

# Accounting for Non Economic Loss & Damage changes perspective of L&D as a whole

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## Valuation Framework for NELD

1. Assessment stage: Set rules for assessment rather than pre-defining what counts as NELD, acknowledging harm without predefining its nature.
2. Preventive stage: Include NELD in adaptation planning, using perception-based instruments for effective pathways.
3. Enabling stage: Take actions to help communities avoid NELD, identifying gaps and providing support based on community needs.
4. Feasibility stage: Assess the efficacy of actions to prevent NELD, promote transparency, share results, and highlight good practices for replication.
5. Reactive stage of incurred NELD: Establish a central independent body to receive and recognize claims, responding appropriately on the ground.
6. Community integration stage: Accept the public as NELD-experiencing actors, promoting locally led practices to address diverse community needs.
7. Communications stage: Engage in NELD communication involving communities to raise awareness, share stories, and inform research and policy actions.
8. Policy Stage: Integrate NELD into policy documents by standardizing its inclusion in vulnerability assessments and preventive adaptation planning, reflecting values and context specificity

## Introduction

Adverse impacts induced by climate change is already occurring and manifesting in the form of losses and damages which are expected to accelerate as climate change worsens and tipping points in ecological systems are reached. Failure to address climate-driven loss can trap populations in a state of vulnerability.

Such kinds of losses and damages can be either economic or non-economic in nature. Economic losses and damages can be measured using market prices. In contrast, non-economic loss and damage (or ‘NELD’) refers to a broad range of harmful impacts that are not so easily quantified, especially in financial terms. This makes it difficult to evaluate the non economic nature and the intensity of the losses and damages faced by frontline communities.

## Non economic loss and damage

While there are several ways to experience losses and damages induced by climate change, policy makers often lean towards focusing on those that can be easily measured. Despite the undermining of the less tangible losses, those are the impacts

that adversely affect the social fabric of societies and wellbeing. Non economic losses and damages are often deeply entangled with the lives of an individual, where it is impossible to value one at the expense of the other since all the factors are embedded in their way of life.

The difficulty in measuring and evaluating NELD makes it neglected, despite its importance to those impacted. The idea of NELD brings forth normative dimensions of the loss and damage debate (Chan, 2016). As pointed in the Discussion Brief by Chan et al., it is imperative to ask whose losses and damages count and how are they counted; what tools are available to avoid NELD and how to respond to NELD.



Without accounting for NELD, it is not possible to address the full spectrum of losses and damages faced by the frontline communities. Not only is arable land lost, but also landscapes; not only new livelihood options are learnt, but intergenerational skill, knowledge and culture is lost. Hence it should be noted that the task of adapting to new realities can in turn cause a sense of loss of their identity.

NELD resonate through the material and non-material spheres of human lives and societies (Chan, 2016). For instance, we often see internal migration induced by both extreme and slow onset disasters. But following the imminent loss of their houses and livelihood, the subsequent traditional knowledge or place of identity may leave communities disconnected from their sense of self and each other.

NELD are always mediated by societal factors that shape the vulnerability of systems to physical impacts and by culture, which provides the context according to which items are experienced and valued. Hence, in this brief, we try to extract and shed light on the diversity of NELD which can be better understood through a focus on their main characteristics, as discussed below.

## 1. Biodiversity and Ecosystems Loss

Biodiversity and ecosystem have long been subject to multiple stressors including habitat degradation, urbanization, pollution, and over-exploitation, underscored by the adoption of the United Nations Convention on Biological Diversity (UNCBD) in 1992. Though goal 15 of the Sustainable Development Goals (SDGs) 2030 focuses exclusively on biodiversity loss and ecosystem degradation, biodiversity plays a part in achieving [14 out of the 17](#) goals set, thus depicting its interconnections.



*Bleaching of coral reefs. PC: Catlin Seaview Survey*

Focusing on climate change, it acts as both an additional stressor and an exacerbator of the pre-existing stressors of biodiversity. A [study](#) on the primary direct drivers of biodiversity loss in various types of ecosystems worldwide by the MEA Board in 2005 had found climate change as a significant contributor, given no novelty/change in policy measures implemented. In particular, the island, mountain, and polar ecosystems are vulnerable to climate change. For instance, the small island community of the [Kunburudhoo Island in South Ari Atoll](#) in the Maldives have lost their beaches and traditional crops, such as banana and breadfruit, to erosion and salinization of groundwater.

*“Beach erosion and harbour construction has deprived our community of the kind of beach it was before. Traditional activities and experiences such as swimming and spending leisure time at the beach are no longer the same for the younger generations,” says Azeem, a member of the community.*

From a global perspective, fortunately, or unfortunately, [most of the biodiversity hotspots](#) are situated in the Global South. It has [also been established](#) that consumption in the North drives depletion in the South to a large extent, which brings in the concepts of cost-and-benefit sharing and ecological debts. For example, 35,977 ha of tropical deforestation globally has been attributed to the UK’s consumption of crop, cattle-related, and timber commodities in 2018, according to [official biodiversity indicators of the UK government](#). In 2006, the area was 80,000 ha. However, the importers are also enabling the livelihoods of many of the depleters, i.e. the trade agreements. This is a stark representation of the relative ease of tangible costs and benefits overshadowing the intangible ones, here the economic returns overshadowing the non-economic LnD of biodiversity and ecosystems.

## Recommendations: Addressing Biodiversity and Ecosystem Loss

- ❖ **Coordination among the MEAs and policy framework:** Even though research and science has been working on the interconnectedness of biodiversity and climate change, the actions in practice are mostly within own territories. Steps have been taken to connect the spheres of climate change and biodiversity, such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) - Intergovernmental Panel on Climate Change (IPCC) co-sponsored workshop and these efforts need to be taken further in terms of economic and trade agreements to address biodiversity and ecosystem loss at a larger scale in a consolidated manner.
- ❖ **Consumer pays:** A major reason for missing the Aichi targets was the lack of financing for the developing countries. And while global biodiversity financing talks about developed nations paying for conserving and restoring ecosystems, channeling funds to the developing nations for compensating the losses and damages incurred due to biodiversity loss is not yet considered. Though there are still no concrete ideas of how the revolutionary LnD fund mechanism agreed in COP27 will operate, there must be provisions for compensating for those caused by biodiversity loss.
- ❖ **Valuation:** Biodiversity is measured in terms of the status of species and gene pool, while ecosystems are valued using stated- and revealed-preferences methods for its services. The Economics of Ecosystems and Biodiversity (TEEB) is a global initiative which suggests methods for measuring ecosystems and biodiversity and concluded that it would be effective to focus on its instrumental value. The intrinsic values such as the impact on the well-being of farmers who have lost provisioning services (e.g. crops) is entirely immeasurable, which leads to the next recommendation.
- ❖ **Documentation:** There is a need for continued documentation, through say case studies, qualitative research, visual methods, etc., to ensure that the intangible immeasurable losses suffered by the most vulnerable due to biodiversity and ecosystem loss are not undermined and receive the required attention in the policy and decision-making realms.

## 2. Culture, Heritage and Indigenous Knowledge Loss

Climate is changing, so are cultures. These changes are heavily intertwined with local knowledge and practice. Culture, heritage along with Indigenous and local knowledge systems are increasingly vulnerable to loss from both slow and rapid onset hazards. Disaster driven displacement brings in loss of sense of identity, intergenerational knowledge and traditions and culture. This in turn weakens social cohesion as people lose touch with traditional ways of life, which can be devastating for many communities. Culture is more about beliefs, customs, language and arts of a particular society and the expression of shared values, traditions and customs. Cultural heritage is typically



Cohasset Central Cemetary after flooding in 2018. PC: The Patriot Ledger

understood to be built heritage, monuments related to culture such as museums, religious buildings, ancient structures and sites. However, there are more aspects to culture than just mere monuments. It's about protecting their roots that define their identities. For instance, in Kamarkhali, Netrokona Bangladesh, a Banyan tree was washed away in a matter of minutes, due to riverbank erosion and tidal surges. This loss was felt significantly for the Hindu community living there, but not so much for the other religions. Hence, loss of culture and heritage does not only account for known monuments, but also to losses of sacred grounds such as burial grounds and even mere Banyan tree in which a society holds value to a certain group. Many communities hold extensive pride in their cultural heritage and practices such as fishing and farming, and as such the possible loss of these traditions in the face of climate change has resulted in significant levels of sadness.

Indigenous knowledge, which can also be referred to as local, folk and traditional knowledge, refers to 'place-based knowledge, rooted in the culture and traditions of a particular community'. As mentioned before, local and indigenous knowledge is more than just about weather and climate, but also in terms of resource use and management, leadership, social networks and values and beliefs; all of which are critically important to enhancing adaptive capacity. Given this, it is critical that indigenous knowledge continues to be shared, passed down between generations, practiced and protected.

### **Recommendations: Addressing Culture and Heritage Loss**

- ❖ Culture is not systematically integrated into the global policies like the UNFCCC mandate or the Paris Agreement, which are two of the main instruments guiding international policy-making. Hence it is imperative to draw the connection to ensure culture is integrated in the global climatic agenda, including Assessment Reports and Special Reports of the IPCC etc.
- ❖ There is a clear lack of data, research and peer-reviewed publications on the linkages between culture and climate change, which is a significant barrier to endorse such integration. Developing this body of research would, furthermore, help countries integrate culture into their Nationally Determined Contributions (NDCs) to the Paris Agreement, which are legally-binding country action plans for meeting climate change targets.
- ❖ **Culture-based approaches can help shift the focus of climate negotiations from competing interests to shared values and the common good.** Culture anchors people to places and to each other; hence using cultural narratives in the form of art, music, heritage can help bring in the attention and influence needed to mobilise urgent climate action. Such practice has begun from COP26 Culture COP which was a successful endeavour to encourage climate and culture engagement
- ❖ **Culture can act as the bridge between global ambitions and locally-adapted solutions.** Given the fundamentally ethical nature of the climate change issue, culture can enhance human-centred and environmentally sustainable models of society that respect the intrinsic linkages between cultural and biological diversity. Bringing culture into environmental policies, for example, can incorporate communities' practices to construct tailor-made solutions for climate mitigation and adaptation strategies.

As captured by Carbon Brief, a 2-day long conference was held earlier this year at the University of East Anglia, where a group of archaeologists, climate scientists and policy experts discussed how unique cultures and heritage are fast disappearing because of climate change – and what can be done to properly measure and address this. [Prof Kwasi Appeaning Addo](#), director of the Institute for Environment and Sanitation Studies (IESS) at the [University of Ghana](#), explained how climate change is already affecting sites of cultural significance in coastal Ghana, including [historic slave forts](#). In the same Conference, [Dr Salma Sabour](#), a postdoctoral researcher of heritage loss from climate change at the [University of Southampton](#), explained her work examining climate impacts in [Banc d'Arguin National Park](#), Mauritania. The coastal desert site is the ancestral home of the [Imraguen people](#), where they mainly carry out many traditional fishing practices, including blowing on seashells to [attract dolphins](#), who bring fish with them. However, sea level rise is causing their villages to become inundated with seawater for months at a time and causing immense levels of fish stock depletion. She told the conference: “Imagine seeing your village becoming an island for three to six months of the year.”

### 3. Non economic loss and damage through gendered lens

Climate disasters disproportionately threaten women's and human rights, with over 80% of those displaced being women and girls. Structural inequalities and unpaid care work leave women vulnerable in the Global South. Cultural norms and social stigma further marginalize them, leading to risks like hunger, lack of shelter, and limited opportunities. After extreme disasters, women who are already marginalized due to lack of education and employment opportunities, often end up seeking work as domestic laborers and face abuse and lack of protection. Women are often denied land ownership and economic support which in turn increases their vulnerability. Gender-based vulnerability to climate change and disasters is also influenced by unequal resource access, limited mobility in rural areas, and socio-cultural norms that hinder women's skills and information acquisition for hazard avoidance.

Vulnerable groups, particularly women responsible for household food and water management, are adversely affected by floods and droughts. Women and girls often bear the burden of fetching contaminated water from distant sources, resulting in health issues and social consequences.

Climate change can lead to increased health risks including mortality and morbidity. Environmental hazards



*Women pay a higher price during floods. PC: Mohammad Ponir Hossain/ Reuters*

intensified by climate change exacerbate illness susceptibility. The spread of infectious diseases is linked to climate and weather changes, and imposing pressure on women, i.e. when it comes to take care of the family. For instance, women in the remote Upazilla of Gaokandia in Netrokona, Bangladesh, have reported how the disconnect on roads and communication hinders expecting mothers in times of delivery and many times the birthing mothers have no choice but to give birth in adverse conditions during extreme events. In saline intrusive areas in coastal parts of Bangladesh, young girls often face health issues during menstrual cycles because of the use of saline water for bathing and cleaning purposes. Perpetual use of saline water further impacts skin and pigmentation, for which families rush towards child marriage options, otherwise they will not

be able to marry off their dark-skinned daughter anywhere. Hence, both social stigma along with impacts of climate change multiplies female's vulnerabilities to a greater extent.

There has been several cases of both internal and cross-border migration due to coastal events, shoreline erosion, flooding, and agricultural disruptions, causing displacement. Such migration, while a survival response, disproportionately affects women in least developed countries, due to socio-economic status and access limitations, and further contributes to ecosystem disruption. A gender perspective allows assessing loss beyond financial aspects, considering societal roles and knowledge.

### **Recommendations: Addressing gender-sensitive losses and damages**

- ❖ Losses and damages impact women differently than men. Hence there is a clear need to connect with National and International Policy Frameworks like the Sendai Framework for Disaster Risk Reduction, emphasizing women's participation and capacity-building. Assessments should encompass vulnerabilities and capacities of both genders and other vulnerable groups. Hence it is important for parties to align L&D mechanisms with gender-sensitive disaster risk reduction and climate change adaptation, ensuring ample funding beyond adaptation.
- ❖ Gender-disaggregated data collection is essential to understand the gendered dimensions of loss and damage caused by climate crisis. A 2012 UNDP report emphasizes integrating gender into disaster risk management for Small Island Developing States, involving gender-disaggregated data collection and analysis to uncover disparities in activities, needs, resource control, and decision-making between genders.
- ❖ Using insights from adaptation and disaster risk reduction, it's important to identify social indicators that drive vulnerabilities during crises. This includes understanding non-economic losses, diverse capacity needs, and coping strategies of men and women in specific contexts.
- ❖ Furthermore, **ensuring women's equitable participation in decision-making and L&D activities**, assessing gender-differentiated vulnerability and prioritized needs, integrating women's particular vulnerability in the L&D accounting processes, **providing gender-sensitive training** are relevant for the development of a loss and damage work programme within the UNFCCC. Gap analysis and way of addressing the non-economic losses and damaged from gendered perspective are important to start from now on.

## **4. Adverse impacts on mental health and wellbeing**

The convergence of climate change and its associated disasters has brought to light a range of non-economic losses and damages (NELD), among which mental health impacts are emerging as a pressing concern. As climate-related events intensify in frequency and severity, vulnerable populations are increasingly exposed to health risks, including heat-related illnesses, waterborne diseases, malnutrition, and psychological distress. These non-economic losses and damages, particularly the psychological toll, compound the challenges faced by affected communities. While the immediate health effects of these events may vary, the ripple effects on mental wellbeing are profound and enduring. Events like hurricanes, floods, wildfires, industrial accidents, and conflicts trigger distressing emotions, exacerbating stress, anxiety, depression, and post-traumatic stress disorder (PTSD) among affected communities. Particularly affecting children, women, and individuals in low and middle-income countries, the mental health repercussions can manifest immediately, remain latent, or extend across generations,

emphasizing the need for comprehensive strategies that address immediate psychosocial support and long-term mental health services within the broader framework of climate change adaptation and mitigation.

The international policy landscape has increasingly recognized the intricate relationship between mental health and NELD resulting from climate change. This recognition is underscored by several key agreements and frameworks that emphasize addressing mental health concerns within the broader context of climate adaptation and mitigation strategies. The international policy landscape concerning climate change and health reflects a growing recognition of the interplay between non-economic loss and damage (NELD), mental health, and well-being.

### **Recommendations: Addressing loss of mental health and well being**

- ❖ There is a critical need to amplify efforts to mainstream mental health considerations within international policies related to climate change, disaster risk reduction, and sustainable development. This entails incorporating mental health support as an integral component of adaptation and mitigation strategies, allocating funding for mental health programs, and building capacity to address psychosocial dimensions effectively. Evidence from reports of the Warsaw International Mechanism for Loss and Damage (WIM) Excom, which specifically addresses NELD, underscores the urgency of addressing mental health issues within climate-induced loss and damage contexts.
- ❖ However, gaps persist, including limited mental health integration in climate policies, insufficient funding for mental health programs, and inadequate attention to psychosocial well-being of vulnerable populations. Addressing these gaps through comprehensive integration, funding allocation, capacity building, research, and global collaboration is essential to ensure a holistic response to the mental health implications of climate change-induced loss and damage, fostering resilience and well-being globally.
- ❖ A comprehensive approach encompasses several key elements, including conducting vulnerability assessments to understand the nuances of mental health impacts, integrating mental health considerations into broader policy frameworks, establishing robust community-based support systems, and advancing education and research efforts. Strengthening the connection between mental health and climate change is paramount and requires collaboration among policymakers, researchers, and mental healthcare professionals. Integrating mental health within climate action strategies demands cross-sector cooperation to achieve a holistic and equitable response. This integration would provide a holistic framework to address the physical and psychological dimensions of climate-induced loss and damage, ensuring the well-being and resilience of affected populations on a global scale.

## 5. Non Economic loss and damage induced by climate displacement

The major impacts of climate change such as rising sea levels, extreme weather events, and environmental degradation can cause the displacement of people or populations, referred to as climate-induced mobility. According to World Bank<sup>1</sup>, due to climatic phenomenon, 143 millions of people in global south will be displaced (both internal and transboundary) by 2050. The prolonged impacts of climate change can trigger the loss and damage of homes and livelihoods as well as social and cultural connections, leading to decisions to migrate for safety and security. This movement can include both



*Relocating due to loss of home caused by riverbank erosion. PC: Shahin Alom*

short-term displacement, such as temporary evacuation during a disaster, and long-term migration, such as relocation due to persistent changes in environmental conditions. For example, prolonged droughts can severely affect agricultural productivity and threatening food security, as a result, communities facing such impacts might make the decision to relocate as a coping strategy to preserve their safety and well-being. This is because the gradual accumulation of risks and vulnerabilities eventually become unmanageable for these communities. With climate change often amplifying the risks over time, certain areas become increasingly hazardous for human habitation due to factors like sea-level rise, soil degradation, or water scarcity. Hence human mobility is one of the strong linkages on how economic losses give rise of non-economic impacts.

When the adaptation efforts fall short, people escape from climate-vulnerable areas as survival strategy (CPRD 2015)<sup>2</sup> along with nothing but memories. When people are forced to move abruptly due to climate-related factors, they may resort to poorly planned mobility decisions, which can further exacerbate risks for both the migrating population and the host communities. If the movements are not well-planned or coordinated, they may even perpetuate or exacerbate vulnerabilities in new locations. For instance, migrants may settle in areas that are ecologically fragile or lack essential services, leading to unsustainable land use practices and inadequate infrastructure. This can increase the vulnerability of both the migrants and the host communities to future climate impacts.

Climate-induced mobility can also lead to psychological and emotional stress for those forced to leave their homes and neighborhoods. People may experience feelings of loss, grief, and disconnection from their cultural and social roots, as they leave behind cultural heritage, traditions, and social networks. Displaced individuals and

<sup>1</sup> World Bank. (2021). Groundswell Report. World Bank. <https://www.worldbank.org/en/news/press-release/2021/09/13/climate-change-could-force-216-million-people-to-migrate-within-their-own-countries-by-2050>.

<sup>2</sup> Center for Participatory Research and Development (CPRD), 2015, Climate-Induced Displacement and Migration: Policy Gaps and Policy Alternative [https://unfccc.int/files/adaptation/groups\\_committees/loss\\_and\\_damage\\_executive\\_committee/application/pdf/briefing\\_paper\\_climate\\_induced\\_displacement\\_and\\_migration.pdf](https://unfccc.int/files/adaptation/groups_committees/loss_and_damage_executive_committee/application/pdf/briefing_paper_climate_induced_displacement_and_migration.pdf)

communities may also experience a loss of identity. In this way, their communities can be fractured, and the disruption can erode social cohesion and weaken the sense of community, resulting in the loss of a supportive social structure. Climate-induced mobility also disrupts livelihoods, especially in cases where people rely on natural resources, agriculture, fisheries, or other climate-sensitive industries. This loss of income and economic stability contributes to huge losses for the migrating families. Displaced individuals, especially children and youth, may also experience disruptions in their education and limited access to opportunities in terms of human capital. This can hinder their personal development and their future prospects.

Overall, the complex and multifaceted impacts of climate change on individuals, communities, and societies can be brought into light through the linkages between climate-induced mobility and non-economic losses. These linkages underscore the importance of considering not only the economic consequences but also the broader social, cultural, and psychological dimensions when addressing the challenges posed by climate-induced displacement.

### **Recommendations: Addressing climate induced displacement**

1. The concept of Climate-Resilient Migrant-Friendly Towns (CRMFT) can be a mutually beneficial approach to address climate displacement. Due to their proximity, these secondary cities share similar socio-cultural traits with migrants' places of origin. CRMFT aims to foster social integration and cohesion between existing residents (host) and migrants and help preserve livelihoods by offering adapted economic opportunities. The towns will prioritize health, education and well-being through essential services, therefore preventing the emergence of informal settlements and promoting long-term sustainability with efficient resource management.
2. In climate-resilient migrant-friendly towns, diversified farming enhances resilience to changing climates, ensuring food security for residents and migrants. Upgraded water systems boost water resilience, addressing scarcity issues. Early warning tech aids disaster preparedness, saving lives during climate-related extreme events. Cultural practices and storytelling pass down traditional knowledge, fostering sustainable practices and maintaining identity. These interventions aim to enhance the overall well-being and resilience of both existing residents and migrants, creating more sustainable and harmonious communities in climate-resilient migrant-friendly towns.

### **NELD Policy Landscape**

The concept of Non Economic Loss and Damage is part of the wider discourse on Loss and Damage. The term Loss and Damage itself still does not hold an official definition, and are often politically motivated. Hence, defining and understanding an intangible aspect of it is something much more difficult, which makes it all the more challenging when it comes of active decisions on policy making. Reflection of NELD values in monetary terms is problematic. To fully understand the non economic nature of the losses, it is important to first consider what purpose an assessment of NELD is to serve. For example, if the value of traditional knowledge ranks high from the perspective of a certain community, then adaptation measures should be taken to preserve and incorporate those knowledge into locally led adaptation practices.

The context of NELD values need to be accounted for in any framework dedicated to addressing loss and damage. This raises the question of how to reflect values that differ across cultures in a setting that is applicable to all. A

catalogue of standard NELD indicators could be the basis for such recognition, which will not only identify losses but also help to score vulnerabilities which can further help to inform policy decisions.

A potential blueprint of NELD valuation framework could guide the implementation of policy principles at the international level. It could ensure an effective treatment of NELD according to their key characteristics.

1. **Assessment stage:** *Set rules for assessment rather than rules for what counts as NELD* The normative dimension of climate change sets in heavily in the NELD discussion as to whose perception counts when it comes to deciding what to count as an adverse impact. An ideal way would be to acknowledge that harm has been experienced and refrain from pre-defining what precisely is considered harmful.
2. **Preventive stage:** *Include NELD in decision-making on adaptation*  
In order to prevent or minimise NELD from occurring, considerations of NELD as part of adaptation planning are key. In the case of potential NELD, perception or value based instruments would be the most effective form of adaptation pathway as they are designed and well understood by the impacted communities.
3. **Enabling stage:** *Enable communities to avoid NELD*  
Actions should be taken that enable communities to buffer against those adverse impacts. Even in this stage, it is best to identify the gaps and needs from the communities and provide them with the support that will be beneficial for them.
4. **Assess efficacy of actions to share good practice**  
In order to promote transparency and accountability, actions taken to prevent NELD should be assessed following implementation. Results should be made public and good practices should be made visible. Based on further conceptual work, descriptions should be provided that facilitate replication.
5. **Reactive stage (actual incurred NELD):** *Establish central independent body to receive NELD claims*  
An ideal framework would consist of central independent body to receive and recognise NELD claims and would handle them according to the responses required on the ground.
6. **Community integration stage:** *Accept members of the public as actors experiencing NELD*  
In order to best understand and address NELD needs on the ground, it is important to integrate members of the community, to promote locally led practices. This would be in recognition of the fact that NELD are experienced by different communities in different ways, and such recognition would guard against the misrepresentation of communities through national governments.
7. **Communications stage:** *Engage in the communication of NELD, and involving communities*  
Raising general awareness of NELD among the public is likely to trigger positive effects. This is imperative both in terms of the impacted communities, as they lack even the mere understanding of climatic impacts, and in terms of research and policy action. With more awareness of local communities about the various kinds of NELD, they can share their stories and also design innovative ways to address them. Similarly, more research will strengthen the evidence base for the NELD debates and mobilise sensitivity of decision-makers.
8. **Integrate NELD in Policy Documents:** *Integrate NELD in vulnerability assessments and preventive adaptation planning*  
Integrating NELD into risk and vulnerability assessments needs to become standard practice if NELD is to be integrated into measures that help to avoid the risk of loss and damage. Assessments should reflect values rather than only commodities at risk and be context-specific. The choice of valuation methods should consider what goal the information will serve. In order to reflect the context dependence of values, the planning and implementation of adaptation measures need to be adapted to context.

## Conclusion

Although the literature explicitly addressing NELD is scarce, there is much knowledge directly relevant to the field of NELD. A value based approach will improve understanding the different value dimensions of NELD items and how the material and non-material spheres relate to one another will help in identifying appropriate approaches to address losses and damages.

Systematically integrating NELD into research and policy-making on climate change would have been an efficient way to endorse national and international cooperation. Besides, developing a comprehensive framework, as discussed above, can offer an opportunity to effectively avoid and address NELD. The concept of non-economic loss and damage is such that it is impossible to pre-define and prescribe. Hence, the only way it needs to be addressed is under the umbrella of major theme based impacts (i.e. loss of biodiversity, loss of culture, impact on mental health, gender based adversities and human mobility) as discussed in this brief and case and context-specific ways and approaches to address them.

## References

1. *What is “non-economic” loss and damage (NELD)?* (n.d.). Grantham Research Institute on Climate Change and the Environment. Retrieved September 13, 2023, from <https://www.lse.ac.uk/granthaminstitute/explainers/what-is-non-economic-loss-and-damage-neld/>
2. *Non-economic loss and damage: insights from the Pacific Islands.* (n.d.). Climate Analytics Blog. <https://climateanalytics.org/blog/2021/non-economic-loss-and-damage-insights-from-the-pacific-islands/>
3. Sustainability (IDOS), G. I. of D. and. (n.d.). *Non-economic loss and damage: addressing the forgotten side of climate change impacts.* Www.idos-research.de. Retrieved September 13, 2023, from <https://www.idos-research.de/en/briefing-paper/article/non-economic-loss-and-damage-addressing-the-forgotten-side-of-climate-change-impacts/>
4. Waters, O. (2016). *Non-economic loss and damage: addressing the forgotten side of climate change impacts.* Briefing Papers; German Institute of Development and Sustainability (IDOS). <https://ideas.repec.org/p/zbw/diebps/32016.html>
5. Serdeczny, O., Waters, E., & Chan, S. (n.d.). *Non-Economic Loss and Damage in the Context of Climate Change Understanding the Challenges.* [https://climateanalytics.org/media/dp\\_neld\\_3.2016.pdf](https://climateanalytics.org/media/dp_neld_3.2016.pdf)
6. *Migration and the Hidden Losses of Climate Change.* (n.d.). Mercy World. Retrieved September 13, 2023, from <https://www.mercyworld.org/newsroom/season-of-creation-2021-migration-and-the-hidden-losses-of-climate-change/>
7. Serdeczny, O. (n.d.). *Non-Economic Loss and Damage in the Context of Climate Change - Understanding the Challenges.* Www.academia.edu. Retrieved September 13, 2023, from [https://www.academia.edu/en/34679606/Non\\_Economic\\_Loss\\_and\\_Damage\\_in\\_the\\_Context\\_of\\_Climate\\_Change\\_Understanding\\_the\\_Challenges](https://www.academia.edu/en/34679606/Non_Economic_Loss_and_Damage_in_the_Context_of_Climate_Change_Understanding_the_Challenges)
8. Gabrielsson, I. (2023, May 30). *Voices of vulnerability and effort: Kunburudhoo Island’s experience with climate change induced Loss and Damage.* Global Resilience Partnership.

- <https://www.globalresiliencepartnership.org/voices-of-vulnerability-and-effort-kunburudhoo-islands-experience-with-climate-change-induced-loss-and-damage/>
9. Mooney, H. A., Cropper, A., Dasgupta, P., Leemans, R., Wageningen, May, R. M., Pingali, P., & Food. (2005). *Ecosystems AND HUMAN WELL-BEING*.  
<http://millenniumassessment.org/documents/document.354.aspx.pdf>
  10. Bruce [editor, B. M. ,Fay,Marianne,Ross-Larson. (n.d.). *World development report 2010 : development and climate change*. World Bank.  
<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/201001468159913657/world-development-report-2010-development-and-climate-change>
  11. Roe, D., Holland, E., Nisi, N., Mitchell, T., & Tasnim, T. (2023). Loss and damage finance should apply to biodiversity loss. *Nature Ecology & Evolution*, 7(9), 1336–1338.  
<https://doi.org/10.1038/s41559-023-02088-8>
  12. *IPBES-IPCC CO-SPONSORED WORKSHOP BIODIVERSITY AND CLIMATE CHANGE WORKSHOP REPORT*. (n.d.).  
<https://doi.org/10.5281/zenodo.4782538>
  13. *Why have countries failed to meet their biodiversity goals?* (2022, December 9). The Indian Express.  
<https://indianexpress.com/article/explained/explained-climate/why-have-countries-failed-to-meet-their-biodiversity-goals-8315725/>
  14. Roe, D., Holland, E., Nisi, N., Mitchell, T., & Tasnim, T. (2023). Loss and damage finance should apply to biodiversity loss. *Nature Ecology & Evolution*, 7(9), 1336–1338.  
<https://doi.org/10.1038/s41559-023-02088-8>
  15. *Non-economic losses in the context of the work programme on loss and damage*. (n.d.).  
<https://unfccc.int/resource/docs/2013/tp/02.pdf>
  16. Stenning, S. (2015, August 21). *Destroying cultural heritage: more than just material damage* / *British Council*. Britishcouncil.org.  
<https://www.britishcouncil.org/voices-magazine/destroying-cultural-heritage-more-just-material-damage>
  17. University, L. (n.d.). *How climate change is affecting cultural heritage*. Phys.org.  
<https://phys.org/news/2021-09-climate-affecting-cultural-heritage.html>
  18. World Bank. (2021, September 13). *Groundswell Report*. World Bank.  
<https://www.worldbank.org/en/news/press-release/2021/09/13/climate-change-could-force-216-million-people-to-migrate-within-their-own-countries-by-2050>
  19. *Climate-Induced Displacement and Migration: Policy Gaps and Policy Alternative A Likely Legal Instrument for a Rights-Based Political Solution*. (2015).  
[https://unfccc.int/files/adaptation/groups\\_committees/loss\\_and\\_damage\\_executive\\_committee/application/pdf/briefing\\_paper\\_climate\\_induced\\_displacement\\_and\\_migration.pdf](https://unfccc.int/files/adaptation/groups_committees/loss_and_damage_executive_committee/application/pdf/briefing_paper_climate_induced_displacement_and_migration.pdf)
  20. Serdeczny, O., Waters, E., & Chan, S. (n.d.). *Non-Economic Loss and Damage in the Context of Climate Change Understanding the Challenges*.  
[https://www.idos-research.de/uploads/media/DP\\_3.2016.pdf](https://www.idos-research.de/uploads/media/DP_3.2016.pdf)