ADPEBI International Journal of Business and Social Science

www.adpebi.com/index.php/IJBS

Vol.,4 No.1, 2024 e-ISSN: 2808-0939 pp. 45- 61

Quo Vadis Loss and Damage Fund After COP-28?

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https://doi.org/10.54099/aijbs.v4i1.940

ARTICLE INFO

Research Paper

Article history:

Received: 12 January 2024 Revised: 30 March 2024 Accepted: 30 April 2024

ABSTRACT

Purpose - The paper examines how financing climate change L&D will work for developing countries. Methodology/approach - The paper uses a systematic literature review (SLR) method, the authors used sources in the Google Scholar, Scopus, Hein, and World of Science (WoS) databases using the following keywords: "Loss and Climate Change", "climate change and COP-28", "climate change and damage", and "World Bank and Loss and Damage Fund". Findings -The findings in this paper show that one of the critical decisions of COP28 is related to the L&D fund. Developing countries are confused. If the WB manages L&D, 12% of the fund will be deducted from the WB. If the fund is not managed correctly with World Bank standards, transaction costs, and leakage will result in the L&D fund losing a lot. The fund management's independence, transparency, and effectiveness will likely be interfered with by certain countries with interests. Therefore, it is essential to publish an independent institution for managing and operating the distribution of L&D funds under the auspices of the UNFCC. In addition, the need for a particular chapter in the IPCC on L&D funds encourages and strengthens the seriousness of developed countries with the consistency of responsibility for the fund. Also, private companies that have interests or contribute the most to high emissions need to contribute to this fund. Furthermore, in the author's opinion, L&D funding is considered successful if it fulfills the following four things: consistency, clarity, community-driven, and corruption-free.

Keywords: Climate Loss-and-Damage Fund, COP-28, and Developing Countries.

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INTRODUCTION

Climate change is expected to have long-term impacts on the real economy, manifesting as reduced production, decreased employment, reduced social coherence, and loss of culture in every country, especially in developing countries vulnerable to climate change risks (R. Mechler and T. Schniko. 2016). The following is an overview of low-income countries, classified as poor and developing

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countries, and advanced economies, which can be classified as developed countries. These low-income countries are the most vulnerable to the impacts of climate change.

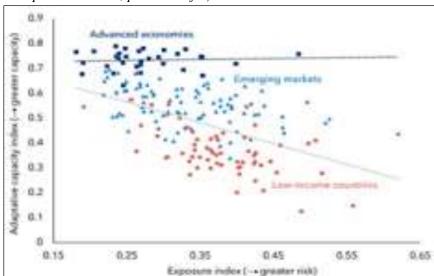


Figure 1: Poorer countries face more significant risks from climate change and are less able to adapt. (adaptive capacity and exposure indexes, point out of 1)

Source: "IMF staff calculations based on 2015-18 data from the European Commission, the United Nations University Institute for Environment and Human Security, the University of Notre Dame, and the April 2020 World Economic Outlook".

As mentioned above, the figure shows us that poorer countries face more significant risks from climate change and are less able to adapt. The dotted lines show estimated linear relationships for advanced economics and emerging and low-income countries combined. It is important to understand the impact of climate change risks on low-income countries because it is closely related to how vulnerable developing countries can mitigate and adapt to the losses and damages caused by climate change. The IPCC in its 2022 report defines vulnerability as "the propensity to be adversely affected". In addition, it explains that vulnerability encompasses multiple concepts and elements, including sensitivity or susceptibility to hazards and lack of capacity to cope and adapt. In its report, global hotspots with high human vulnerability were found mainly in western, central, and eastern Africa, South Asia, Central and South America, small island developing states, and the Arctic. Based on the data, the hotspots cover all developing countries except southern Africa, northern Africa, the Middle East, Southeast Asia, and East Asia (Joe Lo, 2022).





Figure 2: By World Income

Source: High-income countries are in dark green. The upper middle is light green. The lower middle is in light purple. Least developed in dark purple (World Bank, 2021).

If we look at the data in the figure 3. below, you can see that developing countries are very dominating, that almost all of the top 15 countries by population exposed today and in the 2070s, showing the influence of future climate change vs. socioeconomic change are occupied by developing countries with high vulnerability. This explains that the impact of climate change also has an impact on socioeconomic change. Looking at these impacts can also indicate that developing countries are more vulnerable than developed countries or those with good economies. Of course, this becomes problematic, when the large contributor to the damage and losses is caused by developed countries that have a well-established economy.

The adverse effects of climate change, including altered rainfall patterns, increasing temperatures, rising sea levels, and worsening food and water security, pose significant challenges for African countries. It is unfortunate that these countries, despite having contributed the least to environmental degradation, bear the brunt of these consequences. In 2024, Phiri claimed that climate funding had not effectively improved the many aspects of food security in the Sub-Saharan Africa area. Indeed, it indicates that climate finance has shown to be beneficial in enhancing food supply, but it has not been as effective in improving food access, stability, and usage. Another significant discovery from this study is that Foreign Direct Investment (FDI) and government preparedness are the primary elements that have had a greater impact on ensuring food security compared to climate financing. Additionally, we have also seen that the rural population has a negative influence on all aspects of food security. Agricultural land and other agricultural activities, such as agricultural spending and agricultural capacity, fail to provide the anticipated favorable impact on all aspects of food security (Phiri, A., & Doku, I. 2024).

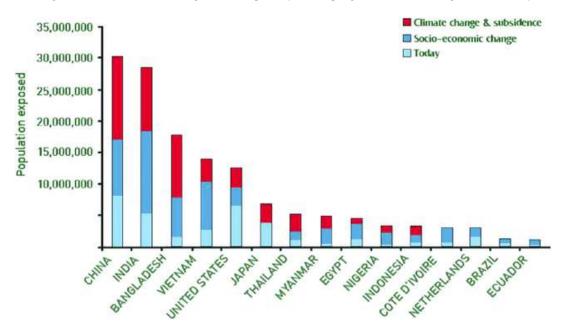


Figure 3: the top 15 countries by population exposed today and in the 2070s, showing the influence of future climate change vs. socioeconomic change are occupied by developing countries with high vulnerability.

Source: Supratid, S., Aribarg, T., 2022).

The urgency of the issue of a country's ability to be most affected by climate change resulting in loss and damage was discussed and decided in the loss and damage fund ("L&D") from November 30 to December 12, 2023, the United Arab Emirates ("UAE") hosted the UN Climate Change Conference, also known as COP28. The delegates have decided to legally create a fund for losses and damages to assist developing nations that are at risk from the effects of climate change. Floods, droughts, and rising sea levels have had the worst effects on developing nations, which have contributed the least to the climate crisis (World Economic Forum, 2023). At the COP27 last year, an agreement was achieved to establish an L&D Fund; nevertheless, discussions over the fund's funding and management have continued until 2023 (Maslin, M. A., Lang, J., & Harvey, F, 2023).

While the climate crisis devastates people and communities worldwide, the deal agreed at COP28 proves that rich countries continue evading their responsibilities. The L&D Fund will do little to repair and remedy the widespread human rights violations suffered by communities as a result of decades of climate inaction. The millions of dollars pledged to the L&D Fund at COP28 are a small contribution to what is needed. With the rationale of immediately channeling the L&D Fund to communities, developed countries have pushed to contribute by channeling loss and damage. However, whether the fund will be sufficient to finance loss and damage for countries heavily impacted by climate change is still being determined. Current research understandings of L&D frequently highlight the unavoidability and irreversibility of specific climate change consequences, as well as the significance of restrictions and limits to adaptation as drivers of negative outcomes. Such negative outcomes, which are understood to result from climate change-related slow onset hazards and extreme weather events, include both monetizable impacts and non-economic losses (NELs), such as loss of biodiversity, territory, cultural heritage, and climate-induced human mobility (Calliari, E., & Vanhala, L. 2022).

Looking back at COP28, discussions continue to set new, measurable collective goals for climate finance by 2024, considering developing countries' needs and priorities. Starting from a base figure of USD 100 billion per year, this new goal will form the basis for the design and implementation of a national climate plan that must be delivered by 2025 (United Nations Climate Change, 2023). Initial pledges to the fund have been made by the European Union, which agreed to provide US\$245 million, including US\$109 million from Germany and a further US\$100 million coming from the United Arab Emirates, with smaller contributions from the UK of around US\$51 million, the United States around US\$17.5 million, and Japan with US\$10 million (Lisa Vives, 2023).



A matter of worry regarding the fund-raising is that the United States was criticized for making an embarrassing amount of contributions to the fund—14 times less than the European Union and less than a quarter of what the United Arab Emirates contributed. Progress in annual negotiations has been halted for years due to the desire for a fund to help developing nations deal with the effects of climate change in the hopes of advancement in other areas (Angela Dewan, Ella Nilsen, and Rachel Ramirez, 2023). Despite all efforts to brand the initiative as a success, until loss and damage become a central component of a comprehensive response to climate change and not just a voluntary option, countries vulnerable to climate change will continue to feel neglected and isolated. So, sustaining climate change financing for developing countries most affected by climate change is essential.

Bhandary noted in 2022 that 38 nations had climate funds. These funds differ in scope, mandate, location, financing, legal basis, and involvement in climate finance in the country. National climate plans and policies necessitate national climate funds. A national climate fund might be an autonomous domestic organization or a climate-specific budget code. Some funds succeed due to their manager's skill, connection with national climate policies and goals, value delivery, and design. Legally autonomous national climate funds are more likely to endure. Survival does not guarantee financial mobilization. National climate funds unite numerous contributors into one finance platform, reducing climate-related support. The Paris Declaration on Aid Effectiveness recommends national systems. As said, tracking climate change assistance payments might stimulate national systems in underdeveloped nations. The national climate fund's legislative design reflects the government's aim at its creation, which is protecting climate change funding. It is necessary to modify national climate budgets to align them with national and global climate objectives when states enhance their level of ambition (Bhandary, R. R. 2022).

Behind the successful negotiation of loss and damage financing at COP-28. There are two critical points to consider, namely: 1) First, to date, the official definition of loss and damage remains unclear or non-existent, but there is an informal consensus on understanding the term as an adverse outcome of climate change that cannot be addressed by mitigation and adaptation. 2) Second, the sustainability of loss and damage financing: whether the developed countries have a commitment that can be held to continue to provide loss and damage financing sustainably. 3) Third, what are the criteria for developing countries affected by climate change that can get loss and damage funding first? How is the systematic distribution, and does the amount obtained by each developing country due to the impact of climate change have the same amount?

The developing countries need clarification. If the World Bank ("WB") manages L&D, 12% of the fund will be deducted from the World Bank (Sonny B & Hariandja 2024). If the fund is not managed correctly according to World Bank standards, transaction costs and leakage will result in the L&D fund losing a lot. With this justification, the author can give a concise summary of the issue, highlighting the WB's management of the fund, the choice to make national investments in the fund voluntary rather than required, the rejection of the notion of climate justice, the lack of clear funding targets, and the difficulties in honoring commitments about climate finance.

Furthermore, this paper will be divided into several discussion sections, namely, the introduction, which will discuss the urgency and reasons for discussing the research theme, the novelty of the research, and the formulation of the study, which is the purpose of the study. Chapter II (two) discusses the climate change loss-and-damage fund before COP-28 for developing countries and the climate change loss-and-damage fund after COP-28 for developing countries. In chapter III (three), the author discusses the results of the research findings and the policy implications resulting from COP-28. In the last chapter, Chapter IV, the author will provide conclusions and recommendations from the research results.

LITERATURE REVIEW Climate Change Loss-and-Damage Fund Before COP-28

There have been several attempts to provide climate finance to developing countries affected and vulnerable by climate change (Islam, M. M, 2022); (Robinson, S. A., Roberts, J. T., Weikmans, R., & Falzon, D. 2023). Many of them have failed for various reasons, but lessons can be learned from their strengths and weaknesses. It is essential to learn from the failures of climate finance so far. What are the causes, and why has climate finance repeatedly failed so that efficient and sustainable L&D finance can be formulated in the future? Learning from these experiences, it is essential first to understand the term "loss and damage" concerning losses, both monetary and non-monetary (such as loss of life, culture, or forced migration), resulting from climate change impacts (Schaeffer, M., Baarsch, F., Charles, L., de Bruin, K., Freitas, S., Hare, B., & Mace, M. J. 2014).

Historically, loss and damage have often been considered residual losses resulting from disasters that cannot be mitigated or adapted to. L&D have been part of the central discourse inside and outside the COP negotiations over the years. COP-27 in Sharm el-Sheikh, Egypt, has been a pivotal moment in the establishment of loss and damage funding that took place in the final hours of negotiations (Tietjen, B., & Gopalakrishnan, T. 2023) (Obergassel, W., Arens, C., Beuermann, C., Elsner, C., Hermwille, L., Kreibich, N., Spitzner, 2022). Developing countries can take a rest for a little easier on their laurels with the achievement of a decades-long goal, as what was previously thought impossible for developing countries has become a reality. Given the process of establishing the L&D fund at COP27 (Tikhomirova, A. C. 2023), the fund's establishment is often considered a success. However, the question is whether this fund can fulfill the funding needs of developing countries due to climate disasters. Let's look at the history of loss and damage in 1991 in the figure below.

Figure 4: Loss and damage negotiation



Source: Bethany Tietjen and Tarun Gopalakrishnan, Taylor & Francis, 2023

The table above explains that L&D have been negotiated since 1991, and in addition to the Special Climate Change Fund (SCCF) established in 2001 (Mace, M. J. 2005), the SCCF also covers the additional costs of interventions to address climate change compared to a predetermined development baseline. The fund is managed by the Global Environmental Facility (GEF) (Batra, G., Uitto, J. I., & Feinstein, O. N. 2022); Anderson, D., Carabias, J., Gitay, H., Hennicke, P., Huntley, B., Huq, S., & Xu, X. B. 2004), a multilateral fund dedicated to addressing biodiversity loss, climate change, pollution, and pressures on the health of land and oceans. Adaptation is a crucial priority of the fund, providing resources through grants and programs that are country-driven, cost-effective, and integrated into national sustainable development in the UNFCCC Report on the Global Environmental Facility (Remling, E., & Persson, Å. (2015).).

Furthermore, funding began to be negotiated at the 2021 Glasgow Dialogue on L&D at COP-26, which discussed the arrangements for funding activities on L&D (McDonnell, S. 2023); (Siegele, L. 2023). To get ideas for approaching L&D financing options, one can look back at how L&D developed in the UN climate negotiations through the COP27 outcome document, media coverage of L&D, reports, and data from various organizations involved in the negotiation process, and emerging research on international law, international relations, and climate policy (McNamara, K. E., & Jackson, G. 2019). The ideas that emerged recommended mainly the following (Zhang, L., & Bai, E. 2023):



- 1. Strategically link the fund with multilateral and non-governmental stakeholders in the climate change "regime complex";
- 2. Innovate funding norms that avoid the pitfalls of voluntary action and legal liability;
- 3. Fill critical niches and gaps in the current global landscape of climate governance and finance.

On the other hand, for developed countries, this is a way to discuss risk management without recognizing legal responsibility for their historical emissions and impacts on developing countries mentioned in IPCC if global CO₂ emissions continue at current rates, the remaining carbon budget for keeping warming to 1.5°C will likely be exhausted before 2030 (IPCC, 2022). As with most international agreements, consensus around COP decisions is built through "constructive ambiguity" language that attempts to reconcile conflicting framings of an issue (Shishlov, I., & Censkowsky, P. 2022). This is similar to the composition of the Adaptation Fund Board (AFB) (Horstmann, B. 2011), which is designed to ensure a permanent governing majority in favor of developing countries and not just in favor of developed countries.

The benefits of this strategy are up for debate. Even though the Adaptation Fund has only raised USD 1 billion in total, it has succeeded in breaking free from the donor-dominated norms of the Bretton Woods institutions and creating an institution that is more responsive to the needs of developing countries due to loss and damage caused by climate change (Jerneck, A., & Olsson, L. 2015; Igwe, I. O. 2018). In contrast to the resources of the World Bank and IMF (Donner, S. D., Kandlikar, M., & Webber, S. (2016)), it is still insignificant and significantly insufficient to meet developing nations' financing needs for adaptation. The Green Climate Fund (GCF) (Bracking, S. 2015), which distributes its board seats evenly between rich and developing nations (12 seats each) (UNFCCC, 2010), is another useful comparator. Although more funds are available to the GCF, governance bottlenecks are severe, delaying consensus on basic policies and disbursements (Bertilsson, J. 2021). Learning from this experience, it is essential to delineate who should receive the funds and the formula for how much should be allocated to each eligible country.

In addition, there is a final formula that shows the burden and allocation for each country. In line with the mandate contained in Article 9 of the Paris Agreement, it explicitly states that developed country Parties shall provide financial resources to developing countries (Voigt, C., & Ferreira, F. 2016); (Galvao Ferreira, P. 2018). Until this point, before COP-28, contributions to climate finance were voluntary and did not correlate with responsibility relative to previous emissions mentioned by the IPCC. The main concern remains that some perceive funding provided or mandated for loss and damage by developed countries such as the United States and other developed countries as an acknowledgment of responsibility and a catalyst for challenges to historical emissions levels. Therefore, COP-28 should be a bright spot for clarity on loss and damage funding for developing countries.

Climate Change Loss-and-Damage Fund After COP -28

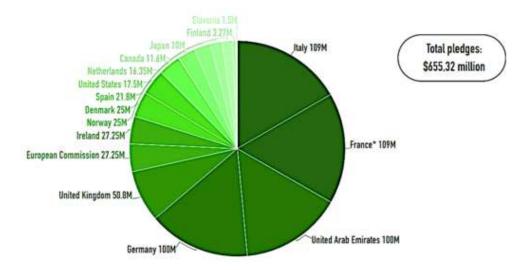
Data released by the World Meteorological Organization reports that 2023 is already a "climate record" and will break 1.4 degrees Celsius. As the Paris Agreement outlines, 1.5 degrees Celsius has been internationally agreed to prevent the worst impacts and potentially irreversible climate change (Cristen Hemingway Jaynes, 2023). Hence, the lift is near the threshold. This higher climate can undoubtedly result in L&D. Therefore, COP-28 decided to operationalize new funding arrangements, including a fund to respond to loss and damage. All Parties adopted the decision by consensus (Aime Williams, 2023). The fund's objective is to support developing nations that are most susceptible to climate change in their efforts to respond to financial and nonfinancial losses and damages brought on by the phenomenon, such as extreme weather events and slow-onset catastrophes. Developing countries argue that rich countries (high- and upper-middle-income countries) (Hannah Ritchie, 2023), were responsible for around 80 percent of greenhouse gas emissions (Maitland, 2023) from 1995 – 2015 (Meng, B., Liu, Y., Gao, Y., Li, M., Wang, Z., Xue, J., & Wang, K. (2023).), should lead in funding the new L&D fund.

L&D has been among the most contentious topics in global talks. Developing and poor countries, which tend to bear the brunt of the impacts of climate change, argue that more extensive and prosperous

countries with giant carbon footprints should be held accountable and contribute. Sharing the costs to help ensure a just transition. In a similar vein to the outcome of COP-28, contributions from developed countries to the L&D Fund totalled US\$700 million in the first week of the UN climate meeting in Dubai, less than 0.2% of the economic and non-economic losses that developing countries face each year due to global warming (Cambridge Institute for Sustainability Leadership, 2023).

Recognizing that wealthy nations were under pressure to mend fences with developing nations during COP-28 in Dubai due to their inability to meet the \$100 billion annual target on schedule, it is important to note that they are not on track to double adaptation funding from 2019 levels by 2025, according to recent data (Joe Thwaites, 2023). Consequently, wealthy nations have promised to pay a minimum of US\$260 million to the fund on the first day of COP-28, above the US\$200 million minimum required to initiate operations (Martina Igini, 2023). The following is a figure of developed countries' contributions to the L&D fund.

Figure 5: Commitments as of December 3, 2023, taking into account the maximum amounts pledged by the States in millions of dollars.



Note: Countries marked with an asterisk (*) have pledged "up to" a certain amount. Therefore, the amounts shown in this graph represent the maximum amounts indicated by the states in question but may be reduced when the contributions are disbursed.

Source: Loss and Damage Collaboration, 2023

The World Bank agreed upon operationalizing and disbursing the L&D fund as the managing institution for the next four (4) years (Bianca Getzel, Michai Robertson, 2023). The United States itself pushed for the World Bank as a permanent operation, and developing countries initially opposed the World Bank's role, fearing high costs, slow procedures, and the influence of the United States on the institution. But they eventually relented and accepted a compromise, with certain conditions attached to the Bank's involvement and exit after four years.

In light of this, thirteen nations including the United States, the United Kingdom, India, France, Kenya, and Barbados have come to a consensus on the Global Climate Finance Framework Declaration (Jonathan Beynon, Ian Mitchell, and Edward Wickstead, 2023), which attempts to lower the cost and increase the accessibility of climate and development finance. The cornerstone of this strategy is collective action, which is consistent with the need to mobilize more public and private financing to address today's global challenges and to leave no country behind. Furthermore, the United Arab Emirates declared that in 2024, it will host a meeting on financing for climate change mitigation (IISD, 2023)). To support sovereign funding for nature and climate, several international organizations and multilateral development banks have formed working groups and released joint declarations. This mechanism seeks to provide long-term, cost-effective solutions for nature and climate that will fulfill the demands of nations in the global South.



China and Petro-Dollar nations like the United Arab Emirates, Saudi Arabia, and Qatar ought to contribute to the fund, according to EU climate director Wopke Hoekstra (Debates, News & Opinions, 2023). Some factions aim to broaden the pool of donors to include nations like South Korea and Russia that have high economic emissions and are classified as developing nations by the UN. By 2030, it is estimated that the annual cost of loss and damage incurred by developing nations will surpass \$400 billion (Heinrich-Böll-Stiftung, 2023). In retrospect, the pledges made to UN climate funds during COP28 were split into four (4) funds: one for adaptation, one for least developed nations, one for loss and damage, and one for unique climate change.

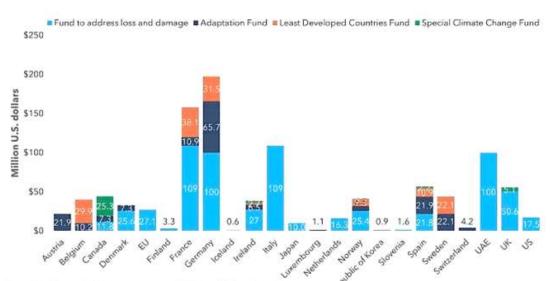


Figure 6: Pledges UN climate funds at COP28

Source: NRDC base on pledges announced at COP28, as of 9 December 2023

As COP28 comes to a close, it is clear that climate finance is a top priority for leaders. The climate finance gap, particularly in Africa, is estimated by the European Centre for Development Policy Management to be \$200-400 billion annually until 2030 (Wanjohi Kabukuru, 2023). That's much money, and while COP28 showed that efforts are increasing, more is needed to bridge this huge gap. Moreover, there are too many uncertainties in the loss and damage fund to be considered a success.

METHOD

The paper uses a systematic literature review (SLR) method, the authors used sources in the Google Scholar, Scopus, Hein, and World of Science (WoS) databases using the following keywords: "Loss and Climate Change", "Climate Change and COP-28", "Climate Change and Damage", and "World Bank and Loss and Damage Fund". The authors found approximately 1200 documents with keywords that the authors searched for several sites that the authors mentioned. The authors filtered up to 500 documents, then filtered again to find approximately 70 documents that the authors used to do this research as a reference for the authors in answering the objectives of this research. Furthermore, the author writes from the data, formulates the purpose of the problem, provides additional argumentation, and describes it through research findings.

RESULT

Policy Implications

Once the fund is established, it is critical to consider the specific areas it can fill, establish due diligence estimates of future loss and damage exposures, and ensure that the fund avoids corruption, meaning funding arrangements are approved but have no funding commitments. On the other hand, with the WB in the position of interim host, officials must adhere to strict deadlines to avoid protracted

decisions or deadlocks. In particular, at COP-29, there will need to be nominations of officials for positions in the fund and finalization of the fund's operating procedures (Brooke Moore, 2023). This will allow for a trial run to ensure the process is effective and concerns are adequately addressed before the fund is fully launched. Criticisms of the WB also point to the importance of setting parameters that ensure the fairness and effectiveness of the fund. Rather than lending money from countries driving climate change to countries disproportionately affected by climate change, which often exacerbates inequalities, the fund should rely on grants. If loans are required, the Council must ensure that they do not contain fiscal conditions such as austerity measures that often result in decreased social spending and increased inequality. These provisions remain distinct monitoring and evaluation criteria that will be important in assessing the appropriate use of funds.

The Board should endeavor to phase out the loan in the long term. In making its decision, the Board is tasked to consider (Cadwalader Wickersham & Taft LLP, 2023) the following:

- 1. The priorities and needs of developing countries that are particularly vulnerable to the adverse impacts of climate change while taking into account the needs of communities vulnerable to climate change;
- 2. Consideration of the scale of impact of specific climate events relative to national circumstances, including but not limited to the response capacity of affected countries;
- 3. The need to guard against excessive concentration of assistance provided by the Fund in a particular country, group of countries, or region;
- 4. The best information currently available, although acknowledging that it may only apply to certain nations and regions, from organizations like the Intergovernmental Panel on Climate Change and pertinent knowledge from Indigenous Peoples and vulnerable communities regarding exposure and sensitivity to the negative effects of climate change and loss and damage;
- 5. estimates of recovery and reconstruction costs that take into account the possibility that the data and information may only be available from particular nations and regions and are based on information and data from pertinent entities, particularly national and regional entities; and
- 6. Basic percentage minimum allocations for LDCs (Least Developed Countries) and SIDS (Small Island Developing States).

For the fund to function, it must address L&D needs. Developed countries and their member states should make long-term commitments consisting of annual contributions. In addition, while the agreement mentions non-state contributions, developed countries, namely the EU and its member states, should encourage publicly controlled private donations to avoid reliance on voluntary contributions. This should be based on the polluter pays principle, using methods such as taxes on oil extraction. Governments, the private sector, and innovative sources, such as levies on international shipping and aviation emissions, should all continue contributing to the fund (Anne Hawke and Elizabeth Heyd, 2023). Fossil fuel companies that have done much to fuel the climate crisis should also contribute (Natural Resources Defense Council/NRDC).

While guidelines for the fund's operations have been agreed upon, nations are not required to contribute to it, and there are no hard deadlines or goals. Getting money into the fund and to the people who need it is currently the most urgent need. This fund needs to act swiftly, inclusively, and transparently to make improvements rather than replicate the errors of earlier systems if it is to begin living up to its potential. Currently, loss and damage are enshrined in the GST, it is essential to recognize it as the third pillar of climate action and treat it accordingly, as well as increase ambition in mitigation and adaptation to prevent and minimize loss and damage (Loss and Damage Collaboration, 2023).

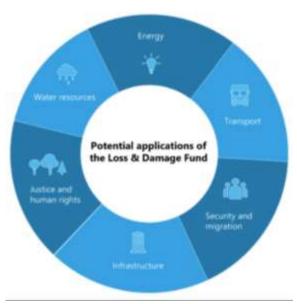


Figure 7: Principles that can guide an effective Loss and Damage fund.

Source: Priti Parikh et al., apolitical, 2023

In the chart above, several things must be considered for successful L&D funding. Consistency, clarity, community-driven, and corruption-free. That is, in conducting funding. All this will require guiding solid principles in accommodating the four aspects above Consistency in the amount and frequency of contributions into the fund; Clarity in the rules and regulations for operationalizing and accessing the fund; Community-driven: timely disbursement of funds and empowerment of local communities; Corruption-free: transparency and accountability to avoid the misuse of funds. In addition to the theoretical success criteria of the fund above, it is also essential to consider what areas need to be prioritized for funding-affected loss and damage; the author agrees with the opinion of Priti Parikh et al., in their article emphasizing what areas are essential, as follows.

Figure 8: The Loss and Damage fund could be effectively leveraged for critical sectors.



Source: Priti Parikh et al., apolitical, 2023

The figure above shows the six (6) areas that are essential to accelerate funding. 1) Water resources are the primary need. According to the author, there are many shortages of clean water, either due to

drought or pollution, based on a report from UNESCO at the UN 2023 Water Conference in New York. Globally, 2 billion people (26% of the population) do not have safe drinking water, and 3.6 billion (46%) lack access to safely managed sanitation (UNESCO, 2023).

Human rights, such as the right to a clean, healthy, and sustainable environment, are also impacted by climate change. To bring about revolutionary change, it has the potential to influence how states, corporations, communities, and courts approach climate change, climate action, and its effects (IOM, 2023). The impacts of climate change disproportionately affect children; for example, 88% of diseases associated with climate change impact children under five years old (WHO 2009: 46). Because they significantly rely on the natural environment for their livelihoods, housing, medicines, and sense of cultural identity, indigenous peoples are among the populations most impacted by climate change. Because of their history of forced evictions and expropriation, they also typically reside in locations vulnerable to climate-related disasters (UNHRC 2017).

Also impacted are infrastructure investors who stand to lose nearly a third of their money, or about \$600 billion, if countries do not plan for a shift to a greener economy by mid-century, especially energy and water companies, where they risk losing 38% percent, or about \$86 billion. Grid utilities could lose 33% of their value, or about \$104 billion. Data infrastructure stands at 32%, or \$61 billion—physical risks from climate impacts or damage done to infrastructure by fire, flood, or typhoon. The overall net value of assets will fall by around \$140 billion by 2050 and will impact every sector, albeit unevenly (Katy Daigle and Simon Jessop, 2023).

Due to a severe drought in the Panama Canal last summer, authorities had to decrease the number of ships that crossed it each day, which led to significant backlogs that affected the supply chain. They repeated it at the end of September. In 2019, similar cuts cost \$370 million in worldwide shipping. The Mississippi River saw record low water levels that year, which hindered the flow of agricultural products and resulted in losses of almost \$1 billion. One hundred nine containers became stranded at sea during a storm in October 2021 off the coast of Vancouver Island, Canada. 90% of traded commodities are moved by water, and as demand increases, maritime trade is anticipated to triple by 2050. Climate change's effects on ports alone might cost the shipping sector up to \$10 billion annually by 2050 and up to \$25 billion annually by 2100, depending on how much damage and disruption they cause (CNBC, 2023).

In Groundswell's World Bank report from 2021, even optimistic projections could still see a minimum of 44.2 million people migrating within their respective countries by 2050; the most pessimistic predictions suggest a figure of 216.1 million. The Groundswell report's figures are based on three future scenarios for six regions, each incorporating different climate and socio-economic developments. To reduce the likelihood of the most pessimistic scenario occurring, action must be taken as soon as possible, mainly as climate change is occurring faster and with more significant consequences quicker and with greater consequences than previously anticipated, and the target set at the Paris Climate Conference (COP 21) to limit global temperature rise to at least 2.0 degrees Celsius. Ideally, 1.5 degrees Celsius is unlikely to be achieved (The SVR Annual Report, 2023).

Based on the explanation of the data considerations above, these six (6) things can be essential in formulating future L&D fund funding so that these funds can be suitable on target for losses and losses due to climate change impacts. It is also important to clearly define the meaning of "loss" and "damage" in the IPCC to narrow down the meaning of the two so that it becomes clear and not finished just debating the meaning of the two. The IPCC should also regulate clearly and in detail the L&D fund to bind all developed countries concerned and responsible for running the L&D fund. This is an urgency that is considered necessary because an assessment of loss and damage in the UN science body IPCC has been a fraught process, it's resulted in limited engagement with the growing scientific literature on this critical issue (IPCC, 2022). Although the AR6 WG II report is a strong reference, it still has gaps that need to be covered, due to the growing scientific literature on the issue. The need for increased support and finance for L&D is clear that the reposts find that current financial, and institutional arrangements and governance to address losses and damages are insufficient. Mitigation and adaptation are not enough to prevent losses and damages, both require support and finance.

CONCLUSION



Based on the discussion above, so that readers can get a more superficial understanding, the author provides a summary of the findings of this paper. L&D funding is still a matter of debate, especially about its operationalization. The World Bank, as the body entrusted with its operation, has a cost-benefit effect, especially for developing countries that need these funds. As for the consequences of L&D funds being managed by the World Bank, there will be a 12% cut, lengthy procedures, and the influence of the United States is a concern; on the other hand, there is still no extraordinary institution that houses the results of this L&D fund agreement that has World Bank standards for managing L&D funds. This is also one of the reasons why developing countries agreed to the World Bank as the operational organizer of the L&D fund for the next four years, despite their initial resistance. In addition, the L&D fund was a success because it was realized at COP-28 in Dubai, and an agreement was reached on how it would operate with the World Bank as the institution responsible for its operationalization. However, the common challenge to date is that there are no firm deadlines and no targets, and countries are not obliged to pay into the fund, so the urgency is to get the money into the fund and to the countries that need it. Therefore, moving quickly, inclusively, and transparently to correct rather than repeat the mistakes of previous climate change lending systems is imperative.

The author would like to provide some input or recommendations based on these conclusions. *First*, for the author, it is necessary to consider the urgency of the need to establish a unique institution for the management, operation, and distribution of L&D funds under the auspices and responsibility of the UN or UNFCCC very important; this is by considering that no interference from the United States or other developed countries has interests so that management and operation are carried out transparently, besides that the distribution costs become more efficient, effective. These L&D funds are not cut large. *Second*, it is essential to include a chapter on the discussion of L&D funds in the IPPC as a form of consistency in encouraging developed countries to continue to contribute to funding losses and damage due to climate change, which is getting worse and the most affected countries are poor and developing countries as mandated in Article 9 of the Paris Agreement. *Third*, the UNFCCC and nations must agree that private and public companies engaged in sectors that impact emissions must also be responsible for providing L&D funds.

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