines trust in the system. Effective monitoring and governance are essential but difficult to implement. Furthermore, impacted communities are sometimes excluded from decision-making processes, leading to outcomes that may not align with their needs. Short-term disaster responses and long-term resilience building must be balanced, but limited resources necessitate tough prioritization decisions.

Differing perspectives on the fund's utilization also contribute to the debate. While some stakeholders advocate for immediate disaster relief, others emphasize investing in long-term infrastructure to prevent future harm. Developing nations highlight the moral responsibility of industrialized countries to address cumulative emissions, whereas wealthier nations call for shared responsibility. Civil society demands participatory engagement, while institutional actors prioritize streamlined decision-making for efficiency.¹¹⁸

Examples from COP27 and COP28 illustrate these diverging viewpoints. Countries like Bangladesh emphasized universal vulnerability metrics, while small island developing states (SIDS) called for context-specific guidelines. Pakistan, following the 2022 floods, requested front-loaded disaster relief, whereas Fiji focused on climate-resilient infrastructure investments. Activists demanded transparency and good governance to prevent corruption, though others warned against excessive monitoring, which could delay aid distribution. Grassroots movements called for immediate involvement in decision-making, while institutional actors advocated for centralized processes. The Himalayan region, including countries like Nepal and Bhutan, exemplifies the urgency for equitable fund allocation. These nations face significant climate challenges such as glacier melt, landslides, and water scarcity, making them compelling cases for vulnerability-based funding.¹¹⁹

In conclusion, the FRLD represents a vital step toward addressing climate-induced challenges, but its operational success depends on navigating complex principles, varied priorities, and practical constraints. Participatory governance, international collaboration, and innovative approaches will be necessary to ensure the fund's effectiveness in providing justice and resilience for vulnerable communities.



Image: Olivier Roche - Paris et périphérie

¹¹⁸ J. Smith, "Implementing the Loss and Damage Fund: Political, Economic, and Practical Challenges," *Climate Policy Review*, vol. 45, no. 3 (2024)

¹¹⁹ A. Sharma, "Climate Vulnerability in the Himalayan Region: A Call for Equitable Fund Allocation," *Environmental Studies Journal*, vol. 38, no. 2 (2023), pp. 47-49

Navigating the Path of Climate Advocacy and Global Commitments

In the realm of climate advocacy, Nepal and other mountain nations have emerged as pioneers in championing their causes on international platforms. Nepal's proactive approach was evident during COP29, where it organized a high-level side event to highlight agendas pertinent to mountain nations. Such efforts have placed regional priorities in the global spotlight.

Managing Climate Resources: Efficient resource management and equitable distribution systems are crucial for realizing the potential of climate funds. However, developing nations may face challenges as internal resource strains and competing priorities could influence the benefits received by Himalayan regions. Effective governance and collaborative frameworks will be essential to overcoming these obstacles.¹²⁰

Global Cooperation and International Support: For tangible progress, support from developed nations is imperative. Their willingness to allocate resources and address the unique challenges faced by mountain areas will play a significant role in advancing climate justice. Despite growing momentum in debates on Loss and Damage (L&D), financial and legal barriers persist. To secure compensation and address vulnerabilities, Nepal must fortify its governance systems, prepare data-driven claims, and actively engage in climate negotiations. A clear strategy will be pivotal in navigating funding shortfalls and geopolitical resistance.

The Loss and Damage Fund: A Milestone: The Loss and Damage Fund, established during COP27 in 2022, marked a historic achievement for climate-vulnerable developing countries. Representing those contributing the least to emissions yet bearing the brunt of climate impacts, these nations advocated for financial mechanisms to address economic and non-economic losses caused by climate disasters. With the fund's operationalization during COP28 and CMA meetings, it now serves as an integral entity under the Financial Mechanism of the Convention, accountable to COP and CMA.

Challenges in Implementation

Despite its inception, the fund faces significant hurdles:

1. *Funding Shortfalls:* Voluntary contributions have fallen drastically short of the estimated annual needs, with pledges of \$700 million compared to a required \$400 billion.¹²¹
2. *Equitable Contributions:* Minimal participation by major polluters raises questions about fairness and adherence to the "polluter pays" principle.
3. *Operational Complexity:* Addressing immediate disaster response alongside long-term recovery demands sophisticated planning.

¹²⁰ B. P. Rai, "Nepal's Advocacy for Mountain Nations at COP29: A Step Towards Global Climate Action," Mountain Research Review, vol. 42, no. 1 (2024)

¹²¹ "UNFCCC, 'The Paris Agreement: Progress and Challenges,' UN Climate Change, 2023

4. *Scientific Assessment*: Evaluating non-economic losses, such as cultural heritage and biodiversity, requires advanced methodologies.
5. *Political Will and Global Cooperation*: Sustained commitment and equitable contributions from developed nations will be paramount.¹²²

While these challenges persist, effective solutions can transform the fund into a powerful tool for climate justice.

The U.S. Withdrawal and Its Repercussions

The U.S. withdrawal from the Paris Agreement, alongside its commitments to the Loss and Damage Fund, has sparked concern globally:

- ☞ *Funding Deficit*: The absence of U.S. contributions, expected to play a significant role, creates substantial funding gaps.
- ☞ *Accountability and Leadership*: The withdrawal undermines the accountability of high-emitting nations and weakens the Paris Agreement's credibility.
- ☞ *Impact on Other Nations*: Strain on resources of other developed countries may delay the fund's objectives.
- ☞ *Symbolic Effects*: Though limited financially, the U.S. exit poses symbolic risks, potentially discouraging other nations from fulfilling their commitments.

Despite these setbacks, global responses have showcased resilience. The European Union reaffirmed its commitment to the Paris Agreement, while countries like China emphasized collective action. Civil society groups have remained steadfast in their advocacy, exemplified by campaigns such as "We Are Still In," signifying commitment despite political shifts. The resilience demonstrated by governments and civil societies reinforces the determination to advance climate justice amidst challenges. Addressing political and financial barriers will be pivotal in ensuring that climate-vulnerable nations achieve the support they need.

Concluding Annotations

The consequences of climate change are already causing serious loss and hardship in developing countries. The amount of L&D experienced will climb in tandem with the rate of climate change. Ignoring these basic facts won't make the problem go away, and delaying the answer will make the bad impacts worse. Rather, it is the moment for courageous leadership and rapid action.

This research addresses L&D under the UNFCCC; it does so by highlighting pertinent issues, offering supporting data, encouraging debate, and outlining possible solutions. In the end, we must work together to confront and resolve the challenge of climate change. The scientific community consistently emphasizes the need for quick action.

The UNFCCC anticipates that actors will support L&D-related activities more and better. To hold the private sector accountable for loss and harm, whether caused by

¹²² United Nations Framework Convention on Climate Change (UNFCCC), 2023

non-financial or financial means, however, an extra framework is required. To define a funding mechanism, a recent study proposes using the "polluter pays principle" to extract money from large corporations to partially offset their environmental effect. Such a concept might serve as a springboard for additional research into the financial involvement of private parties. In terms of non-financial actions, businesses should conduct thorough evaluations and management of climate risk to efficiently guide investments in the mitigation of L&D. Companies should also promote inclusive policies that take the needs of people who will be directly impacted into account.¹²³

People who live in high-risk areas would incur a wide range of losses and damages, for which there is no one source of funding adequate. Therefore, national governments and other stakeholders need to compile and organize various funding sources, and then organize and distribute them appropriately. In a similar vein, national governments and their international partners may establish a national solidarity fund to provide funding and access different sources of funding already in place. To efficiently layer sources in each scenario, institutional setups and financial architecture are needed.

The FRLD Secretariat, hosted in Manila, Philippines, plays a pivotal role in addressing climate-induced losses and damages. Its establishment reflects a commitment to supporting vulnerable countries through financial mechanisms aligned with the Paris Agreement. The Secretariat operates under the guidance of the UNFCCC and the Paris Agreement, with the Philippines hosting the board and secretariat. This arrangement ensures a focus on inclusivity and representation for climate-vulnerable nations.

The World Bank serves as an interim trustee, managing funds and ensuring transparency through independent audits. The fund prioritizes direct access for local actors, with streamlined procedures to address immediate and long-term needs. Emphasis is placed on strengthening institutional capacities in recipient countries. The fund integrates principles of climate justice, addressing structural inequalities and promoting human rights. Mobilization of resources from diverse sources, including high-income countries and private sectors is vital to provide financial tools like grants and loans to address both economic and non-economic losses. This framework positions the Secretariat as a cornerstone for global climate action, ensuring that the voices of the most affected are central to decision-making.¹²⁴

The FRLD Board recently held its fourth meeting in Manila, Philippines. This meeting highlighted the Philippines' push to host the Fund's base, emphasizing the country's vulnerability to climate change and its commitment to addressing climate-induced challenges. The FRLD primarily aims to assist developing countries that are particularly vulnerable to the adverse effects of climate change. This includes addressing both economic and non-economic losses caused by extreme weather events and slow-onset climate impacts.¹²⁵

¹²³ "The Role of the Private Sector in Addressing Loss and Damage: A Framework for Accountability," UNFCCC, 2023

¹²⁴ The Role of the FRLD Secretariat in Climate Justice and Financial Mobilization," UNFCCC, 2023

¹²⁵ "FRLD Board Holds Fourth Meeting in Manila," UNFCCC, 2023

Required Time-line and Actions for WB-hosted LDF Secretariat

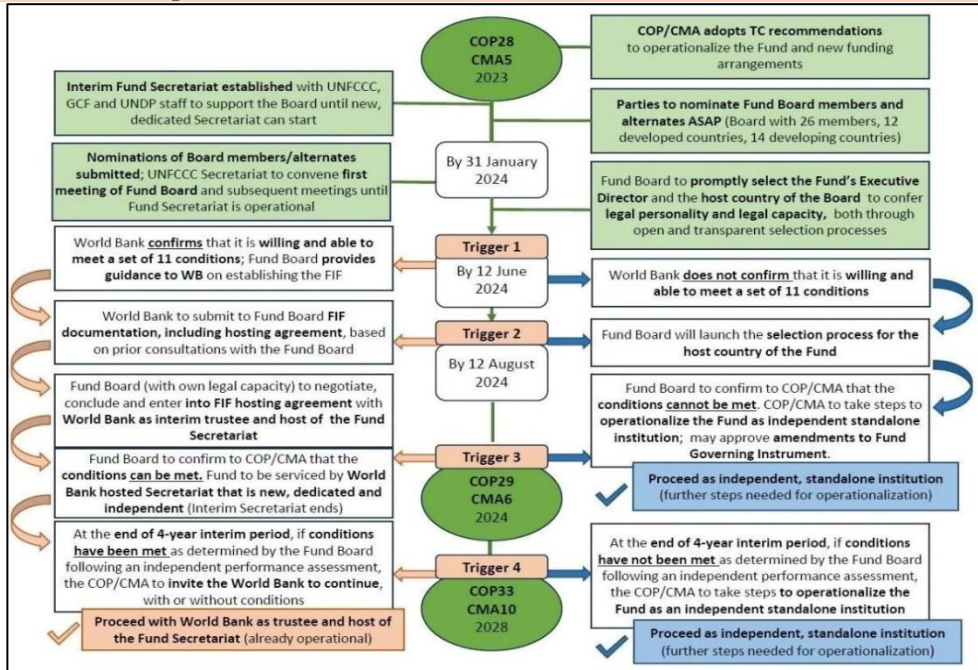


Image: Heidi White and Liane Schalatek¹²⁶

While the drawdown rate of the Fund was not quantified, COP/CMA Decision making the LDF effective, albeit as well researched as it was, had left the majority of the detail to be finalized and approved by the new Board. The Board will need to act quickly to implement the main working arrangements for programme approval, access modalities, application of resources, environmental and social safeguard terms, financing terms and instruments, and outcome management in 2024, provisionally only defined in the Governing Instrument, as it aims to get the Fund to start supporting the countries and populations on the front lines of the impacts of climate as quickly as possible. So, to start with, first and foremost, the Board has to sit together and decide on a general work program so that it has an idea of the road on which it has to induct those modalities onboard by the end of this year. It is the condition precedent to release of approval of the fund under the new LDF (full operation) and World Bank requirement makes the release of stop-gap finance to be released ahead of the Fund being fully operationalized.¹²⁷

Early LDF disbursements will have to be disbursed as early as possible, preferably by 2024 – since pressure to establish the LDF as a FIF with a World Bank-hosted secretariat was described as being among the main inducements for such an agreement by the developing countries in TC negotiations – postponement in organizing the first Board meeting ensures that more likely than not the early LDF disbursements are fully operational only in 2025. Eligibility-wise, priority is given to the third world, specifically

¹²⁶ Available at: <https://us.boell.org/en/media/image/mapping-timeline-and-required-action-world-bank-hosted-ldf>

¹²⁷ UNFCCC, *Governing Instrument for the Loss and Damage Fund* (2023)

LDCs, SIDS, and other vulnerable countries. The fund is also interested in funding L&D projects generated by climate change, for example, disaster recovery programs, risk reduction programs, and adaptation programs. Applications are typically submitted through national focal points or country authorities. The proposals should follow the purpose of the fund and how the project will be capable of responding to L&D. The fund is overseen by UNFCCC and the Paris Agreement to make it transparent and accountable.¹²⁸



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This assumption that the poorer developing world will be rewarded by richer industrialized states relies on the doctrine of climate justice. Wealthier nations have been emitting far more than their fair share of greenhouse gases over centuries, and the poorer developing nations are now experiencing the most harsh effects of global warming in the form of extreme weather patterns, sea level rise, and droughts. This has given rise to "L&D"-based claims, i.e., damages for irreparable harm wrought by global warming.¹²⁹

In the COP meetings, the global south has also persistently called for the use of financial instruments in achieving L&D. A case in point is the proposal to set up the FRLD during COP27, which has been nurtured through COP28 and COP29. The financing engineering and operationalization of the mechanism are contentious. The real problem is that richer countries in the past have not wanted to pay blanket compensation, lest they subject themselves to liability and open-ended claims. There is greater public pressure in some industrialized countries to pay poorer countries compensation, but making it a policy is an uphill struggle. There is a will to pay, but the financial amount involved—perhaps trillions of dollars—is an economic and political will question. The current US pull-out from the Paris Agreement is only to be anticipated to be such a trend follower.

¹²⁸ UNFCCC, *Governing Instrument for the Loss and Damage Fund* (2023)

¹²⁹ Sumudu Atapattu, *Emerging Principles of International Environmental Law* (Transnational Publishers 2006)

Thus, the only question that is most suitable is if industrialized countries would prefer to unconditionally commit to filling the FRLD with adequate funds as a consideration on the scale of the L&D already accomplished and bind themselves to pay up in the event of any future accidents with a sense of responsibility and accountability. In doing so, the new LDF Board has the daunting task of operationalizing the Fund even further. The highest priority on the agenda is to make modalities of access, parameters of allocation, and mobilization strategy for resources to remobilize resources for redirecting into marginalized sections and poor countries in a heterogeneous, inclusive, and equitable manner.

Its negative impact is already inducing loss and suffering at the third-world level. The severity of L&D incurred will be higher with the pace at which global warming is advancing. Denying such grim facts can never put an end to the issue, and procrastination around it will result in more evil consequences. Rather, it is a time for risk-taking leadership and prompt action.

Discourse is important for advancing the L&D of UNFCCC through the raising of pertinent questions, laying out supportive facts, changing debate, and providing possible solutions. Ultimately, we are going to have to do something together if we are going to fix and alter the problem of climate change. The scientific community always needs something done with an underlying sense of urgency.

UNFCCC is asking performers of activity dealing with L&D for more and better. Non-financially or financially to make the private sector responsible for loss and damage, though, a different makeup is needed. In attempts to try and further explore a vehicle for financing, one such report this year suggested the implementation of the "polluter pays principle" where large business companies would be compelled to pay for natural capital usage and thereby fund what they lost. This could be the driver of further study as per the financial contribution of private parties. Concerning non-financial measures, there must be strict climate risk assessment and governance by the firms to enable abatement of climate risk in attempts to channel investment in L&D mitigation efficiently. There also ought to be incentives towards inclusive policy whose design should involve immediate actors involved.

Individuals residing in hazard-prone regions would have to suffer a lengthy chain of damages and losses for which there can never be one pool of funds sufficient. It is therefore crucial that national governments and other involved authorities classify and measure different sources of funds, and classify them and allocate them further. In the same way, foreign governments and national governments can form a national solidarity fund in an attempt to spend and make use of other sources of available finances. All financial structures and finance arrangements and institutions are needed in a manner that each pile up the sources in the proper way. World Bank serves as an interim trustee, the funds being deposited and maintained under open conditions by independent auditing. The fund facilitates easy access to national stakeholders with simplicity of procedures to respond to short- and long-term needs.

Institutional capacity development in the recipient countries receives the highest priority. The fund remains true to the spirit of climate justice struggles against structural injustice and defending human rights. Mobilization of funds from various sources such as wealthy countries and the private sector is of maximum priority in the endeavor to strengthen financial instruments such as grants and credits to fight economic and non-economic damage. This action positions the Secretariat at the forefront of global action on climate change, and the voice of the most vulnerable at the center of decision-making.¹³⁰

Pakistan Flood and Funding

The massive floods of 2022 that killed hundreds, displaced millions, and inflicted economic losses in tens of billions of dollars, besides increasing food insecurity, highlighted the kind of existential threat the cash-starved Pakistani economy must fight off to survive. As if the periodic extreme weather events, ranging from heatwaves to abnormal rains to destructive floods, did not pose enough of a challenge, the shrinking glaciers in the north mean the country would have far less water for its agriculture in the not too distant future. Sadly, the fact that policymakers understand the implications of climate change for the people and economy does not mean their concern will automatically translate into concrete policy actions anytime soon.

The world is too busy with its own problems to focus on and fund our climate challenge. Only a few hundred million dollars have so far been received out of more than \$10bn promised by various nations and global agencies to help Islamabad rebuild the infrastructure destroyed in 2022 and rehabilitate those displaced by the deluge. A large number of affected people remain displaced nearly three years after the floods.

Though the World Bank has pledged to finance some climate-resilient infrastructure projects under its 10-year Country Partnership Framework initiative, the promised funds are too meagre to make any significant impact. Now the government is looking to the IMF to provide \$1bn in climate funding and has launched green action bonds to finance sustainable green projects for greater climate change adaptation and mitigation. However, there is little evidence to back its assertions that it is integrating climate-resilient policies across the sectors.

The fourth FRLD Board meeting was held in Manila, Philippines (2-5 Dec. 2024). Priority was given to hosting the base of the Fund in the Philippines since the Philippines is climate-vulnerable and has a stake in climate matters. The primary objective of the FRLD is to offer support to highly vulnerable developing countries that will likely be exposed to the adverse impacts of climate change. This includes economic and non-economic damage resulting from extreme weather-related events and climate change that takes a slow-onset process.¹³¹ This meeting marked a significant step in operationalizing the Fund, focusing on establishing governance structures, setting up a dedicated secretariat, and ensuring equitable access to resources for climate-vulnerable developing countries. The Philippines, as one of the most climate-vulnerable nations, emphasized the urgency of translating frameworks into tangible actions during the event.

¹³⁰ Saleemul Huq and Mizan Khan, *Loss and Damage from Climate Change: Concepts, Principles and Policy Options* (Routledge 2022)

¹³¹ UNFCCC, *Fourth Meeting of the Loss and Damage Fund Board: Summary and Outcomes* (2024)

5. AGENDA FOR ACTION: A CASE PROFILE



Image: Konsta Punkka, 2025

Access and Mobilization of FRLD: Nepal's Framework for Justice

The Ministry of Forests and Environment (MoFE), Government of Nepal, developed a National Framework on Climate Change-Induced L&D in October 2021 to address the growing impacts of climate change. Rising greenhouse gas emissions have intensified erratic weather patterns, resulting in greater losses and damages, particularly in vulnerable developing countries like Nepal. Climate-induced disasters cause about

65% of annual disaster-related deaths in Nepal and cost around 0.08% of the country's GDP annually, reaching as high as 2.08% during extreme events like the 2017 floods. Given the increasing risk, Nepal recognizes the need to systematically assess and respond to L&D.

Globally, L&D remains a contested issue in UNFCCC negotiations, with developing countries advocating for it as a third pillar alongside mitigation and adaptation, while developed nations resist, fearing new financial liabilities. However, mechanisms like the Warsaw International Mechanism (2013) offer avenues for developing countries to push for recognition and support. Nepal defines L&D as both economic and non-economic losses due to sudden and slow-onset climate events that overwhelm people's capacity to cope or adapt, affecting lives, livelihoods, infrastructure, cultural heritage, and ecosystems.

To operationalize L&D, Nepal proposes a conceptual and methodological framework to assess climate-induced impacts, including identifying exposure, vulnerability, adaptation limits, and both avoided and unavoidable losses. It emphasizes assessing both rapid and slow-onset events, analyzing trends, and evaluating the success of adaptation measures. Special attention is given to climate-induced migration and displacement, highlighting the need for strategies to manage forced human mobility due to environmental changes.

Nepal is adopting a transformative approach to reducing disaster risks, including risk transfer mechanisms like insurance and risk retention through resilience-building. Innovative initiatives such as asset pooling insurance and relocation of high-risk settlements are underway. Agricultural insurance, supported by government subsidies, now covers major crops and livestock, helping farmers mitigate risks.

In global negotiations, Nepal advocates for a comprehensive risk management approach tied to anthropogenic climate change, aiming to strengthen its position by systematically assessing and costing L&D. Recommendations for operationalizing L&D involve strengthening inter-agency collaboration, advancing research (especially through the government agencies and academia), enhancing early warning systems, and integrating climate science into risk assessments. Key agencies like the Ministry of Forests and Environment, NDRRMA, DHM, DoMG, DoWRI, and DoFSC are tasked with leading specific roles to build a coherent, evidence-based approach to address L&D effectively in Nepal¹³².

By integrating local indigenous knowledge and participatory decision-making, the fund can effectively address country-specific vulnerabilities, strengthening adaptive capacities at the grassroots level.

¹³² Available at <https://moje.gov.np/uploads/documents/national-framework-on-loss-and-damage-approved-document-20211653988842pdf-0805-652-1658826902.pdf>

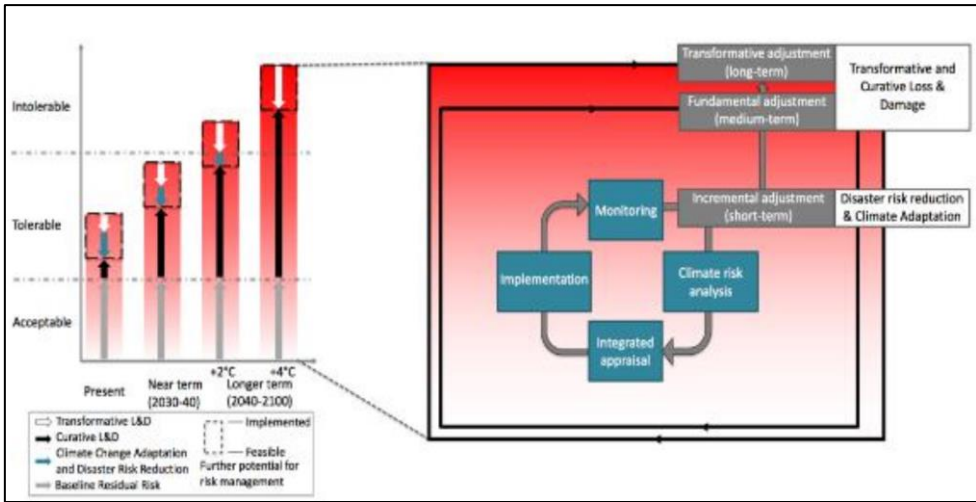


Figure: Dynamic framework for assessing and managing climate-related risks [Source: Mechler, R., Bouwer, L.M., Schinko, T., Surminski, S., Linnerooth-Bayer, J. (Eds.)]¹³³

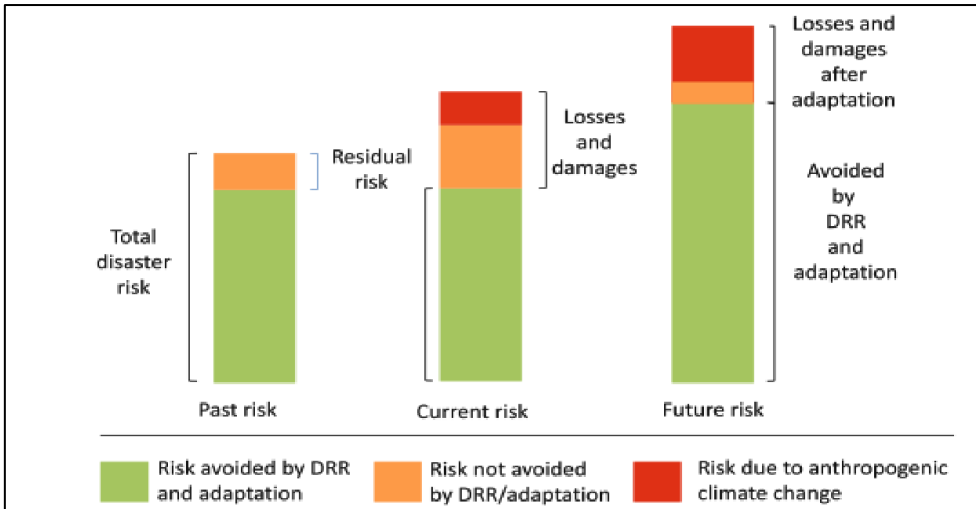


Figure: Current and future risk from extreme weather events, and the relation to L&D (source: Bouwer, L. M., 2019)

The FRLD, endorsed at COP27, operationalizes climate justice by channeling financial and technical support to vulnerable nations like Nepal, which faces disproportionate climate impacts despite minimal emissions. The fund addresses both economic losses (destroyed infrastructure, agricultural losses) and non-economic harms (displacement, cultural erosion). For Nepal, effective utilization requires institutionalizing binding frameworks for predictable financing, leveraging data platforms, and advocating globally to resolve challenges such as voluntary contributions and gaps in assessing intangible losses.

¹³³ National Framework on Climate Change-Induced Loss and Damage (L&D), Ministry of Forests and Environment, Nepal, Page No. 26

Guiding Principle for FRLD Mobilization

Equity and Climate Justice: While mobilizing the fund, priority should be given to communities most affected yet least responsible for climate change. This equity and climate justice is central to redressing imbalances between historical emitters and vulnerable populations.

National Ownership: The framework must ensure national ownership, with the Government of Nepal providing leadership, supported by broad participation from stakeholders, including provincial and local governments.

Transparency and Accountability: A system of transparency and accountability should be established, with clear procedures for tracking fund allocation and use, subject to public audits and regular reporting.

Inclusivity: All activities under this framework should ensure meaningful engagement of women, youth, indigenous peoples, and other marginalized communities in decision-making and implementation processes.

Evidence-Based Decision Making: Decisions and resource allocations must be evidence-based, informed by robust data, scientific assessments, and local knowledge to ensure interventions are relevant and effective.

Institutional Arrangements and Operationalizing L&D in Nepal

The National Framework on Climate Change-Induced L&D, prepared by the MoFE, Government of Nepal, outlines key agencies and a set of roles and recommendations for those agencies to operationalize L&D efforts in Nepal:

Ministry of Forests and Environment (MoFE): A multi-stakeholder initiative focusing on action research and pilot projects is needed to institutionalize L&D assessment in Nepal. Piloting efforts should address questions related to the institutional architecture for assessing climate change-induced L&D.

National Disaster Risk Reduction and Management Authority (NDRRMA): Under the *Disaster Risk Reduction and Management Act, 2017 (amended in 2019)*, NDRRMA is mandated to coordinate with ministries, departments, academic institutions, international agencies, and other stakeholders for multi-hazard risk assessment, risk communication, and disaster risk reduction. NDRRMA manages the BIPAD Portal (<https://bipadportal.gov.np/>), a national common platform where data on risks, hazards, exposure, and vulnerabilities are compiled and made accessible in open-source formats. This supports decision-making for risk management across development sectors and all levels of government. Additionally, in collaboration with the Department of Hydrology and Meteorology (DHM), NDRRMA has initiated impact-based forecasting for floods and landslides. While proposed rainfall thresholds for landslides and floods are a good start, they must be combined with other triggers and local land conditions to improve accuracy.

Department of Hydrology and Meteorology (DHM): DHM should prioritize climate science research, integrating weather data (temperature, rainfall, wind) into L&D assessments. It must also strengthen climate modeling and study the sectoral impacts of climate change in collaboration with other agencies. Data from radars, high-altitude monitoring stations, and automatic weather stations should be regularly used to refine regional and global hazard scenarios and trend analyses. Given the past investment in flood warning systems, DHM should also evaluate the effectiveness of these systems in reducing L&D.

Department of Mines and Geology (DoMG): DoMG leads landslide hazard assessments in Nepal, including landslide susceptibility mapping. To support L&D assessments, it should play a leading role in utilizing & advancing landslide hazard data.

Department of Water Resources and Irrigation (DoWRI): DoWRI is responsible for flood risk assessments. To accurately establish flood-related L&D, DoWRI should systematically collect and manage flood hazard data.

Department of Forests and Soil Conservation (DoFSC): DoFSC manages forest fire monitoring using satellite imagery and supports communities in mitigating fire risks through technical and financial assistance. In light of climate change and increasing fire hazards, the department needs to enhance its monitoring and management systems.

Provincial Governments: Provinces should consolidate L&D-related data and create comprehensive provincial databases, coordinating closely with local governments.

Rural and Urban Municipalities (Local Governments): Local governments play a crucial role in collecting data on losses and damages and in disaster response. Developing a baseline profile of infrastructure and ecosystems is essential for calculating economic L&D, with non-economic losses gradually incorporated to form a complete assessment.

Other Agencies (Civil Society, Development Partners, I/NGOs, Private Sector): These stakeholders are critical in supporting MoFE, NDRRMA, and DHM by contributing to database development and data collection mechanisms. They can also help the government formulate evidence-based national positions and access and mobilize climate finance for addressing L&D.

Actions and Ways of Accessing Climate Finance

The following seven key actions and ways were identified and compiled by the Asian Disaster Preparedness Center to maximize access to climate finance in Nepal.

- 1. Define Key Climate Change and Finance Terminologies in the Nepal Context:** Climate finance terminology should extend beyond the 11 criteria outlined in Nepal's Climate Change Budget Code Guideline (2012). By identifying and contextualizing key priority elements, including those related to loss and damage, global terms can be more appropriately translated into the Nepalese context.

2. **Establish a Climate-related Data Repository at the National Level:** Climate-related data includes information on temperature, atmospheric conditions, precipitation, and seasonal weather trends. These data provide insights into long-term climate patterns. Prepared by meteorologists and scientists, such data is often not easily accessible to the public. The lack of a regularly updated, science-based data set hampers the development of new programs and proposals that reflect evolving climate needs. Given the dynamic nature of climate change, a comprehensive climate database is necessary to inform science- and evidence-based proposals and programs. Enhancing access to existing databases or establishing a national system that is publicly accessible is essential.
3. **Policy Alignment between the Government of Nepal (GoN) and others' Priorities:** Incremental improvements are needed to bridge gaps between the policies of bilateral and multilateral agencies and GoN's priorities and plans. Policy alignment between the development partners' documents and GoN strategies was emphasized. Continuation of high-level meetings such as the Inter-Ministerial Committee on Climate Change (IMCCC) was suggested to reinforce alignment efforts. A fast-track government mechanism to evaluate, implement, and track climate grants, alongside providing technical assistance, could enhance coherence. These recommendations are consistent with Nepal's International Development Policy (2019), which calls for transparency, alignment with national interests, and integration into the national budget (MoF, 2019).
4. **Increase and Encourage Private Sector Engagement to Address Climate Change:** Operationalizing existing policy provisions to attract private sector investment in climate initiatives and strengthening these frameworks can help shift Nepal towards low-carbon pathways. The private sector should be further engaged through policies promoting their participation in decision-making and capacity building. Guidelines similar to the Environment, Social, and Risk Management (ESRM) Guidelines (Nepal Rastra Bank, 2018) could be developed to reduce climate risks and facilitate access to concessional loans and climate bonds. A common platform and institutional mechanism could be established to facilitate "matchmaking" opportunities through the GCF mechanism and concessional loans. Special efforts should be made to include Small and Micro Enterprises (SMEs) in climate finance discussions and decision-making processes.
5. **Address Institutional Barriers to Accessing Climate Finance:** Although Nepal's institutional mechanism to access GCF funding is operational, concerns persist over the lengthy and resource-intensive project development processes, which hinder access to climate finance for resilient development. There is a need to create bankable, credible, risk-proofed, and resilient projects attractive to private-sector financing. Although the MoF and NDA have

developed a pipeline of projects, it does not fully represent a comprehensive country-level project pipeline. Nepal's Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs) could be further unpacked to identify opportunities for private-sector engagement. Clarity on financial instruments and support for proposal development processes under UNFCCC mechanisms like the GCF is essential, including negotiating legal arrangements.

6. **Build Financial Capacities and Address Technical Needs:** Globally, the strategy is shifting from funding isolated green projects to greening entire economies and from focusing on inputs to emphasizing impacts, a shift Nepal must embrace. While Nepal has made satisfactory progress in preparing climate change policies, their implementation needs strengthening. Collaborations with UN agencies, bilateral and regional partners, and multilateral organizations could help assess Nepal's needs and build technical and capacity-building support. Existing fiduciary risks and limited human resources at the local level pose barriers to directly funding local governments on climate issues. Establishing or designating climate/environment units at local levels, with dedicated human resources, can help create an enabling environment for development partners to directly channel climate funds.
7. **Identify L&D as an Opportunity for Accessing Climate Finance:** The National Framework on Climate Change-Induced Loss and Damage (L&D) links climate adaptation and disaster risk management efforts. At COP27, countries agreed to establish a new fund under the UNFCCC to address L&D. Currently, the Green Climate Fund (GCF) is the only multilateral source providing limited funding for L&D. While COP27 marked a historic step toward L&D funding, more work is required to build a coherent framework and institutional arrangements. New, adequate, predictable, and accessible funding must reach climate-vulnerable countries like Nepal. Traditional financial instruments such as social protection schemes, contingency finance, catastrophe risk insurance, and catastrophe bonds could provide buffers and rapid payouts following disasters. A broadened donor base and innovative finance mechanisms, such as debt-for-loss-and-damage swaps, international taxes, and dedicated L&D finance facilities under the UNFCCC, are crucial for addressing the scale of L&D.

(Source: Accessing Climate Finance in Nepal: Issues and Options, Asian Disaster Preparedness Center- ADPC)

Process and Mechanism for Access to the Climate Funds

Nepal, being one of the countries most vulnerable to climate change, can access financial support for climate-induced loss and damage through two primary mechanisms:

- (a) The Green Climate Fund (GCF); and
- (b) The newly established Fund for Responding to Loss and Damage (FRLD) under the UNFCCC

1. National Designated Authority (NDA)

Nepal's Ministry of Finance (MoF) serves as the National Designated Authority (NDA) for the GCF. The International Economic Cooperation Coordination Division (IECCD) within the ministry acts as the primary contact point. The NDA is responsible for coordinating with the GCF and ensuring that funding proposals align with national climate priorities.

2. Accessing the Green Climate Fund (GCF)

While the GCF primarily focuses on adaptation and mitigation projects, it also supports activities that help avert and minimize loss and damage. However, direct compensation for loss and damage is not within its current mandate¹³⁴.

To access and engage with the GCF:

Accredited Entities: Nepal can work with accredited entities, either national or international, to develop and submit funding proposals.

Proposal Development: Projects should align with Nepal's climate strategies, such as the National Adaptation Plan (NAP) and Nationally Determined Contributions (NDCs).

Readiness Support: Nepal can utilize the GCF's Readiness and Preparatory Support Programme to build institutional capacity and develop project pipelines¹³⁵.

3. Engaging with the Fund for Responding to Loss and Damage (FRLD)

The FRLD was established at COP27 in 2022 and operationalized at COP28 in 2023 to specifically address loss and damage in developing countries. It aims to support countries in responding to both economic and non-economic impacts of climate change, including extreme weather events and slow-onset events like sea-level rise.

To access and engage with the FRLD:

Framework Participation: Nepal should actively participate in designing the funding framework to ensure it addresses national needs.

Capacity Building: Strengthening institutional capacity is crucial for effectively accessing and managing funds.

Evidence Collection: Gathering robust data on climate impacts will support funding applications and project justifications.

Project Design: Develop projects that focus on vulnerable communities and align with the FRLD's objectives.

¹³⁴ <https://legalresponse.org/legaladvice/compensation-for-loss-and-damage-under-the-gcf/>

¹³⁵ https://www.greenclimate.fund/publications/documents/?%5B0%5D=field_subtype%3A307&page=4&utm

Process to Access Climate Finance

Strengthen Institutional Frameworks: Enhance the capacity of national institutions to manage and coordinate climate finance.

Develop Comprehensive Proposals: Create well-structured project proposals that align with national climate strategies and the objectives of the GCF and FRLD.

Engage Stakeholders: Involve local communities, civil society, and the private sector in project development and implementation.

Monitor and Evaluate: Establish robust monitoring and evaluation mechanisms to track project outcomes and ensure transparency.

To submit a proposal or claim funding for GCF and FRLD, here's how to proceed:

1. Green Climate Fund (GCF)

The GCF supports projects aimed at climate change adaptation and mitigation, including efforts to avert and minimize loss and damage. However, it does not directly compensate for loss and damage. Submission Process:

Accredited Entities (AEs): Proposals must be submitted through AEs. Nepal can partner with either national or international AEs.

National Designated Authority (NDA): Nepal's Ministry of Finance serves as the NDA and must issue a "no-objection" letter for each proposal.

Proposal Submission: AEs submit proposals via the <https://www.greenclimate.fund/project-cycle>

Funding Proposal Template <https://www.greenclimate.fund/document/funding-proposal-template>

Funding Guideline Climate Fund Green Climate Fund
https://www.greenclimate.fund/document/funding-proposal-template?utm_source=chatgpt.com

2. Fund for responding to Loss and Damage (FRLD)

The FRLD was established to address loss and damage in developing countries. It is currently in the process of becoming fully operational.

Engagement Steps:

Stay Informed: Need to monitor updates for information on submission procedures as they become available at <https://unfccc.int/loss-and-damage-fund-joint-interim-secretariat>.

Capacity Building: Strengthen institutional frameworks to effectively manage and implement FRLD-funded projects.

Project Preparation: Develop projects that align with FRLD objectives, focusing on vulnerable communities and integrating robust data on climate impacts.

The Government of Nepal, through the Ministry of Finance (MoF), and the International Economic Cooperation Coordination Division (IECCD), has developed a *Green Climate Fund (GCF) Handbook* to guide stakeholders on how Nepal can access and apply to the GCF. As a party to the UNFCCC, Nepal is eligible to access GCF funding either directly through nationally accredited entities or indirectly through internationally accredited entities.

The Ministry of Finance has been nominated as Nepal's National Designated Authority (NDA) for GCF, with the IECCD acting as the contact point. The NDA ensures that all activities supported by GCF are in line with Nepal's strategic national climate policies and priorities. Given GCF's relatively new structure, the handbook was prepared to enhance national understanding of GCF processes and guide the NDA in facilitating effective engagement with the Fund.

Nepal has established a three-tier governance mechanism under the MoF to strengthen coordination and decision-making for GCF processes. This includes: (1) the Climate Finance Steering Committee (CFSC), chaired by the Finance Secretary, for policy and coordination; (2) the Technical Committee (TC), chaired by the Joint Secretary of IECCD, for technical support; and (3) the Interdivisional Climate Finance Unit, led by an Under Secretary, for operational functions.

Nepal and other developing countries can access GCF funds through accredited entities. GCF encourages direct access through national Direct Access Entities (DAEs), which must meet specific eligibility standards. The NDA will issue public calls for applications from interested institutions seeking accreditation as needed. Once accredited, these DAEs can submit funding proposals aligned with GCF's eight strategic result areas, six investment criteria, and Nepal's national priorities. The NDA is responsible for identifying and endorsing such proposals and may issue calls for project proposals from DAEs when necessary.

Priority Areas for Fund Allocation

Post-Disaster Recovery and Reconstruction: The fund should support the immediate and long-term recovery of communities affected by climate-induced disasters. This includes rebuilding homes, schools, health facilities, and critical infrastructure damaged by floods, landslides, droughts, and other extreme events. Special attention should be given to areas with repeated impacts and limited coping capacities.

Livelihood Restoration and Economic Resilience: Priority should be given to restoring and diversifying the livelihoods of communities that have lost their means of income due to climate events. This may involve support for agriculture, livestock, small enterprises, and skill development programs that build adaptive capacities and promote economic resilience.

Relocation and Resettlement of Displaced Populations: The fund should assist in the safe and dignified resettlement of populations displaced due to irreversible climate impacts. It should support site identification, infrastructure development, and the

provision of essential services in relocation areas, ensuring that the rights and cultures of displaced people are respected.

Rehabilitation of Public Services and Infrastructure: Public utilities and services such as water supply systems, sanitation facilities, electricity, health services, and education systems that are damaged or disrupted by climate-related events should be prioritized for rehabilitation through L&D funding.

Addressing Non-Economic Losses: The fund should recognize and support efforts to address non-economic losses, including the loss of cultural heritage, ecosystems, biodiversity, traditional knowledge, and spiritual values. Such losses, though intangible, have significant impacts on community identity and well-being.

Strengthening Early Warning and Risk Reduction Systems: Investments should be made in enhancing early warning systems, climate risk assessments, and disaster preparedness at the local level. This includes installing climate monitoring infrastructure, developing community-based early warning networks, and supporting education and awareness initiatives that build resilience.

Resource Mobilization Strategies

International Sources: Nepal should proactively engage with international mechanisms such as the UNFCCC Loss and Damage Fund, the Green Climate Fund (GCF), and other bilateral and multilateral donors, aligning national priorities with international funding criteria, and participating effectively in relevant negotiation and coordination forums.

National Sources: Domestic resource mobilization should leverage existing climate budget codes, disaster risk management funds, and emergency contingency allocations. Budgetary planning at federal, provincial, and local levels must incorporate climate-induced L&D as a key area of investment.

Innovative Finance Mechanisms: Nepal should explore and develop innovative financing instruments such as climate risk insurance, catastrophe bonds, and results-based financing. Public-private partnerships (PPPs), diaspora bonds, and green bonds can be structured to attract private-sector investments in L&D-related initiatives.

Co-financing and Blended Finance: Opportunities for co-financing with development partners and the private sector should be encouraged, especially in infrastructure recovery, livelihood restoration, and resilience-building activities. Blended finance approaches can help de-risk investments and leverage larger pools of capital.

Fund Access and Disbursement Mechanism

Eligibility and Proposal Submission: A transparent eligibility framework should prioritize high-risk, low-capacity communities and regions. Standardized, user-friendly proposal formats must be developed for applicants, with provisions for local governments and civil society to submit both emergency and long-term project proposals.

Two-Tiered Disbursement System

- **Fast-Track Window:** Designed for immediate post-disaster needs (Especially for Response), enabling quick access to funds for emergency relief and early recovery.
- **Standard Window:** A structured, competitive process for funding long-term and preventive L&D projects, subject to detailed appraisal and review.

Accreditation and Fund Flow: Funds should be disbursed through accredited national implementing entities (NIEs) and financial intermediaries that meet depositary, environmental, and social standards. A dedicated FRLD Management Unit should be established to coordinate fund flows and ensure compliance.

Monitoring and Compliance: Disbursement must be linked to performance indicators, milestones, and reporting obligations. Regular reviews, audits, and beneficiary feedback mechanisms should guide adjustments and improve fund effectiveness.

The International Economic Cooperation Coordination Division, under the Ministry of Finance (MoF), has developed a Green Climate Fund (GCF) Handbook for Nepal. https://www.undp.org/sites/g/files/zskgke326/files/migration/np/UNDP_NP-GCF-handbook-for-nepal.pdf

To have access to the guidebook for writing a green climate fund funding proposal:

<https://ndcpartnership.org/knowledge-portal/climate-toolbox/guidebook-writing-green-climate-fund-funding-proposal>

Sagarmatha Sambah: Agenda for Action

On the occasion of International Earth Day, (22 April 2025), Nepal-based Sath-Sathai, Women for Mountain Initiative, hosted a pre-event “Summiters’ Summit: A Dialogue for Climate Action” for the forthcoming Sagarmatha Sambah (Everest Dialogue), slated for May 16-18 May 2025, in Kathmandu. Among other dignitaries and climate campaigners, INHURED International’s representative, Ms. Shreejana Pokhrel, had the privilege to join the mission in a highland Thame village and engage with communities in the Everest region. Discussions with esteemed climbers, government officials, Sherpa families, village elders, and youth leaders highlighted the enduring impacts of the 2024 glacial lake outburst flood (GLOF). The widespread damage to alpine ecosystems and local infrastructure served as a stark reminder that, while climate change remains a focal point of international discourse, affected communities continue to grapple with its consequences with minimal support. This reality reinforces the urgent need for climate reparations—an approach rooted in justice through restitution, compensation, and accountability. As Nepal prepares to host the upcoming Sagarmatha Sambah, the forum presents a crucial opportunity to shift from dialogue to concrete action.



Image: Shreejana Pokhrel, 22 April 2025

The climate crisis is not merely an environmental challenge but an existential threat to cultures, economies, and livelihoods. Nepal, despite contributing minimally to global greenhouse gas emissions, faces disproportionate consequences such as glacial retreat, erratic weather patterns, and escalating natural disasters. This disparity reveals the core injustice of climate change. Climate reparations recognize the historical responsibility of certain nations and corporations in driving global warming, while communities in the Global South bear the most severe consequences. These reparations are not an act of charity but a matter of accountability, ensuring that those who have contributed most to climate degradation provide compensation to those disproportionately affected.

Sagarmatha Sambad holds a unique position in global climate discourse, offering Nepal a moral platform to advocate for fairness, dignity, and equitable solutions. The forum aligns with broader objectives of solidarity, sustainable development, and justice by fostering partnerships between nations facing climate-induced hardships and those capable of providing redress. Nepal, as a country situated at



the world's highest peak and home to vital freshwater resources, can take a leadership role in urging the global community to commit to meaningful reparative actions.

Avoiding the discussion of reparations risks rendering climate discourse ineffective. Sagarmatha Sambad is the right forum to initiate this dialogue and emphasize the accountability of major polluters in mitigating past and ongoing environmental harm. To ensure that climate reparations become a central topic of global dialogue, the upcoming Sagarmatha Sambad must prioritize:

- **Acknowledgment of Loss and Damage:** Recognizing the irreversible impacts that adaptation alone cannot address, including displacement, cultural erosion, and ecological disruption.
- **Financial Commitments:** Advocating for distinct climate reparations funds separate from traditional aid and development assistance.
- **Inclusion of Vulnerable Voices:** Ensuring representation of indigenous communities, least developed countries, and small island developing states in decision-making processes.
- **Legal Frameworks:** Exploring international legal mechanisms that uphold reparations under human rights, environmental law, and principles of global equity.

Historically, Nepal has suffered quietly in the form of slow-onset catastrophes from climate change. The melting glaciers of the Hindu Kush Himalayas and shifting river courses serve as a reminder that the consequences of climate change are not abstract—they are real and urgent. Now, it must elevate its voice to demand justice. Advocating for climate reparations through Sagarmatha Sambad allows Nepal to shape the international discourse, underscoring that genuine sustainability requires redress for past injustices and tangible commitments for future resilience. Nepal has consistently championed climate justice, particularly through its advocacy at the UNFCCC and recent COP summits, pushing for mechanisms to address irreversible damages suffered by vulnerable communities. By prioritizing climate reparations at Sagarmatha Sambad, Nepal can reinforce its commitment to those most affected and propel the global conversation toward concrete policy measures rather than abstract commitments.

Nepal must speak from this lived experience and amplify the voices of those without global platforms. Justice, solidarity, and reparations should form the foundation of climate action, and Sagarmatha Sambad must provide the momentum to transform discussions into lasting commitments¹³⁶.

¹³⁶ Excerpt from: Climate Reparation: A Call for Sagarmatha Sambad, Shreejana Pokhrel Siwakoti, myrepublica.nagariknetwork.com/index.php/news/climate-reparations-call-for-sagarmatha-sambad-88-83.html

6. REMEDIAL ROADMAP



Image: Stephen Naasei Boadi, December 2024

The following are the categorical recommendations directed to diverse actors responsible for advancing the climate action agenda in general, and securing climate justice in particular, in the realm of L&D.

International Climate Community

- Recognize historical responsibility with the fact that developed nations bear a significant responsibility due to their historical greenhouse gas emissions, which have disproportionately contributed to climate change.
- Unconditionally embrace the ‘Polluter Pays Principle’ that those who contribute the most to climate change should bear the costs of addressing its impacts.
- Promote “FRLD launched at COP28 and institutionalized in COP29 to provide financial support to vulnerable nations experiencing climate-related losses.
- Embrace and honor the legal Frameworks and international legal mechanisms, including climate litigation, to be increasingly being used to hold states and corporations accountable for climate harm.
- To ensure equity and justice by emphasizing fairness, the international community must address structural inequalities and ensure that vulnerable populations receive adequate support.
- Provide technical and institutional support to developing nations to enhance their ability to manage and mitigate climate impacts through capacity building.
- Ensure that nations and corporations transparently report their emissions and contributions to L&D initiatives.

- Facilitate the transfer of climate-resilient technologies to developing countries to help them adapt and recover.
- Recognize climate change as a shared global challenge that requires collective action, cooperation, and global solidarity.
- Establishing robust systems to track the implementation of commitments and hold parties accountable for their obligations through effective monitoring and accountability mechanisms.¹³⁷

Conference of the Parties (Member States)

- Recognize that the main factor causing L&D is the adverse effects of climate change is insufficient mitigation measures.
- Acknowledge the findings of the most recent IPCC report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation, which featured proof that anthropogenic influences, such as increases in greenhouse gas concentrations in the atmosphere, had altered some extremes.
- Recognize that emissions from developed countries have historically caused and will continue to cause loss and hardship in poor countries that are more vulnerable to the negative effects of climate change.
- Understand that L&D can take the form of non-financial losses as well as financial ones, such as the devastation of values, cultural heritage, and ecosystems.
- Acknowledge that the L&D caused by the adverse effects of climate change is likely to jeopardize the right to sustainable development and erode the likelihood of long-term sustainable development.
- Acknowledge that the UNFCCC is the proper policy forum and that it ought to lead conversations about ways to assist developing countries, which are particularly susceptible to the adverse effects of climate change, in coping with L&D. This includes approaches for damage rehabilitation and compensation.
- Acknowledge further how important it is to address L&D in poor countries, which are more susceptible to the adverse effects of climate change, in a coherent and well-coordinated manner at both the international and local levels.¹³⁸

Political Actors and Home Governments

- Enact and adopt adequate domestic laws and policies, coordination between agencies, awareness building, readiness, and reaction to climate action.
- Create a supportive environment for research, analysis, and evaluation to guide laws and policy and ensure effective participation on a global scale and involvement of national and local players.
- Design a solid legal framework to ensure victims of human rights violations brought on by climate change secure justice in real life.
- Uphold the notion of the advancement of environmental democracy with more cognizance of environmental challenges and climate change policy responses.

¹³⁷ UNFCCC, *International Climate Community Commitments and Responsibilities in Addressing Loss and Damage* (2024)

¹³⁸ Conference of the Parties (COP), *Decisions on Loss and Damage and the Role of the UNFCCC* (UNFCCC, 2024)

- Advance a crucial role in pushing the environmental agenda and defending fundamental democratic tenets through inter-party competition during election campaigns and through their election manifestos.
- Work towards increasing public awareness of environmental issues and elevating them to a higher priority in countries where environmental concerns are not well-known or taken seriously.
- Design political/electoral manifestos to enshrine a commitment to adapt to climate change and reduce disaster risk, also by establishing a common understanding and practical strategy by all political forces around the L&D.
- Ensure accountability in protecting vulnerable populations, disaster displacement, and raising awareness among stakeholders about issues related to climate change, biodiversity conservation, and ecosystem balancing that directly affect their way of life.¹³⁹

Global Corporations and the Private Sector

- Act immediately to reduce L&D risks by leveraging current strategies and funding sources. Evidence shows that L&D is already occurring and will worsen with global warming, especially impacting disadvantaged groups in the global South, including LDCs and SIDS.
- Develop strategies and action plans to address L&D. International donors and financial institutions should follow the lead of Wallonia and Scotland to allocate funds for tangible actions and support vulnerable nations, especially LDCs and SIDS, in assessing risks and creating multisectoral strategies.
- Use a pragmatic approach to address the varied and interconnected risks faced by marginalized populations in the global South. This approach must consider the specific threats these groups face under different climate scenarios, their unique needs, values, and preferred solutions, drawn from their lived experiences.
- Prioritize the L&D risks of the most vulnerable groups since marginalized and impoverished populations in the global South face the greatest risks from climate change, including loss of culture, identity, and even lives. Despite contributing the least to global warming, they suffer the most and are often unable to adapt, experiencing non-economic damages that exacerbate poverty.
- Assess L&D risks thoroughly for marginalized groups. Support must align with their rights, needs, and priorities to address these risks effectively and respectfully.
- Acknowledge the multifaceted and dynamic nature of L&D risks. Climate change impacts people differently based on their unique circumstances and contexts. Mitigation measures must account for these variations and adapt to evolving risks over time and across locations.
- Help vulnerable nations and communities evaluate L&D risks using robust methodologies. New tools and regulations are needed to assess risks comprehensively, incorporating climate models, local data, and community insights.

¹³⁹ UNDP, *Governance for Climate Action: Understanding the Role of Political Institutions* (2023)

- Include data on vulnerabilities and exposure of marginalized groups in strategies. Existing methods often lack precision in assessing non-economic losses and residual risks, highlighting the need for improved assessments.
- Develop comprehensive strategies to address L&D. Since risks are diverse and dynamic, stakeholders at all levels should collaborate on layered action plans grounded in multidimensional assessments of L&D risks.
- Engage various stakeholders at local, national, and international levels to tackle L&D risks. Policies must integrate climate-resilient development plans, prioritize marginalized groups, and encourage whole-of-government and society approaches for effective action.

Civil Society and the Media

- Educate and enable voters to raise concern over a minimum standard for election manifestos that properly respond to climate and nature emergencies, are embedded in democracy and fairness, and include showing leadership on existing international commitments.
- Become vigilant that political parties incorporate the electoral agenda containing clean, green home-grown energy, reduction of carbon emissions from transport, and ensure a healthy environment for all.
- Launch a campaign to ensure that political parties and candidates argue for cheaper, better public transport to create safer, quieter streets, cleaner air, and wider job opportunities, especially for young people.
- Initiate a major monitoring program to support and ensure clean industries and force polluting businesses and other private sectors to mandatorily align with climate and nature goals in conformity with the SDGs.
- Lobby for the introduction of a new human right to a clean, healthy, and sustainable environment to effectively tackle environmental pollution, protect nature, and uphold standards.
- Spearheaded a “Climate Voters” campaign to promote a climate pledge for contesting parties and candidates and rank them with public report cards following their commitment and words into action.
- Induct systematic advocacy to spark a race to the top where the major parties strive to be the best in climate action, with an aspiration to send a record number of MPs with stronger climate policies into the parliament.¹⁴⁰

¹⁴⁰ Climate Action Network, *The Role of Civil Society in Climate Governance* (2023)

7. APPLICABLE ANNEXURE

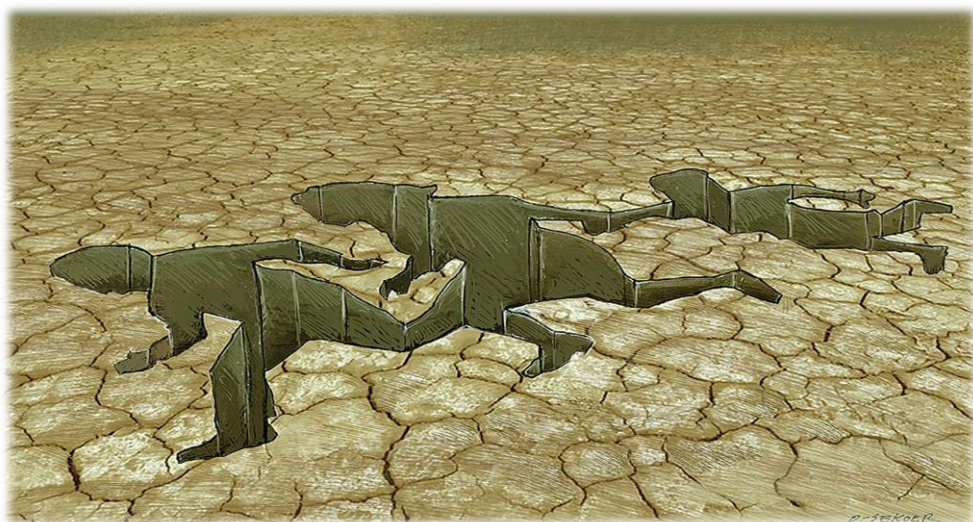


Image: Aneddotica Magazine

1. Legal Obligations under UNFCCC

The following are the legal obligations under the UNFCCC that have been referenced in this report:

Article 3.1: “The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.”

Article 3.2: "The specific needs and special circumstances of developing country Parties, in particular those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, in particular developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration."

Article 3.3: “The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects.”

Article 3.4: “The Parties have a right to, and should, promote sustainable development. Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change.”

Article 4.1: "All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall:

(b) Formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change..... [and] facilitate adequate adaptation to climate change;

e) Cooperate in preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas, particularly in Africa, affected by drought and desertification, as well as floods”.

Article 4.3: “The developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1”. “The implementation of these commitments shall take into account the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among the developed country Parties.”

Article 4.4: "The developed country Parties and other developed Parties included in Annex II shall also assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects."

Article 4.5: "The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties. Other Parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies.”

Article 4.7: "The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties.”

Article 4.8: "In the implementation of the commitments in this Article, the Parties shall give full consideration to what actions are necessary under the Convention, including actions related to funding, insurance and the transfer of technology, to

meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and/or the impact of the implementation of response measures, especially on:

- a) Small island nations
- b) Low-lying coastal regions
- c) Arid and semi-arid regions; forested regions; and regions susceptible to forest decay
- d) Regions vulnerable to natural disasters
- e) Regions vulnerable to drought and desertification
- f) Regions with high urban atmospheric pollution
- g) Regions with fragile ecosystems, including mountainous ecosystems; and (i) nations in transit and landlocked nations.

2. COP28: Key Consensus and Takeaways

Climate Finance: At COP28, Parties continued discussions on setting a New Collective Quantified Goal (NCQG) on climate finance, which would expand on the developed Parties' aim of mobilizing USD 100 billion annually by 2020. While a number of Parties claim that the USD 100 billion per year target has not yet been met, an agreement was reached to advance the development of a draft negotiating text for consideration by the Parties at COP29, including at least three technical expert dialogues in 2024 to allow for in-depth technical discussions on the elements of the NCQG.

Numerous initiatives were undertaken to advance climate finance outside of the negotiation rooms. The key announcements were:

- Thirteen national governments endorsed the UAE Leaders' Declaration on a Global Climate Finance Framework which includes 10 Articles on the four themes of making finance available: accessible, and affordable, collective action, opportunity for all, and delivering at scale.
- The UAE, with launch partners BlackRock, Brookfield, and TPG, announced the launch of ALTÉRRRA, an investment platform that aims to facilitate private capital towards climate investments, focusing on emerging markets and developing economies.
- The Australian Government announced that it will provide \$100 million to the Pacific Resilience Facility, which will provide grants for climate adaptation, disaster preparedness, and nature-based solutions. It also announced that it will both rejoin and contribute \$50 million to the Green Climate Fund (GCF). The Department of Climate Change, Energy, the Environment and Water (DCCEEW) has stated that by rejoining the GCF, Australia will be better positioned to advocate for funding to meet the needs of the Pacific.¹⁴¹

Global Stocktake (GST): In light of an abandonment of fossil fuels and a dedication to the energy shift, Parties adopted a decision on the GST in the last hours of the

¹⁴¹ Australian Government, *Australia's Re-engagement with the Green Climate Fund and Support for the Pacific Resilience Facility* (Department of Climate Change, Energy, the Environment and Water, 2023)

conference, after extensive debate over draft texts. The GST resolution was the conference's main decision. It covers nearly every topic that was negotiated and will influence how nations establish their next NDCs in 2025. Further, it encapsulates the political outputs from the technical assessment conducted earlier this year regarding the Parties' progress concerning their NDCs.

The announcement of the decision was welcomed by many Parties and dubbed "historic" by the COP28 Presidency, the US, Germany, Denmark, and others. To reach net zero by 2050, the language of the GST showed a commitment to a fair and just transition away from fossil fuels in energy systems. It also exhorts Parties to include aggressive, economy-wide emission reduction objectives in their next NDCs.

On the contrary, several states, including the Alliance of Small Island States (AOSIS), expressed dismay that the text was not stronger, noting that "the course correction that is needed has not been secured" and expressing concern about the lack of commitment to "phasing out" fossil fuels. As AOSIS was absent from the plenary room when the GST decision was made, their statement in the text will be attached to the final decision.

Collective Progress: The final GST decision acknowledges that significant collective progress towards the Paris Agreement temperature goal has been made. However, it highlights the concerns contained in the latest synthesis report on NDCs; that implementation of current national targets is not aligned with the emissions reductions needed to achieve this goal. Accordingly, the GST Decision prompts swift action and support to "keep the 1.5 °C goal within reach" and to address the climate catastrophe this decade. It expresses "serious concern" that 2023 is expected to be the warmest year on record and that repercussions from climate change are accelerating rapidly.¹⁴²

Implementation and adaptation: The decision highlights once more, with "alarm and serious concern," the conclusions of the most recent assessment report from the IPCC, which indicate that there are "significant adaptation gaps" that would only widen under the current course of action. The decision notes that the Parties have resolved to promptly address the "implementation gap" that exists between the current NDC commitments and policy implementation.

Capacity building: There is still a capacity gap between wealthy and developing nations, notwithstanding advancements in the Parties' ability to adapt to climate change and implement mitigation measures. In addition to asking the Financial Mechanism and Adaptation Fund to give poor nations more assistance with capacity building, the text asks the Paris Committee on Capacity Building to list current initiatives for improving capacity building in developing nations.

L&D: The decision notes the need for enhanced action on L&D, including through the Warsaw International Mechanism. A significant gap remains in how L&D is addressed as the scale and frequency increase. So, by 2027, early warning systems for extreme weather and climate change must be operational around the world.

¹⁴² UNFCCC, *Decision -/CMA.5: Outcome of the first global stocktake* (Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, 5th session, 2023)

Finance: The main takeaway from the discussions on finance was that there is a significant funding gap and that flows of financing that are aligned with climate goals need to be increased and made easier to access. The GST ruling expresses concern over the growing gap in adaptation financing and the continued inadequacy of technology transfer, climate finance, and capacity building for adaptation in response to the escalating effects of climate change on developing country Parties. The ruling demands that access to climate finance be made easier and that its scope and efficacy be maintained. This includes the provision of grants and other extremely favorable types of funding.¹⁴³

It also emphasizes the role of governments, central banks, commercial banks, institutional investors, and other financial actors in improving the assessment and management of climate-related financial risks, ensuring or enhancing access to climate finance in all geographical regions/sectors, and accelerating the ongoing establishment of new and innovative sources of finance, such as taxation for implementing climate action. These measures enable the scaling down of harmful incentives.

Energy transition and treatment of fossil fuels: The most contentious portion of the proposed GST texts was the wording regarding the transition from fossil fuels, specifically whether to include language advocating for a "phase out" or "down" of fossil fuels. All Parties expressed discontent with the draft texts when they were released earlier in the week, but high-ambition nations expressed their displeasure in particular because they felt the texts did not match the 1.5°C temperature objective outlined in the Paris Agreement and rather, used ambiguous wording regarding fossil fuels. "Deep, rapid, and sustained reductions in greenhouse gas emissions in line with 1.5°C pathways" are acknowledged in the conclusion. It asks Parties to make domestically defined contributions to a variety of international initiatives while keeping in mind the Paris Agreement and their unique national situations, paths, and strategies. Some of these initiatives are:

- Tripling renewable energy capacity globally and doubling the global average annual rate of energy efficiency improvements by 2030.
- Accelerating efforts towards the phase-down of unabated coal power.
- Transitioning away from fossil fuels in energy systems, in a just, orderly, and equitable manner
- Accelerating action in this critical decade, to achieve net zero by 2050 in keeping with science.
- Advancing low-emission technologies, including renewable, nuclear, abatement, and removal technologies particularly in hard-to-abate sectors. For instance, carbon capture and utilization.
- Accelerating and substantially reducing non-carbon-dioxide emissions (like methane) globally by 2030.
- Phasing out inefficient fossil fuel subsidies that do not address energy poverty as soon as possible.¹⁴⁴

¹⁴³ UNFCCC, *Decision -/CMA.5: Outcome of the first global stocktake* (Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, 5th session, 2023)

¹⁴⁴ UNFCCC, *Decision -/CMA.5: Outcome of the first global stocktake* (Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, 5th session, 2023)

One of the conference's first and most important decisions was the Parties' agreement to operationalize the FRLD. The UNDRR and the UNOPS have decided to host the Santiago Network on L&D as a dedicated Secretariat.

Climate adaptation: The Parties decided on a framework for the GGA, which will direct international efforts at adaptation and improve assistance for developing nations' adaptation needs. Four 2030 targets related to risk assessments, planning, implementation, monitoring, and learning about climate change are included in the framework. The framework also includes other aims, such as reducing water scarcity caused by climate change and improving climate resilience to water-related hazards.

Article 6 markets: Parties were unable to agree on texts to advance markets following Articles 6.2 and 6.4 of the Paris Agreement, which was a disappointing result. However, several agreements under Article 6.2 were signed off-camera during the conference and Parties may still engage in bilateral cooperation under Article 6.2. It is important to note though that there is still some degree of uncertainty regarding reporting, transparency, and authorization procedures. It will take at least another year for the crediting system to operationalize due to the lack of consensus on methodology under Article 6.4. Aside from negotiations, COP28 witnessed the endorsement of carbon markets by political and business figures as a crucial means of financing climate change. Additionally, voluntary standards announced cooperation to strengthen transparency and accountability in the voluntary market. These initiatives should serve to stabilize the voluntary carbon market, which has experienced significant volatility in the past year.

3. COP28-Key Themes for Consideration

In addition to discussing the state of fossil fuels today and in the future, the GST decision includes important language relating to critical themes throughout the conference:

Science: There are multiple references in the decision to the findings of the IPCC's sixth Assessment Report which are significant. The IPCC's conclusion that human activity has "unequivocally" caused global warming of about 1.1 °C is noted with "alarm and serious concern" in the decision. It also states that the effects of the climate are already being felt in every region of the world and are disproportionately affecting those who have contributed the least to these impacts. The decision takes into account the IPCC's conclusion that, with the right assistance and collaboration in terms of technology, there are currently feasible and efficient mitigation solutions available in every sector to keep 1.5 °C within reach.¹⁴⁵

Equity: The importance of equity between Parties, as well as the principle of common but differentiated responsibilities and respective capacities, were reiterated frequently throughout discussions on the GST, and the final decision text.

Nature: Throughout the conference, a recurring theme was the vital connections between preserving biodiversity and attaining emission reductions. This is evident in

¹⁴⁵ Intergovernmental Panel on Climate Change (IPCC), *Sixth Assessment Report* (2021)

the decision text, which highlights the significance of maintaining the integrity of all ecosystems and the preservation of biodiversity in addition to stressing the need of conserving, protecting, and restoring nature and ecosystems to meet the temperature target set by the Paris Agreement. The final wording also contained a reference to increased efforts to stop and reverse deforestation and forest degradation by 2030.

Technology and AI: The GST decision highlights the fundamental role that innovation, endogenous technologies, and technological development and transfer play in enabling quick adaptation and mitigation measures. Interestingly, the decision brought attention to the Technology Mechanism Initiative on Artificial Intelligence for Climate Action, which investigates how AI might help with mitigation and adaptation to climate change.

Outside of COP28 negotiations, the AI Innovation Grand Challenge was introduced to create AI-based solutions for climate action in developing nations, with an emphasis on SIDS. The Parties' commitment to creating a "technology implementation programme" to bolster support for the implementation of technology priorities recognized by developing nations is also documented in the GST resolution.¹⁴⁶

International cooperation: The final ruling emphasizes how crucial it is for Parties to continue working together and how crucial it is to frame their activities in the framework of accomplishing the Sustainable Development Goals.

What does the decision entail for the second GST and next round of NDCs?

By March 1st, parties are asked to provide their insights on the lessons learned from the first GST. The Secretariat will then compile this material into a synthesis report. Then, the decision of the GST will need to be taken into consideration when the Parties submit their next round of NDCs in 2025.

It is unclear how much the findings of the GST will encourage Parties to aim higher when they do so but to improve action and maintain the 1.5°C goal, the Parties have decided to develop a "Road Map to Mission 1.5°C". This seeks to strengthen global cooperation and drive ambition in the next cycle of NDCs. Based on lessons learned during the first GST, the subsidiary bodies will review methods for improving the logistical and procedural aspects of subsequent GST processes the following year.

Looking ahead, the eighth COP serving as the meeting of the Parties to the Paris Agreement (CMA) in 2026 will see the start of information gathering and review for the second GST, with outputs to be taken into consideration at the CMA's tenth meeting in 2028.¹⁴⁷

¹⁴⁶ AI Innovation Grand Challenge," *COP28 Decision Document* (2025)

¹⁴⁷ Second GST and NDC Review," *COP28 Decision Document* (2025)



Image: BBC, 24 November 2024

4. Advisory Opinion Procedure Followed by International Court of Justice

I. The request for an advisory opinion

Advisory proceedings start with the filing of a request for an advisory opinion by anybody authorized by or following the Charter of the United Nations to make such a request (Statute, Article 65, paragraph 1).

On receiving that request, the Registrar of the Court (hereinafter the “Registrar”), following Article 66, paragraph 1, of the Statute, gives notice of it, by letter, to all States entitled to appear before the Court (which includes all United Nations Member States- *see Statute, Article 35, paragraph 1*).

The request for an advisory opinion is accompanied by all documents likely to throw light upon the question (Statute, Article 65, paragraph 2; Rules, Article 104). In practice, the author of the request communicates to the Court, sometime after the submission of the request itself, a “dossier” containing all the documents it considers relevant. On receiving those documents, the Registrar sends a letter to all interested parties informing them of this fact. The “dossier” is then posted on the Court’s website.

II. States and international organizations likely to be able to furnish information on the questions posed Article 66, paragraph 2, of the Statute provides that the Registrar notify any State entitled to appear before the Court or international organization considered by the Court, or by the President if the Court is not sitting, as likely to be able to furnish information on the question, that the Court will be prepared to receive written statements, within a time-limit to be fixed by the President, or to hear, at a public sitting to be held for the purpose, oral statements relating to the question.

A. Order of the Court

In practice, in the days following the receipt of the request for an advisory opinion, the Court (or the President if the Court is not sitting) adopts an order setting out which States and/or organizations are likely to be able to furnish information on the question or questions put to the Court (Statute, Article 66, paragraph 2). The time limits within which that information should be communicated are also fixed (*ibid.*).

B. States and/or international organizations other than those referred to in the Court's order States and/or international organizations other than those referred to in the order may consider that they too are in a position to furnish information to the Court and may wish to take part in the proceedings.

In that event, should a State entitled to appear before the Court or an international organization express a desire to submit a written statement or to be heard, it must send a letter to the Registrar (either by mail or by email to secretariatgreffier@icj-cij.org). Its request will then be transmitted to the Court, which will consider it and decide (Statute, Article 66, paragraph 3). The Court will grant the request if it considers that the State or organization in question is "likely to be able to furnish information on the question" submitted to it.

The State or organization making the request will be duly informed of the Court's decision. If the request is granted, the Court will also notify the author of the request for an advisory opinion, all States entitled to appear before the Court, and any other organization whose participation in the proceedings the Court may have already authorized.

III. Requests to participate from non-governmental organizations

A non-governmental organization may, on its own initiative, submit a written statement and/or document in an advisory opinion case. Practice Direction XII reads as follows:

1. Where an international non-governmental organization submits a written statement and/or document in an advisory opinion case on its initiative, such statement and/or document is not to be considered as part of the case file.
2. Such statements and/or documents shall be treated as publications readily available and may accordingly be referred to by States and intergovernmental organizations presenting written and oral statements in the case in the same manner as publications in the public domain.
3. Written statements and/or documents submitted by international nongovernmental organizations will be placed in a designated location in the Peace Palace. All States as well as intergovernmental organizations presenting written or oral statements under Article 66 of the Statute will be informed as to the location where statements and/or documents submitted by international non-governmental organizations may be consulted."

IV. Communication of information to the Court

In an advisory opinion case, States and international organizations considered likely to be able to furnish information to the Court are invited to submit written statements and, in some cases, written comments on those written statements.

A. Procedure for written statements

1. Filing of written statements

An original copy of the written statement containing the handwritten signature of a duly authorized official must be filed in the Registry in person. It is for the government of the State concerned to determine the official empowered to this effect (for example, the Minister for Foreign Affairs, the Legal Adviser of the Ministry of Foreign Affairs, or another duly authorized official). Before filing, each submitting State or organization must contact the Office of the Registrar (by email to secretariatgreffier@icj-cij.org or by calling +31 70 302 2353) to set up an appointment for this purpose.

Submitting States and organizations are asked to provide the Registry with 30 paper copies of their statement so that it may be immediately communicated to the judges and the various departments and divisions of the Registry. These copies do not need to be signed.

They are also asked to submit the document in electronic format (one USB drive containing the Word version and the PDF version of the statement; if annexes are only available in PDF format, they should be provided as such). The 30 paper copies and the USB drive must be filed at the same time and before the expiration of the time limit fixed by the Court. All statements must be drafted in either English or French (the two official languages of the Court under Article 39, paragraph 1, of the Statute). Statements submitted in both languages are greatly appreciated.

2. Transmission of written statements

(a) To States and organizations having submitted a written statement

Once the time limit for the filing of written statements has expired, the Registry provides the States and organizations that have submitted written statements with a list of the other submitting States and organizations. Shortly thereafter, a complete set of written statements is transmitted to them (Rules, Article 105).

(b) To States and organizations that have not submitted a written statement

States and organizations that have not presented written statements are, for their part, simply provided with a list of submitting States and organizations. The written statements are not communicated to them at this stage.

B. Procedure for written comments

In certain cases, the Court may authorize the filing of written comments in which the States or organizations having submitted written statements may comment on the statements made by other States and organizations (Statute, Article 66, paragraph 4).

1. Filing of written comments: Only States and organizations having filed a written statement may submit written comments (Statute, Article 66, paragraph 4). Any such comments must be filed in the Registry in the same way as written statements (see previous section).

2. Transmission of written comments to States and organizations having taken part in the written proceedings. Written comments are communicated to submitting States and organizations in the same way as written statements.

C. Transmission of written statements and comments to States and organizations that have not taken part in the written proceedings. Some days after their filing, written comments are communicated, with a complete set of written statements, to States and organizations considered likely to be able to furnish information that have not taken part in the written proceedings.

It should be noted that, for the entire duration of the written proceedings, statements and comments must be treated as confidential documents. Under Article 106 of the Rules, the Court, or the President if the Court is not sitting, may decide that the written statements and annexed documents will be made accessible to the public on or after the opening of the oral proceedings. (If the request for an advisory opinion relates to a legal question pending between two or more States, the views of those States will first be ascertained.)

V. Oral proceedings

If the Court considers that hearings should be held on the question put to it for an advisory opinion, all States and organizations previously considered by the Court as likely to be able to furnish information will be informed of those hearings (Statute, Article 66, paragraph 2; Rules, Article 105, paragraph 2 (b)).

A State or organization that has not taken part in the written proceedings (i.e. that did not submit either a written statement or written comments) may take part in the oral proceedings. The Registry sends an email to each State or organization deemed likely to be able to furnish information to ask whether it wishes to make an oral statement. The Court then organizes the schedule of the hearings, considering, in particular, the number of States and organizations that have expressed a wish to be heard. The practical arrangements for the hearings are then communicated to the interested parties in due course. The hearings are open to the public unless the Court decides otherwise.

VI. The Court's opinion Once the written and, where necessary, oral proceedings have concluded, the Court retires to begin its deliberation. It then delivers its opinion in open court (Statute, Article 67; Rules, Article 107). Notice is given to the Secretary-General and the representatives of Members of the United Nations, of other States, and of international organizations immediately concerned (Statute, Article 67; Rules, Article 108).

While advisory proceedings are not a solution to climate change, they are an important piece of a larger puzzle. They can help reframe the annual negotiations under the UNFCCC and the Paris Agreement in terms of what is legally required, rather than what is politically expedient.

5. Legally Binding Obligations of States

One of the most remarkable developments in the history of international law is the leadership of small island States in addressing the obligations of States concerning climate change. This has taken the form of two complementary requests for advisory opinions from the International Tribunal for the Law of the Sea (ITLOS) in December 2022 and the ICJ in March 2023.¹⁴⁸

These unprecedented initiatives were born out of long-standing frustration with the lack of progress on climate change mitigation, adaptation, and L&D under the 1992 UN Framework Convention on Climate Change (UNFCCC) and the 2015 Paris Agreement. Small island States are the canary in the coal mine. They face existential threats from rising sea levels and extreme weather events, and some could become uninhabitable or simply disappear under the waves in the near future. In recent times, they have become aware that many of their demands are already part of international law, including the general obligation of major polluters to prevent transboundary harm. While advisory proceedings are not a solution to climate change, they are an important piece of a larger puzzle. They can help reframe the annual negotiations under the UNFCCC and the Paris Agreement in terms of what is legally required, rather than what is politically expedient.¹⁴⁹

One of the protagonists of this campaign is the Commission of Small Island States on Climate Change and International Law (COSIS). It was established on 31 October 2021 at the 26th session of the COP 26 to the UNFCCC in Glasgow by Antigua and Barbuda and Tuvalu. Palau, Niue, Vanuatu, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, and The Bahamas have since become members of COSIS. The COSIS Agreement authorizes the Commission to request an advisory opinion from ITLOS on legal questions within the scope of the 1982 UN Convention on the Law of the Sea (UNCLOS) – also known as “the Constitution of the Oceans.” The questions COSIS submitted to ITLOS on 12 December 2022 concern States’ obligations under UNCLOS to protect and preserve the marine environment from the impacts of climate change and ocean acidification.¹⁵⁰

¹⁴⁸ Legally Binding Obligations of States in Respect of Climate Change," *International Tribunal for the Law of the Sea (ITLOS)*, (2023)

¹⁴⁹ Small Island States’ Leadership on Climate Change Obligations," *International Tribunal for the Law of the Sea (ITLOS)*, (2023)

¹⁵⁰ Commission of Small Island States on Climate Change and International Law (COSIS), "Establishment and Mandate of COSIS," *UNFCCC COP26*, (2021)

Around the same time, Vanuatu was spearheading the initiative for the UN General Assembly (UNGA) to adopt a resolution to request an advisory opinion on climate change from the ICJ. Unlike ITLOS which allowed for a request to be made pursuant to an international agreement, the ICJ requires a resolution of a UN organ or specialized agency. Contrary to the skeptical view that small island States could not succeed in such an enormous undertaking, the UNGA adopted the resolution requesting an advisory opinion from the ICJ by consensus on 29 March 2023. The questions submitted to the ICJ are broader in scope than those before ITLOS – which is a specialized tribunal – and include additional dimensions of human rights, transboundary harm under general international environmental law, and state responsibility for breaches of international obligations.¹⁵¹

The relationship between the two requests is one of complementarity, as is evidenced by Vanuatu becoming a member of COSIS and by COSIS' participation in the ICJ proceedings. The wide participation in both proceedings is a further testament to their significance. An unprecedented number of 42 States and international organizations have made written submissions to ITLOS, and 91 States and international organizations participated in the ICJ proceedings. In addition, numerous non-governmental organizations (NGOs) have made submissions that, although not formally part of the case file, have been published on the ITLOS website.¹⁵²

The sequencing of the two proceedings is also significant. ITLOS was the first to speak on the matter when it delivered its unanimous advisory opinion on 21 May 2024. In doing so, the ITLOS opinion laid several important foundations that are likely to shape the ICJ's jurisprudence, consistent with its role in the harmonization of international law as the principal judicial organ of the UN.

It is noteworthy that while the ICJ has a wider mandate to address different dimensions of climate change, the ITLOS opinion on the protection of the marine environment addresses a fundamental aspect of the Earth's climate system. The ocean has absorbed a quarter of atmospheric carbon dioxide (CO₂) emissions and 93% of excess heat. As UNCLOS governs the protection of the marine environment from all sources of pollution, including land-based and atmospheric pollution, the questions answered by ITLOS are key to ensure, on the one hand, the effective protection of the ocean from climate impacts and, on the other hand, the preservation of the balancing functions of the ocean in the climate system. ITLOS' main findings can be summarized as follows: Greenhouse gas (GHG) emissions into the atmosphere constitute “pollution of the marine environment” according to UNCLOS. This triggers a range of substantive and procedural obligations set out in UNCLOS Part XII.

States have specific obligations under UNCLOS Article 194 to take all necessary measures to prevent, reduce, and control marine pollution from anthropogenic GHG

¹⁵¹ UN General Assembly, "Resolution Requesting Advisory Opinion on Climate Change from the International Court of Justice

¹⁵² International Tribunal for the Law of the Sea (ITLOS), "Submissions Made to ITLOS Regarding Climate Change and Marine Environment Protection,"

emissions. These measures should be determined *objectively*, informed, *inter alia*, by the best available science, relevant rules and standards contained in other treaties, and the temperature goal of 1.5°C. The obligation to take all necessary measures is one of due diligence and is stringent, given the serious risks of irreversible harm. The standard can be even more stringent in cases of transboundary pollution. Implementation of the obligation may vary according to States' capabilities and available resources.¹⁵³

States have an obligation under UNCLOS Article 192 to protect and preserve the marine environment. This obligation is of dual significance in that it requires mitigation as well as resilience-enhancing and adaptation measures, which may include measures to restore the marine environment. A particularly important takeaway from the ITLOS advisory opinion is that obligations under UNCLOS cannot be satisfied simply by complying with commitments under the Paris Agreement. While obligations under different regimes may complement and inform each other, the Tribunal stressed that these are separate agreements, with separate sets of obligations.

ITLOS' affirmation that the Paris Agreement does not supersede UNCLOS on matters of marine pollution from anthropogenic GHG emissions is all the more pertinent because States' voluntary commitments in their nationally determined contributions (NDCs) under the Paris Agreement and its ambition-raising mechanism are falling well short of what is required to meet the 1.5°C temperature goal by 2100 to avert catastrophic harm. With current efforts under existing NDCs, the world is on track to hit 2.8°C by the end of the century, as underlined by the 2023 Global Stocktake and the 2023 NDC Synthesis Report. The reason why going beyond the climate change regime is so important is that this model of global governance, based entirely on voluntary and non-enforceable commitments, has failed to make the necessary progress over the past thirty years.

ITLOS' clarification of the relationship between the climate change regime and UNCLOS is also important with an eye to the ICJ proceedings, where the relationships between various branches of international law and the UNFCCC and the Paris Agreement will be a central issue. While international negotiations under the UN climate regime are imperative to navigate the complexities of climate change, the ITLOS and ICJ advisory opinions could potentially shape this process by clarifying the existing legally binding obligations of major polluters to avert catastrophic harm caused by climate change and to make reparations for breaches of such obligations. One thing is clear: the Earth will not wait for humankind to take the necessary action. The challenge is to appreciate that international law must be informed by irrefutable scientific evidence and that compliance with legally binding obligations is not merely desirable, but a matter of our common survival. Put differently, the international law of climate change reflects the laws of the natural world, which the Earth will no doubt vigorously enforce.

¹⁵³ International Tribunal for the Law of the Sea (ITLOS), "Request for Advisory Opinion by the Commission of Small Island States on Climate Change and International Law," ITLOS Case No. 2022/1 (2023)

6. Members Nominated to the FRLD Board

Abdulla Ahmed Belala Al Harthi	United Arab Emirates	Asia-Pacific States	Didar Temenov (Kazakhstan)
Mohammad Ayoub	Saudi Arabia	Asia-Pacific States	Ali Tauqeer Sheikh (Pakistan)
Mark Dennis Y.C. Joven	Philippines	Asia-Pacific States	Gholamhossein Darzi (Iran)
Richard Sherman	South Africa	African States	Selam Kidane Ababe (Ethiopia)
Mohamed Nasr	Egypt	African States	Tosi Mpanu Mpanu (Democratic Republic of the Congo)
David Kaluba	Zambia	African States	Sumaya Zakiedeen Hamdan (Sudan)
Liliam Beatris Chagas de Moura	Brazil	Latin American and Caribbean States	Corina Lehmann (Argentina)
Elena Pereira	Honduras	Latin American and Caribbean States	Jaime Tramon (Chile)
Avinash Persaud	Barbados	Latin America and Caribbean States	Anthony Ferguson (Bahamas)
Adao Soares Barbosa	Timor Leste	The least developed countries	Maheshwar Dhakal (Nepal)
DjibrilIbila	Benin	The least developed countries	Madeleine Diouf Sarr (Senegal)

The recent Board meeting of the FRLD took place in April 2025 in Bridgetown, Barbados, launching an early start-up phase, the Barbados Implementation Modalities (BIM) for the period of 2025 and 2026.

BIM is the start-up phase of the Fund, an initial set of interventions for 2025 and 2026, with a total envelope of US\$ 250 million. This phase will support individual activities, projects, or programs in the range of US\$ 5–20 million. While the funding will primarily be in the form of grants, countries may also test blended models that combine grants with other financial instruments.



Image: Matthieu Ricard

Reference Text Highlights

- 1) Redress is compensation paid for economic harm, whether in the form of a monetary remedy (eg a voluntary payment, damages, restitution, or other monetary relief) or a conduct remedy with a restorative element (eg an exchange of a good or service, specific performance or rescission of a contract). Organization for Economic Cooperation and Development (OECD). 2007. Recommendation of the Council on Consumer Dispute Resolution and Redress. 12 July (2007)74.
- 2) University of Hawai's law professor Maxine Burkett adds an important contribution to thinking about redress and compensation in a recent article on climate reparations (see footnote 42 below for citation). According to Burkett, "reparation, broadly defined, describes programs that are justified by past harms and are also designed to assess and correct the harm and improve the lives of the victims into the future." She goes on to state that "the ability of reparations to express moral force is what makes reparations so compelling in the climate change context".
- 3) Parties are developed countries and countries undergoing the process of transition to a market economy, as defined in Annex-I to the UNFCCC. Annex II Parties are developed countries. Each group of countries has specific obligations defined by the Convention. Annex-I Parties have specific commitments related to emission reductions established under Article 4.2. On top of these commitments, Annex-II Parties have commitments related to finance and technology transfer as articulated in Articles 4.3, 4.4, and 4.5. More detail on the financial commitments of Annex II Parties is contained in a later section of the report.
- 4) "Superstorm Sandy caused as much as \$50 billion in economic damage, with about \$10 billion to \$20 billion of insured losses, more than double previous estimates." Gittelsohn J. 2012. Sandy estimate raised to as much as \$50 billion. Bloomberg.com. 1 November. <http://www.bloomberg.com/news/2012-11-01/sandy-damage-estimate-raised-to-as-much-as-50-billion.html>
- 5) Saleem ul Huq, Executive Director of the International Centre for Climate Change and Development. Comment made during the UNFCCC expert meeting on a range of approaches to address L&D associated with the adverse effects of climate change, including impacts related to extreme weather events and slow-onset events. Bangkok, Thailand. 27 August.
- 6) The UNFCCC background paper (UNFCCC, 2012) provides some introduction to the limits of insurability, both concerning slow-onset events and extreme events. "Traditional risk transfer approaches like loss-based insurance payouts may be unsuitable for longer-term foreseeable climate stressors like sea level rise and desertification.

- Two preconditions for insurability of disasters are the unpredictability of a specific event, which means that losses occur suddenly and cannot be foreseen; and the ability to spread risk over time, regions, and between individuals/entities.
- 7) Although human rights obligations are different for every state, virtually every State has ratified at least some treaties. For example, while the United States has not ratified some conventions—most famously it has not ratified the Convention on the Rights of the Child, which every other state in the world except Somalia has ratified—it has ratified other core treaties, such as the International Covenant on Civil and Political Rights.
 - 8) The UNFCCC background paper on a range of approaches (UNFCCC, 2012) notes that “The impacts of L&D related to climate-related stressors and longer-term climatological shifts can set back socio-economic development and reinforce cycles of poverty across the world. ... Some of these impacts will involve L&D to life, property, and other assets important for the sustainable development of those countries which need these resources most, including impacts that contribute to constraints on economic production and non-economic losses.”
 - 9) UNFCCC decision 1/CP.16: “Slow onset events are defined as including sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification.”
 - 10) The IPCC concluded in 2007 that “for the next two decades a warming of about 0.2°C per decade is projected for a range of SRES emissions scenarios”. IPCC. 2007. Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II, and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva, Switzerland: IPCC.
 - 11) The Barbados expert meeting concluded that more work is needed to identify non-economic L&D. Questions identified included: how to address the loss of livelihoods and cultural values; how to preserve the culture of relocated communities; how to “prepare with dignity”; what social protection measures must be developed and supported; what will happen to country sovereignty; how will the definition of economic zone change?
 - 12) Decision 1/CP.16 “Invites Parties to strengthen and, where necessary, establish regional centers and networks, in particular in developing countries, with support from developed country Parties and relevant organizations, as appropriate, and to facilitate and enhance national and regional

- adaptation actions, in a manner that is country-driven, encourages cooperation and coordination between regional stakeholders and improves the flow of information between the Convention process and national and regional activities.”
- 13) A high-yield debt instrument that is usually insurance-linked and meant to raise money. In case of a catastrophe such as a hurricane or earthquake.
<http://www.investopedia.com/terms/c/catastrophebond.asp#axzz2C70HGZo8>.
 - 14) The Sabin Center Climate Litigation Database: database, containing different pieces of climate litigation worldwide.
 - 15) Climate Liability News: updates on new climate litigation cases.
 - 16) Climate Change Laws of the World Database: database on climate litigation and climate laws/policies around the world.
 - 17) New Model Statute for Citizens to Challenge Governments Failing to Act on Climate Change (IBA 2020): rationales, precedents/authoritative decisions, and articles that would support climate litigation for the reduction of greenhouse gases.
 - 18) action4justice: Civil society platform that equips actors with tools to identify and exploit opportunities to take legal action in furtherance of social (and climate) justice.
 - 19) Research Handbook on Climate Change Litigation: comprehensive depiction of the various stages, opportunities, and challenges of climate change litigation at national and international levels from an innovative practice-oriented perspective, bringing together expert authors, experienced academics strategic planning specialists, and legal coordinators.
 - 20) Investigation of legal issues that emerge from the highly topical discourse on climate protection.
 - 21) Illuminating different legal perspectives from international law, European law, and national public and private law.
 - 22) Adaptation constraints: Factors that make it harder to plan and implement adaptation actions or that restrict options.
 - 23) Adaptation limit: The point at which an actor’s objectives (or system needs) cannot be secured from intolerable risks through adaptive actions.
 - 24) Hard adaptation limit: No adaptive actions are possible to avoid intolerable risks. Soft adaptation limit: Options are currently not available to avoid intolerable risks through adaptive action.
 - 25) Adaptation deficits: The lack of timely action and support. Extreme events refer to landslides, floods, debris flow, GLOFs, hailstones, and wildfires, along with droughts and heatwaves in the context of Nepal. Loss is considered as the negative impact that prohibits restoration or reparation. Damage is the negative

- impact that permits restoration or reparation.
- 26) Tangible cost: Tangible cost is the quantifiable cost that is associated with distinguishable assets. Damage to infrastructure and property, such as cars, livestock, crops, business interruptions, and costs for relocation, are some examples of tangible costs.
 - 27) Direct tangible cost: Direct tangible costs are considered those that occur as a direct result of the physical impact of the event on assets and property (e.g., cost per square foot of residential housing).
 - 28) Indirect tangible cost: Business interruption, relief efforts, lost tourism, relocation costs, disruption to transportation, and diminished living conditions are indirect tangible costs.
 - 29) Intangible cost: Intangible costs cannot be quantified or easily estimated because of the subjective nature of the variables involved. Putting a dollar value on environmental degradation can include several considerations and is complex. Physical injuries, social disruption, and challenges in post-disaster recovery are intangible.
 - 30) Direct intangible cost: Direct intangible costs occur as a result of the physical impact of the event on the subjective variables that are difficult to value monetarily. Examples: loss of life, productivity loss, the decline in employee morale, loss of brand value, or damage to brand equity.
 - 31) Indirect intangible cost: Indirect intangible costs are triggered by placing subjective value on a circumstance or event in an attempt to quantify the direct impacts. Social disruption, challenges in post-disaster recovery, and cultural impacts are some examples of indirect intangible costs.
 - 32) Risk mitigation costs: Risk mitigation costs signify the expenditure incurred to achieve a reduction in L&D when an extreme event is experienced. Common risk mitigation costs comprise funding for (1) administrative practices, (2) land-use preparation, (3) hazard reforms, (4) infrastructure, (5) prior communication of events, (6) emergency response and evacuation, (7) financial incentives, and (8) risk transfer (e.g., insurance). Slow-onset events refer to the events that take place over longer time frames (typically years to decades). Examples are sea-level rise, salinization, ocean acidification, coastal erosion, desertification, loss of biodiversity, and glacial retreat etc. (*Source: Doktycz, C., & Abkowitz, M., 2019*)

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He has represented at various UN forums relating to human rights, peace, transitional justice, and SDGs, including the General Assembly, Human Rights Council Sessions, and a series of UNHCR Consultations. He has been conferred several credits, including Summit Person of the Year 2008, Global Nonviolence Advocate 2010, along with National Peace Award 2010; Nominee of Real-Life Hero by UNHCR-2021; and many others. He has been conferred with the “Human Rights Hero Award-2022” and “National Peace and Human Rights Award-2024”.

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