

ADDRESSING ROADBLOCKS TO LOSS AND DAMAGE MECHANISM UNDER THE CLIMATE CHANGE REGIME

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ABSTRACT

Loss and Damage mechanism is one of the essential issues under the climate change regime yet remained ignored at the international forum for a long period. The controversy attached to this mechanism is due to the divided opinion among developed and developing countries on the meaning, contents, and implications of loss and damage. It gained momentum when the countries realized that mitigation and adaptation would be insufficient to address the inevitable negative impacts of climate change. With the formation of the Warsaw International Mechanism (WIM) and adoption of article 8 under the Paris Agreement, this issue attracted a whole new realm of discussions, negotiations, and clarifications for its implementation. However, several challenges related to the effective implementation of this climate measure remain vague and unresolved. The present article attempts to understand the crucial elements of loss and damage that should necessarily be resolved to realize the needs of vulnerable countries.

Keywords: *Climate Change, Compensation, Liability, Loss and Damage, Warsaw International Mechanism*

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I. Introduction

CLIMATE CHANGE had already caused hundreds of billion-dollar loss and damage in the twentieth century through lost crops, rising sea, and extreme weather events.¹ The situation will worsen in the twenty-first century as the weather events will be more frequent and severe in magnitude. Where the problem of climate change is a common concern of humankind,² it poses an enormous implication on the vulnerable developing countries and Island States that have contributed least to the emergence of this problem.³

The most effective tools to fight against climate change are mitigation and adaptation.⁴ Countries shall sincerely restrict their greenhouse gases (GHGs) emissions to meet the goals of the Paris Agreement.⁵ Also, they must adapt to the adverse consequences of climate change and enhance climate resilience.⁶ However, considering the present ambitious goals of countries committed through their Nationally Determined Contributions (NDCs),⁷ it will not be possible to avoid inevitable losses and damages.⁸ Similarly, humans cannot adapt indefinitely to calamities and disasters. There exist financial, technological, and capacity barriers to those adaptation measures.⁹ It implies that despite mitigation and adaptation measures, not everything under the sun could be protected, and consequently, human life & property will suffer a few unavoidable loss and

¹ Roz Pidcock and Sophie Yeo, “Explainer: Dealing with the ‘loss and damage’ caused by climate change” *Carbon Brief*, May 9, 2017, available at: <https://www.carbonbrief.org/explainer-dealing-with-the-loss-and-damage-caused-by-climate-change> (last visited on May 5, 2021).

² United Nations Framework Convention on Climate Change, Paris Agreement to United Nations Framework Convention on Climate Change, Dec. 12, 2015, *UNTS*: 52 [*hereinafter* ‘Paris Agreement’], Preambular paragraph to the Agreement.

³ Sam Adelman, “Climate Justice, Loss and Damage and Compensation for Small Island Developing States” 7 *Journal of Human Rights and the Environment* 32 (2016).

⁴ Chunli Zhao, Yan Yan, *et. al.*, “Adaptation and mitigation for combating climate change – from single to joint” 4 *Ecosystem Health and Sustainability* 85 (2018).

⁵ *Ibid.*

⁶ *Ibid.*

⁷ *Supra* note 2. Nationally Determined Contributions (NDCs) denote the cumulative efforts of each country adopted for reducing their carbon emissions and adapting to the impacts of climate change. Article 4(2) of the Paris Agreement requires that “Each Party shall prepare, communicate and maintain successive nationally determines contributions that it intends to achieve”

⁸ Reinhard Mechler, C. Singh, *et.al.*, “Loss and Damage and limits to adaptation: recent IPCC insights and implications for climate science and policy” 15 *Sustainability Science* 1245 (2020).

⁹ Erin Roberts and Mark Pelling, “Climate change-related loss and damage: translating the global policy agenda for national policy processes” 10 *Climate and Development* 4 (2018).

damage.¹⁰ Thus, to take care of such instances of injuries, loss, and damage mechanisms should be substantially addressed by countries in their climate efforts.

Despite being an essential measure, loss and damage have not received much attention from the countries. Even after twenty-eight years of the Convention, this principle is occupied with several uncertainties. It is essential to identify the complexities of this mechanism and resolve them in upcoming sessions. This article deals with the challenges to be faced by loss and damage mechanism during its implementation. It has dealt with the historical background of the issue. Further, it attempts to elaborate on the meaning and concept of loss and damage mechanism and explore the reasons for the contentious nature of this mechanism. It also tries to ascertain probable solutions to the complexities within the issue. Notably, it investigates possibilities for establishing liability and compensation of developed countries in and beyond the Paris Agreement. It suggests a proactive role for the Warsaw International Mechanism (WIM) in strengthening loss and damage under the climate regime. Further, it stresses that areas including non-economic loss and damage, slow-onset weather events, scaled-up finance, and reporting by developing countries require special attention from the states. Lastly, the article provides an Indian perspective on this mechanism and illustrates the relevance of removing ambiguities for India.

II. Understanding Loss and Damage mechanism

Loss and damage are the consequences of the adverse impact of climate change.¹¹ It denotes the outcomes that cannot be avoided by mitigation and adaptation measures.¹² Since mitigation and adaptation cannot prevent all effects of climate change thus, some losses and damages remain inevitable. Saleemul Huq describes the term as, “Loss refers to things that are lost forever and cannot be brought back, such as human lives or species loss, while damages refer to things that are damaged, but can be repaired or restored, such as roads or embankments.”¹³

Loss and damage can be collectively understood from the working definition of United Nations Framework Convention on Climate Change (UNFCCC) Subsidiary Body for Implementation as,

¹⁰ Gregor Vulturius and Marion Davis, “Defining loss and damage: The science and politics around one of the most contested issues within the UNFCCC” *Stockholm Environment Institute* (2016).

¹¹ Veera Pekkarinen, Patrick Toussaint, *et.al.*, “Loss and Damage after Paris: Moving Beyond Rhetoric” *Carbon and Climate Law Review* 31 (2019).

¹² *Supra* note 3.

¹³ *Supra* note 1.

“the actual and/or potential manifestation of impacts associated with climate change in developing countries that negatively affect human and natural systems.”¹⁴ It consists of extreme weather events like flooding, heat waves, droughts and storm surges and slow-onset events like sea-level rise, salinization, desertification, loss of biodiversity, and ocean acidification.¹⁵ This notion further includes economic and non-economic loss and damage where the former means harm to the source of livelihood or property. At the same time, the latter signifies loss of life, nature, or cultural heritage.¹⁶ Depending upon the temporal nature of the events, different approaches are prescribed to address them. Risk-based approaches are suited to address destruction caused by extreme events that primarily include risk reduction, risk retention, and risk transfer.¹⁷ For slow-onset events, measures like the institutional arrangement and governance schemes that promote cooperation among countries are reliable.¹⁸ Loss and damage include past, present, and future climate-induced destructions.¹⁹ Notably, the majority of the present-day instances of loss and damage have been reported from local levels.²⁰ However, there will be several global focus areas for loss and damage in the future. Thus, it is pertinent to analyze the historical account related to this measure to understand the needs and circumstances that led to its evolution.

III. Historical Background

The demands for an adequate mechanism were made in 1991 at the beginning of climate change negotiations by the Alliance of Small Island States (AOSIS) group of countries facing climate change risks.²¹ They advocated for establishing an international insurance pool funded by developed countries that could compensate victims of sea-level rise. This proposal got rejected at the negotiation table. Only a simple reference was made under article 4(8) of the UNFCCC as

¹⁴ UNFCCC Subsidiary Body for Implementation, A literature review on the topics in the context of thematic area 2 of the work programme on loss and damage: a range of approaches to address loss and damage associated with the adverse effects of climate change, UN Doc. FCCC/SBI/2012/INF.14, Nov. 15, 2012, *available at*: <https://cop23.unfccc.int/sites/default/files/resource/docs/2012/sbi/eng/inf14.pdf> (last visited on May 28, 2021).

¹⁵ Daniel Puig, Elisa Calliari, *et.al.*, “Loss and Damage in the Paris Agreement’s Transparency Framework” *Policy Brief* 1 (2019).

¹⁶ *Supra* note 11.

¹⁷ *Supra* note 15.

¹⁸ *Ibid.*

¹⁹ Julia Taub, Naznin Nasir, *et.al.*, “From Paris to Marrakech: global politics around loss and damage” 72 *India Quarterly* 317 (2016).

²⁰ Wil Burns, “Loss and Damage and the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change” 22 *ILSA Journal of International and Comparative Law* 415 (2016).

²¹ Intergovernmental Negotiating Committee for a Framework Convention on Climate Change, Working Group II (1991).

“...including actions related to funding, insurance and the transfer of technology, to meet the specific needs and concerns of developing country Parties....”²² However, until 2007 it did not attract much discussion at the international forum. The term ‘Loss and Damage’ got introduced at the Conference of Parties (COP) 13 in the 2007 Bali Action Plan.²³ It was significantly developed in 2010 when under the Cancun Adaptation Framework, a work programme was introduced to assess loss and damage mechanism.²⁴

From the Fifth Assessment Report of the Intergovernmental Panel on Climate Change,²⁵ it became evident that the upcoming impacts of climate change shall be more severe. It further noted that the state parties are not prepared with any international mechanism to address the harmful effects of human-induced climate change, especially on vulnerable countries. Ultimately, at the COP 19 to UNFCCC, Warsaw International Mechanism (WIM) was established with a mandate to enhance knowledge, cooperation, and financial support to address loss and damage.²⁶ The WIM performs its work through the Executive Committee (Excom), which has primarily been engaged in collecting and disseminating information.²⁷ Later another significant development was made at the COP 21 to UNFCCC with the inclusion of article 8 on ‘Loss and Damage’ under the Paris Agreement²⁸ that established loss and damage as a ‘third pillar’ to deal with climate change with a broadened mandate for the WIM.²⁹ COP 24 to UNFCCC in 2018 has included the aspect of loss and damage within the transparency and global stocktake framework with many uncertainties.³⁰

²² United Nations Framework Convention on Climate Change, May 9, 1992, 1771, *UNTS*, 107 [hereinafter ‘Convention’], art. 4.8.

²³ Conference of Parties, United Nations Framework Convention on Climate Change, *Report of the Conference of the Parties on its thirteenth session, Addendum, Part Two: Action taken by the Conference of the Parties at its Thirteenth Session*, Decision 1/CP.13 Bali Action Plan, U.N. Doc. FCCC/CP/2007/6/Add.1 (March 14, 2008).

²⁴ Conference of Parties, United Nations Framework Convention on Climate Change, *Report of the Conference of the Parties on its sixteenth session, Addendum, Part Two: Action taken by the Conference of the Parties at its sixteenth session*, Decision 1/CP.16 The Cancun Agreement: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, U.N. Doc. FCCC/CP/2010/7/Add.1 (March 15, 2011).

²⁵ Intergovernmental Panel on Climate Change, Climate Change 2014, *Synthesis Report*, Contribution of Working Groups I, II and III, to the Intergovernmental Panel on Climate Change.

²⁶ Conference of Parties, United Nations Framework Convention on Climate Change, *Report of the Conference of the Parties on its nineteenth session, Addendum, Part Two: Action taken by the Conference of the Parties at its nineteenth Session*, Decision 2/CP.19 Warsaw international mechanism for loss and damage associated with climate change impacts, U.N. Doc. FCCC/CP/2013/10/Add.1 (Jan. 31, 2014).

²⁷ *Supra* note 11.

²⁸ *Supra* note 2.

²⁹ *Id.*, art. 8.

³⁰ Daniel Puig, Olivia Serdeczny, *et.al.*, “Loss and damage in COP 24” (2018), available at: https://backend.orbit.dtu.dk/ws/portalfiles/portal/165384768/LD_COP24_DTU_CA_ICCCAD_final.pdf (last visited on May 15, 2021).

The entire evolutive journey of this measure has observed a sharp distinction between the stand of developed and developing countries. States can address the contemporary challenges related to loss and damage only if they resolve these fundamental disagreements. The next part attempts to highlight the grey areas within the approaches of developed and developing countries.

IV. Why is this mechanism controversial?

While responding to the actual or potential destructions caused by anthropogenic climate change, vulnerable countries argued for establishing the responsibility of industrialized nations and sought reparations.³¹ On the other hand, developed countries have always cautiously avoided references to loss and damage to escape their responsibility for the devastation caused by climate change. The difference in the interpretation between developed and developing countries is the primary cause of the existing complexities related to this mechanism. This mechanism is crucial for least developed countries and small island States to provide them relief from the upcoming climate-induced disasters.³² Developed countries see this mechanism as a tool to establish their liability and compensation.³³ Daniel Bodansky elaborates the reason for neglecting the AOSIS proposal as the vulnerable countries had little to offer to developed countries in return for the financial favors.³⁴ This debate has drawn a red line both for developed and developing countries.³⁵

When this concept was addressed in the 2007 Bali Action Plan, it was recognized as a part of adaptation measures and not a separate mechanism. Where developing countries wanted to establish loss and damage an independent mechanism, the developed countries have tried to include it within adaptation. The developed countries also purposely shifted the focus by sidelining the talks on compensation and promoting risk management mechanisms.³⁶ They avoided any discussion on ‘compensation’ but agreed to provide technical or financial support to the vulnerable parties.³⁷ For developing countries, loss and damage are adverse effects caused beyond adaptation.

³¹ Benoit Mayer, “Whose Loss and Damage: Promoting the Agency of Beneficiary States” 4 *Climate Law* 267 (2014).

³² Maxine Burkett, “Reading between the Red Lines: Loss and Damage and the Paris Outcome” 6 *Climate Law* 118 (2016).

³³ *Ibid.*

³⁴ Daniel Bodansky, “The United Nations Framework Convention on Climate Change: A Commentary” 18 *Yale Journal of International Law* 528 (1993) cited in Benoit Mayer, “Migration in the UNFCCC Workstream on Loss and Damage: An Assessment of Alternative Framings and Conceivable Responses” 6 *Transnational Environmental Law* 107 (2017).

³⁵ *Supra* note 32.

³⁶ *Supra* note 31.

³⁷ *Ibid.*

Further, developing countries considered WIM an incomplete institution that does not address the compensation factor.³⁸

There exists a deliberate avoidance of loss and damage mechanism throughout the climate negotiations by developed country parties. Since 1991 it has remained a controversial issue in subsequent COPs as both the developed and developing countries had a divided opinion to the meaning, nature, and scope of this concept. Even after so many years of the climate regime, many questions related to loss and damage mechanism are still debatable and not gaining much progress.³⁹ It can be argued that too much discussion on compensation has degraded the priority of this mechanism in the negotiations. The next part of the article analyzes the contemporary challenges that limit the effective implementation of loss and damage measures.

V. Challenging areas related to the Loss and Damage mechanism

Definition and concept of Loss and Damage

There exists no standard definition of the term ‘loss and damage’ among the countries.⁴⁰ They are using a working definition provided by the Work programme on Loss and Damage; however, it does not explain the necessity of creating a separate category for this mechanism.⁴¹ The working definition is different from the one pleaded by AOSIS in 1991. It reflects that the mechanism underwent several changes in past years due to the absence of a common understanding. Despite that Paris Agreement or other related document does not attempt to define this term. It creates further confusion and controversy among the countries concerning the meaning and shared understanding of the notion. Kureienkamp and Vanhala consider loss and damage as ambiguous and multifaceted and raise the concern over the absence of any arrangement.⁴² However, this constructive ambiguity has also helped to develop the loss and damage regime.⁴³

³⁸ Maxine Burkett, “Loss and Damage” 4 *Climate Law* 119 (2014).

³⁹ *Supra* note 11.

⁴⁰ *Supra* note 38.

⁴¹ Elisa Calliari, “Loss and Damage: a critical discourse analysis of Parties’ positions in climate change negotiations” 21 *Journal of Risk Research* 725 (2018).

⁴² Julia Kreienkamp and Lisa Vanhala, “Climate Change Loss and Damage” *Global Governance Institute* (2017), available at: <https://www.ucl.ac.uk/global-governance/sites/global-governance/files/policy-brief-loss-and-damage.pdf> (last visited on May 21, 2021).

⁴³ *Supra* note 41.

Two prevalent conceptions have been developed recently on this mechanism. First emphasizes loss and damage as the adverse impacts of climate emergency over human and natural systems.⁴⁴ The second considers loss and damage as a failed outcome of mitigation and adaptation measures.⁴⁵ Notably, the second notion has become more popular among the academicians. Countries agreed on residual impacts of climate change; however, they differed on the approaches to resolve those impacts.⁴⁶ Further, the states were again divided on the scope and contents of loss and damage.⁴⁷ Some countries debated not even to include loss and damage under the Convention.⁴⁸ Indeed, the concept and scope of loss and damage require a common understanding among the parties to proceed further with other related aspects.⁴⁹ Once the states settle with a shared understanding, only then can the structure of the mechanism be determined.

Weak structure of the mechanism under the Paris Agreement

With the adoption of a provision on loss and damage under the Paris Agreement, countries have come closer to an effective mechanism on this contentious issue. Article 8.1 of the Paris Agreement provides, “Parties recognize the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, and the role of sustainable development in reducing the risk of loss and damage.” Initially, developed countries did not want to include loss and damage mechanism under the Paris Agreement. However, developing countries fought to incorporate this significant and independent provision.⁵⁰ Ultimately the mechanism became a part of the Agreement, but it has lost its core issue related to liability. Moreover, article 8 of the Paris Agreement notes certain limitations to this mechanism. Firstly, the language of this article does not create any legal obligation for the parties to observe this provision. Secondly, article 3 of the Agreement does not include loss and damage under the list of items maintained for addressing Nationally Determined Contributions (NDCs) of the parties. Parties are kept free to decide on the inclusion of this mechanism under their NDC. Thirdly, loss and damage are not reflected in the transparency

⁴⁴ *Supra* note 19.

⁴⁵ *Ibid.*

⁴⁶ *Supra* note 10.

⁴⁷ *Ibid.*

⁴⁸ *Ibid.*

⁴⁹ *Supra* note 42.

⁵⁰ *Supra* note 20.

framework under article 13 of the Agreement. However, later the Paris Rulebook adopted at COP 24 of UNFCCC has included the loss and damage within the transparency and global stocktake framework but with many uncertainties.⁵¹

Warsaw International Mechanism for Loss and Damage (WIM)

On the Warsaw International Mechanism for Loss and Damage (WIM), the countries were confronted with a crucial dilemma that whether WIM should continue with its mandate and strengthen over time or a new mechanism should be created separately under a new treaty.⁵² However, the countries proceeded with the first approach and strengthened the WIM after the Paris Agreement. The mandate of WIM requires the enhancement of action and support, including financial aid, which has yet not been clearly visualized.⁵³ Under COP 20, WIM was created for a two-year period. After the adoption of the Paris Agreement, it had become a permanent institution with an expanded mandate. The Agreement provided Excom to establish a task force on displacement and clearinghouse for risk transfer that eventually took place under COP 22 and 23, respectively. COP 22 approved a five-year rolling workplan for WIM with the next review in COP 25. A clearing house for risk management does not address the long-term request of developing and least developed countries to establish a technical advisory body and financial support for rehabilitation.⁵⁴ Under COP 25, WIM has been strengthened by establishing both expert groups on action and support and the “Santiago network” for providing technical assistance to developing countries.⁵⁵ However, it does not address the request of developing countries to focus on additional finance to address loss and damage. Due to the absence of adequate financial resources, WIM is facing hardships in its work.

Further, WIM cannot be the sole instrument to address loss and damage mechanism. Article 8(5) of the Paris Agreement provides that WIM “shall collaborate with existing bodies and expert

⁵¹ *Supra* note 15.

⁵² M. J. Mace and Roda Verheyen, “Loss, damage and responsibility after COP 21: All options open for the Paris Agreement” 25 *Review of European, Comparative and International Environmental Law* 197 (2016).

⁵³ *Supra* note 11.

⁵⁴ *Ibid.*

⁵⁵ Conference of Parties, United Nations Framework Convention on Climate Change, *Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on its second session, Addendum, Part two: Action taken by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its second session*, Decision 2/CMA.2 Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts and its 2019 review, UN Doc. FCCC/PA/CMA/2019/6/Add.1 (March 16, 2020).

groups under the Agreement, as well as relevant organizations and expert bodies outside the Agreement.”⁵⁶ Another crucial aspect of WIM is its governing instrument. As per article 8(2), CMA shall be the governing authority. Developed countries wish that WIM should be governed by the Paris Agreement alone, whereas developing countries seek to regulate WIM through both the Paris Agreement and UNFCCC. It is essential to clarify the authority of COP and CMA concerning WIM. This issue could not have been resolved at COP 25 and ultimately left upon COP 26 for decision.⁵⁷ Unfortunately, due to the COVID-19 pandemic, COP 26 has been postponed to November 2021 that means the uncertainty shall persist for a more extended period. Lastly, the mandate of WIM is limited only to the current and future loss and damage and does not extend past destructions.

WIM, though, emerged as an institutional body on loss and damage. However, it did not perform sufficiently on the requirements of developing countries. It has remained merely as a body without teeth that do not have a decision-making authority. It has not established any liability of the developed countries and does not advocate for any adequate financial commitment for developing and vulnerable countries.⁵⁸ Moreover, developed countries never prioritized WIM as a permanent agenda item for COP/CMA.⁵⁹

Nexus between Adaptation and Loss and Damage

Loss and damage mechanism is the outcome of failed UNFCCC negotiations for effective mitigation and adaptation measures.⁶⁰ Further, in the light of several limitations to these measures, loss and damage have emerged as a third pillar of the international climate regime.⁶¹ In the 2015 Paris Agreement, developing countries were expecting either a separate mechanism or extending the mandate of WIM for loss and damage. In contrast, developed countries avoided this issue in Paris negotiation and wanted to deal with it either separately from the Agreement or under the head of adaptation.⁶² Developed countries were concerned that a third independent mechanism will add more complexities to the climate regime and establish their liability for climate-induced

⁵⁶ *Supra* note 2, art. 8(5).

⁵⁷ *Supra* note 55.

⁵⁸ *Supra* note 11.

⁵⁹ *Ibid.*

⁶⁰ *Supra* note 3.

⁶¹ *Supra* note 1.

⁶² *Supra* note 11.

destruction.⁶³ Ultimately, the Paris Agreement came out with a stand-alone provision, i.e., article 8, on loss and damage mechanism that does not talk about liability and compensation. However, COP 24 has included loss and damage within article 7 for transparency framework provisions.

Richards and Schalatek state that there lies a difference between adaptation and loss and damage mechanism.⁶⁴ Despite introducing loss and damage separately, Paris Agreement involves many of the aspects related to adaptation that maintains confusion regarding the actual nature of both the provisions and further how they will be implemented on several fronts.

Liability and Compensation

The question of liability and compensation was initially raised when the AOSIS sought to establish a mechanism to redress their climatic grievances.⁶⁵ Their request founds a basis on two-fold reasons that include the historical emissions of the developed countries and incapacity of the vulnerable states to cope up with the adverse impacts of climate change.⁶⁶ It could have been a moment for industrialized countries to rectify their mistakes and facilitate the victims of their past actions. On the contrary, this legitimate claim was denied and neglected for more than a decade by the developed part. The developed countries believed that they could not be held responsible for something which they have foreseen as harmful at the time of past GHG emissions.⁶⁷

Paragraph 51 of Decision 1/CP.21 of the Paris Agreement denies article 8 from providing any liability or compensation. It ensures that “...Article 8 of the Agreement does not involve or provide a basis for any liability or compensation”.⁶⁸ M. J. Mace and Roda Verheyen argue that paragraph 51 of Decision 1/CP.21 does not sufficiently evade the liability and compensation under the Paris

⁶³ *Supra* note 20.

⁶⁴ Julie-Anne Richards and Liane Schalatek, *Financing Loss and Damage: A look at governance and implementation options* (Heinrich Boll Stiftung North America, 2007), available at: https://www.boell.de/sites/default/files/loss_and_damage_finance_paper_update_16_may_2017.pdf (last visited on May 23, 2021).

⁶⁵ Birsha Ohdedar, “Loss and Damage from the Impacts of Climate Change: A Framework for Implementation” 85 *Nordic Journal of International Law* 1 (2016).

⁶⁶ *Supra* note 3.

⁶⁷ Edward A. Page, “Distributing the burdens of climate change” 17 *Environment Politics* 556 (2008).

⁶⁸ Conference of Parties, United Nations Framework Convention on Climate Change, *Report of the Conference of the Parties on its twenty-first session, Addendum, Part Two: Action taken by the Conference of the Parties at its twenty-first session*, Decision 1/CP.21 Adoption of the Paris Agreement, U.N. Doc. FCCC/CP/2015/10/Add.1 (Jan. 29, 2016).

Agreement, and it can still make the developed countries liable for their emissions.⁶⁹ The decisions of the Paris Agreement are not legally binding, and future COP decisions can amend them.⁷⁰ Other than this mechanism, developed country parties can still be held liable under the no-harm rule and state responsibility principle under international law.⁷¹ Lavanya Rajamani argues that ascertaining responsibility and liability is not a prospective option and ultimately cannot be made a sole basis for loss and damage mechanism.⁷² Similarly, Sam Adelman theorizes that developed countries are ethically obliged towards small developing state parties (SIDS), and they should compensate SIDS without being admitted for liability.⁷³ Rajamani asserts the requirement of properly implementing loss and damage mechanisms in the better interest of vulnerable nations and communities.⁷⁴

Finance

Another critical issue related to the financial support being provided to the vulnerable developing countries has also got many uncertainties attached primarily associated with the determination of the source of funds, beneficiaries, allocation of funds, events for funding, and quantification of loss and damage arising out of the consequences of human-induced climate change. The Warsaw International Mechanism ExCom has identified various funding mechanisms for loss and damage; however, they are inadequate regarding the needs and capacity of the vulnerable countries. Moreover, its five-year workplan is nowhere intended to emphasize the exploration of new sources of funding. A pertinent question revolves around ascertaining the actual beneficiary of the funds among regional establishments, national bodies, cities, communities, or individuals. It is impossible to determine the total cost of loss and damage, especially from several INDCs that involve different approaches to calculate the cost. Another limitation of these funding mechanisms is that they do not address slow-onset events and non-economic loss and damages. This neglect includes significant areas like degraded health, injuries induced by human mobility, cultural heritage, indigenous knowledge, biodiversity, and other relevant elements for developing countries.

⁶⁹ *Supra* note 52.

⁷⁰ *Supra* note 11.

⁷¹ *Ibid.*

⁷² Lavanya Rajamani, "Addressing loss and damage from climate change impacts" 50 *Economic and Political Weekly* 17 (2015).

⁷³ *Supra* note 3.

⁷⁴ *Supra* note 72.

The language of the text of the Agreement is non-binding and consists of general terms like ‘support’ instead of ‘finance’ raises uncertainties in the mechanism. Moreover, under article 9 of the Agreement, the text does not mention finance for loss and damage mechanism.⁷⁵ The loss and damage mechanism does not receive a response from any existing international climate funds.⁷⁶ Under COP 25, it was decided to develop linkages between WIM and Standing Committee on Finance.⁷⁷ It has also engaged the Green Climate Fund to include loss and damage within its activities.⁷⁸

Jonathan Gewirtzman and others have advocated that the funding mechanism prescribed by WIM generally involves insurance-based schemes. In the light of the upcoming severe impacts of climate change and the incapacity of vulnerable developing nations to cope, such programs are inadequate, and they require other funding mechanisms to be explored.⁷⁹ The scholars have introduced innovative finance mechanisms that could replace the existing ones and proved to be more appropriate and feasible for generating funds for loss and damage.⁸⁰ Mayer argues that a horizontal approach that involves the state-to-state transfer of funds should be preferred over a vertical path that provides state-to-victim transfers.⁸¹

VI. Prospects for the Loss and Damage mechanism

The absence of a common understanding of the concept remains the foremost hurdle on loss and damage mechanism. Since the beginning, this broad concept has been interpreted differently by the countries that suit their interests. Without a proper and acceptable definition of this mechanism, many of the gaps were challenging to resolve. Parties must agree upon a common framework to move further with the mechanism. They must consider few criteria while outlining this mechanism, including impacts attributable to human-driven climate change, physically or socially irreversible impacts, avoidable or unavoidable impacts, and tolerable or intolerable impacts.⁸²

⁷⁵ Erin Roberts and Saleemul Huq, “Coming full circle: the history of loss and damage under the UNFCCC” 8 *International Journal of Global Warming* 141 (2015).

⁷⁶ *Supra* note 15.

⁷⁷ *Supra* note 55.

⁷⁸ *Ibid.*

⁷⁹ Jonathan Gewirtzman, Sujay Natson, *et.al.*, “Financing loss and damage: reviewing options under the Warsaw International Mechanism” 18 *Climate Policy* 1076 (2018).

⁸⁰ J. Timmons Roberts, Sujay Natson, *et.al.*, “How will we pay for Loss and Damage?” 20 *Ethics, Policy and Environment* 208 (2017).

⁸¹ *Supra* note 31.

⁸² *Supra* note 10.

Paris Agreement has acknowledged the loss and damage mechanism under article 8 as a distinct element than mitigation and adaptation. However, the subsequent provisions like article 9 (Finance), 13 (Transparency), 14 (Global Stocktake), COP decisions, and procedural framework do not reflect its position as that of a separate entity. Despite that, it could be argued that WIM has expanded the scope of loss and damage that goes beyond adaptation. Further, it is necessary to identify and establish the differences between adaptation and loss and damage mechanism. The Decision 1/CP.21 further denies the applicability of article 8 from providing any liability or compensation by the developed countries, raises a question on the ethical considerations of loss and damage. Moreover, the Paris Agreement does not prevent the establishment of developed countries' liability and compensation under International law.

WIM has to play a proactive role in establishing loss and damage regime as an essential foundation of climate emergency. It can perform a range of functions, including creating a loss and damage finance facility to cover effects from slow-onset weather events and non-economic loss and damage; monitoring and reporting roles to address progress and gaps in loss and damage; disseminating information and technical expertise on loss and damage directly to developing countries, and; working extensively with other international organs outside UNFCCC.⁸³

The areas concerning the regulation of funding mechanisms require necessary clarification. WIM should collaborate with financial institutions and other stakeholders to chalk out the sources for funding the mechanism.⁸⁴ It is essential that along with the insurance schemes, additional sources of funds must be generated by developed countries considering the incapacity of vulnerable countries to pay enormous premiums for insurance. Countries should emphasize innovative mechanisms like global fossil fuel bonds, climate or catastrophe bonds, resilience bonds, social

⁸³ Rebecca Byrnes and Swenja Surminski, "Addressing the impacts of climate change through an effective Warsaw International Mechanism on Loss and Damage: Submission to the second review of the Warsaw International Mechanism on Loss and Damage under the UNFCCC" *GRICCE and CCCEP, LSE* (2019), available at: https://www4.unfccc.int/sites/SubmissionsStaging/Documents/201910251036---GRI_WIM%20Submission.pdf (last visited on May 30, 2021).

⁸⁴ *Supra* note 19.

protection schemes, and finance that can be scaled up later to respond to climate-induced disasters.⁸⁵

In the absence of adequate mechanisms, vulnerable countries are bound to take measures at the domestic level. Importantly those actions that could otherwise be proved informative are scattered and goes unrecognized. UNFCCC made provisions under Global Stocktake in December 2018 at COP 24 to UNFCCC to record such information. However, that also requires guidance and assistance for its production.⁸⁶ Since reporting on loss and damage is voluntary, vulnerable countries will likely be more prone to report information on loss and damage. Therefore, they must adhere to a framework that includes measurement, costs, policies, and finance of loss and damage mechanism.⁸⁷ Moreover, countries must emphasize the areas of non-economic loss and damage and slow-onset weather events. Successful implementation of this mechanism is crucial for the sustainable future of developing and least developed countries, like India.

VII. Addressing Loss and Damage mechanism from an Indian Perspective

India is one of the most vulnerable countries to the adverse consequences of climate change. It primarily comprises four climate-sensitive regions as the Himalayan region, Western Ghats, North-Eastern region, and Coastal region.⁸⁸ These regions and the rest of the mainland continuously face tremendous threats from extreme and slow-onset weather events. Cyclones are causing continuous destruction to the Sunderbans and other coastal areas.⁸⁹ The heat waves are another challenge for a country, followed by droughts, less rainfall, and crop failures.⁹⁰ Every year climate change-led disasters cause massive destruction of lives and properties in the Indian subcontinent. In 2018, India lost more than 2000 people and suffered a loss of USD 37.8 billion

⁸⁵ *Supra* note 42.

⁸⁶ Brook M. Dambacher, Olivia Serdecznyet, *et.al.*, “Loss and damage in the Paris Agreement’s global stocktake” *IIED Briefing*, Nov. 2018, available at: <https://pubs.iied.org/pdfs/17490IIED.pdf> (last visited on May 27, 2021).

⁸⁷ *Supra* note 15.

⁸⁸ *Climate Change and India: A 4*4 Assessment Report – A Sectoral and Regional Analysis for 2030s*, available at: <http://www.indiaenvironmentportal.org.in/files/fin-rpt-incca.pdf> (last visited on May 30, 2021).

⁸⁹ Jayanta Basu, “Climate Emergency CoP 25: Loss and damage ‘fighting out’ in Madrid” *Down to Earth*, Dec. 13, 2019, available at: <https://www.downtoearth.org.in/news/climate-change/climate-emergency-cop-25-loss-and-damage-fighting-out-in-madrid-68416> (last visited on June 1, 2021).

⁹⁰ David Eckstein, Vera Kunzel, *et.al.*, “Global Climate Risk Index 2020” Briefing Paper German Watch, Dec. 2019, available at: https://germanwatch.org/sites/germanwatch.org/files/20-2-01e%20Global%20Climate%20Risk%20Index%202020_10.pdf (last visited on June 2, 2021).

approximately due to the disasters caused by climate change.⁹¹ Additionally, they have caused a significant loss of up to 1.5 percent in India's GDP.⁹² These disasters will get more frequent, unpredictable, and intensified in the upcoming years.

Considering its socio-economic challenges and its developing status, India has always remained vocal about the loss and damage mechanism in the climate negotiations. In its NDC, India recognizes that the link between Adaptation, Disaster Risk Reduction, and Loss and Damage is crucial.⁹³ It highlights an urgent need for finance to undertake activities for the early warning system, disaster risk reduction, capacity building at all levels.⁹⁴ It always advocated for support from developed countries in terms of finance, technology, and capacity-building to make developing countries capable of averting, minimizing, and addressing loss and damage.⁹⁵ India was among the chief advocates to demand a separate provision on loss and damage in the Paris Agreement.⁹⁶ Along with the other developing countries, it has emphasized the polluter pays principle for seeking compensation from the States responsible for climate change.⁹⁷

Existing human rights challenges clubbed with the ongoing COVID-19 pandemic situations have significantly hampered the country's economic capacities.⁹⁸ In the absence of financial and technological assistance from the developed countries, India becomes more vulnerable to the

⁹¹ Soumya Sarkar, "India deeply vulnerable to climate disasters" *India Climate Dialogue*, Dec. 5, 2019, available at: <https://indiaclimatedialogue.net/2019/12/05/india-deeply-vulnerable-to-climate-disasters/#:~:text=More%20than%202%2C000%20people%20lost,estimated%20at%20USD%2037.8%20billion.&text=In%202017%2C%20there%20were%202%2C726,Risk%20Index%202019%20had%20said> (last visited on June 1, 2021).

⁹² Subhojit Goswami, "Climate change impact on agriculture leads to 1.5 per cent loss in India's GDP" *Down to Earth*, May 18, 2017, available at: <https://www.downtoearth.org.in/news/agriculture/climate-change-causes-about-1-5-per-cent-loss-in-india-s-gdp-57883> (last visited on June 2, 2021).

⁹³ United Nations Framework Convention on Climate Change, India's Intended Nationally Determined Contribution – Working towards Climate Justice, available at: <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/India%20First/INDIA%20INDC%20TO%20UNFCCC.pdf> (last visited on June 3, 2021).

⁹⁴ *Ibid.*

⁹⁵ Ministry of Environment, Forests and Climate Change, "Outcome of COP 25 balanced, with the exception of Climate Finance issues: Shri Prakash Javadekar" Dec. 20, 2019, available at: <https://pib.gov.in/PressReleasePage.aspx?PRID=1597047> (last visited on June 3, 2021).

⁹⁶ Lisa Vanhala and Cecilie Hestbaek, "Framing Climate Change Loss and Damage in UNFCCC Negotiations" 16 *Global Environmental Politics* 111 (2016).

⁹⁷ Press Trust of India, "Carbon Emission: Principle of Polluter Pays Must be Respected, Says Piyush Goyal" *NDTV*, Sep. 30, 2015, available at: <https://www.ndtv.com/india-news/carbon-emission-principle-of-polluter-pays-must-be-respected-says-piyush-goyal-1224856> (last visited on June 3, 2021).

⁹⁸ Zoha Shawoo, "There will be no 'green recovery' for poor countries without loss and damage finance" *Climate Home News*, Sep. 4, 2020, available at: <https://www.climatechangenews.com/2020/09/04/will-no-green-recovery-poor-countries-without-loss-damage-finance/> (last visited on Apr. 20, 2021).

present and future destructions caused by climate change. Thus, India must be prepared with policy measures for risk reduction, disaster management, and insurance schemes to face the present and potential threats of climate change. It should devise alternative ways to mobilize finance and capacity.⁹⁹ Moreover, at the South Asian level, India should emphasize increasing the regional capabilities and potentials for maximizing the risk appetite of the region.

VIII. Conclusion

Some inevitable climate-induced losses and damages cannot be avoided by mitigation and adaptation. With the increase in global temperature, the adverse impacts of climate change will become more severe and frequent in upcoming years. The disasters led by climate change will have a devastating effect on developing and least developed countries. For instance, India is substantially vulnerable to the adverse impacts of climate change. Considering the vast size and socio-economic realities of India, climate change measures fall insufficient and poorly implemented. If the ambiguities associated with loss and damage mechanism are not addressed soon, it will have a long-lasting impact on the countries' population, economy, and ecological systems. Thus, it is pertinent that nations must establish a functional mechanism as early as possible. Though the adoption of the Paris Agreement is a positive development in this direction, however, countries are yet to fill in the details and address crucial gaps related to this mechanism. To some extent, the adequate implementation of loss and damage depends on fundamentally contested issues related to the climate change regime. Countries must address those critical parts to expand the horizons of international environmental law and pave the way to remove long-standing ambiguities to loss and damage. While considering the present status of loss and damage mechanism, it can be asserted that the provisions related to the mechanism are yet in their nascent stage and required to be clarified, elaborated, and implemented urgently by the state parties through upcoming COPs. Existing ambiguities and uncertainties regarding loss and damage mechanism can never provide solutions to climate emergency threats. Countries should not get them attached to their differences; instead, consider this issue urgently through the lenses of climate justice. Loss and damage have remained controversial for many years. It's time for the countries to push their red lines and come closer to each other.

⁹⁹ *Ibid.*