

# UNPACKING FINANCE FOR LOSS AND DAMAGE

## Why do developing countries need support to address loss and damage?

### What is loss and damage?

Loss and damage<sup>1</sup> has been defined as the impacts of climate change which are not avoided by mitigation, adaptation and other measures such as disaster risk management (Verheyen, 2012; Roberts and Pelling, 2018). It has both economic and non-economic costs and results from both extreme weather events like hurricanes and floods and slow onset climatic processes such as sea level rise and salinisation. Loss and damage includes permanent and irreversible losses such as to lives, livelihoods, homes and territory, for which an economic value can be calculated and also to non-economic impacts, such as the loss of culture, identity and biodiversity, which cannot be quantified in monetary terms.

Loss and Damage became officially recognised at COP 19 in 2013 after the catastrophic effects of Typhoon Haiyan (also known as Super Typhoon Yolanda) on the people of the Philippines made it apparent that vulnerable developing countries required significant levels of support in the face of such widespread devastation. In 2015, at COP 21, Loss and Damage was included as a distinct article in the Paris Agreement, separate from adaptation. This was an important milestone as developing countries have long stressed that loss and damage refers to climate change impacts that are “beyond adaptation”.

### How does loss and damage manifest on the ground in vulnerable developing countries?

In most parts of the world, the most vulnerable people, communities and countries are grappling with multiple climate-related hazards simultaneously and incurring a spectrum of loss and damage, both economic and non-economic in nature. These include both extreme weather events that manifest rapidly and slow onset climatic processes, the impacts of which emerge over time but which can be even more severe in nature.<sup>2</sup>

Extreme weather events like cyclones cause damage to housing and infrastructure and result in the loss of livestock and crops. They can also result in the loss of lives, profoundly disrupt livelihoods and displace

households and communities, which results in both economic and non-economic loss and damage. Non-economic loss and damage includes, but is not limited to, the loss of culture and biodiversity, as well as repercussions for both physical and mental health (see: Morissey and Oliver-Smith, 2013).

Cyclone Idai, which hit southern Africa in the spring of 2019, damaged 100,000 homes, one million acres of crops and caused billions of USD in damage to infrastructure. As a result of the cyclone, 146,000 people were displaced (Podesta, 2019). In the midst of the COVID-19 pandemic, several regions of the world

<sup>1</sup> Loss and Damage (capitalised) has been used to refer to the spectrum of policies which can be implemented to address loss and damage while loss and damage refers to the manifestation of the impacts of climate change (IPCC, 2018).

<sup>2</sup> Slow onset climatic processes (referred to as “slow onset events” under the UNFCCC) are defined as including: increasing temperatures; desertification; loss of biodiversity; land and forest degradation; glacial retreat and related impacts; ocean acidification; sea level rise; and salinisation (UNFCCC, 2011).

have been struck by cyclones or hurricanes including the Pacific, the Caribbean, South Asia and the Americas. **Vanuatu has been hit particularly hard.** In the wake of Cyclone Harold, which made landfall in Vanuatu in the spring of 2020, the economic loss and damage was estimated to be more than **440 million USD**. The **Internal Displacement Monitoring Centre** estimates that 50,000 people in the Pacific region are in danger of losing their homes each year. Given that it was estimated that **90 percent of the buildings** in Vanuatu's capital were damaged by Cyclone Harold, this might be a gross underestimate as the impacts of climate change increase in magnitude and frequency. Decision makers in Vanuatu are preparing to bring a case to the International Court of Justice to demand compensation for the economic costs of climate-related events like Cyclone Harold and its predecessor Pam, which hit the country in 2015 (**Esswein and Zernack, 2020**). In January 2021 **Cyclone Ana** hit neighbouring Fiji, just a month after Cyclone Yasa hit the country's northern islands. Ana left 10,000 people temporarily homeless and caused widespread damage to infrastructure and crops. The increasing frequency and magnitude of cyclones is repeatedly overwhelming the capacity of communities and countries to respond to the loss and damage they leave in their wake.

Slow onset climatic processes also give rise to a spectrum of loss and damage. Glacial retreat is a key concern for countries, communities and households in both the Andes and Himalayan regions. The rapid melting of glaciers is affecting the availability of water for drinking, irrigation and the generation of hydropower, as well as economic activities that depend on stable water supplies (**UNESCO, 2018**). As the glaciers continue to recede, runoff will likely be concentrated in the wet season with little flow during the dry season. This will likely lead to more frequent droughts (Ibid). The increased runoff also feeds glacier lakes which are at increasing risk of overflowing, threatening lives and livelihoods (**DW, 2019**) and causing potentially widespread displacement throughout the region. In 2016 a Peruvian farmer brought a legal case against a German utility company for its share (based on its estimated contribution to global average warming) of the costs of the protective measures he has implemented to protect his land (**DW, 2019**). Glacial retreat also causes non-economic loss and damage in the form of loss of culture and the social and psychological impacts of forced migration and relocation. Another slow onset climatic process, increasing temperatures, is manifesting in loss and damage worldwide in both developing and developed countries. With each 1°C of warming beyond the present, an estimated 1 billion people will be impacted by extreme heat, as even a small increase in average temperature creates a large change in extreme temperatures (**BBC, 2020**). If current trends continue, it may not be possible to live in a number of cities by 2050, with increasing temperatures increasing the risk of wildfires and also impacting global food productivity and exacerbating competition for water resources (Ibid).

Climate change has increased the frequency and severity of drought worldwide, hitting the drought

prone regions of Africa particularly hard (**IPCC, 2019**). Food insecurity is on the rise in sub-Saharan Africa and undernourishment has increased 46 percent between 2012 and 2018 according to the Food and Agricultural Organization (**WMO, 2020**). At the end of 2018, almost 12 million people within Ethiopia, Kenya and Somalia were severely food insecure (Ibid). While climate change is not the only driver of migration worldwide, displaced populations often live in climate "hotspots" in which they are exposed to both extreme weather events and slow onset climatic processes (Ibid). In the second half of 2018, heavy rains fell on drought impacted areas causing widespread flooding leading to loss of lives, livestock and damage to crops; all of which are prompting further displacement (**WMO, 2020**). This does not take into consideration the profound impact of non-economic loss and damage which result from climate change impacts.

Loss and damage impacts the most vulnerable and marginalised in vulnerable developing countries and can impede both human rights, in particular women's rights (**Women and Gender Constituency, 2019**). Women and girls in vulnerable countries on average experience greater levels of loss and damage than their male counterparts. Women often have unequal access to resources and decision making processes and have limited mobility (**Shahid, 2018**). Due to socio-cultural norms women also often have limited access to the information and skills needed to avoid loss and damage (Ibid) and are often not involved in decision making processes about climate change responses (**CARE, 2020b**). Gender inequality can also deepen further when families decide not to send girls to school or force them into early marriage when household income falls due to the impacts of climate change (**CARE, 2020a**).

The gap between the economic costs of loss and damage and the level of funding vulnerable developing countries receive to address loss and damage continues to widen. In the meantime, developing countries are making considerable efforts to address loss and damage at both the national and sub-national levels with their own resources. The Government of Fiji began supporting the relocation of villages, which were moved due to coastal erosion and flooding in 2014 (**Hirsch et al., 2019**). In 2018, Fiji developed **Planned Relocation Guidelines** to support relocation efforts within the country. Other vulnerable developing countries are also increasingly focusing on supporting those forced to move by climate-related loss and damage. In 2019, the **Climate Bridge Fund** was established in Bangladesh by the Bangladesh Rural Advancement Committee (BRAC) to contribute short term funding for projects that provide services to and develop infrastructure for climate-induced migrants. These efforts have opportunity costs in that the resources dedicated to addressing loss and damage could be used to support sustainable development and to fund public education and health initiatives. Vulnerable developing countries simply cannot afford the escalating costs of preparing for and addressing loss and damage. When impacted by extreme or slow onset loss and damage events, they require support.

## What type of support is needed to address loss and damage?

In the first [brief](#) of this series, we reported that by 2030 the economic cost of loss and damage is projected to be between 290 billion and 580 billion USD in developing countries (Markandya and González-Eguino, 2018). Vulnerable developing countries are facing different types of climate hazards, often more than one simultaneously. There are many tools and approaches that vulnerable countries, communities and households will need to implement to address loss and damage within comprehensive risk management strategies. This will depend on the country context and the nature of the climate hazards the country is exposed to. Efforts to address loss and damage are often complicated by the fact that they involve multiple line ministries and sectors. Mandates are not always clearly delineated, for example, between the ministries responsible for disaster risk management and those responsible for preparing for and responding to the impacts of climate change.

However, while addressing loss and damage is complex, the needs are very clear. To unpack what is needed to prepare for and respond to loss and damage, we have drawn from the [submissions](#) of vulnerable developing countries to the Executive Committee of the Warsaw International Mechanism (WIM), the oversight body on Loss and Damage under the UN Framework Convention on Climate Change (UNFCCC), in which they articulated the types of measures that need to be implemented to address loss and damage and which require finance to do so. The WIM was established at the 19th Conference of the Parties (COP) in 2013 to address loss and damage from the adverse effects of climate change in particularly vulnerable developing countries (UNFCCC, 2014). This information is supplemented with information on what vulnerable people and communities within those countries need to address loss and damage.

## Strengthened national capacities to reduce loss and damage through comprehensive risk management approaches

### Improving climate information services and developing methodologies to assess loss and damage

Understanding the geographies, sectors and people at risk of incurring loss and damage is fundamental to developing and implementing measures to address it. Vulnerable developing countries stressed the importance of strengthening climate information services to inform planning. Identifying risks to sectors, people and geographies is foundational to developing approaches to address loss and damage. The Alliance of Small Island States (AOSIS) stressed the need to develop needs assessments to both assess risks and identify approaches to manage those risks within comprehensive risk management frameworks (AOSIS, 2018).

The World Meteorological Organization (WMO) has also recognised the need for information that allows decision makers in vulnerable developing countries to better understand and prepare for the climate related risks they face. The [State of the Climate in Africa 2019](#) report found that limited funding to meteorology, hydrology and disaster risk management left Mozambique unprepared for Cyclone Idai (WMO, 2020). Across Mozambique, Madagascar, Malawi and Zimbabwe, Cyclone Idai left 1,300 people dead and caused an estimated 2 billion USD in economic loss and damage (Christian Aid, 2019). Clearly, countries need support to help them prepare for both extreme weather events and slow onset climatic processes. Risk assessments must also take into account the people and

communities who are both most vulnerable to and most exposed to climate hazards.

The importance of assessing loss and damage and understanding where the risks lie has long been a feature of the negotiations on Loss and Damage under the UNFCCC (see: [UNFCCC, 2013](#)). Yet, most vulnerable developing countries still lack adequate climate information services to inform the development and implementation of measures to address loss and damage. In 2019 the [World Meteorological Organization](#) committed to work with partners – including the Green Climate Fund (GCF) – to scale up support to developing countries to improve weather, climate and hydrological services as part of the [Alliance for Hydromet Development](#). Since the GCF started providing funding in late 2015, it has supported at least 15 projects and programmes<sup>3</sup> with a significant focus on climate information and forecasting systems. This includes financing for two projects under the World Bank's [Africa Hydromet Program](#) in Mali and Burkina Faso. Funding from the GCF was also approved for projects to build or strengthen climate information services in each of Vanuatu, Malawi, the Philippines, Tajikistan, Georgia, Mongolia and Kyrgyzstan. In 2020, funding was approved for projects to support climate information systems in Liberia and in five Pacific SIDS. While welcome, these projects represent only a small share of indicated needs. Until this support is significantly scaled up, it will continue to be challenging for vulnerable developing countries to develop and implement policies, plans and strategies to adequately address loss and damage.

<sup>3</sup> As of March 2021, funded GCF projects and programmes with a focus on climate information services and systems include, inter alia (with most recently approved projects/programmes listed first): FP162, FP161, SAP022, SAP018, FP147, FP141, SAP010, SAP002, FP075, FP074, FP068, F049, FP035, FP012, FP002. Detailed information on approved GCF projects and programmes is accessible at <https://www.greenclimate.fund/projects>.

## Responding to and recovering from loss and damage due to extreme weather events

Vulnerable developing countries are incurring loss and damage from many different types of extreme weather events, including floods and cyclones, hurricanes and typhoons.<sup>4</sup> For vulnerable developing countries, avoiding loss and damage to the extent possible through early warning systems, contingency and evacuation plans – among other measures – is essential. Building back better in the aftermath of extreme weather events is also critical (Indonesia, 2018; LDC Group, 2018; Philippines, 2018). There is also an economic argument to be made to get economies and societies fully functioning again while increasing the capacity to respond to future loss and damage. Measures are needed to support those who are displaced or forced to migrate due to an extreme weather event. Refugees and internally displaced people are particularly vulnerable along with traditionally marginalised groups (see: Hirsch et al., 2019). Women often face additional dangers, such as sexual and gender-based violence in the aftermath of extreme weather events (UNEP et al., 2020). Responses to loss and damage must take into account and address different vulnerabilities to reduce marginality – including, but not limited, to those based on gender.

One of the most challenging aspects of preparing for and addressing loss and damage is that it is cross-cutting and involves multiple ministries and sectors of the economy. Most, if not all, vulnerable developing countries have risk management strategies in place. However, as climate change impacts increase in magnitude and frequency (IPCC, 2012), it becomes increasingly expensive to address loss and damage. As articulated above, there are also opportunity costs to investing more in measures to address loss and damage, especially in the face of existing economic, social and health crises, which have been further aggravated by the COVID-19 pandemic. Even if vulnerable developing countries have adequate information to inform planning, they do not have the level of finance, fiscal space – due to unsustainable levels of indebtedness – or capacity needed to implement approaches to address loss and damage to the extent needed. The needs at the local and sub-national levels are often even greater.

## Developing financial tools to support those who incur loss and damage

Developing countries also need support to develop financial tools to address loss and damage. There has been a lot of emphasis on risk transfer mechanisms within the loss and damage discussions under the UNFCCC which has overemphasised the potential of insurance as a tool to address loss and damage and overshadowed consideration of other tools and support mechanisms (see: Richards and Schalteck, 2017). Insurance has utility in appropriate contexts, but it is not a panacea, nor is it a tool that can be used

alone. In addition to questions regarding the long-term sustainability of insurance schemes in light of mounting requests for payouts, there is also a moral argument for not imposing the cost of premiums on those who are not responsible for causing the climate change impacts they are severely affected by.

Some vulnerable developing countries identified climate risk insurance as one tool to address loss and damage and articulated the need for support to develop legal and institutional frameworks to support insurance-based mechanisms. The AOSIS stressed the importance of developing and strengthening regional risk transfer mechanisms while the LDC Group also proposed a global solidarity risk transfer scheme. As one of a number of tools, insurance has a place in overall efforts to address loss and damage, particularly for smallholder farmers. However, it must be implemented in a way that is accessible to and supports the poorest and most vulnerable (see: Schaefer and Waters, 2016).

In the case of Hurricane Maria in Dominica in 2017, which caused damage of 1.4 billion USD over one night, insurance paid out 19 million USD, 1.5 percent of the total cost, mainly towards emergency food aid (see: Richards et al. 2018). Whilst useful, insurance made a marginal contribution to addressing the total economic cost of Hurricane Maria. As risks grow over time, issues of insurance coverage, enlarged costs of premiums and delayed and disputed payouts, are likely to escalate and make this approach increasingly unviable. With that in mind, there is an opportunity cost to an over-reliance on insurance as a remedy when measures like the creation of a solidarity facility for loss and damage would benefit from being developed.

Vulnerable developing countries also stressed the importance of social protection measures to support individuals and households who incur loss and damage arising from both extreme weather events and slow onset climatic processes (AGN, 2018; LDC Group, 2018; Palestine, 2018). The World Bank established the Sahel Adaptive Social Protection Program in 2014 to help Burkina Faso, Chad, Mali, Mauritania, Niger and Senegal design and implement adaptive social protection projects that take climate change impacts into account. Since 2019, the programme has focused on strengthening social protection systems. If social protection systems integrate climate information they can trigger support to where it is needed and help vulnerable countries address loss and damage (Steinbach et al., 2016). However, robust systems must be in place in order to ensure that the most vulnerable people and communities benefit from these programmes (Kaur et al., 2019). These must be able to respond in a gender-responsive way to address gender-differentiated impacts of loss and damage on women and girls and men and boys, also acknowledging intersectionalities with other factors such as socio-economic status (von Ritter Figueres, 2013).

<sup>4</sup> Hurricanes, cyclones and typhoons are essentially the same but given different names depending on geography. Hurricanes are tropical storms that form over the North Atlantic and Northeast Pacific Ocean, cyclones form over the South Pacific and Indian Ocean while typhoons form over the Northwest Pacific Ocean.

## Approaches to address loss and damage from slow onset climatic processes

Vulnerable developing countries have long called for more focus on approaches to address loss and damage from slow onset climatic processes. Work on this subject tends to focus on the impacts of sea level rise and increasing temperatures. Other slow onset climatic processes, such as glacial melt or slope instabilities in high mountain areas, have received less attention. This, despite the fact that they are a critical issue for many countries, particularly in the Himalayan and Andes regions. In their submissions, vulnerable developing countries identified a spectrum of slow onset climatic processes, from which they are incurring

loss and damage, including drought, glacial retreat and sea level rise. The African Group of Negotiators (AGN) highlighted drought as the slow onset climatic process which has the greatest impact on Africa. For AOSIS identifying gaps in addressing slow onset climatic processes and developing strategic plans for addressing those gaps at all levels is critical (AOSIS, 2018). Several measures to address slow onset climatic processes were identified in submissions, including protecting coastal communities, ensuring that infrastructure is climate-resilient and rehabilitating ecosystems, such as mangroves.

## Approaches focused on recovery, rehabilitation and addressing permanent losses

One of the defining features of discussions on loss and damage has been the way in which it draws attention to the existential threat that climate change represents. Vulnerable developing countries require support to develop, implement and integrate policies and plans to address permanent losses, which cannot be recovered, into their national and sub-national risk management frameworks. To do so, they will need to have effective legal, financial and institutional measures in place. These approaches must respect human rights, be gender-responsive and ensure the well-being of those affected by permanent losses. These measures must also provide targeted support to the most vulnerable households and communities (LDC Group, 2018).

Vulnerable developing countries also need support to develop measures to address non-economic loss and damage (NELD). The AGN identified the need to protect both cultural heritage and ecosystems (AGN, 2018), while Pakistan highlighted the importance of protecting biodiversity for both its economic and non-economic benefits (Pakistan, 2018). There have been steps taken to better understand NELD under the WIM, but much more needs to be done to help vulnerable developing countries develop and implement approaches to address NELD. This is a gap that remains in efforts to address loss and damage.

### **Supporting migrants and displaced people and communities (and eventually countries)**

Loss and damage is already prompting distress migration, immediate displacement and relocation in vulnerable developing countries. Support is needed both for sending and receiving countries of persons migrating and displaced in the context of climate change to allow them to stay with their communities where possible. This requires ensuring adequate housing and livelihood opportunities – both in temporary and permanent

homes. Relocation plans will also need to be in place to ensure that the communities who need to relocate have somewhere to go and livelihoods to support them once they get there (Uruguay, 2018). In its submission, the AGN stressed the importance of support for planned relocation and the displacement of communities from a wide range of climate hazards. The need for relocation due to increasing loss and damage from climate change impacts is a significant concern for vulnerable developing countries and remains a significant gap in the global policy infrastructure to address loss and damage.

The Task Force on Displacement (TFD), established in the decision which accompanied the Paris Agreement, (UNFCCC, 2016), has developed recommendations for averting, minimising and addressing displacement to the adverse impacts of climate change (see: TFD, 2018). These recommendations include developing guiding principles on internal displacement and implementing policies and plans to support displaced persons, as well as communities of origin. The TFD has recommended that UN agencies and other relevant stakeholders provide support, including finance, technology and capacity building, to help countries avert, minimise and address human mobility related to loss and damage from climate change impacts. Thus far it is not clear the extent to which these recommendations have been adopted. The work of the TFD continues but progress on addressing human mobility associated with loss and damage is slow and inadequate.

# How can we ensure vulnerable developing countries and the vulnerable people and communities within them have the support they need to address loss and damage?

The depth and breadth of the needs of vulnerable developing countries for addressing loss and damage is significant. Moreover, addressing loss and damage on the ground involves multiple sectors and ministries, whose mandates overlap. Some initiatives are under way. The WMO, for example, has declared that it will work with partners to strengthen climate, hydrological and meteorological systems in developing countries. This is a good first step; but is only one element of the broader support needed for a system-wide approach with adequate governance structures to ensure vulnerable developing countries can develop and implement approaches to address loss and damage comprehensively. Similarly, there are initiatives to provide support to develop and implement approaches to address loss and damage within comprehensive risk management frameworks but these tend to be targeted to specific countries as with the R4 Resilience Initiative and the World Bank's Sahel Adaptive Social Protection Program. There is a clear need to scale up and adapt these efforts with lessons learned and to provide global support with high concessionality that meets the scale of needs in vulnerable developing countries. There is also a clear need to provide support at the sub-national levels and there are some mechanisms, such as the Climate Bridge Fund in Bangladesh, which could provide some lessons on how best to do this.

In recent years, focus on addressing loss and damage, which is already occurring, has been sidelined. Developed countries have made attempts to change the mandate of the WIM to averting, minimising and addressing loss and damage instead of focusing on articulating how vulnerable developing countries can be supported immediately. Avoiding (or averting) loss and damage through mitigation and reducing (or minimising) loss and damage through adaptation are

both important. However, this recognition does not change the mandate of the WIM, which is to promote approaches to address loss and damage in developing countries particularly vulnerable to the impacts of climate change.

Support to address loss and damage in vulnerable countries has been deliberately and systematically delayed. One of the reasons for the lack of concrete action is because loss and damage is associated with ideas of historical liability and compensation. However, the excuse that loss and damage is too political must not be used to block necessary action on the ground. Moreover, the political impasse within the loss and damage negotiations under the UNFCCC is based on a false narrative. Recent research unpacking what actors mean by "compensation" has found that many developing countries simply mean providing support (finance, capacity building and technology) to allow vulnerable developing countries to address loss and damage (see: Calliari et al., 2020). Before the UNFCCC was established, the AOSIS tabled a proposal for an international climate fund to finance efforts to address climate change as well as a global insurance pool to compensate countries incurring loss and damage from sea level rise (INC, 1991). It is time to bring these proposals back. It is incumbent upon developed countries to overcome the political sensitivities within the negotiations and not use them as an excuse for not addressing loss and damage in affected vulnerable countries and communities. Vulnerable developing countries have articulated their needs, it is now time to scale up efforts to address them. The longer we delay action and support to address loss and damage, the more costly it will be – both in economic and non-economic (and human) terms.

## Summary

- Though many countries are already incurring loss and damage – including high income economies – vulnerable developing countries remain the most vulnerable and exposed to loss and damage from climate change impacts.
- Vulnerable developing countries have communicated what they need in order to address loss and damage from the escalating impacts of climate change including:
  - Adequate climate information services, risk and needs assessments to inform planning;
  - Support to develop and implement approaches to address loss and damage from both extreme weather events and slow onset climatic processes;
  - Support to develop and implement financial tools including social protection; and
  - Measures to support people and communities displaced by loss and damage at all levels.
- There are some initiatives, such as the WMO's efforts to ensure countries have adequate climate information services, the WFP's R4 Resilience Initiative and the World Bank's Sahel Adaptive Social Protection Program. However, these initiatives are addressing a fraction of the needs in vulnerable developing countries. Support must be ramped up urgently and significantly to begin meeting the scale of the needs.
- Much more focus is needed on approaches to address irreversible losses at all levels, which cannot be recovered, including migration and displacement.
- Work on Loss and Damage under the UNFCCC must focus on addressing loss and damage, which is the

mandate of the WIM – inclusion of averting and minimising loss and damage in the Paris Agreement must not distract from mobilising financial resources to address loss and damage.

- A narrative has emerged characterising Loss and Damage as a political issue, which has been blamed for the lack of progress on mobilising action and support for vulnerable developing countries.

## References

- AGN (2018). Submission by the Arab Republic of Egypt on behalf of the African Group of Negotiators on matters related to financing actions to address loss and damage [online] Available at: <https://cop23.unfccc.int/sites/default/files/resource/AGN%20Submission%20on%20matters%20related%20to%20financing%20of%20actions%20to%20address%20L%26D.pdf>.
- AILAC (2018). Submission on Chile on behalf of the AILAC Group of Countries composed by Chile, Colombia, Costa Rica, Honduras, Guatemala, Panama, Paraguay and Peru: Call from the Executive Committee of the WIM on type and nature of factions to address loss and damage as input or the technical paper to inform the review of the WIM [online] Available at: [https://unfccc.int/files/adaptation/application/pdf/20180228\\_submission\\_ailac\\_l&d\\_vf.pdf](https://unfccc.int/files/adaptation/application/pdf/20180228_submission_ailac_l&d_vf.pdf).
- AOSIS (2018). Submission on “type and nature of actions to address loss and damage for which finance may be required” by the Republic of the Maldives on behalf of the Alliance of Small Island States [online] Available at: <https://cop23.unfccc.int/sites/default/files/resource/AOSIS%20Submission%20on%20type%20and%20nature%20of%20actions%20to%20address%20loss%20and%20damage%20for%20which%20finance%20may%20be%20required.pdf>.
- BBC (2020). Climate change: More than 3bn could live in extreme heat by 2070 [online] Available at: <https://www.bbc.co.uk/news/science-environment-52543589>.
- Calliari, E., Serdeczny, O. and L. Vanhala (2020). Making sense of the politics in the climate change loss & damage debate. *Global Environmental Change* [online] Available at: <https://reader.elsevier.com/reader/sd/pii/S0959378020307160?token=6AA1A1B10CB44CAC99472260430931CAF7DD8ED1D76F9290BC0FB276D95218C9A86F51D55C0009E9F19C16A5BB42BF09>.
- CARE (2020a). Evicted By Climate Change: Confronting the Gendered Impacts of Climate-Induced Displacement. The Hague: CARE Climate Change and Resilience Platform [online] Available at: <https://careclimatechange.org/evicted-by-climate-change>.
- CARE (2020b). #SheLeadsInCrisis: Putting Gender Justice at the Center of the Global Response to the Climate Crisis [online] Available at: <https://careclimatechange.org/wp-content/uploads/2020/04/SheLeadsInCrisis-Brief.pdf>.
- Christian Aid (2019). Counting the cost 2019: a year of climate breakdown [online] Available at: <https://www.christianaid.org.uk/sites/default/files/2019-12/Counting-the-cost-2019-report-embargoed-27Dec19.pdf>.
- DW (2020). Peruvian farmer takes on German energy giant RWE [online] Available at: <https://www.dw.com/en/peruvian-farmer-takes-on-german-energy-giant-rwe/a-51546216>.
- Esswein, A. and F. Zernack (2020). Pushing back against the die: Vanuatu’s climate fight. *The New Humanitarian* [online] Available at: <https://www.thenewhumanitarian.org/news-feature/2020/12/1/pacific-vanuatu-disappearing-island-climate-change-cyclone-lawsuit-migration>.
- Hirsch, T. et al. (2019). Climate Finance for Addressing Loss and Damage: How to Mobilize Support for Developing Countries to Tackle Loss and Damage [online] Available at: [https://reliefweb.int/sites/reliefweb.int/files/resources/ClimateFinance\\_LossDamage.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/ClimateFinance_LossDamage.pdf).
- INC (1991). Vanuatu: Draft Annex Relating to Article 23 (Insurance) for Inclusion in the Revised Single Text on Elements Relating to Mechanisms A/AC.237/WG.II/Misc.13.
- Indonesia (2018). Submission by the Government of Indonesia [online] Available at: [https://unfccc.int/files/adaptation/application/pdf/indonesia\\_submission\\_-\\_dec\\_5\\_cp23\\_on\\_wim\\_loss\\_and\\_damage.pdf](https://unfccc.int/files/adaptation/application/pdf/indonesia_submission_-_dec_5_cp23_on_wim_loss_and_damage.pdf).
- IPCC (2012). *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation: A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change*, Field, C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and Midgley, P.M. (eds.). Cambridge and New York: Cambridge University Press.
- IPCC (2014). Climate Change 2014: Synthesis Report. In: *Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Core Writing Team, Pauchauri, R.K. and Meyer, L.A. (eds.). Geneva: IPCC.
- IPCC (2018). Glossary. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. Geneva: IPCC.
- IPCC (2019) *Summary for Policymakers. In: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems* [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)]. Geneva: IPCC.
- Kaur, N. et al. (2019). Building resilience to climate change through social protection: Lessons from MGNREGS, India [online] Available at: <https://pubs.iied.org/10197IIED>.
- LDC Group (2018). Submission by Ethiopia on behalf of the Least Developed Countries Group on the type and nature of actions to address loss and damage for which finance may be required [online] Available at: [https://cop23.unfccc.int/sites/default/files/resource/LDC%20submission\\_March6.pdf](https://cop23.unfccc.int/sites/default/files/resource/LDC%20submission_March6.pdf).
- Markandya, A. and M. González-Eguino (2018): Integrated Assessment for Identifying Climate Finance Needs for Loss and Damage: A Critical Review. In: Mechler R., Bouwer, L., Schinko, T., Surminski, S. Linnerooth-Bayer, J. (eds): *Loss and damage from climate change. Concepts, methods and policy options*. Springer, 343-362.
- Morissey, J. and Oliver-Smith, A. (2012). *Perspectives on Non-economic Loss and Damage*. Bonn: Germanwatch.
- Pakistan (2018). Concept note on action to address loss and damage caused due to climate change in Pakistan [online] Available at: <https://cop23.unfccc.int/sites/default/files/resource/Submission%20Pakistan.pdf>.

- Philippines (2018). Type and nature of actions to address loss and damage for which financing may be required [online] Available at: <https://cop23.unfccc.int/sites/default/files/resource/PHL%20Submission%20to%20WIM.pdf>.
- Podesta, J. (2019). The climate crisis, migration and refugees. Global Economy and Development at Brookings [online] Available at: [https://www.brookings.edu/wp-content/uploads/2019/07/Brookings\\_Blum\\_2019\\_climate.pdf](https://www.brookings.edu/wp-content/uploads/2019/07/Brookings_Blum_2019_climate.pdf).
- Richards, J.-A. and L. Schalatek (2017). Not a silver bullet: Why the focus on insurance to address loss and damage is a distraction from real solutions [online] Available at: [http://boell.org/sites/default/files/https\\_\\_\\_us.boell.org\\_sites\\_default\\_files\\_not\\_a\\_silver\\_bullet\\_1.pdf](http://boell.org/sites/default/files/https___us.boell.org_sites_default_files_not_a_silver_bullet_1.pdf).
- Richards, J.-A., Hillman, D. and L. Boughey (2018). The Climate Damages Tax: A guide to what it is and how it works. London: Stamp Out Poverty [online] Available at: [https://www.stampoutpoverty.org/live2019/wp-content/uploads/2019/06/CDT\\_guide\\_web23.pdf](https://www.stampoutpoverty.org/live2019/wp-content/uploads/2019/06/CDT_guide_web23.pdf).
- Roberts, E. and M. Pelling (2018). Climate change-related loss and damage: translating the global policy agenda for national policy processes *Climate and Development* 10(1):4-17.
- Schaefer, L. and E. Waters (2016). Climate Risk Insurance for the Poor & Vulnerable: How to Effectively Implement the Pro-Poor Focus of InsurResilience [online] Available at: <https://collections.unu.edu/view/UNU:5956>.
- Shahid, S. (2018). Loss and damage from a gender equality perspective [online] Available at: <http://www.icccad.net/dhaka-tribune-articles/loss-and-damage-from-a-gender-equality-perspective>.
- Steinbach, D. et al. (2016). Aligning social protection and climate resilience: a case study of WBCSIS and MGNREGA in Rajasthan [online] Available at: <https://pubs.iied.org/10157IIED/>.
- TFD (2018). Report of the Task Force on Displacement [online] Available at: [https://unfccc.int/sites/default/files/resource/2018\\_TFD\\_report\\_17\\_Sep.pdf](https://unfccc.int/sites/default/files/resource/2018_TFD_report_17_Sep.pdf).
- UNEP et al. (2020). Gender, climate and security. Sustaining inclusive piece on the frontlines of climate change. United Nations Environment Programme, UN Women, UNDP and UNDP/PA/PBSO [online] Available at: <https://wedocs.unep.org/bitstream/handle/20.500.11822/32638/GCS.pdf?sequence=1&isAllowed=y>.
- UNESCO (2018). The Andean Glacier and Water Atlas: The impact of glacier retreat on water resources [online] Available at: <https://unesdoc.unesco.org/ark:/48223/pf0000265810>.
- UNFCCC (2011). Report of Conference of the Parties, on its Sixteenth Session, Cancun, 29 November–10 December 2010, Addendum, FCCC/CP/2009/11/Add.1 [online] Available at: <https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>.
- UNFCCC (2013). Report of the Conference of the Parties on its Eighteenth Session, Doha, 26 November to 8 December 2012, FCCC/CP/2008/8/Add.1 [online] Available at: <https://unfccc.int/resource/docs/2012/cop18/eng/08a01.pdf#page=21>.
- UNFCCC (2014). Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013. FCCC/CP/2013/10/Add.1 [online] Available at: <https://unfccc.int/resource/docs/2013/cop19/eng/10a01.pdf> (Accessed 2 April 2014).
- UNFCCC (2016). Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December. FCCC/CP/2015/10/Add.1.
- Uruguay (2018). Oriental Republic of Uruguay: Submission on the type and nature of actions to address loss and damage for which finance may be required [online] Available at: <https://cop23.unfccc.int/sites/default/files/resource/20180312%20Submission%20Uruguay%20Loss%20and%20Damage.pdf>.
- Vanuatu (2018). Submission by the Republic of Vanuatu to the Executive Committee of the Warsaw International Mechanism for Loss and Damage of the UNFCCC [online] Available at: <https://cop23.unfccc.int/sites/default/files/resource/Vanuatu%20Submission%20Action%20and%20Support%20FINANCE%20for%20Loss%20%26%20Damage.pdf>
- Verheyen, V. (2012). *Tackling Loss & Damage – A new role for the climate regime?* Bonn: Germanwatch.
- Von Ritter Figueres, N. (2013). Loss and Damage, Women and Men. Applying a gender approach to the emerging loss and damage agenda. Bonn: Germanwatch [online] Available at: [https://www.gendercc.net/fileadmin/inhalte/dokumente/6\\_UNFCCC/Topics/Loss\\_and\\_damage/2013\\_Loss\\_and\\_damage\\_Figueres.pdf](https://www.gendercc.net/fileadmin/inhalte/dokumente/6_UNFCCC/Topics/Loss_and_damage/2013_Loss_and_damage_Figueres.pdf).
- WMO (2020). State of the Climate in Africa 2019. Geneva: WMO [online] Available at: [https://library.wmo.int/index.php?lvl=notice\\_display&id=21778#X89zLS21pQ](https://library.wmo.int/index.php?lvl=notice_display&id=21778#X89zLS21pQ).
- Women and Gender Constituency (2018). Loss and Damage. Issue Brief [online] Available at: <https://womensgenderclimate.org/wp-content/uploads/2019/12/PAPER-SERIES-Loss-and-Damage-1.pdf>.



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