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From Colonial Exploitation to Climate Vulnerability: A Legacy of Injustice for Marginalized Communities - Non-Economic Loss and Damage in Asia and the Pacific

From Colonial Exploitation to Climate Vulnerability: A Legacy of Injustice for Marginalized Communities - Non-Economic Loss and Damage in Asia and the Pacific

Submission by
Manushya Foundation

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Manushya Foundation extends its heartfelt solidarity with the communities in Asia and the Pacific whose lives and rights are threatened by the planetary crisis. Your courage and resilience serve as a powerful reminder of the urgent need for justice and equity in climate action.

This research seeks to denounce climate injustice rooted in colonialism and its enduring non-economic impacts on vulnerable communities in Asia and the Pacific. The disproportionate suffering faced by these communities highlights the historical exploitation by the Global Minority, whose lack of accountability perpetuates inequalities and undermines the rights, identities, and livelihoods of those most affected.

We would like to express particular appreciation to **Delasari Krisda Putri,** Corporate Accountability and Climate Justice Fellow at Manushya Foundation, who authored the report, **Neïla Mangin Maïza**, Manushya Foundation's Corporate Accountability Advisor for her review, and **Putu Deoris** for his meticulous work on the overall layout and design.

Finally, this work is dedicated to marginalized communities in Asia, the Pacific, and beyond, whose voices and struggles underscore the critical need for equitable and inclusive climate action.

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1.

Introduction

As the world is facing the triple **planetary crisis**, some communities are more vulnerable to it than others due to historical and structural inequalities. Communities that are the least responsible for this crisis are not only at the forefront of facing its consequences but also lack the means to either prepare for or recover from it. Furthermore, the impacts they are facing are not limited to immediate economic losses but also include profound non-economic loss and damage.[1]

Photo Credit: ©24Novembers/Shutterstock
https://theaseanmagazine.asean.org/article/the-triple-planetary-crisis/

"Triple Planetary Crisis"

Key Terms

The triple planetary crisis refers to the three major interconnected issues that humanity faces: climate change, biodiversity loss and pollution and waste.

Climate change refers to long-term shifts in temperatures and climate patterns that will completely alter the ecosystems that support life on earth.

Biodiversity loss refers to the decline and disappearance of biological diversity, which includes fauna, flora and ecosystems.

Pollution and waste generated by the capitalist economic system cause great impacts on human and ecosystem health.

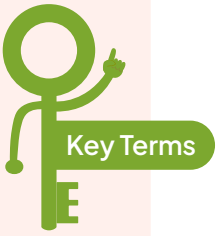
Colonial legacies, structural and gender inequalities, and systemic racism have left these communities with fewer resources to adapt to climate impacts, making them more susceptible to both economic and non-economic loss and damage. While economic losses, such as property damage and loss of livelihoods, are relatively straightforward to assess, non-economic losses - including cultural heritage destruction, loss of identity, and mental trauma - are less tangible but no less devastating.[2]

The historical and structural factors that drive climate vulnerability are particularly evident in formerly colonized regions and indigenous communities. These groups, whose land and resources were exploited under colonial regimes, are now among the most affected by climate-induced displacement and cultural loss.[3] In the Pacific Islands, for example, rising sea levels threaten not only the physical survival of these nations but also their cultural heritage and way of life. For many islanders, the loss of ancestral lands due to sea-level rise represents a profound form of non-economic damage, severing ties to cultural identity and spiritual practices.[4]

Similarly, gender inequality plays a critical role in shaping climate vulnerability. Women, particularly in rural and indigenous communities, are often the primary caretakers of natural resources and bear the brunt of climate impacts, such as water scarcity and food insecurity.[5] In many cases, these women face intersectional discrimination based on their gender, economic status, and ethnicity, making them particularly vulnerable to both economic and non-economic loss and damage. Further, studies show that climate change exacerbates pre-existing social inequalities, leading to higher rates of gender-based violence, psychological trauma, and displacement among women in affected areas.[6]

"Intersectionality"

Intersectionality, a concept introduced by Kimberlé Crenshaw, refers to how overlapping forms of discrimination - based on race, gender, class, and other social identities - compound vulnerabilities. In the context of climate change, this means that marginalized communities face not only environmental challenges but also social and structural barriers that exacerbate their suffering.[7]



At the global level, international frameworks have begun to acknowledge the importance of addressing both economic and non-economic loss and damage in climate policy. The United Nations Framework Convention on Climate Change (UNFCCC) and its associated Warsaw International Mechanism for Loss and Damage (WIM) have been pivotal in bringing attention to the issue. However, a significant gap remains to be seen in how these frameworks address non-economic loss and damage, particularly for marginalized communities. Legal and policy mechanisms have largely focused on economic compensation, while non-economic aspects - such as mental health support, cultural heritage preservation, and social cohesion - are often overlooked.[8]

This paper aims to explore how historical and structural inequalities exacerbate the vulnerability of marginalized communities to climate change in Asia and the Pacific, focusing on non-economic loss and damage. By examining historical and structural drivers of climate vulnerability and analyzing case studies of marginalized communities, the paper will shed light on how these factors intensify the non-economic impacts and highlight the need for an equitable and context-sensitive approach in addressing climate change.

2.

Methodology

This research is based on desktop research conducted between October 2023 and January 2024 and review of academic literature, legal frameworks, policy documents, government reports, and news articles. The approach centered on understanding how historical injustices and structural discrimination shape climate vulnerability, particularly for Indigenous and marginalized communities. Additionally, a comparative case study analysis focusing on climate-affected communities illustrate the long-term consequences of structural inequalities on climate vulnerability.

This research highlights gaps in existing climate policies and underscores the need for equitable, context-sensitive approaches to loss and damage.

3.

Historical and Structural Inequalities in Climate Vulnerability

3.1 Colonialism and Historical Inequalities

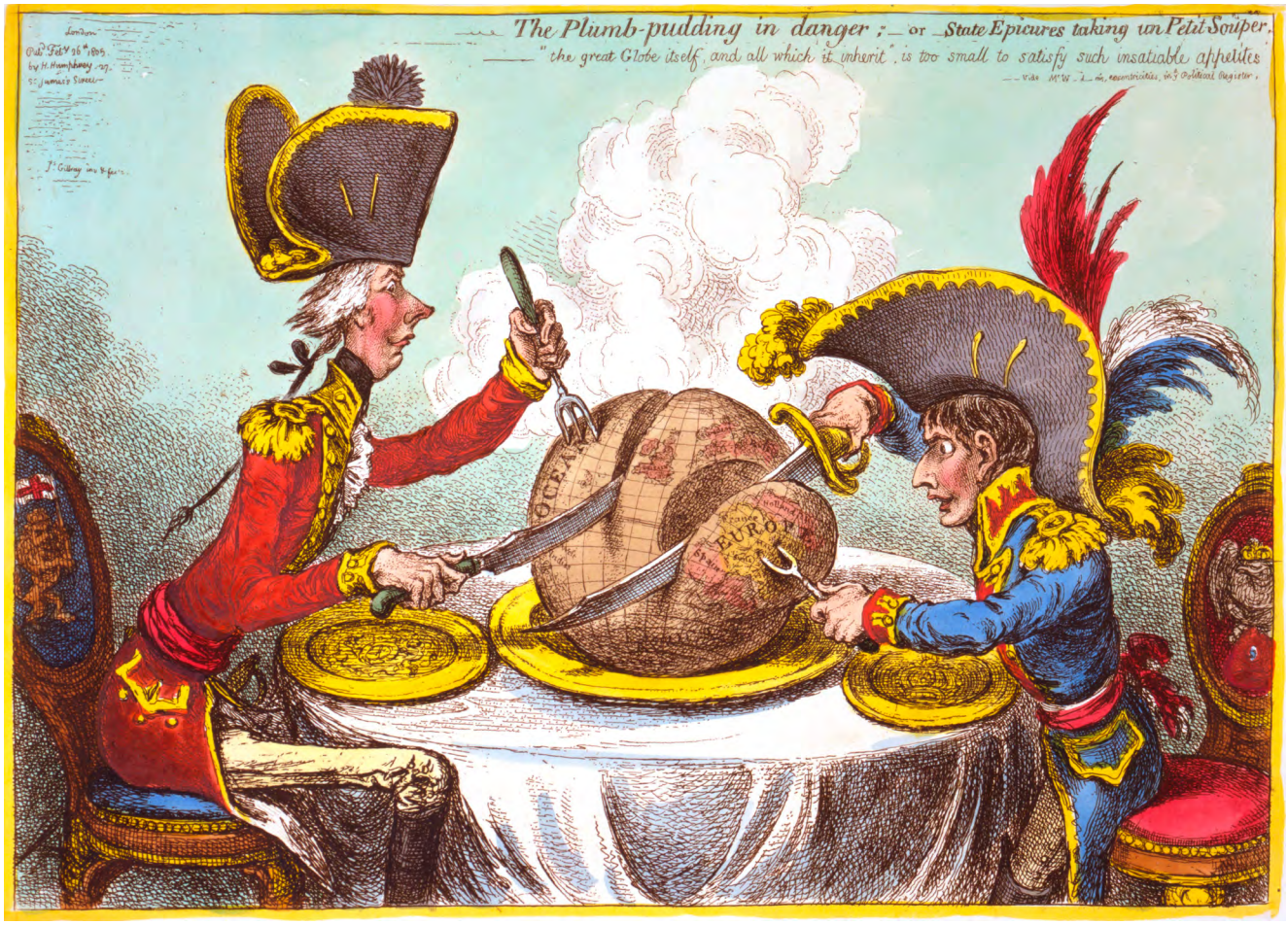


Photo Credit: James Gillray
https://en.prolewiki.org/wiki/Colonialism

From the 15th to the early 20th century, colonialism was a complex phenomenon that significantly impacted human civilization. At its core, colonialism is based on the exploitation of colonized peoples, their territories, and resources.[9] The primary goal of the colonial project was to acquire new territories and resources, providing financial gains and strategic advantages to expand empires.[10] These pursuits were often carried out with minimal regard - and sometimes outright disregard - for the local environment.

Building upon the exploitative foundations laid by colonialism, the Industrial Revolution accelerated environmental degradation and deepened climate inequities on a global scale. While this era marked substantial technological and economic advancements, it was fueled by the intense extraction often in colonized territories and burning of fossil fuels such as coal and, later, oil, which resulted in massive greenhouse gas emissions, the leading cause of today's climate crisis.[11]

Economic advancements primarily benefited colonial and wealthier nations, while colonized regions were left with environmental degradation and economic exploitation. The climate challenges we face today are the "predictable consequences of an ecologically unequal exchange" between the Global Majority and the Global Minority. The climate crisis is deeply rooted in the Global Minority's economic model, which

has driven 92% of cumulative carbon emissions, as classified by the UNFCCC.[12] Recognizing this, the Intergovernmental Panel on Climate Change (IPCC) acknowledged in its 2022 report that present development challenges, including heightened vulnerability, are shaped by historical and ongoing inequities, notably colonialism.[13] The legacies of this environmental, economic, and social exploitation are still experienced today and weaken former colonized territories' resilience to climate change.

"Global Majority"

Global Majority reflects the reality that most of the world's population lives in Africa, Asia, Latin America, and Oceania. Contrary to "Global South" which often implies a hierarchy order with the "Global North", placing the latter at the top, "Global Majority" reframes the narrative to numerical and cultural reality.

Key Terms

Environmental degradation

Photo Credit: Ulet Ifansasti / Getty Images
https://grist.org/cop26/countries-pledge-to-save-forests/

Colonial powers often established **extractive economies** based on the exploitation of natural resources, such as timber, minerals, and agricultural products. Nature was entirely regarded as a commodity, leading to exploitative and destructive resource extraction. Across former colonized regions, large-scale deforestation for plantations and mining has left a lasting ecological footprint, illustrating the extensive harm colonial economic practices inflicted on local environments.[14] In British-controlled India, for example, vast expanses of oak and deodar forests in the Himalayas were cleared in the late 1800s to make way for pine plantations geared toward resin production. Unlike native forests, these pine plantations contributed to widespread wildfires every summer, impacting both

the environment and local communities.[15] Similarly, Dutch colonial policies in Indonesia promoted large-scale deforestation, especially on the northern coast of Java, including Rembang, Jepara, and Pekalongan, which disrupted traditional land stewardship and intensified ecological vulnerability, a legacy still evident today in the region's susceptibility to climate-induced disasters.[16] These forms of extracted natural resources result in environmental degradation and have weakened natural resource bases, undermining today's ability to adapt to climate impacts, such as changing rainfall patterns, droughts, and floods.

"Extractive Economies"

Key Terms

An extractive economy is a system built on exploitation, prioritizing profit, consumerism, and colonial control over people and the planet. It concentrates wealth and power in the hands of a few through predatory financing, land grabs, and labor exploitation. By treating natural resources as commodities, it fuels environmental destruction, deepens inequality, and undermines democracy and workers' rights—all to extract, burn, and dump with little regard for communities or nature.

Economic disparity and vulnerability

Photo Credit: Vlad Cheţan
https://th.boell.org/en/2025/02/12/criticality-and-securitization-mineral-resources

During the colonial period, powers prioritized the exploitation of natural resources, often at the expense of developing local infrastructure and industries.[17] This led to economies becoming heavily reliant on extractive and

climate-sensitive activities. Subsequently, this dependency has persisted post-independence, leaving many nations vulnerable to economic instability and heightened climate risks.[18] These nations often struggle to diversify their economies, compounding their exposure to the dual crises of economic precarity and climate change.

"Economic Diversification"

The process of expanding an economy beyond a single income source by developing multiple sectors and markets. It is a key strategy for fostering sustainable growth and reducing economic dependence and vulnerability.

Key Terms

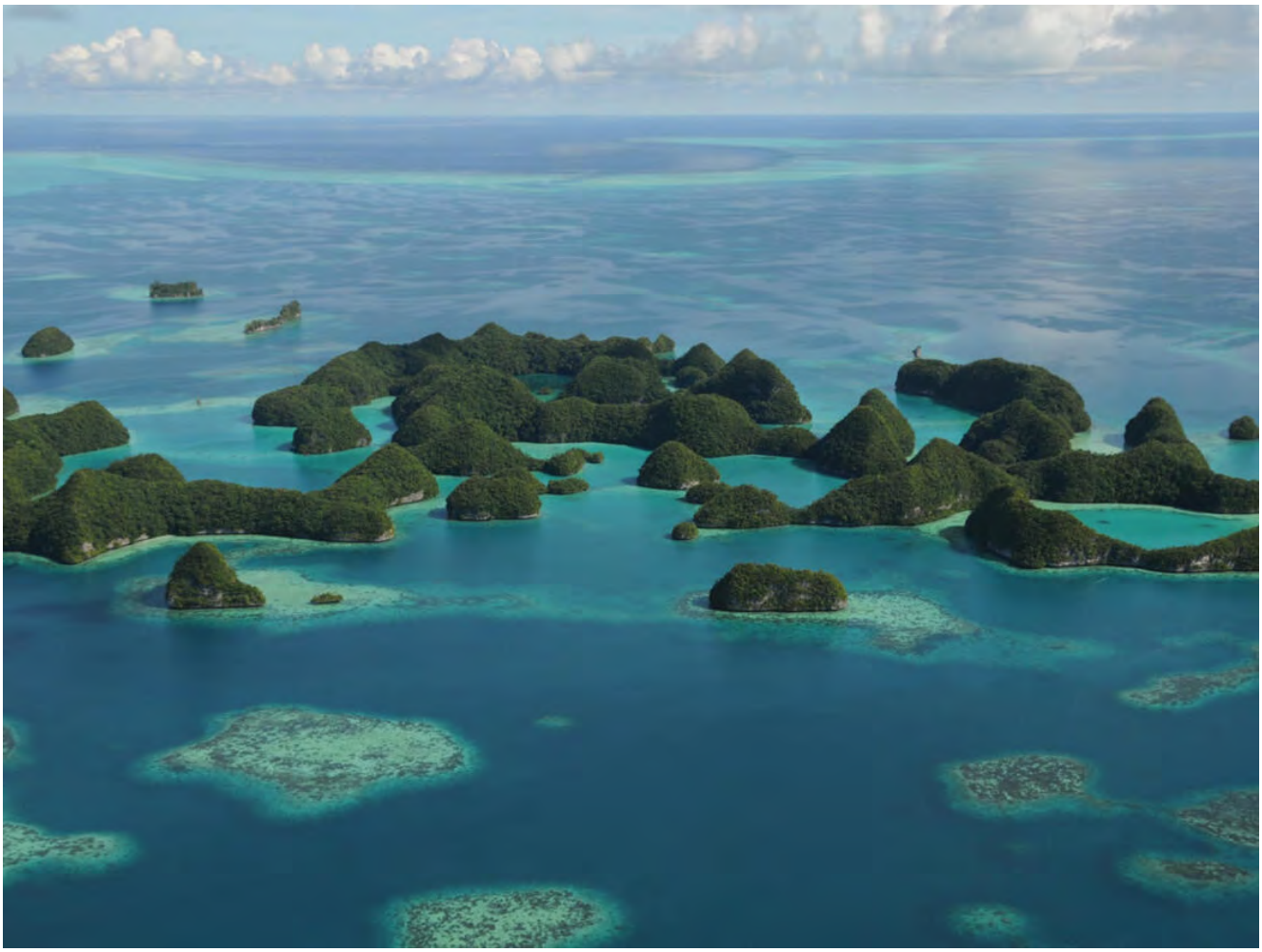


Photo Credit: IUCN / James Tamelander
https://iucn.org/story/202306/small-island-developing-states-call-ambitious-global-plastics-treaty-inc-2-paris

For instance, the economy in the Small Island Developing States (SIDS) in Oceania largely focuses on monoculture plantations and the exploitation of marine resources, leaving nations with economies that are highly susceptible to climate-induced disasters. Relying on narrow and fragile resource bases while being subject to the vagaries of international trade,[19] coupled with debt distress, volatility due to fluctuations in private income flows and prices of raw materials[20], and lack of financial access,[21] SIDS do not have the capacity to diversify their economies.

Key Message on Colonialism and Historical Inequalities

Colonialism played a foundational role in shaping the climate inequalities we see today, as it was driven by the relentless exploitation of people, land, and resources. This extractive system left deep economic and environmental disparities that persist long after colonial rule ended. The Industrial Revolution, which fueled the expansion of colonial powers, further entrenched these inequalities by accelerating the large-scale consumption of fossil fuels—primarily coal and later oil—driving massive greenhouse gas emissions. While industrialized nations reaped the benefits of economic growth and technological advancement, colonized territories bore the environmental costs, enduring deforestation, resource depletion, and ecological destruction.

This imbalance continues today in what scholars call an "ecologically unequal exchange," where wealthier nations have contributed disproportionately to carbon emissions, yet former colonized nations face the most severe climate impacts.

Beyond environmental harm, colonial economic structures have also contributed to ongoing climate vulnerability. Colonized regions were molded into economies dependent on resource extraction rather than sustainable development.

3.2 Intersectionality and Climate Vulnerabilities

Photo Credit: Luc Forsyth/Mongabay
https://asiatimes.com/2019/10/rural-women-unite-across-asia-pacific/#

Intersectionality emphasizes the ways in which overlapping social identities, such as gender, race, class, ethnicity, ability, and age contribute to distinct vulnerabilities.[22] Through thoroughly analyzing these identities' interactions, we can better comprehend the intricate elements leading to climate vulnerability. This approach is crucial as marginalized communities face not only environmental challenges but also social and economic barriers such as systemic racism, economic inequality, and limited access to healthcare, which amplify their vulnerability to climate-induced events.[23]

Gender and climate vulnerability

Women, especially those in low-income, rural, and Indigenous communities, face significant challenges from climate change because of their responsibilities in overseeing essential natural resources like water, food, and fuel, which becomes significantly more challenging in the face of droughts, yield decrease, and deforestation.[24] Gender-based discrimination compounded by the intersection of poverty and location intensifies these vulnerabilities, as women often face barriers to accessing land ownership, education, and financial resources, which are essential for effectively strengthening climate resiliency and responding to climate-induced disasters.[25]

Race, ethnicity, class, and climate vulnerability

Historically marginalized groups such as low-income and racial and ethnic minority groups frequently experience the most severe impacts of climate change. Residing in areas that are more vulnerable to environmental threats as a result of past segregation, colonization, discrimination and economic exploitation, poor infrastructures, and limited financial resources prevent resiliency, resulting in a persistent cycle of poverty.[26] For instance, without adequate resources for relocation or reconstruction, underprivileged communities living in floodplains bear an inequitable burden of the destruction caused by floods or hurricanes.

Disability, age, and climate vulnerability

Photo Credit: Jayanta Dey/Reuters
https://www.abc.net.au/news/2022-06-23/south-asia-s-heat-and-floods-spark-fears-over-climate-change/101172804

Individuals with disabilities face distinct vulnerabilities in the context of climate change, particularly during catastrophic events like floods, hurricanes, and heatwaves.[27] They may face mobility challenges, which can complicate or hinder evacuation efforts during severe weather events.[28] Additionally, systemic obstacles, such as the exclusion of individuals with disabilities from disaster planning and decision-making processes, further marginalize them in climate adaptation strategies.[29] At the same time, their reliance on informal or low-paying jobs further hampers financial recovery.[30] These compounded inequalities leave individuals with disabilities less equipped to withstand and recover from the socioeconomic shocks of climate crises.

Similarly, children and the elderly face heightened risks regarding the health consequences of climate change.[31] Due to physiological development factors, children are uniquely vulnerable to the impacts of climate change [32], while the elderly, due to pre-existing health conditions, are more vulnerable than adults during extreme weather events.

Indigenous Peoples and cultural sensitivity

Photo Credit: United Nations
https://news.un.org/en/story/2020/08/1069822

Indigenous peoples face significant risks from climate change, given their deep connection to ecosystems as they depend on their ancestral territories and natural resources for their cultural traditions, economic sustenance, and overall survival.[33] As climate change transforms their ecosystems, indigenous peoples encounter not only physical and economic difficulties but also the erosion of their cultural identity and heritage.[34] Further, in numerous instances, indigenous communities are being forcibly removed from their ancestral territories for the benefit of extractive industries, undermining their sovereignty and exposing them to environmental degradation without any consultation or involvement in decision-making processes, ignoring their rights, including the right to Free, Prior and Informed Consent. For instance, nickel mining in Indonesia's Sulawesi islands has destroyed coastal ecosystems relied upon by indigenous fishing communities.[35] The global push for energy transition, despite its environmental aims, continues to prioritize resource extraction over the rights of indigenous peoples, perpetuating the same exploitative patterns established during the colonial era and deepening their vulnerability to ecological harm and cultural erasure as the loss of land and the resulting poverty weakened their resilience.[36]

Key Message on Intersectionality and Climate Vulnerabilities

Climate change doesn't affect everyone equally—it magnifies existing inequalities, with marginalized communities bearing the heaviest burden. Factors like gender, race, class, ability, and age shape a person's ability to withstand and recover from climate disasters, creating overlapping vulnerabilities that are often overlooked.

Climate justice isn't just about reducing emissions; it's about ensuring that those most affected have the support and resources to protect themselves. Without addressing these deep-rooted inequities, the fight against climate change will continue to leave the most vulnerable behind.

4.

The concept of Loss & Damage

The notion of loss and damage has surfaced as a vital component of global climate discussions, focusing on the negative, unavoidable, and irreversible impacts of the climate crisis.[37] According to 2023 research, climate change caused at least $2.8 trillion in global loss and damage between 2000 and 2019, costing approximately $16 million every hour.[38] Loss and damage are strongly linked to the concepts of **just transition** and equity, as the world's most climate-vulnerable countries are frequently the lowest emitters of greenhouse gasses. This begs the dilemma of who should pay for loss and damage in low-income countries with limited resources.

Photo Credit: Reuters
https://www.dawn.com/news/1056331

The term 'loss and damage' was legally recognized in 2013 at the 19th Conference of the Parties (COP19) in Warsaw, establishing the Warsaw International Mechanism for Loss and Damage. Since then, attention has grown, and more countries are addressing loss and damage in their Nationally Determined Contributions.[39]

"Just Transition"

Just transition means ensuring that no one is left behind, including workers and communities, in the transition to a low carbon society.

Key Terms

At the international policy level, the Paris Agreement established loss and damage as the third pillar of climate action.[40] Article 8 underscores the importance of both avoiding and reducing, as well as addressing, loss and damage caused by the adverse effects of climate change. The agenda on loss and damage focuses on responding to the lived realities of affected communities and addressing the resulting economic and non-economic impacts.

Economic Loss and Damage

Photo Credit: Reuters
https://asia.nikkei.com/Economy/Natural-disasters/Climate-change-brings-Japan-more-deadly-downpours

Economic loss and damage refers to the quantifiable financial impacts of climate change involving resources, goods, and services commonly traded in markets.[41] These losses are typically captured in a country's system of national accounts, reflecting reductions in economic productivity, the destruction of physical assets, and the disruption of services.[42] Market prices are used to assess the value of these losses, making them easier to quantify and address through traditional compensation mechanisms. Examples of economic damage include infrastructure damage, such as the destruction of roads, bridges, and public facilities, as a result of extreme climate events.

Non-Economic Loss and Damage

Non-economic loss and damage (NELD) refers to the intangible and often irreversible negative impacts of climate change that cannot be easily quantified in monetary terms. NELD encompasses losses such as cultural heritage, biodiversity, and mental health impacts. These losses can affect individuals, communities, and ecosystems:[44]

- Individual losses: Loss of life, health, or mobility.
- Societal losses: Loss of territory, cultural heritage, indigenous or local knowledge, societal or cultural identity.
- Environmental losses: Loss of biodiversity or ecosystem services.

NELD can occur through a variety of sources. They can be linked to both slow-onset impacts (e.g., territorial loss due to sea level rise) and extreme occurrences (e.g., loss of life in a cyclone) caused by climate change. The losses may also be directly linked to unfavorable climate change consequences (e.g., ecosystem destruction) or indirectly (e.g., starvation as a result of agricultural impacts).

Challenge on Non-Economic Loss and Damage

Photo Credit: Reuters
https://www.malaymail.com/news/life/2023/07/17/climate-change-menaces-chinas-ancient-heritage-sites/80264

NELD has emerged as a critical issue in UN climate negotiations, particularly under the UNFCCC.[45] Nevertheless, addressing NELD remains fraught with significant challenges, including measurement, valuation, communication, and decision-making.

One of the fundamental challenges in addressing NELD is the difficulty of measuring and assigning value to items that are often intangible and context-specific. Unlike physical assets, many NELD components lack standardized measurement frameworks.

For instance:[46]

- **Intangibility:** While metrics exist for some dimensions, like health impacts, many aspects of cultural and ecological loss remain without systematic assessment tools.
- **Contextual value:** The value attributed to NELD is deeply rooted in cultural, social, and individual contexts. Perceptions of loss vary significantly between communities, influenced by cultural traditions and local values.

- **Dual complexity:** NELD measurement involves defining indicators for losses while also ensuring that valuation reflects the socio-cultural context of those affected.
- **Attribution issues:** Linking NELD directly to anthropogenic climate change introduces complexity, as indirect effects and systemic interconnections make causality difficult to establish.

Subsequently, NELDs are often overlooked in climate-risk assessments due to their intangible nature and difficulty in assigning monetary values.[47] This neglect undermines the importance of these losses for affected communities, even though they can have significant impacts on individuals, societies, and ecosystems. Addressing these challenges demands a shift in how losses are conceptualized, measured, and integrated into policy frameworks. This requires the development of context-sensitive indicators, fostering cross-cultural understanding, and creating decision-making tools that accommodate non-monetary values, ensuring that NELD is inclusively and equitably addressed in climate action.

Key Messages on Loss & Damage

Climate change is already causing irreversible harm, costing trillions globally, with the most severe impacts falling on the world's lowest emitters. Recognized in global climate agreements, loss, and damage have become the third pillar of climate action, alongside mitigation and adaptation.

Economic loss and damage are easier to quantify but deeply impact economies. Tangible financial losses, such as infrastructure destruction, agricultural decline, and service disruptions, can be measured and addressed through compensation mechanisms. These losses highlight the economic toll of climate change and the urgent need for financial support in vulnerable regions.

Non-economic loss and damage (NELD) remains a major challenge. Many climate impacts, such as loss of life, cultural heritage, biodiversity, and mental well-being, cannot be easily quantified but have profound consequences for individuals, societies, and ecosystems. The intangible nature of NELD makes it difficult to assess, often leading to its exclusion from climate policies and risk assessments.

5.

Non-Economic Loss & Damage: Case studies across Asia and the Pacific

5.1 The loss of cultural heritage in the Bajo tribe Indonesia

Photo Credit: Handout
https://www.thesun.co.uk/news/6097973/tribe-fish-people-huge-spleens-drive-230ft-below-ocean/

> *"The coast is our home. When we put down the traps, fish swamp around. We could get hundreds of big or small fish. But now, where could we catch the fish?"*
>
> - Said, a fisherman in Bajo Tribe.[48]

The Bajo tribe, known as "the people of the sea," is a community closely connected to marine life. Because they have always lived moving from one place to another across the vast ocean, the Bajo tribe is also known as the nomadic tribe. This reflects their belief in the fluid movement of both their people and marine creatures from the sea to the land.[49]

Living predominantly along the coasts of Sulawesi, including Southeast Sulawesi, the Bajo people move between locations depending on fishing and other marine activities.

However, global climate change is disrupting the microclimate they depend on, complicating daily

activities. The unpredictable marine environment due, for instance, to the increased occurrence of extreme weather events is compelling the Bajo people to adapt, threatening the traditions that have sustained them for generations and forcing a reevaluation of this deep connection with the sea as survival becomes increasingly difficult, leading to the loss of intangible cultural assets, such as oral histories, rituals, and customary laws tied to the sea.[50]

5.2 The loss of linguistic heritage in Vanuatu

Photo Credit: Thomas Ballandras/Flickr
https://asiasociety.org/blog/asia/photo-day-dancing-vanuatu

The Republic of Vanuatu, a Pacific island nation in Melanesia, is emblematic of the challenges faced by Small Island Developing States in the context of the global climate crisis. Comprising over 80 islands and home to approximately 325,000 people, Vanuatu is renowned for its rich linguistic and cultural diversity, hosting over 120 indigenous languages.[51] Surrounding Vanuatu, the South Pacific Ocean shapes both the terrain and the culture, as well as channels of thousands of years of ancient wisdom continuously carried forth.[52]

> *We find ourselves on the front lines of a crisis we did not create, a crisis that threatens our very existence.*
>
> - Ralph Regenvanu, Vanuatu's special envoy for climate change and the environment.[53]

One of the most profound consequences of climate change in Vanuatu is the loss of cultural and linguistic heritage. Rising sea levels, cyclones, and landslides have rendered many coastal and mountainous areas uninhabitable, forcing indigenous communities to relocate from their ancestral lands, either temporarily or permanently. So far, six villages have been relocated as rising sea levels erode Vanuatu's coastline alongside centuries-old cultural practices.[54] This displacement has brought diverse linguistic groups into closer proximity, leading to a decline in the use of indigenous languages and the erosion of linguistic diversity as communities adapt to new surroundings.[55] Words and phrases linked to unique environmental features are disappearing, diminishing the cultural identity and historical continuity of Vanuatu's people. Efforts to document and preserve these languages remain underfunded and insufficient in addressing the rapid rate of loss.

5.3 The loss of cultural heritage in Bangladesh

Photo Credit: Dhaka Tribune
https://www.dhakatribune.com/bangladesh/298811/fishermen-worry-as-mighty-padma-dries-up-fast

Bangladesh's susceptibility to the impacts of climate change, especially in its coastal regions, is shaped by its flat, low-lying terrain, the poverty of its coastal communities, and the dependence of many livelihoods on climate-sensitive industries. Bangladesh is home to approximately 160 million people, with around 12% of the population employed in the fishing industry.[57]

For the residents of Padma, fish is not just a means of livelihood, it is also a source of joy, excitement, and prosperity. A good catch fills the village with celebration, bringing people together in festive gatherings that strengthen their sense of community. However, as the population of many fish species is declining, and species are disappearing due to climate stressors leading to smaller catches and reduced earnings, villagers can no longer afford to host festivals as they once did. This decline in fish availability indirectly erodes cultural traditions and social activities.[58]

> *"The population of the villagers has increased, but the population of the fish is decreasing."*
>
> - A fisherman in Padma village.[59]

A similar story unfolds in the Haor region, where women have long celebrated their heritage through the vibrant Dhamail dances and songs, passed down through handwritten songbooks. They usually perform Dhamail or Dhamali dances and songs with great pomp and splendor during religious rites, various festivals, and birth or marriage ceremonies. However, the 2022 floods in the Haor region obliterated their cultural artefacts like Dhamail songbooks, which are essential to the area's musical heritage.[60] This has led to the gradual disappearance of countless traditional songs.

5.4 The Loss of Biodiversity in the Greater Mekong Subregion

Photo Credit: VNA/VNS Photo Vũ Sinh
https://vietnamnews.vn/society/1342710/mekong-delta-farmers-expand-nature-based-aquaculture.html

The Greater Mekong Subregion (GMS), comprising Cambodia, Laos, Myanmar, Thailand, and Vietnam, is grappling with severe challenges stemming from shifting rainfall patterns and increasingly frequent extreme weather events, all driven by climate change.[61] Over the past 50 years, temperatures in the region have risen by 0.5 to 1.5°C, and while some areas may experience shorter rainy seasons, overall rainfall is expected to increase, intensifying precipitation events.[62]

The region is generally experiencing the impacts of rising sea levels. This is evidenced in Vietnam's Mekong Delta, where rising sea water contributes to coastal erosion.[63] Mangrove forests, for example, which are crucial for protecting coastal ecosystems and biodiversity are particularly vulnerable.[64] As sea levels rise, saltwater intrudes into freshwater ecosystems, displacing species that rely on brackish or freshwater conditions.[65] Mangrove forests, which serve as vital habitats for numerous species of fish, birds, and other wildlife, are lost to coastal erosion. The reduction in mangrove area by 5% over a 25-year period underscores the direct threat that rising sea levels pose to these ecosystems and the species they support.[66]

"The Mekong subregion is at a crossroads. There are critical challenges in water, energy, and climate governance. This event is an essential opportunity for stakeholders to showcase inspiring solutions and to collaborate on creating robust, adaptive policies that can drive sustainable development in the region."

- Niall O'Connor, Centre Director, Stockholm Environment Institute Asia.[67]

5.5 Lost of lives in the Philippines

Photo Credit: Francis R Malasig/EPA, via Shutterstock
https://www.nytimes.com/2024/11/07/world/asia/philippines-typhoon-yinxing.html

The Philippines is one of the most climate-vulnerable nations in the world.[68] On average, the country experiences around 20 cyclones annually, with approximately 8 making landfall within its jurisdiction.[69] In 2024 itself, the country endured a harrowing series of typhoons, with Typhoon Usagi and Super Typhoon Man-yi delivering devastating blows just days apart from each other. The growing intensity of these storms is no coincidence—climate change is making typhoons stronger, wetter, and more unpredictable. Warmer ocean waters provide more energy for storms to develop while rising sea levels worsen storm surges.[70]

On October 24, Tropical Storm Trami, locally known as Cyclone Kristine, made landfall on the northeastern coast of Luzon, causing at least 24 deaths and forcing tens of thousands to flee.[71] Most casualties resulted from flooding and landslides, particularly in the Bicol region southeast of Manila, including Naga City.[72] Trami was soon followed by Super Typhoon Kong-Rey, which passed north of the Philippines, killing at least three people.[73]

> *“We can’t rescue them all at once because there are so many and we need additional motorboats.We’re looking for ways to deliver food and water to those who were trapped but could not be evacuated right away.”*
>
> - Dizon- Members of the Philippine Coast Guard and the military.[74]

The sequence of disasters continued with Typhoon Usagi and Super Typhoon Man-yi, which struck within days of each other.[75] Usagi, striking the northern Luzon region on November 14, brought winds of up to 175 km/h and tidal surges of three meters. Just two days later, Super Typhoon Man-yi followed, unleashing winds of 195 km/h and compounding the devastation. By the time Man-yi made landfall, it became the sixth typhoon to strike the Philippines in a single month.

The cumulative impact of these typhoons claimed at least 163 lives[76], including the 24 deaths caused by Cyclone Kristine (Trami) and the fatalities from Super Typhoon Kong-Rey. Many of these deaths resulted from floods, landslides, and storm surges, while others succumbed to injuries or the lack of timely medical care as overwhelmed systems struggled to cope.

6. Conclusion

The interlinked crises of climate change, pollution, and biodiversity loss are not just environmental challenges; they are profound human rights issues. At their core lies a stark truth: historical and structural inequalities have deepened the suffering of marginalized communities, pushing them to the forefront of the crisis. These communities are not merely losing economic assets but enduring irreplaceable non-economic losses, losses that tear at the fabric of identity, culture, and history.

Non-economic loss and damage must no longer be sidelined in climate conversations. They demand acknowledgment and integration into decision-making processes as central elements of justice and equity. These losses transcend individuals and communities; they impact the complex socio-ecological systems in which identity and culture are deeply embedded.

We cannot allow communities' stories to fade into the background. Climate change is not just a scientific or economic issue, it is a moral crisis that demands systemic change. The time is now to honor the lived experiences of those bearing the brunt of this crisis, confront the colonial legacies and systemic barriers that perpetuate vulnerability, and build a future where no one is left behind.

7.

Recommendations

Create a comprehensive international policy framework to address NELD

Developing a robust international framework is essential to address the complexities and diverse manifestations of non-economic loss and damage across cultural, social, and geographical contexts. This framework must prioritize contextual sensitivity by recognizing the unique experiences of harm as defined by affected communities rather than imposing rigid, standardized definitions. It should also establish standardized processes for documenting, assessing, and addressing NELD, ensuring legitimacy and international acknowledgement.

Financial considerations must underpin this framework. The $300 billion annual climate finance agreed upon at COP 29 must be disbursed transparently and efficiently. Additionally, the Loss and Damage Fund must include NELD-related interventions, such as supporting displaced communities, safeguarding cultural heritage, and addressing mental health and well-being. Furthermore, these funds must prioritize adaptation and resilience-building efforts in vulnerable regions, ensuring that marginalized groups disproportionately affected by climate-induced displacement can access critical resources.

Integrate NELD into decision-making on adaptation policies

Embedding considerations of NELD into national and international adaptation strategies is essential for holistic and effective decision-making. Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs), and National Biodiversity Strategic Action Plans (NBSAPs) must explicitly include NELD. This integration ensures that non-economic losses are formally recognized and addressed at every policy level.

Policymakers must recognize the interconnectedness of economic and non-economic impacts in climate adaptation planning. They should develop tools and guidelines to incorporate NELD into risk assessments, funding allocations, and resilience strategies. Cross-sector collaboration is equally vital to ensure that NELD considerations are reflected in broader social, environmental, and development policies, creating a more inclusive and equitable approach to adaptation.

Strengthen community capacity for informed decision-making

Local communities must be powered to actively participate in identifying and addressing NELD to ensure that responses are grounded in local needs and aspirations. Supporting and powering local leaders to implement work plans and objectives driven by community input fosters resilience at the grassroots level.

Enhancing community capacity begins with education and awareness. Workshops, training programs, and campaigns can increase understanding of NELD and its implications. Access to information is equally important, requiring that communities are provided with accessible data, tools, and resources to support evidence-based decision-making. Finally, fostering stakeholder engagement through partnerships between governments, civil society, and community organizations builds trust and shared ownership of adaptation efforts, ensuring sustainable and inclusive outcomes.

Commitment at COP30

At COP30, Parties must formally acknowledge NELD as a central issue in climate discourse. This acknowledgment must go beyond rhetoric and translate into specific actions that ensure climate policies are inclusive, resilient, and responsive to the full spectrum of climate impacts. Concrete commitments to addressing NELD, alongside measurable steps for implementation, are vital to ensuring that the most vulnerable are not left behind in the global response to climate change.

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