



# Loss and Damage: Perspectives from Southeast Asia

## Key Messages

- Countries in Southeast Asia have a high risk of experiencing extreme weather events such as typhoons, heavy rainfall, droughts and flooding due to their geographical locations and human-induced climate change.
- These weather events have become so extreme that countries and communities are now reaching the limits of their abilities to adapt and thus loss and damage is and will continue to be a reality. These are known as losses and damages.
- The region is experiencing both economic losses and damages, or losses of goods and services that are normally traded in market, and non-economic losses and damages, which do not fall under the previous category.
- Given the severity of the losses and damages vulnerable countries face, particularly in Southeast Asia, and the absence of funding mechanisms that address them, a financing facility is needed. This financing facility should be additional to existing adaptation and mitigation financing mechanisms, should be immediately accessible, should not impose additional burdens on communities, should build on the capabilities of vulnerable communities, and should be founded on equity and justice.

## The Southeast Asian context

According to the Global Climate Risk Index, a yearly report by GermanWatch, among the top ten countries at risk to climate-related extreme weather events, three (3) countries are from Southeast Asia (Table 1). They are: Myanmar at 2<sup>nd</sup> place, the Philippines at 4<sup>th</sup> place<sup>1</sup>, and Thailand at 9<sup>th</sup> place. The majority of the countries listed as having high risk indices are from Asia, and all of them are developing countries.<sup>2</sup>

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<sup>1</sup>See Eckstein, D., Kunzel, V., & Schafer, L. (2021). Global Climate Risk Index 2021. Berlin: Germanwatch

<sup>2</sup>The discussion necessarily looks at the development level of countries as “[t]hese results emphasise the particular vulnerability, particularly in relative terms, of poor countries to climatic risks, despite the fact that the absolute monetary losses are much higher in richer countries. Loss of life, personal hardship and existential threats are also much more widespread in low-income countries.”

Table 1. Top 10 countries most affected from 2000 to 2019 (annual averages). Source: Eckstein et al 2021.

Global Climate Risk Index							
CRI 2000-2019 (1999-2018)	Country	CRI Score	Fatalities	Fatalities per 100,000 inhabitants	Losses in million US\$ PPP	Losses per unit GDP in %	Number of events (2000-2019)
1 (1)	Puerto Rico	7.17	149.85	4.12	4149.98	3.66	24
2 (2)	Myanmar	10.00	7056.45	14.35	1512.11	0.80	57
3 (3)	Haiti	13.67	274.05	2.78	392.54	2.30	80
4 (4)	Philippines	18.17	859.35	0.93	3179.12	0.54	317
5 (14)	Mozambique	25.83	125.40	0.52	303.03	1.33	57
6 (20)	The Bahamas	27.67	5.35	1.56	426.88	3.81	13
7 (7)	Bangladesh	28.33	572.50	0.38	1860.04	0.41	185
8 (5)	Pakistan	29.00	502.45	0.30	3771.91	0.52	173
9 (8)	Thailand	29.83	137.75	0.21	7719.15	0.82	146
10 (9)	Nepal	31.33	217.15	0.82	233.06	0.39	191

The Association for Southeast Asian Nations (ASEAN) notes that “climate related hazards such as floods, typhoons, droughts, heat or cold waves and storm surges have affected over 57 million people in Asia Pacific, including Southeast Asia. Not only threatening the lives of the most at-risk populations, these hazards also have ripple effects on community livelihoods, which can strip away income and food security.”<sup>3</sup>

As the world continues to heat up due to climate change, these climate hazards will increase in frequency, intensity, or both. Such hazards are already being witnessed in several parts of Southeast Asia: every year since 2020 the Philippines has been ravaged by Category 5 typhoons, previously thought to be rare occurrences; Indonesia is facing extreme events such as flooding and extreme heat, and is bracing for long-term climate hazards such as sea-level rise; Vietnam is exceptionally vulnerable to flooding, particularly its coastal communities.

<sup>3</sup>ASEAN. “Southeast Asian countries enhance capacity to anticipate climate related hazards”. May 26, 2022. ASEAN. <https://asean.org/southeast-asian-countries-enhance-capacity-to-anticipate-climate-related-hazards/>

# Loss and Damage: Lives at Risk

As these climate hazards increase in intensity, outweighing the ability of vulnerable groups and communities to adapt, losses and damages will also increase. Article 8 of the Paris Agreement states that “[p]arties 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.”<sup>4</sup>

While loss and damage has no working definition yet in the context of the Paris Agreement, it is generally used in the UN climate negotiations “to refer to the consequences of climate change that go beyond what people can adapt to, or when options exist but a community doesn’t have the resources to access or utilize them.”<sup>5</sup> The same article also states that “[l]oss and damage is and will continue to harm vulnerable communities the most, making addressing the issue a matter of climate justice.”

It is crucial that these losses and damages, categorised as economic and non-economic, are addressed, as they involve remedial actions, disaster management, risk reduction, and climate justice. Economic loss and damage are generally defined as the loss of resources, goods, and services that are normally traded in the market, involving income, property, and physical assets. Non-economic loss and damage is understood as those not falling under the former definition. It includes, among others, individual losses and damages (losses to life, health, and mobility), societal losses and damages (such as loss of cultural and indigenous knowledge), and environmental losses and damages (such as biodiversity loss and damage to our ecosystem services). Figure 1 below<sup>6</sup> explains these losses and damages further.

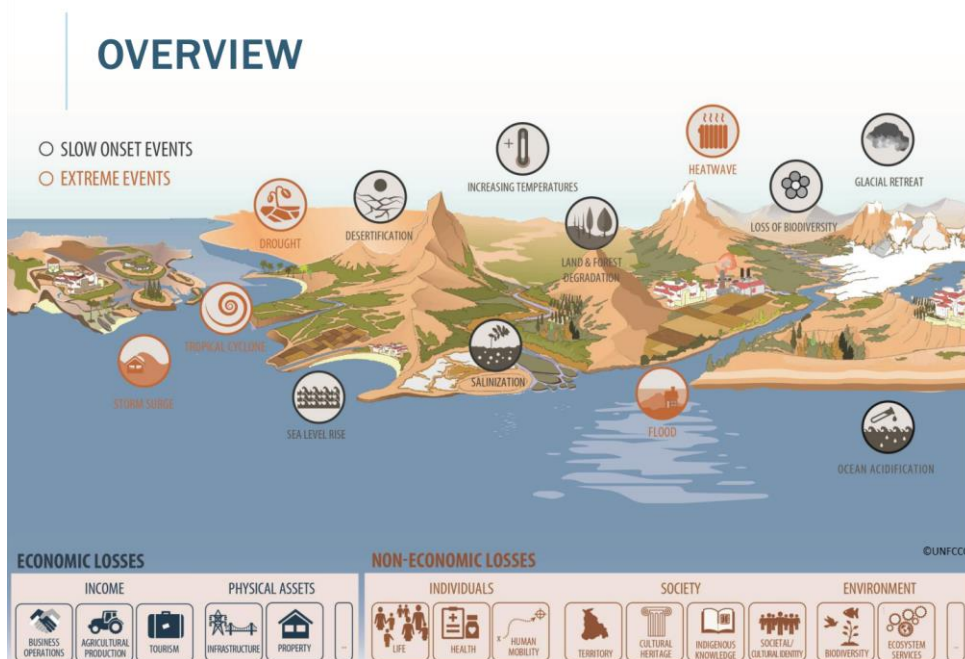


Figure 1. Economic and non-economic loss and damage from slow onset and extreme events. Source: UNFCCC.

<sup>4</sup>“Paris Agreement.” United Nations 2015, [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf)

<sup>5</sup>Bhandari, P., Warszawski, N., Cogan, D., & Gerholdt, R. (2022, November 3). What Is “Loss and Damage” from Climate Change? 6 Key Questions, Answered. World Resources Institute. <https://www.wri.org/insights/loss-damage-climate-change>

<sup>6</sup>United Nations Framework Convention on Climate Change. (2018). Loss and Damage Online Guide. [https://unfccc.int/sites/default/files/resource/Online\\_guide\\_on\\_loss\\_and\\_damage-May\\_2018.pdf](https://unfccc.int/sites/default/files/resource/Online_guide_on_loss_and_damage-May_2018.pdf)

## ■ *Loss and damage in Southeast Asia*

In Southeast Asia, these losses and damages are becoming more apparent in the face of slow-onset and extreme climate events. Sea-level rise interacting with other non-climate related factors such as land subsidence in Jakarta have forced communities to leave their homes. Super typhoon Karding (international name Noru), which hit the Philippines in September 2022, caused agricultural damage in several regions of Luzon and Visayas amounting to PHP 3.12 billion<sup>7</sup> (or more than USD 50 million).

Non-climate factors amplify climate impacts. For instance, Indonesia is also facing a deforestation crisis, biodiversity loss, and species extinction due to “habitat degradation and fragmentation, landscape changes, overexploitation, pollution, climate change, alien species, forest and land fires, and the economic and political crises occurring in the country.”<sup>8</sup> Other biodiversity issues include destruction of coral reefs<sup>9</sup> and coastal ecosystems<sup>10</sup>, loss of forests, and impacts on agriculture.

The Mekong Region is recognized to be on the brink of irreversible damage due to the effects of climate change, the proliferation of upstream dams, and “other human-made activities such as deforestation, sand mining, extensive irrigation for agriculture and wetland conversion”<sup>11</sup>. This is extremely alarming as the Mekong River ecosystem runs through five Southeast Asian nations Myanmar, Laos, Thailand, Cambodia, and Vietnam. Changes in water supply from the Mekong River will directly impact the food security of nations that rely on it. Flooding is an issue as well, with around 62% of the sampled villages reporting they experienced it.<sup>12,13</sup>

The communities along the Mekong Delta are also experiencing bank erosion, flash floods, sea-level rise, and salinity intrusion<sup>14</sup>, among others, proving that climate change is a threat multiplier to already existing vulnerabilities in the region.<sup>15</sup>

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<sup>7</sup>Greenpeace Philippines. “Tarlac farmers, advocates demand climate polluters to ‘pay up’ for Karding Impacts.” October 8, 2022. Greenpeace.org. Available at <https://www.greenpeace.org/philippines/press/53517/tarlac-farmers-advocates-demand-climate-polluters-to-pay-up-for-karding-impacts/>

<sup>8</sup>The article also stated that: The list of species threatened by extinction includes 140 species of birds, 63 species of mammals and 21 species of reptiles. Indonesia has 728 conserved species which consist of 130 mammals, 390 birds, 48 reptiles, 12 mollusks, and 9 crustacea. Read more at <https://www.cbd.int/countries/profile/?country=id>

<sup>9</sup>This includes mass bleaching and increasing mortality of coral reefs. Coral reefs in Thailand have experienced significant bleaching due to warming waters; coral reefs of Cambodia and Vietnam are some of the most threatened in the region; Singapore and Indonesia’s coral reefs are also threatened due to land reclamation and development; and the Philippines’ coral reefs face constant pressures including overfishing and destructive aquaculture practices. Read more at [https://www.dni.gov/files/documents/climate2030\\_southeast\\_asia\\_pacific\\_islands.pdf](https://www.dni.gov/files/documents/climate2030_southeast_asia_pacific_islands.pdf)

<sup>10</sup>This includes mangroves, loss of feeding grounds for migratory birds, etc.

<sup>11</sup>Ha, H. T. & Seth, F. N. (2021). The Mekong River Ecosystem in Crisis: ASEAN Cannot be a Bystander. ISEAS Perspective. <https://www.iseas.edu.sg/articles-commentaries/iseas-perspective/2021-69-the-mekong-river-ecosystem-in-crisis-asean-cannot-be-a-bystander-by-hoang-thi-ha-and-farah-nadine-seth/>

<sup>12</sup>Tilly, M. “Trouble on Mekong.” Lowy Institute, <https://www.lowyinstitute.org/the-interpreter/trouble-mekong>. Accessed on 10 October 2022.

<sup>13</sup>Supra

<sup>14</sup>Southeast Asia and Pacific Islands: The Impact of Climate Change to 2030: A Commissioned Research Report. (2009). In National Intelligence Council. [https://www.dni.gov/files/documents/climate2030\\_southeast\\_asia\\_pacific\\_islands.pdf](https://www.dni.gov/files/documents/climate2030_southeast_asia_pacific_islands.pdf)

<sup>15</sup>World Wildlife Fund. “Challenges in the Greater Mekong.” [https://origin-mekong.wwf-sites.org/challenges\\_in\\_the\\_greater\\_mekong/climate\\_change\\_in\\_the\\_greater\\_mekong/](https://origin-mekong.wwf-sites.org/challenges_in_the_greater_mekong/climate_change_in_the_greater_mekong/). Accessed on 10 October 2022.

Eco-anxiety is becoming more prevalent as well. The Climate Change Anxiety Scale (CCAS), developed by Clayton and Karazsia in 2020<sup>16</sup>, which measures emotional responses to climate change, showed that individuals, many of them young people, are experiencing mental health effects due to climate change. Climate change leads not just to deterioration of physical health (as a result of pollution, lower quality yield of food, etc.), but mental and emotional health as well. A study in the Philippines using the CCAS reported that “an increase in climate change anxiety is associated with a significant decrease in overall mental health.”<sup>17</sup>

Another important – yet oft-overlooked – aspect of loss and damage is cultural loss, including the loss of indigenous knowledge and the loss of social and cultural identity. Climate events, particularly extreme ones, can potentially denude ancestral lands. As a result, Indigenous Peoples and local communities may have to move away from their sources of livelihood and their ties to the land, including their burial grounds, worship areas, and ritual sites. In the Philippines, for instance, the Dumagat-Remontado who live along the Sierra Madre mountain range in the Southern part of Luzon, are displaced by both climate change impacts and development projects.

## ■ *Climate justice*

It is widely understood that climate change affects everyone, but in different ways. Developing countries, while contributing the least to greenhouse gas emission, are the most affected, as has already been discussed above. Marginalized sectors within these countries, including women, youth, Indigenous Peoples, persons with disabilities, and gender-diverse individuals, are made much more vulnerable because of these climate impacts, and will face the brunt of climate-induced losses and damages.

Therefore, a discussion on losses and damages necessarily includes a discussion on justice. This includes fair and equal representation on all matters involving climate policy. This also includes sharing the burden of the climate crisis. For marginalized groups, this means receiving accessible and immediate aid after experiencing weather hazards, as well as long-term, durable solutions for rebuilding, recovery, or resettlement, depending on their needs.

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<sup>16</sup>Clayton, S., & Karazsia, B. T. (2020). Development and validation of a measure of climate change anxiety. *Journal of Environmental Psychology*, 69, 101434. <https://doi.org/10.1016/j.jenvp.2020.101434>

<sup>17</sup>Reyes, M. E. S., Carmen, B. P. B., Luminarias, M. E. P., Mangulabnan, S. A. N. B., & Ogunbode, C. A. (2021). An investigation into the relationship between climate change anxiety and mental health among Gen Z Filipinos. *Current Psychology*. <https://doi.org/10.1007/s12144-021-02099-3>

## Loss and damage financing: solidarity and justice

Therefore a loss and damage financing facility must cater to the needs of the most marginalized and vulnerable communities. While there are talks in climate negotiations about what this facility should look like, discussions with communities on the ground have already forwarded ideas on what best addresses local needs and lived experiences.

1. The financing facility should be additional to existing financing for adaptation and mitigation, considering they tackle different issues and, therefore, respond to different needs. Loss and damage is specific to those losses and damages that people experience because they can no longer adapt to the adverse impacts of climate change; therefore, the funding should be limited to those issues, and should not take away from the other pillars of climate action: adaptation and mitigation.
2. The financing facility should be accessible and requirements to access the fund should be as least onerous as possible. A criticism of current funding for climate adaptation (e.g., the People's Survival Fund in the Philippines) is that it takes a long time for funding to be accessed – so much so that it then runs almost counterintuitive to the original purpose of the fund. This means reducing the bureaucracy that comes with drafting concept notes and applying for grants, as well as lessening the number of signatories who will have to sign off prior to the release of the amount needed.
3. The facility, whichever form it holds, should not impose additional burdens on the communities. This means the money should not be given in the form of a loan, which will further disadvantage communities, who will then have to think about not just repayment, but the cost of interest and collaterals.
4. The facility should build on the capabilities and accountability of vulnerable communities. Those communities on the ground facing the brunt of climate hazards are also among those with the most knowledge on how to utilize the money in a way that benefits the communities most, whether this is through improving their early warning systems, climate education, resettlement, or rehabilitation. Therefore, communities should be able to use the money in a way that works for them, taking into consideration their specific contexts and needs. This means the communities will also be accountable, not just to the money, but also to each other.
5. The facility should be founded on equity and justice. The priority for access should be those who need it most, and in an amount that will genuinely allow them to move forward from climate hazards, taking into consideration principles such as the polluter pays, whereby those responsible for the pollution are held accountable, the beneficiary pays, where those who benefit from a clean environment pay, and also who has the ability to pay. It is understood that those who contribute the least to climate change are those who are most affected by it, and therefore those who have benefited the most from industrialization and the consumption and burning of fossil fuels should assist those who experience the brunt of an ever-heating world. It is therefore an issue of climate justice.

As of writing, Southeast Asian countries are already facing losses and damages. It is expected that with the increasing warming, they will heighten in severity, scope, and permanence. Before further losses and damages are felt, and before we decidedly reach the point of no return, the global community in general and Southeast Asian countries in particular have to come together and agree on the creation of a loss and damage financing facility,\* one founded on the principles of human rights and justice.

\*Update as of November 2022: During COP27 in Sharm El-Sheikh in Egypt, countries came together and agreed on the creation of a loss and damage fund. The source of the fund is yet unknown, and will be the subject of discussions in the next meetings, as well as its specifics; however, the creation of the fund is a victory for climate justice in and of itself.



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