

Navigating the Complexities of Climate Justice: The Loss and Damage Fund in Focus

Abstract:

Climate change has intensified the propensity of frequent and severe weather events and disasters, causing loss and damage to the lives and livelihoods of millions across the globe. However, least responsible for climate change, developing states are more vulnerable to the impacts of climate change. The Loss and Damage Fund established in the Conference of Parties (CoP27) by the member states of the United Nations Framework Convention on Climate Change (UNFCCC) marks a notable achievement for developing states because it provides support to developing states that require assistance in adjusting to the impacts of climate change and enhancing their ability to withstand challenges. This paper seeks to examine the Loss and Damage Fund within the broader framework of climate justice to explore its prospects and challenges in its appropriation to the needs of vulnerable states. This paper will employ a qualitative research approach to evaluate the operationalization of the Loss and Damage Fund and its intricacies in financial, and governance mechanisms.

Keywords: *climate change, the Conference of the Parties (COP), the Loss and Damage Fund, vulnerable nations, and the United Nations Framework Convention on Climate Change (UNFCCC).*

Introduction

Climate change has significant impact on the welfare of humankind and the fundamental equilibrium of Earth's ecosystems characterized by increased occurrence and severity of severe

weather events, including heat waves, droughts, and floods etc. The evidence shows that climate change has significantly impacted the human wellbeing directly as well as indirectly. Since 1970s anthropogenic climate change is estimated to have caused the loss of approximately about 150000 deaths annually in the past decade (Patz, 2005). Climate-induced hazards pose significant challenges for marginalized populations, communities, and nations worldwide. These hazards result in various losses and damages, including economic and non-economic consequences. This range of challenges includes sudden-onset extreme weather events and long-term climatic shifts, which may aggravate over time. Currently, the onus of addressing the adverse repercussions of climate change falls disproportionately on countries directly affected rather than those primarily accountable for instigating climate change. The foundational principles of "common but differentiated responsibilities" and "distributive justice," enshrined within the United Nations Framework Convention on Climate Change (UNFCCC) of 1992, underscore the imperative for equitable global action (Cullet, 2021).

The landmark COP27 climate summit convened in Sharm el-Sheikh, Egypt, marked a pivotal juncture in international efforts to support vulnerable nations in coping with the losses and damages precipitated by climate change. Although there have been notable advancements, there is still an urgent requirement for improved worldwide cooperation to implement these measures properly. Although the creation of the Loss and Damage Fund, suggested during the 27th Conference of the Parties (COP27) in Egypt in 2022, has garnered interest, there remains an urgent requirement to enhance consensus on implementing these measures (Gabbatiss & Dunne, 2023). Unfortunately, there is inconsistency in addressing the pressing needs of countries grappling with climate-induced challenges. Various developed nations, including Austria, Belgium, Canada, Denmark, Ireland, New Zealand, and Scotland, have demonstrated admirable commitment by allocating financial resources to tackle the impacts of human-induced climate change (Alayza et al., 2022). Although the annual increase in financing from 2017 to 2020 has shown remarkable upward trend, it accounts only 7% of the total climate finance. There is an urgent requirement to enhance the allocation of funds for adaptation efforts in vulnerable nations (Buchner et al., 2021).

This paper examines the various opportunities and challenges of the Loss and Damage Fund to explore its capacity in addressing the needs of vulnerable nations to mitigate the impacts of climate change. Moreover this paper attempts to evaluate the Loss and Damage Fund and its intricacies in financial, technical, and governance mechanisms.

Research Methodology

This study adopts a qualitative research design using the framework of climate justice to evaluate the establishment of the Loss and Damage Fund, its prospects and challenges. The study uses a critical analysis approach to discern the strengths and weaknesses of the Fund across governance, technical, and financial dimensions. Gathering data for this study requires intentionally combining primary and secondary sources.

The study employs both primary and secondary sources in its analysis. The primary data was collected in the form of official documents from the official websites of International Organizations concerned with climate change policies and governance such as the United Nations Framework Convention on Climate Change (UNFCCC) and the Conference of the Parties (COP). These documents include official reports, policy directives, resolutions, and agreements. Secondary data includes rigorous scrutiny of academic literature, research papers, scholarly articles, and reputable academic journals that will supplement the primary data. This holistic approach ensures a comprehensive understanding of climate change dynamics, ramifications, and mitigation strategies.

In order to analyze the collected data, the study adopts the technique of content analysis to delve into the opportunities and challenges associated with the Loss and Damage Fund. This systematic examination of textual data aims to identify recurring themes, patterns, and discrepancies related to the Fund's establishment and operation. Themes and patterns unearthed through content analysis will undergo critical analysis to assess their implications for climate justice, equity, and international cooperation.

The Manifestations of Loss and Damage occur in Vulnerable Nations.

Severe meteorological events, such as cyclones, significantly impact residential structures, infrastructure, and agricultural resources, resulting in a wide range of economic and non-economic losses. The far-reaching consequences transcend material harm, encompassing loss of life, disruptions to livelihoods, and disruptions to societal structures, thus giving rise to profound socio-economic repercussions. Non-economic losses, particularly the degradation of cultural heritage and biodiversity and the detrimental effects on physical and mental well-being, exacerbate the multifaceted nature of disaster-stricken regions (Morrissey & Oliver-Smith, 2013).

In the Asian context, natural disasters constitute the predominant catalyst for large-scale internal displacements, eclipsing conflicts and violence in their frequency and magnitude. Pakistan, which is grappling with extensive flooding, saw a staggering 8 million people displaced in 2022, marking the most significant disaster-induced displacement globally. The Philippines and China trailed closely, with millions displaced by tropical storm Nalgae and other calamitous events. Moreover, India and Bangladesh also contend with substantial displacement crises attributable to climatic exigencies (McAuliffe & Oucho, 2024). The recurring inundation of flood-prone regions in Assam, India, underscores the persistent vulnerability to hydrological hazards, manifesting in substantial economic losses and human casualties. The perennial onslaught of floods, accompanied by landslides and thunderstorms, exacts a significant toll on lives and livelihoods, with an average of 114 fatalities annually recorded over the past decade. The Brahmaputra and its tributaries precipitate bank erosion, exacerbating the region's vulnerability and losing arable land and vital infrastructure (The Assam State Disaster Management Authority, 2022).

Climate change's detrimental effects on agricultural output further compound the pressing issue of mounting food insecurity in Sub-Saharan Africa. Concerns about the growing number of malnourished people and the severe lack of food in Ethiopia, Kenya, and Somalia make it clear

that coordinated efforts are needed to reduce humanitarian crises made worse by weather conditions (World Meteorological Organization, 2020). Pacific Island nations find themselves grappling with profound vulnerabilities to climate-induced calamities, wherein Tonga, the Solomon Islands, and Vanuatu stand out as some of the most susceptible regions on a global scale. Tropical cyclones, volcanic eruptions, and droughts are catalysts for a perpetual cycle of devastation, necessitating large populations' displacement and intensifying socio-economic inequalities. The economic disparity between the increasing expenses of loss and damage and the insufficient financial resources allocated to vulnerable developing nations underscores the pressing need to strengthen international assistance mechanisms (McAuliffe & Oucho, 2024). Tropical Cyclones Winston and Gita are prime examples of the profound impact inflicted upon vulnerable communities, resulting in extensive devastation of residential structures, infrastructure, and sustenance. The economic implications are significant, hindering access to education and economic prospects, especially for marginalized communities that rely on agriculture and fisheries for their livelihoods. Tonga, a nation heavily dependent on rural livelihoods, experienced significant food security and income generation disruptions. This highlights the urgent need for focused interventions to enhance resilience and reduce the adverse effects of recurring climatic challenges (ESCAP, 2020).

The uneven and disproportionate impact climate change upon marginalized communities in both the postcolonial Global South and minority groups in the affluent Global North stem from both historical legacies and geographic disparities, ultimately resulting into climate injustices. While hurricanes, floods, and wildfires have long plagued Southern regions, they increasingly encroach upon Northern territories amidst escalating global climate crises. This unequal burden manifests in rising death tolls, losses, displacements, and recovery expenses, particularly affecting frontline communities while as rich nations insulate themselves from catastrophic events as they have capability to address the issues of loss and damage at their own level. This phenomenon underscores the stark socio-spatial inequities exacerbated by colonial and racial injustices, which is described as "climate apartheid" (Elia, 2023). Scholars argue that affluent nations owe a climate debt to their post-colonial counterparts, given the historical

exploitation and contemporary ecological imbalances perpetuated by colonial powers (Telang, 2023). Climate change, framed as a form of gradual violence, further marginalizes impoverished communities in the Global South, compounded by systems of racial capitalism, colonialism, and neoliberal globalization—these historical injustices compound vulnerabilities, amplifying the impacts of climate disruptions. As experiences of climate injustices vary within and between communities, a nuanced, context-specific approach to climate justice is imperative. However, international negotiations are hindered by normative disagreements and the reluctance of wealthier nations to take full accountability for their historical and present contributions to global emissions.

Voice for Loss and Damage Fund: A Step towards Climate Justice

Since the Rio Earth Summit 1992, where the UNFCCC was embraced, and the principle of common but differentiated responsibilities and respective capabilities (CBDR + RC) was introduced, equity and justice have been pivotal concerns for Global South nations in climate negotiations (Cullet, 2021). Climate finance, a cornerstone of climate justice, remains a subject of ongoing debate regarding who should provide support, the required financial commitments, governance structures, and the nature of financial assistance. Despite these discussions, funding for adaptation has consistently fallen short of the expectations and needs of developing countries, leading to concerns that financing for Loss and Damage (L&D) will face similar challenges.

Climate justice broadly addresses the unequal impacts of climate change and rectifies resulting injustices fairly and equitably. It was born out of civil society organizations and social movements, mostly in the Global South. Its goal is to understand the causes and effects of climate change and promote socially fair solutions (Thiri et al., 2022). The emphasis on justice at the global level highlights how the Global North has contributed disproportionately to climate change, while the Global South has been burdened disproportionately with its share of the obligations. A climate justice framework at this level would support fair processes and responses to climate change, even if climate justice is not specifically stated in the UNFCCC text and is

only briefly discussed in the preamble of the Paris Agreement (Khan et al., 2020). It would be influenced by the developed world's historical role in creating the climate crisis, the continued unequal distribution of the costs and benefits of climate change, recognition of the various experiences and values of impacted communities, participation in decision-making processes, and initiatives to make amends for historical wrongs through restitution and restoration. We examine a range of standards for justice in climate finance systems as we examine the possibility that the L&D Fund will become a revolutionary force in climate finance that can further climate justice. In light of this, it is imperative to examine the fight for L&D by the global south in order to thoroughly examine the lessons discovered and difficulties faced in the field of adaptation financing.

For more than thirty years, the Loss and Damage Fund has played a crucial role in climate discussions. During the United Nations Framework Convention on Climate Change (UNFCCC) negotiations in 1991, Vanuatu, a member of the Alliance of Small Island States (AOSIS), first suggested the notion of "loss and damage" (Künzel et al., 2017). Under the direction of Vanuatu's ambassador, Robert Van Lierop, AOSIS suggested creating a global insurance pool and fund based on the polluter pays theory. This plan sought to use the insurance pool's resources to reimburse the most vulnerable small island nations and low-lying coastal developing countries for losses and damages brought on by sea level rise. It was submitted to the Intergovernmental Negotiating Committee, which the UN General Assembly (UNGA) established to negotiate the UNFCCC (Hurley, 2011). In spite of the developed world's initial opposition, AOSIS managed to have insurance included in Article 4.8 of the Convention, and the Kyoto Protocol's Article 3.14(1) eventually adopted language similar to this (Hyvarinen et al., n.d.).

In the Bali Action Plan, a COP resolution included the phrase "loss and damage" for the first time (UNFCCC, 2008, p. 4). It has since been often mentioned in COP resolutions and was prominently included into the 2013 mission of the Warsaw International Mechanism on Loss and Damage (WIM). Enhancing action and assistance, especially in finance, technology, and

capacity-building, to mitigate loss and damage due to the adverse consequences of climate change is one of WIM's duties, as stated in UNFCCC 2013, paragraph 5(c) (Johansson et al., 2022). Because it addressed rich countries' worries about possible culpability while advancing procedures to address climate consequences for poor nations, the flexibility of the "loss and damage" paradigm allowed for progress in discussions (Vanhala & Hestbaek, 2016). References to "recovery and rehabilitation" in WIM's first two-year work plan approved at COP20 in Lima (Wewerinke-Singh & Salili, 2020) and its five-year rolling work plan adopted at COP23 in Bonn (IISD, 2022) were particular successes for Vanuatu and other developing nations.

The loss and damage regime was further reinforced by the 2015 Paris Agreement. In order to embed the WIM inside the climate regime, Vanuatu and other developing nations, with backing from the Pacific Civil Society, pushed for a stand-alone article on loss and damage (Wewerinke-Singh & Doebbler, 2016). A strong legal basis for WIM was given by Article 8 of the Paris Agreement, which included directives to improve knowledge, response, and assistance in addressing loss and damage. Nevertheless, the lack of specific reference of the Convention's funding structure in Article 8 raises concerns over the Green Climate Fund's (GCF) ability to compensate for loss and damage (Paris Agreement, 2015). The insertion of paragraph 52—which declares that "Article 8 of the Agreement does not involve or provide a basis for any liability and compensation"—was prompted by developed nations' reluctance (UNFCCC, 2015). A compromise shaped by the concerns of developed nations, especially the United States, which initially sought to exclude any basis for liability and compensation from the climate change regime, is reflected in the history and implications of paragraph 52 (Calliari, 2018; Pekkarinen et al., 2019).

Only a small portion of the money needed by the G77 + China for loss and damage was covered by insurance at the Suva Expert Dialogue at the 48th session of the Subsidiary Bodies (SB48) in 2018. Typically outspoken nations, the Global North was remarkably silent and mostly abstained from the conversation. Australia, the United States, and Japan were required under the improved financial transparency framework to report on loss and damage later that year. The United States,

Australia, and the European Union (EU) only consented to a discussion on "arrangements for the funding of activities to avert, minimize, and address loss and damage" to be held during midyear meetings from 2022 to 2024 when the G77 + China proposed a "Glasgow Loss and Damage Facility" at COP26 in 2021 (Rowling, 2021). It ultimately paid off for the G77 + China to push for an agenda item on loss and damage after the first Glasgow Dialogue at SB56 in 2022. Under "matters relating to finance," the draft COP27 agenda included "matters related to funding arrangements to address loss and damage." Nonetheless, the US and other Global North nations tried to get rid of it in the days before COP27. Following discussions throughout the course of the night, the parties revised the agenda item to include "matters relating to funding arrangements responding to loss and damage associated with the adverse effects of climate change, including a focus on addressing loss and damage." "The outcomes of this agenda item are based on cooperation and facilitation and do not involve liability or compensation," as COP27 president Sameh Shoukry cautioned in his introduction, repeating paragraph 51. The Global North parties made an unsuccessful effort to include President Shoukry's verbal caution in the decision language. In the end, parties decided to "establish new funding arrangements for assisting developing countries that are particularly vulnerable to the adverse effects of climate change" as well as "establish a fund for responding to loss and damage whose mandate includes a focus on addressing loss and damage." The decision to establish them is the closest the UNFCCC has got in its thirty-year history to financing loss and damage, even if the precise funding mechanisms (real sources of money) have not yet been decided (Falzon et al., 2023).

Evaluation of Governance and Financial Aspects of the Loss and Damage Fund

Governance Aspect of the Loss and Damage Fund

The governance issues related to financing the Loss and Damage Fund revolve around political debates about past obligations, current emissions, and projected payments from countries. Developing nations commonly support the concept of "common but differentiated responsibilities" (CBDR) and Article 9.1 of the Paris Agreement. This article mandates that

“Developed country Parties shall provide financial resources to assist developing country Parties concerning both mitigation and adaptation in continuation of their existing obligations under the Convention” (UNFCCC, 2016). It emphasizes that developed countries, particularly those in Annexure I, should be primarily responsible for addressing climate change. The United Nations Framework Convention on Climate Change (UNFCCC) designates industrialized nations as leaders in this effort due to their significant historical and ongoing emissions of greenhouse gases. This perspective aligns with the viewpoints of underdeveloped nations, small island nations, and climate justice organizations within the UNFCCC, which aim to hold major historical polluters accountable for the consequences of climate change. However, affluent nations have consistently resisted acknowledging their responsibility through the loss and damage framework due to concerns about potential future claims for compensation and climate-related lawsuits based on culpability, which could result in substantial financial burdens (Pekkarinen et al., 2019). The European Union, Small Island Developing States (SIDS), and other industrialized nations have proposed assigning the financial burden of the Fund to emerging economies and major emitters like China, India, and Brazil. Controversies have also arisen regarding potential financial assistance from prosperous countries such as Israel, South Korea, and Singapore, as well as oil-producing nations like Saudi Arabia and the UAE. China and India support the loss and damage system but have openly stated that they will not provide financial contributions to the Fund, citing their historical and developmental needs to justify this decision.

This stalemate between historical emitters and current emitters of greenhouse gases (GHG) has posed significant challenge in realizing the Loss and damage Fund to its full potential within the ambit of climate justice. This stalemate of who to be accused to have ignited the fire, yields nothing but burns the house of victim. Both who ignited the fire (historical emitters) and who adds fuel to fire (current emitters) are responsible and needs to be made accountable. Otherwise this makes the governance mechanism of the Loss and Damage Fund smokier, better to be called as based on “fogy justice” rather than the true justice.

Another point of contention in the ongoing debate about financial responsibility is the identification of beneficiaries for the loss and damage fund. The resolution outlined in COP27 states that the Fund is intended to assist impoverished nations particularly susceptible to climate change's consequences. However, this statement needs to be more specific, leading to subjective interpretations and clarity. Some wealthier nations argue for narrowing down the group of beneficiaries to "highly vulnerable countries," thereby excluding certain developing nations from eligibility. The United States suggested that only countries with populations under five million should be eligible. The Alliance of Small Island States (AOSIS) proposed using criteria that consider a nation's capacity to handle and adapt to challenges, as well as its susceptibility to damage. However, these suggestions target affluent developing nations in Asia and the Middle East. Developed nations have expressed a desire to restrict funds for small island developing states (SIDS) and the least developed countries (LDCs) without adequately discussing the size of the Fund and the contributions they are willing to make. Developing nations argue that the Fund should be impartial and available to all developing countries. Cuba, leading the G77, believes that administrative measures should be implemented to increase access to loans and financial resources for vulnerable developing countries. They argue that fund allocation should be based on the severity of climate-related incidents rather than a country's classification. Developing countries insist that imposing limitations on the qualifying criteria would diminish the Fund's capacity to address a wide range of global needs related to loss and damage. Such limitations could impede the allocation of funds for recent catastrophic events like the floods in Pakistan. Given the widespread poverty, lack of development, and increasing vulnerability to climate change in developing regions, it is essential for the Loss and Damage Fund to prioritize the management of the growing effects of climate change. It should not be exploited as a political instrument that benefits a select few while neglecting a larger population.

Financial Aspects of the Loss and Damage Fund

In order to analyze the financial mechanism of the Loss and Damage Fund and the challenges at this front it is necessary to answer the questions arising at this front. What is financial strength of

this institution? Does these funds are enough for the assistance of vulnerable nations to adjust to the impacts of climate change? What are the criteria for distributing and allocating funds related to loss and damage? Who controls the funds and do these funds need centralized agency or federal agency? These questions will lead to an in depth understanding about the financial mechanism of the Loss and Damage Fund and challenges pertaining to it.

Although Loss and damage Fund marks a notable achievement, the financial pledges at CoP28 signify the potential challenge to the financial strength of the Loss and Damage Fund. The commitment to the Loss and Damage Fund is at just over US \$700 million which accounts merely 0.2% of the total amount needed by vulnerable nations to adjust to the impacts of climate change, which is about US \$ 400 billion each year (Lakhani, 2023). This shortage of funds is essentially due to the intricacy within the financial mechanism of the Loss and damage Fund itself. It does not have obligatory norm instead the funding is voluntary and not linked to carbon emission levels. It is here the principle of climate justice becomes obscured. To be clearer I would like to say that the finance mechanism of the Loss and Damage Fund is based on 'fogy justice' where there is no clarity, transparency and effectiveness. China which is largest emitter of carbon emissions has no contribution to the loss and Damage Fund. Similar path is followed by Saudi Arabia, Russia, and India etc. Funding not linked to carbon emissions makes affluent nations responsibility free (Nyamu, 2024).

The procedures pertaining to allocation and distribution of funds have a pivotal role in the mechanism to support vulnerable states. The Loss and Damage Fund has a very well defined procedure for allocation and access of the funds. But the procedure is cumbersome because of the lengthy process of documentation and approval procedure leading to the delay of funds distribution. This makes it challenging for vulnerable states to provide a prompt response to the climate impacts resulting into the loss and damage (Robert & Pelling, 2018). Additionally the ambiguity in defining the term of vulnerability makes it complex who is eligible to receive funding from the Loss and Damage Fund (UNCTAD, 2023).

Previous climate finance funds have faced issues regarding board structure and membership, project selection processes, the possibility of earmarking funds, and the overall intent and execution of the funds. Graham and Serdaru (2018) highlight that voting rules—egalitarian or weighted by contribution—and the ability to earmark funds significantly influence donor states' willingness to contribute. This may partly explain why UNFCCC-established funds like the Adaptation Fund and the Green Climate Fund (GCF) remain chronically underfunded compared to other climate finance channels such as bilateral agencies and multilateral development banks. The Adaptation Fund, characterized by egalitarian voting, no earmarks, grant-only delivery, and a board predominantly composed of representatives from developing countries, is often cited as the best existing example of a fund that furthers core tenets of climate justice. Historically, advanced countries, particularly the United States, have combined loss and damage with adaptation strategies, categorizing all climate change impacts as matters of adaptation and mitigation. Despite recognizing loss and damage as distinct elements of climate change, significant ongoing debates about financial obligations exist.

Schalatek and Bird (2017) propose a normative framework for climate finance, emphasizing the importance of transparency, accountability, and alignment with respective capabilities. They argue that climate funds should adhere to the polluter pays principle and be new and additional, adequate, and predictable. The administration of these funds should prioritize transparency, accountability, and equitable representation. Additionally, fund disbursement should be transparent, locally owned, timely, and aligned with gender equality.

Conclusion

The governance challenges associated with financing the Loss and Damage Fund reflect deep-seated political debates surrounding historical and current responsibilities for climate change. Developing nations advocate for "common but differentiated responsibilities" (CBDR) and Article 9.1 of the Paris Agreement, which place the primary financial responsibility on developed countries due to their historical and ongoing emissions. This principle aims to hold

major historical polluters accountable, aligning with the views of vulnerable nations and climate justice organizations. However, affluent nations have resisted acknowledging their financial obligations, fearing potential legal repercussions and significant financial liabilities. Meanwhile, industrialized nations and emerging economies, such as China and India, are at odds over financial contributions, with some major emitters refusing to contribute based on their own historical and developmental contexts. This deadlock creates a governance framework that is increasingly ineffective and obscured, undermining the potential of the Loss and Damage Fund to address climate justice effectively. The metaphor of "foggy justice" aptly describes the situation, where both historical and current emitters are responsible, but the lack of clear accountability and equitable financial contributions makes the governance mechanism of the Fund inadequate and inefficient, failing to deliver genuine climate justice.

The financial and procedural weaknesses of the Loss and Damage Fund highlights significant gaps between its intended purpose and actual effectiveness. With financial pledges at CoP28 amounting to just over \$700 million—merely 0.2% of the estimated \$400 billion needed annually—the Fund's capacity to support vulnerable nations is called into question. The voluntary nature of contributions, which are not tied to carbon emissions, allows major polluters to evade responsibility, leading to what the author describes as "foggy justice," where the principles of climate justice are obscured by a lack of clarity, transparency, and equity. Additionally, cumbersome procedures and ambiguous criteria for determining vulnerability further hinder the timely and equitable distribution of funds, raising serious concerns about the Fund's ability to provide effective and just support to those most affected by climate change.

Müller (2018) highlights that financing for adaptation has to adhere to certain standards specified in the Bali Action Plan of 2007. This entails becoming novel, extra, dependable, suitable, fair, and producing at least \$10 billion in revenue worldwide each year. Van Drunen et al. (2019) supplement this by putting out standards like practicality, efficacy, and efficiency as well as taking institutional, political, and ethical problems into account.

These frameworks provide thorough instructions for assessing climate finance programmes, guaranteeing efficient funding distribution in accordance with international climate objectives. Analysis of Loss and Damage (L&D) finance might benefit from an understanding of the adaption finance criteria. However, a different framework is needed because to the special requirements of L&D financing, which include the need to handle both abrupt catastrophes and occurrences with a delayed start as well as account for differences between solvable risks and permanent losses.

Three main criteria as well as supplementary sub-criteria are identified by Robinson et al. for L&D funding. They suggest that L&D finance be flexible enough to respond to particular calamities or events, sustainable in the sense that it will always have money available, and consistent with a number of financing tenets, including those pertaining to equity, viability, predictability, sufficiency, transparency, newness, additionality, direct accessibility, and vulnerability.

References:

- Akiwumi, P. (2022, May 23). *Climate finance for SIDS is shockingly low: Why this needs to change*. Development Matters. <https://oecd-development-matters.org/2022/05/23/climate-finance-for-sids-is-shockingly-low-why-this-needs-to-change/>
- Alayza, N., Bhandari, P., Burns, D., Cogswell, N., Zoysa, K. de, Finch, M., Fransen, T., González, M. L., Krishnan, N., Langer, P., Larsen, G., Srouji, J., Warszawski, N., & Waskow, D. (2022).

Cop27: Key takeaways and what's next. <https://www.wri.org/insights/cop27-key-outcomes-un-climate-talks-sharm-el-sheikh>

Assam Water Resources. (n.d.). *Flood & erosion problems | water resources | government of assam, india.* Government of Assam Water Resources. Retrieved 22 May 2024, from <https://waterresources.assam.gov.in/portlets/flood-erosion-problems>

Black, S., A. Liu, A., Parry, I., & Vernon, N. (2023). IMF Fossil Fuel Subsidies Data: 2023 Update . *IMF, Working Paper.*

Buchner, B., Naran, B., Fernandes, P., Padmanabhi, R., Rosane, P., Solomon, M., Stout, , S., Strinati, C., Tolentino, R., Wakaba, G., Zhu, , Y., Meattle, C., & Guzmán, S. (2021). *Global Landscape of Climate Finance 2021.* Climate Policy Initiative.

Calliari, E. (2018). Loss and damage: A critical discourse analysis of Parties' positions in climate change negotiations. *Journal of Risk Research*, 21(6), 725–747. <https://doi.org/10.1080/13669877.2016.1240706>

Cullet, P. (2021). Common but differentiated responsibilities. In M. Fitzmaurice, M. Brus, P. Merkouris, & A. Rydberg (Eds.), *Research Handbook on International Environmental Law.* Edward Elgar Publishing. <https://doi.org/10.4337/9781786439710.00017>

ESCAP. (2020). *The Disaster Riskscape across the Pacific Small Island Developing States: Key Takeaways for Stakeholders* (ST/ESCAP/2880). United Nations. <https://www.unescap.org/sites/default/d8files/IDD-APDR-Subreport-Pacific-SIDS.pdf>

Falzon, D., Shaia, F., Roberts, J. T., Hossain, Md. F., Robinson, S., Khan, M. R., & Ciplet, D. (2023). Tactical opposition: Obstructing loss and damage finance in the united nations climate

negotiations. *Global Environmental Politics*, 23(3), 95–119.
https://doi.org/10.1162/glep_a_00722

Gabbatiss, J., & Dunne, D. (2023, November 7). *Q&A: The fight over the 'loss-and-damage fund' for climate change*. Carbon Brief. <https://www.carbonbrief.org/qa-the-fight-over-the-loss-and-damage-fund-for-climate-change/>

Garschagen, M., Doshi, D., Reith, J., & Hagenlocher, M. (2021). Global patterns of disaster and climate risk—An analysis of the consistency of leading index-based assessments and their results. *Climatic Change*, 169(1–2), 11. <https://doi.org/10.1007/s10584-021-03209-7>

General Assembly. (2022). *The human right to a clean, healthy and sustainable environment*. United Nations. https://digitallibrary.un.org/record/3983329/files/A_RES_76_300-EN.pdf?ln=en

Hansen, J. E., Sato, M., Simons, L., Nazarenko, L. S., Sangha, I., Kharecha, P., Zachos, J. C., Von Schuckmann, K., Loeb, N. G., Osman, M. B., Jin, Q., Tselioudis, G., Jeong, E., Lacis, A., Ruedy, R., Russell, G., Cao, J., & Li, J. (2023). Global warming in the pipeline. *Oxford Open Climate Change*, 3(1), kgad008. <https://doi.org/10.1093/oxfclm/kgad008>

Hurley, L. (2011, September 28). Island nation girds for legal battle against industrial emissions. *The New York Times*. <https://archive.nytimes.com/www.nytimes.com/gwire/2011/09/28/28greenwire-island-nation-girds-for-legal-battle-against-i-60949.html?pagewanted=all>

Hyvarinen, J., Ortiz, M., Schwarte, C., & Wei, D. (n.d.). Climate Law In Brief A brief summary of key legal issues relevant to Durban and beyond. *Foundation for International Environmental Law and Development (FIELD)*. <https://www ldc-climate.org/wp-content/uploads/2018/02/LDC-paper-series-16.pdf>

- IISD. (2022). *Summary of the Bonn Climate Change Conference: 6-16 June 2022*. <http://enb.iisd.org/bonn-climate-change-conference-sbi56-sbsta56-summary>
- Johansson, A., Calliari, E., Walker-Crawford, N., Hartz, F., McQuistan, C., & Vanhala, L. (2022). Evaluating progress on loss and damage: An assessment of the executive committee of the warsaw international mechanism under the unfccc. *Climate Policy*, 22(9–10), 1199–1212. <https://doi.org/10.1080/14693062.2022.2112935>
- Khan, M., Robinson, S., Weikmans, R., Ciplet, D., & Roberts, J. T. (2020). Twenty-five years of adaptation finance through a climate justice lens. *Climatic Change*, 161(2), 251–269. <https://doi.org/10.1007/s10584-019-02563-x>
- Künzel, V., Schäfer, L., Minninger, S., & Baldrich, Roxana. (2017). *Loss and Damage at COP23: Looking at Small Island Developing States*. Germanwatch.
- Martyr-Koller, R., Thomas, A., Schleussner, C.-F., Nauels, A., & Lissner, T. (2021). Loss and damage implications of sea-level rise on Small Island Developing States. *Current Opinion in Environmental Sustainability*, 50, 245–259. <https://doi.org/10.1016/j.cosust.2021.05.001>
- McAuliffe, M., & Oucho, L. A. (2024). *World Migration Report 2024* (PUB2023/047/L). International Organization for Migration. <https://worldmigrationreport.iom.int/what-we-do/world-migration-report-2024-chapter-3/asia>
- Morrissey, J., & Oliver-Smith, A. (2013). *Perspectives on non-economic loss and damage: Understanding values at risk from climate change*. <https://doi.org/10.13140/RG.2.1.1668.1041>
- Paris Agreement*. (2015). <https://legal.un.org/avl/ha/pa/pa.html>

- Pekkarinen, V., Toussaint, P., & Asselt, H. van. (2019). Loss and damage after paris: Moving beyond rhetoric. *Carbon & Climate Law Review*, 13(1), 31–49. <https://doi.org/10.21552/cclr/2019/1/6>
- Pekkarinen, V., Toussaint, P., & van Asselt, H. (2019). Loss and damage after paris: Moving beyond rhetoric. *Carbon & Climate Law Review*, 13(1), 31–49. <https://www.jstor.org/stable/26739642>
- Rowling, M. (2021, November 13). Climate ‘loss and damage’ earns recognition but little action in COP26 deal. *Reuters*. <https://www.reuters.com/business/cop/climate-loss-damage-earns-recognition-little-action-cop26-deal-2021-11-13/>
- The Assam State Disaster Management Authority,. (2022). *Envisioning a Disaster Resilient Assam: Assam Disaster Risk Reduction Roadmap, 2030*. Government of Assam.
- Thiri, M. A., Villamayor-Tomás, S., Scheidel, A., & Demaria, F. (2022). How social movements contribute to staying within the global carbon budget: Evidence from a qualitative meta-analysis of case studies. *Ecological Economics*, 195, 107356. <https://doi.org/10.1016/j.ecolecon.2022.107356>
- Thomas, K., Hardy, R. D., Lazrus, H., Mendez, M., Orlove, B., Rivera-Collazo, I., Roberts, J. T., Rockman, M., Warner, B. P., & Winthrop, R. (2019). Explaining differential vulnerability to climate change: A social science review. *WIREs Climate Change*, 10(2), e565. <https://doi.org/10.1002/wcc.565>
- UNFCCC. (2016). *Paris agreement*. <https://legal.un.org/avl/ha/pa/pa.html>
- UNFCCC. (2006). *United nations framework convention on climate change: Handbook*. Intergovernmental and Legal Affairs, Climate Change Secretariat.

- UNFCCC. (2008). *Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December 2007* (FCCC/CP/2007/6/Add.1). United Nations.
- UNFCCC. (2015). *Conference of the Parties, Twenty-first session*. United Nations. http://unfccc.int/documentation/documents/advanced_search/items/6911.php?preref=600008831#beg
- UNFCCC. (2019). *Report of the Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts* (FCCC/SB/2019/5). United Nations.
- Vaidyanathan, G. (2024). A giant fund for climate disasters will soon open. Who should be paid first? *Nature*. <https://doi.org/10.1038/d41586-024-00149-x>
- Vanhala, L., & Hestbaek, C. (2016). Framing climate change loss and damage in unfccc negotiations. *Global Environmental Politics*, 16(4), 111–129. https://doi.org/10.1162/GLEP_a_00379
- Wewerinke-Singh, M., & Doebbler, C. (2016). The Paris Agreement: Some Critical Reflections on Process and Substance. *UNSW Law Journal*, 39(4), 1486–1517. <https://www.sprep.org/publications/sprep-annual-report-2015-rapport-annuel-du-proe-2015>
- Wewerinke-Singh, M., & Salili, D. H. (2020). Between negotiations and litigation: Vanuatu's perspective on loss and damage from climate change. *Climate Policy*, 20(6), 681–692. <https://doi.org/10.1080/14693062.2019.1623166>
- World Meteorological Organization (WMO). (2020). *State of the Climate in Africa 2019* (WMO-No. 1253). WMO. <https://library.wmo.int/idurl/4/57196>