Climate Change Loss and Damage Briefing Series: What Congress Needs to Know About COP27

Thursday, October 20, 2022
About EESI

Non-partisan Educational Resources for Policymakers
A bipartisan Congressional caucus founded EESI in 1984 to provide non-partisan information on environmental, energy, and climate policies

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In addition to a full portfolio of federal policy work, EESI provides direct assistance to utilities to develop “on-bill financing” programs

Commitment to Diversity, Equity, Inclusion, and Justice
We recognize that systemic barriers impede fair environmental, energy, and climate policies and limit the full participation of Black, Indigenous, people of color, and legacy and frontline communities in decision-making

Sustainable Solutions
Our mission is to advance science-based solutions for climate change, energy, and environmental challenges in order to achieve our vision of a sustainable, resilient, and equitable world.
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**Climate Change Solutions**
Bi-weekly newsletter with everything policymakers and concerned citizens need to know, including a legislation and hearings tracker

**Fact Sheets and Issue Briefs**
Timely, objective coverage of environmental, clean energy, and climate change topics

**Social Media (@EESIOnline)**
Active engagement on Twitter, Facebook, LinkedIn, and YouTube
Loss and Damage: IPCC scientific assessment

Dr. Adelle Thomas
EESI Briefing Series
October 20, 2022
losses and damages

- harm from observed **impacts** and projected **risks**
- can be **economic** or **non-economic**
Global warming of 1.1°C has already caused dangerous and widespread losses and damages, led to disruptions in nature as well as affected the lives of billions of people, despite efforts to adapt.

- increased heat-related human mortality, warm-water coral bleaching and mortality, increased drought-related tree mortality, increases in areas burned by wildfires, adverse impacts from tropical cyclones

- Widespread deterioration of ecosystem structure and function, resilience and natural adaptive capacity, as well as shifts in seasonal timing have occurred due to climate change

- millions of people exposed to acute food insecurity and reduced water security, with the largest impacts observed in many locations and/or communities in Africa, Asia, Central and South America, Small Islands and the Arctic
### Observed impacts of climate change on ecosystems

<table>
<thead>
<tr>
<th>Ecosystems</th>
<th>Changes in ecosystem structure</th>
<th>Species range shifts</th>
<th>Changes in timing (phenology)</th>
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<td>Tropical forests</td>
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<td>Mountain regions</td>
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<td>Deserts</td>
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<td>Biodiversity hotspots</td>
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**Confidence in attribution to climate change**
- ⬤: High or very high
- Medium
- Low
- Evidence limited, insufficient
- na: Not applicable

**Source:** AR6 WGII Figure SPM. 2a
## Observed impacts of climate change on human systems

<table>
<thead>
<tr>
<th>Human systems</th>
<th>Impacts on water scarcity and food production</th>
<th>Impacts on health and wellbeing</th>
<th>Impacts on cities, settlements and infrastructure</th>
<th>Confidence in attribution to climate change</th>
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<tbody>
<tr>
<td></td>
<td>Water scarcity</td>
<td>Infectious diseases</td>
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<td>Mediterranean region</td>
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</tbody>
</table>

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- Medium
- Low
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### Impacts
- Increasing adverse impacts
- Increasing adverse and positive impacts

Source: AR6 WGII Figure SPM. 2b
Non-economic loss and damage (NELD) associated with climate hazards attributed to climate change with background on the global vulnerability.

Source: AR6 WGII Figure 8.10
2. Future losses and damages will rise with increased global warming

With increasing global warming, losses and damages increase and become increasingly difficult to avoid, while strongly concentrated among the poorest vulnerable populations

- Risks are highest for nature and people in regions experiencing the highest temperatures, those living along coastlines, in the frozen parts of the world, along rivers and where other threats exist, but these can be moderated to some extent
- Sea level rise will put people living in coastal cities and settlements at greater flood risk and low-lying coastal ecosystems will be submerged and lost
- The number of people at risk from climate change and associated loss of biodiversity will progressively increase
- Reducing GHG emissions to limit global warming to 1.5°C would substantially reduce climate-related losses, but they cannot be eliminated completely
3. Losses and damages are unavoidable and are unequally distributed

**Adaptation does not prevent all losses and damages, even with effective adaptation.**

- Losses and damages are
  - unequally distributed across systems, regions and sectors
  - not comprehensively addressed by current financial, governance and institutional arrangements, particularly in vulnerable developing countries

- In Small Islands:
  - 1.5°C is a critical threshold for losses and damages
  - Sea level rise poses an existential threat
  - Loss of terrestrial, marine and coastal biodiversity and ecosystem services
  - Loss of lives and assets, risk to food security and economic disruption due to destruction of settlements and infrastructure
  - Economic decline and livelihood failure of fisheries, agriculture, tourism and from biodiversity loss from traditional agroecosystems
  - Reduced habitability leading to increased displacement
  - Risk to water security in almost every small island
Addressing Climate Change Loss and Damage

Co-generating pathways for impact

20 October 2022
Ritu Bharadwaj, Principal Researcher and Team Leader, Climate Change Group
What is Loss and Damage (L&D) and why do we need to address it now

Unprecedented extremes
Climate impacts exceeding the adaptive capacity
Impacts that cannot be prevented by adaptation and mitigation
Unequal impact
Case Study Compendium

Bottom up evidence generation – to contribute new set of evidence to guide deliberations on L&D
Approach to Bottom up evidence generation

1. Illustrate L&D impacts of climate change-related hazards such as droughts, floods, soil degradation, glacier melt, sea-level rise, salination, coastal erosion and biodiversity loss in 12 geographies

2. Various L&D impacts on the lives, living conditions and livelihoods of the most vulnerable people and on the ecosystems and infrastructure they depend on (and how different group experience the impacts differently)

3. How L&D impacts compound or exacerbate other risks (such as poverty, health, marginalisation, conflict and so on)

4. Impacts L&D is having at the level of community and society (such as access to basic services and institutions, population displacement or migration, loss of cultural heritage)

5. Existing coping and adaptation measures – both traditional and innovative – that are being employed by households and communities to manage L&D risks.

6. Highlight the existing gaps and challenges, and what needs to be done to help the communities to prepare, cope and recover from them

7. Explain the priorities for action on L&D at local level and national levels, sharing solutions, and providing recommendations.
‘Forced Displacement’ and ‘Distress Migration’ common consequence across different types of climate impacts and geographies

<table>
<thead>
<tr>
<th>Case Study Location</th>
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<tbody>
<tr>
<td>Mwaja village, Singida Municipal (Tanzania)</td>
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<tr>
<td>Turkana County (Kenya)</td>
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<tr>
<td>Lake Chad Basin (Nigeria and Niger)</td>
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<tr>
<td>Kasese District (Uganda)</td>
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<td>Chitrakoot (India)</td>
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<td>Punakha (Bhutan)</td>
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Among those who get displaced or undertake distress migration, ones most poor and vulnerable become victim to slavery and human trafficking.
L&D create physical health, mental health, and well-being issues for people pushed into distress migration and those left behind

- Recurring L&D impacts and hardships are pushing people into despair and creating health issues. Recurring floods and drought, increase feelings of worry, sadness, anger and tiredness. Flooding also increases health budget of the community.

- Reduction in incomes and insecurity in livelihoods, have resulted in increased household stress and increased susceptibility to addiction, anxiety, suicides, emotional distress, domestic violence and other related issues.

- Displacements have resulted in overcrowding of camps, outbreaks of hygiene-related diseases like cholera, due to the lack of latrines and the use of contaminated water. Also causing drug and alcohol abuse and gender-based violence.

- Receiving areas inadequately prepared - poor shelter and unsanitary conditions, exposing them to diseases. Migrants are often forced to overwork in polluting working conditions without safety equipment causing lung diseases and accidents. Migrating single men are also susceptible to high-risk sexual behaviour exposing them to HIV/ AIDS/STD.

- Women left behind face additional responsibilities which lead to health and nutrition impacts. Water crisis further aggravates sanitation and hygiene issues, especially menstrual hygiene, making them prone to diseases.

- Children staying back or migrating are exposed to emotional trauma. When floods hit, schools and health clinics are destroyed. When droughts occur, children spend less time in school because they have to walk miles to collect water, get fatigued and this affected their ability to concentrate on their studies. Disruption to education heightens risk of trafficking, exploitation and child pregnancy.
Deliberative Dialogue process
What are the realities of Climate Change Loss and Damage and what should we consider in responding?

What is the nature of L&D risks?

- Develop an operational framework for L&D
- Integrate secondary and tertiary impacts in L&D framing and response
- Climate impacts are dynamic and responses to them need to be dynamic too
- Early action is the key to protecting against loss of lives

What are the critical elements of a framework for managing L&D risks?

- Learn from existing approaches to L&D risk management- Pathways approach, Social protection, Forecast based finance…
- Risk management tools can be customised to capture information to manage L&D
- Strengthen institutional capability for dealing with L&D
- Integrating risk into national planning processes
- Consider gender and intersectionality in responding to different types of L&D impacts

How can citizens be engaged in defining the appropriate response to L&D risks?

- Community involvement and inclusion in decision making process
- Consider dimensions of L&D in terms that matter to the poor and marginalised
- Ensuring meaningful participation
- Create a space for mutual trust
What type of action and support is needed to tackle Climate Change Loss and Damage?

The use and misuse of climate science
- Tailor climate information for decision makers at different levels based on their needs.
- Incorporate the climate information needs of local level actors.
- Establish a communication and feedback loop between generators of climate information and decision makers (government and community).
- Combine different types of knowledge and information.
- Conduct continuous risk assessments.

The dynamic interaction between adaptation and Loss & Damage
- Need for risk informed planning processes.
- Early Warning Systems are crucial but are not effective on their own.
- Communities need to be equipped to tackle loss and damage.
- Small-Medium events should be planned for and responded to.

Institutional and governance mechanisms
- Climate change and loss and damage are development issues.
- Institutional and governance arrangements should facilitate alignment across Government and society.
- Longer-term thinking is needed.
- Improving the quantity, quality and uptake of adaptation research
- Participation and inclusion of those most vulnerable
How can action and support be delivered to tackle Climate Change Loss and Damage?

Localised delivery capacity
- Integration of local with scientific knowledge on L&D can improve delivery of support to the most contextually relevant actions
- The differentiated needs of vulnerable communities must be taken into account
- Formally connecting locally led organisations to the international decision making process such as Warsaw International Mechanism (WIM) could be one way of institutionalising the role of CBOs
- Decentralising decision making power can foster more adaptive approaches

Enabling agile and flexible action
- Cross sectoral coordination and policy harmonisation is crucial
- Long-term asset management should incorporate risk of L&D
- Risk information is vital for communities
- Flexibility in planning requires flexibility in financial management

Enabling mobility and livelihood shifts
- Community participation and involvement is essential
- International community will need to play a pro-active role
- Communities need to be taken towards opportunities, not distress
- Relocation planning must be undertaken through ‘whole of society’ approach
How can action and support be financed to tackle Climate Change Loss and Damage?

What are the financing needs?
- Loss and damage finance must be separate from adaptation finance
- Loss and damage finance must reach the most vulnerable and the poorest
- Needs-assessments are critical

How to get the finance to most vulnerable countries and communities?
- Principles can bring people together to understand how and why finance should flow between and within countries to reach the most vulnerable.
- There are a range of existing mechanisms through which L&D finance can be delivered to the local level
- Greater volumes of finance are needed to provide support

What sources of finance are available and in what form it can be delivered?
- The appropriateness of different sources of finance for L&D will be different over different time horizons
- A dedicated fund to supply finance to L&D actions
- Process of experimentation is required in the delivery of finance
- Transparency on L&D financing could be improved by securing clarity on it conceptually
Thank you

For more detailed findings and recommendation, please see our publication:

Harnessing Nationally Determined Contributions to tackle loss and damage in least developed countries [https://www.iied.org/sites/default/files/pdfs/2022-09/21081IIED.pdf](https://www.iied.org/sites/default/files/pdfs/2022-09/21081IIED.pdf)

Loss and damage case studies from the frontline: a resource to support practice and policy [https://www.iied.org/sites/default/files/pdfs/2021-10/20551iied.pdf](https://www.iied.org/sites/default/files/pdfs/2021-10/20551iied.pdf)


Climate Change Loss and Damage: 3rd Deliberative Dialogue Report [https://www.iied.org/20476iied](https://www.iied.org/20476iied)

Climate Change Loss and Damage: 2nd Deliberative Dialogue Report [https://www.iied.org/20391iied](https://www.iied.org/20391iied)

Climate Change Loss and Damage: 1st Deliberative Dialogue Report [https://www.iied.org/20346iied](https://www.iied.org/20346iied)
• Key issues under negotiation at COP27 on loss & damage
• Possible landing zones
• The position of the United States and others
Expectations for COP27

• Mandates from COP26
  • Santiago Network
  • Glasgow Dialogue

• Developing country proposal for new agenda item

• Likely most contentious issue at COP27

• Landing zone?
The US position

• Legal liability and compensation
• The Paris Agreement
• The developing country proposal
• US... outlier?
Loss and Damage and the US National Interest

Taylor Dimsdale
October 20 2022
Three themes to cover

**Geopolitics**
It is a priority for strategic US allies

**Security**
It has implications for US national and international security interests

**Learning**
The US is not immune to climate impacts and lacks a coherent strategy
Climate risk is a geopolitical issue

- Financial support for climate impacts is a top priority for many developing countries that do not see climate as separate from broader foreign policy objectives.

- Failure to find agreement on L&D will reduce the incentives for cooperation on a wide range of issues, including trade and mitigation.
Climate impacts have implications for US and international security

• “We assess that climate change will increasingly exacerbate risks to US national security interests as the physical impacts increase and geopolitical tensions mount about how to respond to the challenge…

• Elsewhere, as temperatures rise and more extreme effects manifest, there is a growing risk of conflict over water and migration, particularly after 2030…

• Intensifying physical effects of climate change …will be most acutely felt in developing countries, which we assess are also the least able to adapt to such changes. These physical effects will increase the potential for instability and possibly internal conflict in these countries, in some cases creating additional demands on US diplomatic, economic, humanitarian, and military resources”

There is a significant overlap between countries that are most vulnerable to climate impacts and those that are at high risk of conflict
Lessons for addressing impacts at home

The total cost of U.S. billion-dollar disasters over the last 5 years (2017-2021) is $742.1 billion, with a 5-year annual cost average of $148.4 billion, both of which are new records and nearly triple the 42-year inflation adjusted annual average cost.

"Moody's has warned that climate change would have a growing negative impact on the creditworthiness of U.S. state and local insurers."

Opinion | Your Climate Disaster Tax Bill Is Growing - The New York Times (nytimes.com)

Source: 2021 U.S. billion-dollar weather and climate disasters in historical context | NOAA Climate.gov
THANK YOU!
Upcoming Briefings in this Series

What Congress Needs to Know About COP27

Natural Climate Solutions
Oct 28 @ 1:00 PM EDT

What’s on the Table for the Negotiations?
Nov 02 @ 11:00 AM EDT

Climate Summit Recap: Key Outcomes and What Comes Next
During the week of November 28, 2022

Signup for our COP newsletter here: eesi.org/signup
Briefing RSVP here: eesi.org/cop27
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www.eesi.org/survey

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www.eesi.org/102022cop

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