

A Short History of The Loss and Damage Principle

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There is now settled consensus that climate change is one of the most dangerous dilemmas affecting humanity as well as other species and Earth systems¹. Climate change has been defined as a “long-term change in the average weather patterns that have come to define Earth’s local, regional and global climates”². There have been a lot of research carried out on the ways that countries are tackling with climate change from a mitigation and adaptation perspective. However, beyond the limits of mitigation and adaptation, lie the principle of loss and damage (L&D). L&D has, from a historical point of view, been a very contentious issue to grapple with an added ambiguous definition³. L&D, in a nutshell, has been defined as permanent loss or repairable damage caused by the manifestations of climate change. This can include both severe weather events, as well as slow-onset events, such as desertification and sea level rise. Moreover, L&D can also refer to economic and non-pecuniary harm, such as loss of life, ecosystems, cultural heritage, and livelihoods, to name a few.

It is necessary, for our understanding of how L&D functions, to be able to trace the history, development, and evolution of the L&D concept.

¹ Scientists attribute the global warming trend observed since the mid-20th century to the human expansion of the “greenhouse effect”, warming that results when the atmosphere traps heat radiating from Earth toward space. Certain gases in the atmosphere, such as nitrous oxide, methane and carbon dioxide (CO₂), block heat from escaping. These gases are known as Green House Gases (GHGs). It has been scientifically proven that humans have contributed to increase atmospheric CO₂ concentration by more than a third since the Industrial Revolution began.

² NASA, “Overview: Weather, Global Warming and Climate Change”, *Global Climate Change*, (2020), available online at <https://climate.nasa.gov/resources/global-warming-vs-climate-change/>, accessed on 10 January 2021.

³ A. DURAND, S. HUQ, “Defining Loss and Damage: Key Challenges and Considerations for Developing an Operational Definition”, *International Centre for Climate Change and Development*, 2014.

To achieve this, the article will adopt the following plan: part I will focus on the historical background since the introduction of the climate change regime, fitting L&D into the picture, with section A delving on a brief historical overview of the international climate change regime, while section B will consist of analyzing the inception of the L&D principle. Part II will be made up of an assessment of how the L&D principle gained importance, relevance, and momentum, with section A focused on the landmark milestone in the development of the principle, which is the instauration of the Warsaw International Mechanism (WIM), while section B will study the defining moment since the introduction of the L&D principle, which is its inclusion in the Paris Agreement.

I. Background

The main cause of climate change, according to scientific observations and studies, are fossil fuel burning, which leads to increases in heat-trapping greenhouse gas (GHG) levels in the Earth's atmosphere, which in turn raises the planet's average surface temperature. Therefore, it is undeniable that climate change has stemmed mainly from anthropogenic activity, since the early 20th century, at the start of the industrial revolution which happened in global north countries such as the UK, France, Germany, Canada, and the US. Indeed, in its fifth assessment report, the Intergovernmental Panel on Climate Change (IPCC), which is a team of 1,300 independent scientific experts from countries across the globe, under the authority of the United Nations (UN), conclusively reached the conclusion that there was more than 95% likelihood that human activities over the past 50 years have contributed to the warming of the Earth⁴. The consequences of climate change can be underestimated. Ice caps are melting; sea levels are rising; oceans are becoming warmer; we are experiencing longer and more intense droughts which in turn threaten wildlife, crops and freshwater supplies; and heat waves, floods, storms, hurricanes and cyclones are become fiercer and more frequent across the globe. These impacts, while also affecting developed nations, however disproportionately burden vulnerable countries, such as those located in Africa and Asia, Small Island Developing States (SIDS), and Least Developed Countries (LDCs), in terms of their economies, human rights, livelihoods, cultures and ways of life. As a response to the above identified threats, a climate change regime has been set up since the late 1950s, to empower vulnerable countries and their citizens to mitigate the effects of climate change and adapt to its severity.

⁴AR5 Synthesis Report: Climate Change 2014', IPCC, available online at <https://www.ipcc.ch/report/ar5/syr/>, accessed on 10 January 2021

A. A Brief Historical Overview of the International Climate Change Regime

The timeline for the development and evolution of the international framework set up to provide an effective response to the scourge of climate change is an interesting one. In painting the picture for the evolution of climate change governance, policy, institutions, and law from an international perspective, it is easy to identify five distinct periods. First and foremost, there is the foundational phase (1957-1979), during which time the concept of climate change springs up as an internationally recognized scientific dilemma⁵. Then comes the agenda-setting period (1985-1990), a period where climate change as a concept transformed itself from a scientific conundrum into an important and crucial policy issue⁶. The next tranche has been termed as the pre-negotiation interval, a period spanning 1988 to 1990, during which time nation states around the world became actively and purposefully involved in the climate change process. Then came the actual negotiation phase, which was between 1990-1992, during which the IPCC established itself as the “*leading international expert body on climate change and the UNGA set up a negotiating committee to prepare the text for the UNFCCC*”⁷. During this crucial stage of the evolution of international climate change governance, the UNFCCC, which was adopted in 1992, was celebrated for being a landmark international agreement with tremendous potential to respond effectively to climate change, especially in terms of global CO₂ emissions reduction. In its wake, there was what has been described as a post-agreement phase, a time which was dedicated to the elaboration and implementation of the UNFCCC, and formulation of negotiations on additional commitments, leading ultimately to the adoption of the Kyoto Protocol in

⁵ E.g. International Geophysical Year (1958), Keeling Curve [the Keeling Curve is a daily record of global atmospheric carbon dioxide concentration maintained by Scripps Institution of Oceanography at UC San Diego (1960), the establishment of the World Weather Watch programme by the World Meteorological Organisation (WMO) in 1963, the launch of the Global Atmospheric Research Programme by the International Council for Science in 1967, the UN Conference on the Human Environment (UNCHE) in 1972, the Report of the U.S. National Academy of Sciences (1979), and the First World Climate Conference in 1979.

⁶ The latter stage of the 1980s witnessed climate change induced by human activity slowly transform from a scientific into a political and public affair, as governments were quick to reassert control over this problem: this encouraged the setting up of the Intergovernmental Panel on Climate Change (IPCC), with a mandate to “provide internationally coordinated scientific assessments of the magnitude, timing and potential environmental and socio-economic impacts of climate change and realistic strategies” (UN General Assembly – 1988, art. 5).

⁷ J. KREIENKAMP, , “The Long Road to Paris: The History of the Global Climate Change Regime”, Policy Brief, Global Governance Institute, University College London (UCL), 2019, p.3

December 1997⁸. More recently, with the adoption of the Paris Agreement (PA) in 2015 as a new climate treaty, there has been the identification of a sixth stage in the development of the global climate change regime. However, it is disappointing to note that despite these metamorphoses in the international climate change governance, the latter has been touted as being ineffective, unresponsive, and not ambitious enough, with the latest example cited being the UNFCCC's 25th Conference of Parties (COP 25)⁹.

B. The Inception of the Loss and Damage Principle

As a direct response to the inadequacy of mere adaptation and mitigation efforts, the concept of L&D has been introduced as early during the initial negotiations of the UNFCCC. The idea of support for vulnerable countries which bear a heavier brunt in terms of the effects of climate change, is nothing new, but in recent years, “*pressure to institutionalize a UNFCCC mechanism on L&D [increased] in response to the shortcomings of mitigation policy and the inadequacy of adaptation support for nations and communities already experiencing the worst effects of climate change*”¹⁰.

The term L&D has been defined as the residual impacts of climate change which mitigation and adaptation efforts are insufficient to prevent or alleviate. L&D can be the consequence of severe weather events or slow onset events, namely desertification or sea level rise. It was the Alliance of Small Island States (AOSIS) that first began championing the cause of L&D since the year 1991, in the run up to the negotiations of setting up the UNFCCC¹¹. At that time, AOSIS led the way in proposing the creation of an international insurance pool to assist in offering compensation to the most vulnerable and low-lying coastal developing countries, such as Mauritius, Seychelles, the Maldives, Samoa, Palau, etc., in

⁸ The Kyoto Protocol was adopted in the year 1997, and is an international agreement that was aimed at managing and reducing states' carbon emissions and GHGs. The Protocol had as principal function the operationalization of the UNFCCC.

⁹ M. HOOD, “Five Reasons COP25 Climate Talks Failed”, (2019) Phys.org [online]. available at <https://phys.org/news/2019-12-cop25-climate.html>, accessed on 10 Dec 2020; A. CHANDRASHEKAR, The Guardian, [online]., available at <https://www.theguardian.com/commentisfree/2019/dec/21/un-climate-talks-deadlock-cop25>, accessed on 10 Dec 2020; A. VAUGHAM, ‘COP25 Climate Summit Ends in Staggering Failure of Leadership’. [online]. 16 December 2019. Available at <https://www.newscientist.com/article/2227541-cop25-climate-summit-ends-in-staggering-failure-of-leadership/>, accessed on 10 Dec 2020

¹⁰ A. DURAND, S. HUQ, Defining Loss and Damage: Key Challenges and Considerations for Developing an Operational Definition, International Centre for Climate Change and Development, 2015.

¹¹ Climate Analytics (2019), “Briefings on Loss and Damage”, available online at <https://climateanalytics.org/briefings/loss-and-damage/>, accessed on 16 March 2021

terms of loss and damage arising from sea level rise¹². In the proposal submitted by AOSIS, the contributed amount by each country to this fund would be determined by the latter's corresponding role played to increase global CO₂ emissions and their relative share of global gross national product (GNP): this was a formula modelled on the 1963 Brussels Supplementary Convention on Third Party Liability in the Field of Nuclear Energy¹³.

Subsequently, loss and damage was first referred to in a “*formally-negotiated UN text in the 2007 Bali Action Plan, which called for “disaster reduction strategies and means to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change”*”¹⁴. Since then, the AOSIS have consistently called for a mechanism that would possess the ability and effectiveness to compensate countries affected by sea level rise. The AOSIS mechanism consisted of three elements, namely:

- insurance;
- rehabilitation and compensation;
- and risk management.

II. Loss and Damage Gaining Traction

The Loss and Damage principle started gaining more traction in the following years. At COP16, in 2010, a framework was developed for loss and damage, under the Subsidiary Body on Implementation (SBI) Work Programme. The SBI Work Programme had two aims, namely, to consider approaches to address loss and damage, including impacts of extreme weather events and slow onset events in developing countries that are particularly vulnerable; and to strengthen international cooperation and expertise in order to understand and reduce loss and damage¹⁵.

¹² M. J. MACE, R. VERHEYEN, “Loss, Damage and Responsibility after COP21: All Options Open for the Paris Agreement”, *Review of International European Community and International Environmental Law* 2016 (2)

¹³ The 1963 Convention Supplementary to the Paris Convention of 29 July 1960 (the “Brussels Supplementary Convention” or BSC) was adopted to provide additional funds to compensate damage as a result of a nuclear incident where Paris Convention funds proved to be insufficient.

¹⁴ F. D. W. BROT *et al*, “Climate Finance for Addressing Loss and Damage How to Mobilize Support for Developing Countries to Tackle Loss and Damage” (2019).

¹⁵ UNFCCC (2010), “SBI Work Programme”, available [online] https://unfccc.int/sites/default/files/resource/Online_guide_on_loss_and_damage-May_2018.pdf, accessed on 26 April 2021

For a while, people outside the UNFCCC negotiation process criticized the slow development of the L&D principle into hard law and genuine policy at international level: this was because L&D has emerged as a topic that is susceptible to misinformation and misinterpretation. It was unclear at that time how L&D tied in with climate mitigation and adaptation and why it should not have a relationship with compensation or liability, especially from the point of view of the principle of common but differentiated responsibility under international environmental law. As such, the United Nations, as well as most other developed nations have for a long time, rejected, in an unequivocal manner, the argument that L&D should be conflated with liability or compensation.

It took increasingly robust evidence on climate change impacts and risks, as synthesised by the IPCC (e.g. through the 5th Assessment Report in 2014), for L&D to be recognised institutionally by the UNFCCC. A study of the Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC WGII, AR5) used qualitative data analysis software (text mining) to “*assess which climatic stressors, impact sectors and regions the report primarily associates with losses and damages, and compared this with the focus areas of the Warsaw International Mechanism*”¹⁶. The study reveals that IPCC WGII AR5 primarily associates losses and damages with extreme weather events and economic impacts, and treats it primarily as a future risk. The SBI undertook technical work in the areas of assessing the risk of loss and damage; a range of approaches; and the role of the UNFCCC.

A. Landmark Milestone for the Loss and Damage Principle

The landmark milestone for the loss and damage principle was undoubtedly in 2013, at COP19 in Warsaw, when there was the setting up of the Warsaw International Mechanism for Loss and Damage (WIM). The Warsaw International Mechanism for Loss and Damage (WIM) is the main vehicle in the UNFCCC process to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change, in a comprehensive, integrated and coherent manner. The implementation of the functions of the WIM is guided by the Executive Committee of the Mechanism. The three aims of the WIM are to enhance knowledge and understanding of comprehensive risk management approaches; to strengthen dialogue, coordination, coherence and synergies among relevant stakeholders; and finally, to enhance action and support, including, finance, technology and capacity-building. The ExCom holds biannual meetings in order to strategize implementation of the mechanism. At its sixth meeting (ExCom 6)

¹⁶ K. VAN DER GEEST, K. WARNER, “Loss and Damage in the IPCC Fifth Assessment Report (Working Group II): A Text-Mining Analysis”, Climate Policy 2020.

held from 11–13 October 2017, the five-year rolling work plan (succeeded by the initial two-year work plan) was approved with recommendations, and progress was acknowledged on the focus areas of the mechanism, such as on the clearinghouse for risk transfer, the work of the task force for displacement, and communication strategy¹⁷. The five-year rolling work plan was reviewed at COP25. It is to be argued that the setting up of the WIM was a huge achievement for climate negotiators, especially for the AOSIS, SIDS and other vulnerable nations of the world, which are already bearing a disproportionate brunt of this scourge. However, the WIM has been criticized on numerous fronts, especially because of its slow development as a fully functional mechanism to monitor L&D. For example, it has been debated whether the WIM should be removed from the adaptation framework of the UNFCCC¹⁸.

B. Inclusion of the Loss and Damage Principle in the Paris Agreement

At COP21, the principle of loss and damage was inserted into the much-celebrated Paris Agreement, and it was a watershed moment, especially for AOSIS, SIDS and other vulnerable and least-developed countries (LCDs) who had been advocating for a robust loss and damage principle, recognized under international law. The loss and damage principle was thus enshrined in Article 8 of the Paris Agreement. The Paris Agreement “*recognizes the importance of averting, minimizing and addressing loss and damage*”¹⁹. The overarching areas of cooperation and facilitation to enhance understanding, action and support are in the following areas: Emergency preparedness; low onset events; comprehensive risk assessment and management; risk insurance facilities, climate risk pooling and other insurance solution; early warning systems’ events that may involve irreversible and permanent loss and damage; non-economic losses; and resilience of communities, livelihoods and ecosystems²⁰. While everyone acknowledges that the inclusion of the L&D principle in the Paris Agreement is a watershed moment in the history of the development of the concept, there has been some criticism levelled at Article 8 since then. For starters, both the Paris Agreement and the WIM have not clarified the financing aspect of the L&D principle. This has been due to the unwillingness of developed nations to put a monetary value on the concept. It is also partly because of lack of consensus on the framing and definition of L&D, and also additionally on the big and contentious question of who will be bearing the burden of finance (Global North

¹⁷ THE ENERGY AND RESOURCES INSTITUTE (2019), “Loss and Damage: The Gradual Progression and the Road Ahead”, An Issue Brief, The Energy and Resources Institute, New Delhi, India

¹⁸ G. TARASKA, “The Meaning of Loss and Damage in the International Climate Negotiations”, *Energy and Environment, Centre for American Progress*, 2015.

¹⁹ Article 8 (1), Paris Agreement, Decision 1/CP.21

²⁰ Article 8 (4), Paris Agreement, Decision 1/CP.21

or developed nations). For example, in Article 8 of the PA, which is dedicated to the principle of L&D, the closest and most obvious indications of finance are to be found in Article 8 (3) and (4), which only mentions “support on a cooperative and facilitative”²¹ basis, with nothing else supporting this statement. Indeed, what is lacking is that there is no question of liability and compensation: these are plainly and outrightly excluded in the most non-equivocal terms by decision 1/CP.21 (para 49, 50). Additionally, it is disappointing that Article 9 mentions finance but only refers to how this aspect should be balanced between adaptation and mitigation, with no mention whatsoever of L&D in this particular article, even after the ExCom of the WIM had previously entreated for the question of finance to be addressed at COP21 in Paris.

Conclusion: Loss and Damage in the Wake of the Paris Agreement

After the adoption of the loss and damage principle in the Paris Agreement, the notion was given an official and formal platform within the UN climate change treaty regime. Researchers have however argued that “whereas Article 8 of the Agreement provided the bones for a loss and damage scheme there was still an obvious need to put flesh to these bones”²². There have not been major developments regarding the loss and damage principle since Paris: The five-year rolling work plan of the WIM was reviewed at COP25, in 2019, and there was also slight mention of the loss and damage principle in the Paris Agreement Work Programme.

As has been seen by the above article, L&D principle lacks effective normative value, and is a “legal principle” devoid of legal force, unlike hard law concepts, which are binding upon member States signatory to treaties and agreements under international law. The discourse around L&D has generated significant confusion among practitioners and policy makers²³, as it has been

²¹ Article 8 (3) and Article 8 (4), Paris Agreement, Decision 1/CP.21.

²² M. BROBERG, B. M. ROMERA, “Loss and Damage After Paris: More Bark than Bite”, *Climate Policy*, Taylor and Francis, Vol. 20, n°6, 2020.

²³ For example, E. A. PAGE and C. HEYWARD, “Compensating for Climate Change Loss and Damage”, *Political Studies*, Vol. 65, n° (2), 2017, p. 357 argue that “the UNFCCC has yet to adopt an account of climate change loss and damage that is sufficiently precise to identify which changes in climate generates losses and damages, which agents should cover the costs of interventions designed to address loss and damage or what ought to be the normative goal of these interventions.” Other authors which have commented on this confusion include E. BOYD et al., “A Typology of Loss and Damage Perspectives”, *Nature Climate Change*, Vol. 7, Springer Nature, p. 723 ; K. E. McNAMARA and G. JACKSON, “ Loss and Damage: A Review of the Literature and Directions for Future Research”, *WIREs Climate Change*, n°1,

argued that the operational details of the WIM, as well as Article 8 of the PA which ought to give binding force to the principle, are not settled yet. Therefore after studying the history and evolution, as well as the current framework for L&D, there is scope to explore how the L&D principle can be effectively implemented as a binding compensatory mechanism for Small Island Developing States (SIDS) regarding residual climate impacts beyond mitigation and adaptation efforts.

2018 and G. VULTURIUS, M. DAVIS, “Defining Loss and Damage: The science and politics around one of the most contested issue within the UNFCCC”, *Discussion Brief, Stockholm Environment Institute*, 2016.

