## Climate Tribune



LOSS AND DAMAGE: CALL TO ACTION

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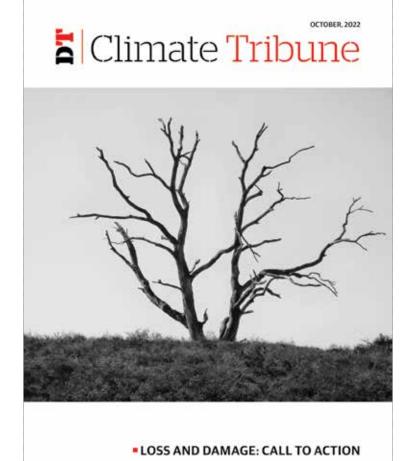
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#### ADDRESSING LOSS AND DAMAGE

## Wind of change

ICCCAD'S programme on addressing Loss and Damage from human induced climate change



Saleemul Huq and Nusrat Naushin

he International Centre for Climate Change and Development (ICCCAD) at the Independent University Bangladesh (IUB) has a long history of conducting research as well as capacity-building and public awareness raising on different aspects of loss and damage from human induced climate change.

Most recently ICCCAD has made our Loss and Damage Programme into a major multi-level Programme as the world has entered the new era of Loss and Damage. This article describes some of the ways in which we are addressing the topic.

#### **UNFCCC** domain

The UNFCCC Domain of the ICCCAD L&D Programme focuses on supporting and mobilizing international climate action and solidarity, with respect to the Loss & Damage agenda. The UNFCCC sub-team has been undertaking a number of tasks at hand to ensure the operationalization of the Santiago

Network on Loss and Damage; mobilization of Glasgow dialogue on finance for Loss and Damage; support to Warsaw International Mechanism and WIM EXCOM; and support to COP Presidencies.

#### Research domain

ICCCAD collaborates with various international and national organizations in endeavours to understand better how to address loss and damage. ICCCAD has formed a loss and damage research team with Dr Simon Anderson (IIED) providing technical advice and guidance to the team. This team has consulted widely and reviewed knowledge gaps to develop a research portfolio that ICCCAD will pursue in the short to medium term. This portfolio includes research on non-economic losses and damages (NELD); gendered aspects of loss and damage; framing of loss and damage; and storytelling. The team is also responsible for research outputs like policy briefs, video outputs, and infographics.

#### LDC domain

The LDC programme on Loss & Damage (LPLD) is a recently

initiated programmatic approach to carry out research and evidence gathering as well as capacity-building on L&D in every LDC over time. The ultimate objective of the programme is to strengthen the capacity of the 46 LDCs to address L&D from climate change with a focus on the most vulnerable communities within countries. The programme consists of five levels which consist of awareness raising, stakeholder engagement, capacity-building, feasibility testing, and finally tapping in and accessing finance to address losses and damages. Depending on the availability of resources, each country will move from one level to the next over successive years. Clusters of LDCs will turn into communities of practice to share learning and accelerate progress.

#### **Bangladesh domain**

ICCCAD is a key organization in Bangladesh that has been involved in the process around the national L&D mechanism from its beginning, and has a trusted network including all relevant actors, especially high-level government officials, on the national level. Thus ICCCAD has a key role in setting up a

Entire populations are already suffering the impacts, but vulnerable people living in some of the most fragile and conflict-affected countries are often disproportionately affected

national level Multi Actor Partnership (MAP) around the L&D mechanism. This will be done via stakeholder mapping and creating a baseline; empowering local and national level CSOs by enhancing the capacity of government policy makers; and building the capacity of both public and private level L&D actors through peer-to-peer learning.

#### **Capacity-building domain**

Research and capacity-building are the main suits for ICCCAD. Hence the expected results of the programme's capacity-building activities are to foster an improved state of knowledge, capacity, and technologies to understand, address, and track impacts and enable approaches for highlighting loss and damage associated with the adverse effects of climate change. Activities of the work plan in relation to capacity-building entail capacity-building of in-house

researchers; support and mentorship to visiting researchers; short courses for L&D practitioners and young negotiators; and capacity-building of LDC negotiators through ICCCAD's LUCCC Network.

#### Climate displacement domain

Climate change is the defining crisis of our time and disaster displacement is one of its most devastating consequences. Entire populations are already suffering the impacts, but vulnerable people living in some of the most fragile and conflict-affected countries are often disproportionately affected. In the purview of this, ICCCAD has set up a climate displacement domain that aims to connect the local actors and migrants to global L&D actors, engage with the humanitarian sector and find synergies, and support innovative actions to develop Climate Resilient Migrant Friendly Cities.

#### Youth domain

Climate change has increased the level of uncertainty about our future. As the youth today are now, and will continue, facing the brunt of climate change induced impacts, the youth all over the world has begun to fight back and mobilize action. As they are valuable agents of change, ICCCAD has set up the youth domain to contribute to empowering them through the needed education and resources to scale up their efforts. Through the CCD Masters courses, the short courses on L&D, and supporting the various climate youth networks in their work, ICCCAD hopes to contribute to helping youth tap into their own skills to accelerate climate action.

#### Media and advocacy domain

The media has a social responsibility to provide effective information services for climate change issues, particularly for contentious issues like loss and damage. The media and advocacy domain coordinates advocacy and policy work around loss & damage, carrying out outreach to key stakeholders and political influencers to raise awareness of the importance of loss and damage, scaling up finance for addressing loss and damage and ensuring it gets to the vulnerable people, communities, and countries who need it most. This will be done by active contribution to global events like UNFCCC mandated events COPs and SBs, Global Gobeshona Conference, etc; setting up National and Local advocacy events; Climate Tribune Special Issue on Loss & Damage; and the newly developed Loss and Damage Forum (LDF) which is a flagship activity of ICCCAD to serve as a unified workspace and platform of Loss & Damage.

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## **Loss and Damage in UNFCCC**

#### Discussions on Loss and Damage need to be translated to action immediately

#### Nusrat Naushin and Hafij Khan

Disaster impacts may now be clearly attributable to humaninduced climate change, as per the latest IPCC Sixth Assessment Working Group 2 report, providing the most robust assessment of losses and damages to date. It notes that even with effective adaptation, it is insufficient to prevent losses and damages from occurring. With increasing global warming, losses and damages are becoming increasingly

relating to loss and damage "in a comprehensive, integrated and coherent manner."

The mechanism, and the Executive Committee responsible for overseeing it, had very clear-cut functions to fulfill:

- Enhancing knowledge and understanding of loss and
- Strengthening dialogue and coordination;
- Enhancing action and support, including finance and technology.



UNFCCC

difficult to avoid, while strongly concentrated among the poorest vulnerable.

The history of L&D in the context of climate negotiations dates to 1991 when the formation of UNFCCC was under consultation. The idea of a mechanism that would help vulnerable nations, in addressing loss and damage, began when the Alliance of Small Island States (AOSIS) called for a mechanism that would compensate countries affected by sea level rise. However, it took another 16 years for loss and damage to be included in a formally negotiated UN text as a part of enhancing adaptation action, the 2007 Bali Action Plan.

After 9 years of being in the talks, a formal concept of Loss and Damage was materialized in the 2010 COP16 decision of a Loss and Damage Work Programme, which finally led to the establishment of the Warsaw International Mechanism at COP19 in 2013, which is a body to deal specifically with issues

The Warsaw International Mechanism has a 20 member Executive Committee with representatives from both developed and developing countries. It implements its activities through five strategic workstreams which also form the basis of the thematic work carried out by its five expert groups:

- 1. Slow onset events;
- 2. Non-economic losses:
- 3. Comprehensive risk management approaches
- 4. Task force on displacement
- 5. Action and support, including finance, technology, and capacity-building.

The Paris Agreement in 2015 moved the issue of Loss & Damage forward where a separate Article 8 was dedicated to loss and damage in the agreement, "to avert, minimise and address climate change induced Loss and Damage;" but only with an added clause that it "does not involve or provide a basis for any liability or compensation."

During COP25, developing countries demanded an enhanced and strengthened WIM that was able to facilitate action and support for developing countries through urgent, scaled-up, new, and additional finance from developed countries to address loss and damage and the establishment of the Santiago network for addressing loss and damage to provide technical support directly to developing countries, for addressing loss and damage.

Parties responded to this call through the establishment of the Santiago network as part of the WIM, to catalyze technical assistance of relevant organizations for the implementation of relevant approaches in developing countries that are particularly vulnerable to the adverse impacts of climate change. However, the COP25 decision did not work out the details of how the SNLD would be set up and what exactly it would do. At COP26, Parties elaborated on the functions of the SNLD and a process was set out for developing its institutional arrangements, modalities, and structure in 2022 with the aim to fully operationalize the SNLD by COP27.

In addition to a robust SNLD, developing countries also called for the mobilization of finance for Loss and Damage. Despite the proposal made by G77+China to establish the "Glasgow financial facility for loss and damage," the decision adopted by the Glasgow Climate Pact did not include the funding mechanism. Instead, as a weak compromise, the Glasgow Dialogue was established as a platform for discussing the arrangements for L&D funding, which will take place during the mid-year UNFCCC session each year (the SBs) and conclude at SB60 in June 2024 in partnership with the Executive Committee, the body which guides the work of the WIM

With zero guidance on the structure or mandated outcome, the first Glasgow Dialogue took place during the first week of SB56 in June 2022. Developing country Parties and groups, together with observers, expressed that the first dialogue was no more than a "talk shop" and therefore would not contribute to any concrete outcome at COP27 including the establishment of a Loss and Damage Finance Facility.

A number of civil society organizations, along with ICCCAD, are now working immensely towards these agendas. ICCCAD has been at the forefront of loss and damage research for many years. Dr Saleemul Huq has been a long veteran and spokesperson on the Loss & Damage issue since its inception.

With the hope of efficiently enabling vulnerable countries to understand and tackle loss and damage, ICCCAD has concretized an ICCCAD Loss and Damage Programme, with one of its domains focusing on support to the UNFCCC process. As a constituent member and observer of the UNFCCC, ICCCAD has responded to two calls this year to contribute to the operationalization of the Santiago Network. ICCCAD has also made submissions to the calls of the Special Rapporteur

of the UN Human Rights Council and Climate Change whose first report calls on the "Promotion and protection of human rights in the context of mitigation, adaptation, and financial actions to address climate change, with particular emphasis on loss and damage."

ICCCAD makes a proactive contribution to the WIM EXCOM meetings, with a special focus on NELs, TFD, and ASEG. ICCCAD has also played a proactive role during the Glasgow Dialogues during the SB56. It brought together LDC Negotiators to discuss the way forward on the Loss and Damage agenda during SBs and will also convene a similar

With increasing global warming, losses and damages are becoming increasingly difficult to avoid, while strongly concentrated among the poorest vulnerableimplement adaptation solutions and improve finance flow

consultation at COP27. To gain momentum for L&D Finance, ICCCAD has played an active partner role in the Scottish Conference on Loss & Damage, prior to COP27.

We are now at a critical stage of the negotiations for COP27 to include Loss and Damage as an official agenda item and deliver a Loss and Damage Finance Facility. With less than 2 weeks to go until COP27, we need to translate the various discussions from different spaces to action and that will require more ambitious mandates and the much needed space to discuss Loss and Damage finance at every SB and COP going forward.

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#### GENDER PERSPECTIVE

## A gender perspective on non-economic losses and damages in coastal **Bangladesh**

Fighting climate change, especially in a country such as Bangladesh, has a gender-based component to it

Douwe van Schie, Afsara Binte Mirza and Fatema Akhter

he impacts of climate-related hazards go beyond losing a house or job; hazards such as floods, droughts, and cyclones can affect communities' mental health, their ability to practise religion, and cultural traditions. It is complicated to attach a monetary value to these impacts.

Therefore, they are often called non-economic losses and damages. Non-economic losses and damages are frequently overlooked in disaster response. Men and women do not experience the same non-economic losses and damages: some impacts affect them disproportionally, and others only affect men or women.

We first highlight three examples of gender-specific noneconomic losses and damages in Burigoalini and Gabura Union (Satkhira District). Later, we discuss how this should be addressed in Bangladesh.

#### Examples of gendered non-economic losses and damages

Impacts on mental well-being: Perpetual climate-related impacts significantly affect the mental well-being of people in both unions. The possibility of losing a house, livestock, or family members causes anxiety prior to disasters. The multitude of post-disaster losses causes further harm to their mental health. Women in rural Bangladesh have more household responsibilities, which adds on to their stress of impending disasters.





**Incorporating** gender-sensitive indicators when planning development measures to address non-economic losses and damages can be helpful

Additionally, women experience a greater range of impacts on their mental well-being. For example, people are commonly forced to reside on embankment roads after floods waterlog their land. Here, women face harassment and have to live around unfamiliar men, not having enough privacy to even change their clothes. Moreover, such hazards impact the basic sanitation infrastructures like toilets which are either completely destroyed or become unavailable during high tide, causing discomfort, particularly among girls.

Non-economic losses and damages also emerge with the disappearance of cultural ties and beliefs (material and experiential elements of culture, identity, community cohesion, and a sense of place). This also affects women's mental well-being.

Gynaecological issues and self-esteem: The water salinity level in Burigoalini and Gabura Union has increased due to multiple climate-related (eg floods) and human drivers (eg shrimp farms). Consequently, women must bathe and wash sanitary products in saline water, causing gynaecological diseases. These go largely untreated as women are reluctant to seek support due to a stigma concerning gynaecological problems, which is further aggravated by the fact that women doctors are scarce in both unions.

The increased exposure to saline water also leads to an increase in skin diseases, to which women are more susceptible. Skin diseases bring physical complications that can also affect women's self-esteem. Women from the heavily impacted Gabura Union often feel unattractive and have lower self confidence, especially compared to women who live in less affected regions.

A shift in marriage dynamics: Women in rural Bangladesh move to their new husband's villages during the marriage process. Gabura Union is more prone to disasters compared to surrounding areas due to various natural and anthropogenic factors. Families from nearby unions are scared for their daughters to move to a disaster-prone area and therefore state they do not marry their daughters to men in Gabura Union.

A man from Burigoalini Union said: "How could I give my daughter to someone in Gabura Union? [After flooding,] she would have to stay at the embankment road for three months." Therefore, men in Gabura Union face complications in finding a partner. Some men decided to relocate to a different village during the marriage or marry someone from a lower-income family to overcome these complications.

### Addressing non-economic losses and damages from a gender perspective

The ministerial level: Some non-economic losses and damages impact men, and some women. However, women face a broader range of impacts and experience them at a greater scale. The Government of Bangladesh has established and implemented several mitigation and adaptation policies and programmes which include the Bangladesh Climate Change Strategy and Action Plan (BCCSAP), Nationally Determined Contribution (NDC), National Adaptation Plan (NAP), the Mujib Climate Prosperity Plan. Other than the Mujib Climate Prosperity Plan, no plan explicitly mentions losses and damages.

Hence, the two main ministries that can oversee non-economic losses and damages in Bangladesh include the Ministry of Environment, Forest and Climate Change (MoEFCC) and the Ministry of Disaster Management and Relief (MoDMR). These should work collaboratively with the Ministry of Women and Children Affairs (MoWCA).

Also, the Ministry of Finance and the Ministry of Planning can play a crucial role address non-economic losses and damages that tackle the challenges, women often have less agency to respond to non-economic losses and damages (less access to financial resources, less freedom to operate outside of the household, no women service providers [eg doctors]). To address non-economic losses and damages holistically, the upcoming NAP, 9th-Five Year Plan, should incorporate a gender perspective that would address, for example, women's physical and mental health, cultural cohesion, and marriage dynamics.

A national mechanism: Following the Conference of Parties (COP) 19, prominent climate policy actors in Bangladesh had the idea of establishing a national mechanism for Loss and Damage. The government of Bangladesh wanted assistance from CDKN to do a scoping study on a national mechanism

for Loss and Damage. However, this request was not completed due to the political sensitivities around the topic. The potential national mechanism included a component to address non-economic losses and damages. It will be essential to build momentum, make this mechanism a reality, and include a gender-sensitive approach to addressing climate change-related non-economic losses and damages. This should also be realized by close cooperation between the different ministries.

Closing the gaps: There are still significant gaps in addressing the increasingly evident link between climate change and gender inequality, and non-economic losses and damages. In the absence of disaggregated data analysis, and evidence regarding gender-related impacts, it is difficult for practitioners to assess climate-related vulnerabilities in a

Non-economic losses and damages also emerge with the disappearance of cultural ties and beliefs

gender-sensitive manner.

Incorporating gender-sensitive indicators when planning development measures to address non-economic losses and damages can be helpful to facilitate the inclusion of women's knowledge, experience, and perspectives in planning and design, and the monitoring and evaluation.

The examples in this report are derived from the report Local responses to climate-related non-economic losses and damages: A case study in Burigoalini and Gabura Unions, Southwest Bangladesh, published by the International Institute for Environment and Development (IIED).

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# Stepping up of CSOs for the establishment of the National Loss and Damage Mechanism

A mechanism that is robust, transparent, and capable of detecting the victims of Loss and Damage is what Bangladesh needs



SM Saify Igbal

group of Civil Society Organizations (CSOs) such as ActionAid Bangladesh, CARE, ICCCAD, and NACOM prepared a scoping report a few years back regarding the development of a national mechanism to address Loss and Damage (L&D) with several recommendations such as the requirement for an institutional framework for climate risk management (including risk assessment, early warning systems, preparedness, etc), financial instruments, a capacity strengthening framework as well as a framework to build community resilience, and more.

The scoping report suggests creating a national steering committee and technical working group to advance the establishment of a national mechanism in Bangladesh to fill the existing policy gaps.

But, developing the national mechanism has historically struggled due to the lack of political will and synergies, along with other pressing issues such as the Covid-19 pandemic and the Rohingya crisis, and a lack of coordination and cooperation among the Ministry of Environment, Forest, and Climate Change (MoEFCC) and Ministry of Disaster Management and Relief (MoDMR).

Recognizing the complexity of developing the nationallevel mechanism, the Public Private Partnership Authority (PPPA) recommended a two-year work programme that would follow a step-by-step procedure undertaking a whole-of-society and learning-by-doing approach. PPPA in cooperation with its technical partners chalked out some activities in order to create the National Mechanism which included stakeholder analysis, capacity assessment of CSOs and relevant stakeholders, key areas of intervention, analysis of the existing policies, and assessing the tentative financial architecture for addressing L&D.

Unfortunately, the process of developing the national mechanism came to a standstill due to a change in leadership of PPPA, and hence, there is concrete progress in recent times. Considering the overall circumstances, it is the appropriate time for CSOs and other relevant stakeholders to mobilize the process of developing the national mechanism. Through the Loss and Damage in Vulnerable Countries Initiative (CVI), civil society has already played a significant role in shaping and promoting the idea of the national L&D mechanism but now the time has come to concretize the first National Mechanism on Loss and Damage.

In Bangladesh, CSOs that already liaise with the government on a regular basis can offer to support the better ministry and departmental coordination. Although there is numerous informal cooperation between CSOs and government bodies, there is no institutional structure or modality of work between the two. The current lack of coherence is also a result of the lack of coordination between CSOs, local and regional authorities, and affected communities engaged in disaster and climate risk management (CRM) and climate change adaptation (CCA).

Additionally, CSOs -- who work at the local level with frontline communities -- do much of the work assisting households in preventing, reducing, and coping with loss and damage. However, these are the communities whose needs are frequently excluded from the design of policies, plans, and strategies, especially when it comes to longer-term assistance, beyond the immediate humanitarian responses.

In order to reduce this gap, the involvement of local community leaders and CSOs in local government planning needs to be increased. Organizations like ICCCAD, for example, have access to relevant decision-makers and relevant processes that can be used as a foundation. On the other side, NGOs that are currently collaborating with the government and actively taking part in efforts to get ready for the creation of a national L&D mechanism may make it easier for these groups to work together.

A number of NGOs have been formally collaborating with the government to develop policies and plans, including the BCCSAP and NAP revisions, which are currently in progress. Hence, NGOs can also establish channels of communication between local communities and government representatives so they can work together and share tasks.

The most important way forward is building the capacity of CSOs and NGOs which will significantly improve the effectiveness of efforts to avert, minimize, and address L&D in Bangladesh, since CSOs and NGOs assist the government

in establishing policies and strategies. The following organizations are crucial for advancing the country's L&D system: NACOM, C3ER, CPRD (operating at both the national and local levels), Research Initiative Bangladesh, Manusher Jonno Foundation, Coastal Development Partnership, Coast Trust, and BARCIK. The active INGOs tackling L&D in Bangladesh include ActionAid, CANSA, CARE, Practical Action, and Friendship.

These also function locally and, for instance, help local actors increase their ability.

The planned project titled "Multi-actor Partnership

The involvement of local community leaders and CSOs in local government planning needs to be increased

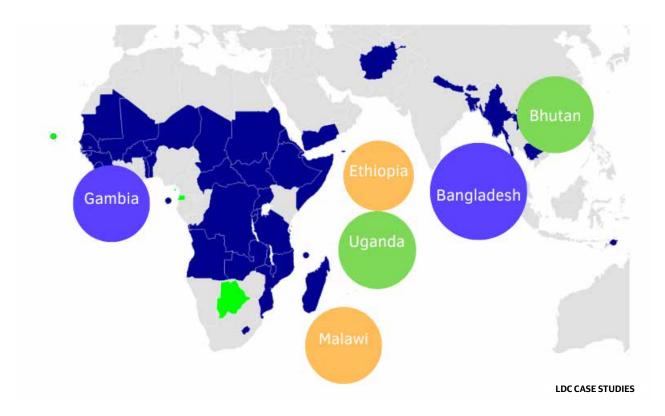
(MAP) on climate-related loss and damage, supporting the establishment of a national L&D mechanism in Bangladesh," to be implemented jointly by ICCCAD and Germanwatch, expands on the work of the L&D in Vulnerable Countries Initiative, which brought together CSOs and ministries to develop a general understanding of L&D and approaches to address it. According to recommendations made by political actors who are involved in the UNFCCC negotiation process, a national mechanism should be set up.

Also, a feasibility study for the MAP project with its initial phase in Bangladesh conducted by Germanwatch, emphasizes the role CSOs can play in paving the way for inter-ministerial and cross-sectoral collaboration. In this case, the project can replicate the work of ICCCAD, ActionAid Bangladesh, and other CSOs, but it should also go beyond the national to the local level.

Basically, the goal for Bangladesh is to develop a mechanism that is robust, transparent, and capable of detecting the victims of L&D, to assist them not only in recovering but also coping with its effect in the future. The proposed MAP project can be a model for other Least Developed Countries (LDCs) once it is successful. ■

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#### LDC POLICIES



# Loss and damage in least developed countries

Case studies from six LDCs which are frontline victims of climate change impacts and their stance on climate-induced loss and damage

#### Khandker Tarin Tahsin and Md Fahad Hossain

While the Least Developed Countries still can barely access their fair share of adaptation funds irrespective of their vulnerability status, the ever-increasing loss and damage escalating from climate change keeps burdening these countries and diminishing their economic welfare.

A decade ago, when realized by these innocent victims that mitigation and adaptation alone are not enough to protect themselves from climate change impacts, an obscure requisition of loss and damage as a separate stream was made to UNFCCC. After years of debate, the notion of loss and damage has been finally recognized as the third pillar of international climate policy by developed countries.

However, the financial flow under this stream still remains scant. Additionally, countries vouching for the separate funding stream have seldom policies/programs entitled exclusively for loss and damage at national/sub-national levels. In this article, we present case studies from six LDCs which are also frontline victims of climate change impacts, and try to portray their stance on climate-induced loss and damage.

#### **Bangladesh**

As Bangladesh graduates from its current status as a low-income country, the amount of grant allocation for adaptation will decrease from the international arena, while the percentage of loss and damage fueled by climate change keeps escalating. Although the country has adopted multiple policies and strategies, incorporated climate vulnerability issues in annual plans since the very beginning, and has been recognized as a role model for climate change adaptation, measures to address loss and damage are seldom reflected.

A handful of research has been carried out by nongovernment organizations, research foundations, and individual researchers, however, the current level of knowledge on climate-induced loss and damage at the national level still remains scant.

Recently, research has also highlighted a persisting coordination gap within ministries and also among other non-government bodies working in the field of loss and damage which often results from a lack of communication within and among different sectors of the country. Additionally, a lower understanding of climate-induced loss and damages, particularly the non-economic ones, has made it quite complicated to vouch for financial assistance at international levels.

While the country takes a stand on addressing the loss and damage issue and asks for compensation, it must also concentrate on developing a knowledge pool, addressing existing gaps, capacitating actors, and developing techniques to measure both economic and non-economic loss and damage.

Research has also highlighted a persisting coordination gap within ministries and also among other non-government bodies working in the field of loss and damage which often results from a lack of communication within and among different sectors of the country

#### Bhutan

Marked as a carbon-negative country, Bhutan's status as one of the most climate-vulnerable nations remains unchanged. Being a small economy, Bhutan has been trying to adapt to the ever-increasing climate-induced disasters even with its inadequate in-house capacities. Relying mostly on nature, Bhutan's vulnerability to both slow and rapid-onset events

will keep escalating.

In the past few years, this country has worked rigorously to put the institutional arrangement in place and develop effective climate change policies and programs to address the associated hazards to both lives and livelihoods. However, not enough importance is given to climate-induced loss and damage.

Further, the country's non-economic losses and damages appear to be too huge as climate change attacks the most crucial ecosystems of the country. The Glacial Lake Outbursts Floods were yet another example of Bhutan's increasing threats to climate change, which affected agriculture and infrastructure, increased pest infestation, and threatened food security.

Although Bhutan's steps towards adapting to the changes are praiseworthy, lax policies and inadequate financial resources often hold the country back. Thus, an in-depth analysis of Bhutan's climate vulnerability, better allocation of resources, and proper efficiency and applicability of innovative adaptation techniques are required.

#### **Ethiopia**

High vulnerability and lower adaptive capacities often put Ethiopia at greater risk of climate change impacts. Further, the country's economy highly depends on climate-sensitive sectors, and climate change's increasing frequencies and intensities of events such as prolonged droughts limit the livelihood opportunities of millions of Ethiopians, putting huge pressure on the food security of the country.

Ethiopia recently highlighted a total of 301,284 people being displaced, the death of 15 individuals and 57 livestock, and damage of 23.25 ha of cropland in 2020's floods. Other than that, every year at least 10.2 million people are affected by El-Nino-induced prolonged droughts which results in food scarcity.

Further, the non-economic loss and damage such as loss of ecosystem services, social cohesion, and loss of cultural and traditional values are barely fathomed in the country. Ethiopia has established multiple policies prioritizing climate change issues but none reflects the loss and damage problem in the country.

Additionally, the persisting gaps in coordination, the lack of a monitoring and evaluation system, and weak implementing bodies often disrupt the country's adaptation plans. Therefore, to reduce climate-induced loss and damage, the country must propose a new strategy concerning entirely loss and damage, strengthen the already existing legal frameworks, and develop institutional and capacity at the federal and regional levels.

#### Gambia

Gambia's situation is no different from other low-income climate-vulnerable entities. The ever-increasing climatic variability has resulted in huge losses and damages to Gambia's agricultural sector. In the last few decades, climate change has changed the rainfall patterns, concurrently increasing the length of drier periods and leading to prolonged droughts -- further threatening the food security of the country.

Although the government of Gambia has formulated a climate change policy which initially was adopted to interlink climate threats and sustainable development, ensure ecological well-being, and outline a long-term vision for the country, it barely considered the economic and non-economic losses that the farmers incurred.

The research identified that the number of children withdrawn from school increased among the farmer community. While the economic losses and damages were quantified, non-economic loss and damage such as mental health deterioration, migration, loss of assets, and school

LDCs must recognize and reflect enough understanding regarding climate change-induced loss and damage in their national climate policies

drop-outs remained seldom highlighted. A handful of projects do exist that attempt to consider the loss and damage issue in the country, however, the inadequate number of policies and strategies and lack of coordination among different sectors have hampered the affectivity of such projects.

#### Malawi

Malawi defines loss and damage as "unavoidable consequences, negative effects or residual impacts" triggered by climate change and associated events which contradicts the consensual definition of loss and damage implying "impacts of climate change that cannot be addressed by mitigation and adaptation alone."

This particular definition proposed has led to loss and damage being embedded in adaptation and mitigation plans and programs rather than treating L&D as a separate program. Furthermore, most of the intervention in Malawi is emergency response-based which further pushes the issue of loss and damage under the already existing streams.

Recent estimation of only economic loss and damage stands at \$220.2 million in 2019 and an increasing trend has

been noticed since 2015. Nevertheless, non-economic loss and damages remain unquantified due to the complexities associated with its assessment. Malawi has several policies and plans drafted to address climate change impacts to facilitate the coordination of climate actions in the country.

However, none of the policies attempt to directly address loss and damage, further raising the complications associated with financial support from funding windows. Therefore, the government of Malawi must now consider having a dedicated section for loss and damage in its national plans and climate action policy and domestic financial mechanism for loss and damage only.

Additionally, data gaps and lack of capacity of local institutions and government entities on loss and damage must be addressed in the country.

#### Uganda

The irreversible economic and non-economic loss and damages resulting from climate change have been recently assessed by Uganda -- which accounted for a huge amount. Additionally, the adaptation deficit and increasing climate change impacts on the country outweigh the existing interventions. Studies have also identified that loss and damage are not well-articulated in the national documents or even in the projects and programs implemented.

Given the elaborated national institutional framework on climate change that Uganda has, adaptation and mitigation issues are well addressed while loss and damage are barely considered.

Moreover, the National Climate Change Policy (NCCP) and National Determined Contributions (NDC) hardly stress on loss and damage. Nevertheless, the National Climate Change Bill 2020 explicitly talks about loss and damage which further got reflected in the legal structure of the country. Uganda now must also invest more in loss and damage related research to bridge the existing knowledge gaps and capacitate local and national level actors.

In retrospect, LDCs must recognize and reflect enough understanding regarding climate change-induced loss and damage in their national climate policies. Bangladesh, Bhutan, Ethiopia, Gambia, Malawi, and Uganda, although having years of practice in adaptation now must specify both economic and non-economic loss and damage issues in their national plans.

Additionally, developing countries should concentrate on developing evidence-based research, bridging persistent knowledge gaps in the national policies, capacity building of stakeholders, and proper quantification of both economic and non-economic losses and damages. Only then they can breathe a sigh of relief. 

■

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# Loss and Damage Forum: A vision to synergize and connect

#### This forum is to be launched at COP27

#### Nusrat Naushin

he Loss and Damage Forum (LDF) is a collaborative platform and virtual workspace where resources and tools are shared among a group of practitioners, researchers, and decision makers across the world, with a prime focus of connecting local to global, to support and address climate change induced loss and damage.

With the hope of efficiently enabling the vulnerable countries to understand and tackle loss and damage, LDF aims to create a unified workspace where team members regularly communicate, share their knowledge, and work together.

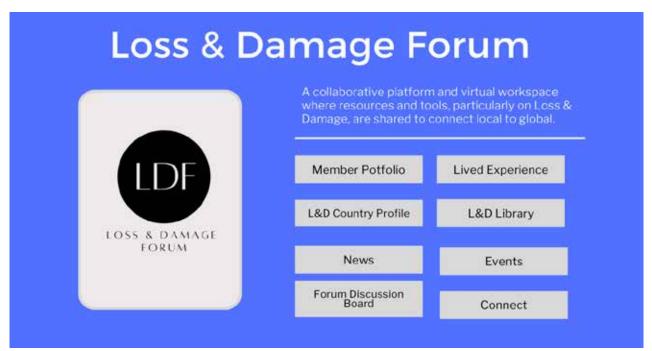
Our main aim is to connect from local to global and it will be achieved by curating members from both local and global levels, across different geographies. We already have a number of global members, both individual and global, like Global Resilience Partnership (GRP), Government of Vanuatu, Platform on Disaster Displacement and so on, who will be able to showcase their work and connect with others to synergize their efforts.

To achieve our aim of ensuring that vulnerable people, communities, and countries have the support they need to address loss and damage, we will curate stories from the ground as well as map country profiles, which will strengthen the evidence base of losses and damages happening on the ground.

Our curated case studies will be in the form of a map in the L&D Country Profile space, which will be a compendium of the Loss and Damage scenario in each country, outlining the climate change impacts and vulnerabilities of that country, types of losses and damages occurred, existing policy and institutional framework and gaps, and finally possible recommendations.

Another feature would be a Loss and Damage Library which will serve as a knowledge repository of as many Loss and Damage knowledge products (policy briefs, blogs, infographics, journal articles etc) as possible. Researchers and interested parties can make a search and have the option of filtering via event (SOE or Rapid Onset), impact (Economic or NELD) and geography.

The Forum will further display the latest news on Loss and Damage which includes both political and on the



Purple Colorful Blocks Fitness Bio-Link Website



ground news. The members of the forum would be able to add news and events to the webpage. This will allow all Loss and Damage related events to be captured in one place and as a result, this L&D calendar will be accessible to all.

For a crash course on the introduction of the world of Loss and Damage, we will have a section called Loss and Damage 101, which will include a set of Frequently Asked Questions (FAQs), developed by L&DC and ICCCAD, which answers the basics of Loss and Damage world. We will also include an interactive animation, with three specific stories from hypothetical regions, which will help users to identify what losses and damages did the characters suffer and what is needed to tackle them.

One important feature of the Forum is to serve a Discussion Board, which will be a living doc, where anyone can ask questions and then we will share it with our members for expert opinions to answer the queries.

Our membership form will be live, so anyone who wants to be a member will have a chance to do so. We will also try to set up on demand capacity building (one-on-one session, mentorship, visiting researcher, short course, etc) for any feasible request made. The forum will have a monthly call to discuss progress and plan a way forward.

After an initial consultation with interested members, the Loss & Damage Forum (www.lossanddamageforum.

LDF aims to create a unified workspace where team members regularly communicate, share their knowledge, and work together

org) will be launched at COP27. The vision of this forum is to synergize and connect actors, working in different spaces, to strengthen our voice for proactive action on Loss and Damage.

Nusrat Naushin works as a programme Coordinator at International Centre for Climate Change and Development (ICCCAD). She can be reached nusrat.naushin@icccad.org

# Capacity building for addressing Loss and Damage: ICCCAD perspective

Capacity Building is essential for the actions needed to address the Loss and Damage caused by climate change related events upon countries in the Global South



#### Mizan R Khan

apacity building (CB) is a capacious concept, which does not have a common definition. But we at the International Centre for Climate Change and Development (ICCCAD) at Independent University, Bangladesh (IUB) understand CB as a whole gamut of activities and processes beginning with awareness raising at different levels, to education and training, all the way to building higher levels of expertise in any area of human action aimed at addressing climate change. However, this piece on CB focuses specifically on how to address loss and damage

(L&D), increasingly inflicted by all onset climate events, particularly on the poor and vulnerable communities in the Global South. Before specifying the methods and approaches that ICCCAD applies for CB, we need to briefly discuss what areas of action fall within L&D under the Paris Agreement.

Article 8.3 of the Agreement includes three areas for action: averting, minimizing, and addressing L&D from adverse impacts of climate change. However, there are disagreements as to the ways of addressing these areas. Averting L&D can be achieved through ambitious mitigation and adaptation measures. Minimizing L&D can be achieved by strengthening the adaptive capacity of vulnerable countries

and communities. But how to `address' L&D? This is the most debated part of the equation. Obviously, it also includes the humanitarian responses to climate disasters. In the Global South, we usually interpret L&D as actions needed to address the residual damage, ie beyond adaptation, meaning losses and damages that cannot be adapted to. Besides, L&D includes both economic and non-economic losses and damages (NELD). However, we need to keep in mind that each economic loss also entails NELD, such as the loss of labour productivity and productive time, psychological stress, etc. In any case, once we consider different perspectives on L&D, we have a clearer understanding of the types of capacities needed and how to impart them.

Article 8.3 of the Agreement includes three areas for action: Averting, minimizing, and addressing L&D from adverse impacts of climate change

In broader terms, CB is needed for enhancing capacities to initiate actions that reduce greenhouse gas emissions and for strengthening adaptive capacity with a `whole of society' approach. This requires developing basic capacities to assess vulnerabilities at local and community levels with the appropriate approach and tools. When minimizing L&D, certain capacities are needed. For example, DRR and risk transfer tools require insurance mechanisms. For the poor, vulnerable communities, CB for micro-insurance instruments are more applicable. In the case of slow onset events, such as sea level rise, loss of biodiversity, land degradation, etc capacities are needed for developing saline

and flood-tolerant varieties of crops, developing naturebased solutions, and for the preparation and application of bio-fertilizers that maintain the organic content of the soil. In the training modules, both structural and non-structural measures are included.

Now let's focus on how ICCCAD approaches CB in terms of addressing L&D. This is done at different levels, beginning with CB of our own staff as well as our visiting foreign researchers. We have a dedicated division of research and action on L&D, where our colleagues are constantly trained by senior staff members on different aspects of climate change. Every Thursday of the week, we organize a 2-hour session where ICCCAD staff members and also foreign researchers present their own research or excellent articles written by global experts for threadbare discussion. In the CCD programme, courses with an inter-and-multidisciplinary approach cover all the issues of adaptation and L&D discussed above.

At local and national levels, we have Capacity Building Workshops for community leaders, private sector representatives, and NGO leaders, with a focus on youth, women, and girls. Then we have CB workshops under formal agreements to build the capacity of government officials from different ministries and agencies. For example, we have a workshop called "Learning Hub Event" where once a month, together with Planning Commission officials, we organize workshops on topics decided by the officials themselves. These events are attended by at least one or two very senior officials. ICCCAD also has formal agreements for CB, like with the Ministry of Foreign Affairs to train young diplomats, and with the Local Government Engineering Division to train engineers on how to internalize current and predicted impacts of climate change when building resilient infrastructures.

Then comes the initiative of CB under the LDC Universities Consortium on Climate Change (LUCCC), which is an official programme of the 46 LDC governments under the UNFCCC. ICCCAD serves as the secretariat and also as the CB Hub for the LUCCC partners. We have already implemented Phase-1 of CB in L&D with a cohort of six LDCs, led by LUCCC partners of those countries. Now we are implementing Phase-2 of this project on L&D, where another cohort of six countries are making assessments of losses and damages in their countries and how their communities are addressing them. Currently, LUCCC includes 16 universities as the hub for CB in their respective countries. The LDC Chair, currently held by Senegal, guides the process, contributing as the key adviser, together with Prof. Saleemul Huq, Director of ICCCAD.

Then comes the initiative of ICCCAD for CB at the global level, particularly under the Paris Committee on Capacity Building (PCCB). ICCCAD and LUCCC are not just PCCB network members but are close partners, who jointly organize CB events during the COPs and also beyond COPs. PCCCB in each COP organizes a weeklong CB Hub, where ICCCAD initiates the process on the very first day, including



an inaugural session, attended by senior officials of the Convention Secretariat and some relevant VIPs.

We at ICCCAD are now developing a short course on L&D which we plan to execute through workshops globally, both in-person and online, led by LUCCC experts in collaboration with relevant foreign experts. The short course will first identify the needs and gaps, in consultation with the LUCCC

We at ICCCAD are now developing a short course on L&D which we plan to execute through workshops globally, both in-person and online, led by LUCCC experts in collaboration with relevant foreign experts

partners. Based on the feedback, 2 short course modules will be developed, targeting 10 young negotiators and 10 practitioners. The purpose of the courses will be to provide sharing and learning opportunities, and where identified, build the capacity of these negotiators and practitioners across the rapidly evolving Loss and Damage discussion. The negotiators will then be better informed for negotiations and the practitioners and academics will be better equipped to produce thought leadership pieces to influence policy and improve the debate on Loss and Damage. The short course will be launched at COP27, with an inaugural workshop including the LUCCC partners and the Young negotiators.

In the end, I must emphasize that the goal of ICCCAD CB is to look for ways of promoting South-South and South-North collaboration in designing and implementing CB programmes. The specific South-South focus aims for sharing the best practices of disaster management, disaster risk reduction, and adaptation, based on local and indigenous knowledge validated by modern scientific knowledge. At every stage of our education and training programme, we have specific theories of change (ToC), so that at the end of the day, the acquired knowledge and skills of different stakeholders enable the change needed in specific areas of action when addressing climate change, including L&D.. ■

 $\label{eq:mizan} \textbf{Mizan R Khan is Deputy Director, ICCCAD and Technical Lead, LUCCC.}$ 

#### REFLECTIONS

# Climate Resilience Academy for LDCs: Reflections from South Asia

The adverse effects of human-induced climate change have resulted in unpredictable economic and non-economic losses of enormous proportions in the last decade

#### Climate Tribune Desk

he International Centre for Climate Change and Development (ICCCAD) and Global Resilience Partnership (GRP) initiated the program of Climate Resilience Academy for South Asia (CRAL-2). The purpose is to amplify, coordinate and learn from experts in the Global South, particularly in South Asia, and help bring the highly unequal playing field between the global north and south to an equal level. The Academy will organize a series of annual programs that will bring together transdisciplinary cohorts of academics, scientists, practitioners, thought leaders, and policymakers with the aim to combine diverse forms of knowledge and generate useful insights towards providing inclusive assessments on how to guide actions addressing loss and damage in South Asia.

The key objectives of the academy include mobilizing and building a collaborative and trans-disciplinary network of regional resilience and Loss and Damage experts from South Asia, in addition to synthesizing knowledge and perceptions of Loss and Damage from the Least Developed Countries (ie, what losses are relevant, what counts as Loss and Damage, and how does it manifest themselves) and identifying key resilience challenges, as well as advocating and collecting evidence of Loss and Damage through community-level assessments to integrate loss and damage perspectives into existing practices and policies.

Loss and damage manifests across "multiple temporal and spatial scales" with historic, present, and future climate change impacts. For this cohort of the CRAL Academy, four thematic areas of the broad Loss and Damage topic are focused upon, including Non-Economic Loss and Damage,



Economic Loss and Damage, Financing Loss and Damage, and Adaptation Measures for Loss and Damage. The reflections of the participants are attached below:

#### Moumita Das Gupta (Bangladesh)

Advocate of the Supreme Court of Bangladesh and Research Fellow of Centre for Climate Justice -- Bangladesh

The workshop has helped broaden my horizon on the agenda of loss and damage. Going forward, I would like to work towards creating social awareness at a wider extent, by utilizing

We witnessed how communities who previously belonged to a middle-class income were now forced to dwell in slums due to the losses and damages they suffered in the face of climate change induced problems

electronic media, print media, and social media. To create better awareness among the victims of climate change, leaflets outlining the remedies available for loss and damage situations can be distributed. Furthermore awareness raising and capacity building workshops can be arranged at local levels to inform them about the way forward and the procedures to avail them.

Additionally, frontline communities should be made aware of their human rights and legal aid can be provided to support them. Field-level data and information can be collected to gather evidence and enable the policy makers, at both national and international levels, to make more informed decisions about real life situations. Collaboration can be created among policy makers, NGOs, CSOs, victims of climate change, and other citizens of the country in general. Students of schools, colleges, and universities can join as volunteers for the social awareness campaign through different young volunteer organisations like Red Cross or Red Crescent Youth, Scout, Girls' Guide and National Cadet Core of respective countries.

#### Afroz Shah (India)

Sr Assistant Professor of Structural Geology at the Department of Geosciences, Universiti of Brunei Darussalam (UBD)

My interactions with participants and presenters, mainly from South Asia, taught me valuable lessons on what the world needs to do to tackle the growing crisis of climate impacts, particularly in the developing world. The fieldwork at one of the slum areas of Dhaka was a great learning experience to witness firsthand accounts of what life is like there. We witnessed how communities who previously belonged to a middle-class income were now forced to dwell in slums due to the losses and damages they suffered in the face of climate change induced problems. The forced migrations related to the climate crisis and other related factors, such as the loss of opportunities, have forced people to take shelter in slum areas.

The climate change migrants are at the mercy of shelters, where space is minimal; often, the sunlight cannot even reach the rooms. The inadequate space, untidy conditions, lack of proper sanitation, and bunker-like structures are highly vulnerable to fires, disease, and other hazards. Moreover, it jeopardizes the environment for appropriate education and care of the children and the elderly. I can use the slum experience to model the future conditions in Bangladesh and work towards developing climate-migrant friendly habitations.

We discussed and mapped the knowledge gap in formalizing the document which will address the growing concerns about the impacts of climate change and discussed how to approach the international community to win a consensus on Loss and Damage as a separate agenda at the International Climate Change tribunals. The workshop experience has specialized training on Loss and Damage ingrained into it, thus establishing within us a new understanding on how to tackle and explore it further in our research and teaching activities when training students. Loss and Damage can largely limit the ferocious nature of climate disasters in the developing and poor world by increasing climate disaster resilience. Therefore, I have also started work on two projects with international collaborations on Loss and Damage.

#### Neha Khandekar (India)

Trained in masters of science in water management, I have been a student of socio-hydrology (water-society) and climate vulnerability and adaptation studies for the last 10 years. Being part of several interdisciplinary cohorts, I have traversed these complex subjects at varied geographic scales that is -- local (with critical social sciences and field work in the mountain and coastal ecosystems in India) as well as regional (policy, transboundary governance) issues within the Global South (Bangladesh, Nepal, Myanmar).

The adverse effects of human-induced climate change have resulted in unpredictable economic and non-economic losses of enormous proportions in the last decade

I am interested in reflecting on broader questions of knowledge plurality -- whose knowledge counts and forms the dominant hegemonic narrative in knowledge and policy discourse and whose is left behind. For breaking silos, I am interested in engaging with the norms, justice and values towards decolonising the science and practice of climate and water in the Global South.

Learning about the history of climate governance, science and policy, specifically the Loss and Damage aspect in light of negotiations to be held at COP 27 was specifically insightful within the ICCCAD resilience academy. The loss and damage at its heart calls for justice in the international context by holding the polluters accountable. Moving forward in my own research work, these sessions in the academy have gently

nudged me to engage in areas of climate finance facility, science and governance such that I can bridge the sensibilities that I have gathered by working at sub-national levels within the global context of injustice. These revolve around principles of knowledge pluralism, knowledge co-production, interdisciplinarity, and inclusivity.

#### Kavita Sachwani (India)

Chartered Accountant by qualification and a public policy and sustainable finance professional and currently a part of the global leadership team at the 2030 Water Resources Group of the World Bank

The adverse effects of human-induced climate change have resulted in unpredictable economic and non-economic losses of enormous proportions in the last decade. This needs multi-stakeholder approaches, as well as heightened levels of awareness, effort, and financing from various sources in the Global North, across the private and public sectors, for addressing Loss and Damage at a scale and speed that is unprecedented. I want to thank ICCCAD for inviting me to participate in the CRAL-2 cohort. It was indeed an enriching experience and I would be happy to continue to support ICCCAD's ongoing efforts in amplifying the importance of financing for L&D and in accelerating the speed and scale at which this needs to happen -- particularly in the Advocacy and Financing area for example. The Loss and Damage Finance Facility connects the ground realities of Loss and Damage from regional to global and frames a compelling case for L&D financing.

#### **Umesh Basnet (Nepal)**

#### The Mountain Institute

Based on my learning from the CRAL 2 workshop, I am interested in conducting research on economic and non-economic loss and damage that Nepal is facing for the last 30 years along with the total climate-related fund that Nepal has received to date. Similarly, the proposed research will be aimed at a micro-level analysis of policies implemented by the country and the actual gap in policy formulation and implementation. Apart from this, I am planning to introduce the loss and damage concept while organizing training to strengthen the capacity of the local government for climate change adaptation and mitigation. Also, loss and damage should be integrated into the local government's annual and periodic development plans.

#### **Mohammed Shumais (Maldives)**

Energy Economics and Policy PhD candidate, Tech University of Korea

South Asia as a region is vulnerable to climate change and this has challenging implications in terms of the well-being of the communities and the sustenance of critical resources. Capacity development and enhancing regional networking within South Asia are significant for better mutual understanding



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of the impacts of climate change in the region. In general, understanding of risks and tolerance vary based on location and time. Therefore, methodologies to monitor, evaluate, and capture costs and cumulative impacts of loss and damage at regional and country levels, can help minimize inaccurate perceptions and bias. Currently, there is a lack of effort on documenting the impacts of slow-onset events and noneconomic losses.

#### Tshering Lhamo (Bhutan)

#### Founder, Gross International Nature

Our youth group Gross International Nature (GIN), is planning to implement Climate Change Education campaigns in Bhutan and Nepal. We have selected two regions with similar geographical features and climatic conditions to compare and exchange the traditional knowledge embedded within the communities. Therefore, as an immediate action plan, we will collect data and advocate for Loss & Damage during the campaign. I hope to use this opportunity to disseminate the learnings from CRAL 2 and hopefully bring Loss & Damage into the limelight.

#### Amila Lankapura (Sri Lanka)

Lecturer in Agricultural Economics and Extension at the Department of Agricultural Systems, Faculty of Agriculture, Rajarata University of Sri Lanka

My prior knowledge of loss and damage caused by humaninduced climate change was limited, and the training provides the timely relevance, significance, and scope of climate change, which I consider to be the essence of the training. After receiving this valuable training package from ICCCAD, I devised a strategy that corresponds to my core activities as a university lecturer: teaching, research, and outreach. I'd like to gain a solid understanding of loss and damage (be it economic, non-economic, financial, or adaptative), as well as a better understanding of climate change and development in general. Reviewing scientific publications, attending webinars and other knowledge-sharing events, and participating in collaborative knowledge-sharing projects are the identified learning activities.

Secondly, I intend to identify significant research gaps and develop research proposals and concept notes in order to seek funding and collaborations for supervision. I will initially concentrate on Sri Lankan and South Asian regional issues. The third goal is to disseminate knowledge to various stakeholders using multiple tools. My previous experience as an extension practitioner, as well as my professional training in communication skills, will be extremely useful in facilitating awareness sessions and training. As a fourth action, I intend to collaborate and volunteer for organisations concerned with climate change and development, as well as other related fields. ■

#### EARLY WARNING SYSTEMS

# Role of early warning systems in addressing Loss & Damage

A multi-layered approach with EWS is imperative to address loss and damage



#### Towrin Zaman

arly Warning Systems (EWS) are one of the biggest instruments of a disaster management system in a country. The efficiency of EWS is reflected in the efficiency of a country's disaster management, and consequently, the rate of climate change induced losses and damages. Bangladesh has managed to become a model in the successful execution of EWS, particularly for cyclones.

How effective is EWS in mitigating Loss and Damage for Bangladesh?

In 1991, when Bangladesh's disaster management system was more recovery-focused instead of on response, the devastating super cyclone Gorky led to 138,886 deaths and \$2.31 billion of economic damage, based on government estimates. In contrast, the super cyclone Sidr hit the country

when its disaster management approach was focused on anticipatory action rather than only response-based. According to official estimates, 3,363 people lost their lives due to Sidr, with economic loss worth \$1.7bn, equivalent to 2.6% of the country's GDP at the time. In 2020, when the government became focused on disaster risk reduction rather than disaster management, the super cyclone Amphan hit the country, causing 26 deaths and the \$131 million worth of economic loss.

The contrast in losses and damages caused by the three super cyclones across consecutive decades reflects the Bangladesh government's growing prioritization of disaster risk reduction over time. This success is also highly attributed to progress in the development of the country's EWS. However, one might notice that the rate of reduction in economic loss and damage, while remarkable, has not

The manifold effects of extreme climatic and weather events make it imperative for the EWS for these events to have manifold layers in the structure as well

been as substantive as that of the reduction in death rates. This difference may be due to a variety of factors, but a major cause is the government's prioritization of reducing loss of lives, with loss of livelihoods being a secondary concern. This prioritization is also reflected in the development of EWS in the country.

#### How does EWS work for cyclones and floods in Bangladesh?

The EWS in Bangladesh for cyclones is centered around the dissemination of bulletins, warnings, and signs by the Storm Warning Centre (SWC) of the Bangladesh Meteorological Department (BMD). The warnings are based on information received by weather stations, balloons, and radars of BMD, from regional and national offices of the World Meteorological Organization (WMO). Residents of cyclone-vulnerable areas are evacuated to cyclone shelters, in accordance with the

BMD bulletins which forecast warnings based on the danger levels of the river, maritime port, and wind speeds.

For floods, on the other hand, there is no similar signal-based warning mechanism. The EWS for floods also lacks warnings based on location-specific context. The flood EWS in Bangladesh is generated and disseminated by the Flood Forecasting and Warning Centre (FFWC) of BMD and also by the Department of Disaster Management (DDM). The FFWC primarily provides flood-related information based on up-to-date scientific data, mathematical models, satellite imagery, voice data, and rainfall radars. The information is used to strengthen the capacities of communities and improve the disaster management system of national agencies. While not as effective as the cyclone EWS, FFWC has still played an integral role in supporting evacuation during floods and consequently reduced the number of flood casualties over the years.

#### Should EWS only be focused on loss of lives?

Evacuation of people in vulnerable communities, and ensuring their safety is the principal core of the EWS of Bangladesh. There is still no system in place for the EWS to help in providing warnings with mechanisms to enable vulnerable people resilient against incoming damages to their livelihoods. EWS should also help people take early action to protect their livelihoods and the environment on which they depend.

Extreme weather events and climate hazards pose a risk to not only the lives of vulnerable people but also to incapacitating their livelihoods and standard of living. Such events not only leave these people reeling with damages to their assets -- houses, livestock, crops, etc -- but can also leave them with irrecoverable losses -- loss of land, property, or livestock -- leading to loss of livelihoods. As a result, there are long-term repercussions, leading to an increase in vulnerabilities and other far-reaching problems such as migration.

The manifold effects of extreme climatic and weather events make it imperative for the EWS for these events to have manifold layers in the structure as well. EWS should not only contribute to saving lives but also should be developed and restructured such that it can lead to livelihood resilience. Improved coping mechanisms and enhanced adaptive capacities play an imperative role in building this resilience. To achieve this, the existing shortcomings in EWS should be addressed such that its application and execution do not undermine risk reduction, particularly at the grassroots level, to prevent loss of lives and shocks to livelihoods.

#### How to develop a manifold layered EWS

To develop an EWS with multiple layers, it is not sufficient to only just provide communities with the warning message, but also imperative to widen its scope and strengthen its capacity to track and provide actionable information. EWS can also monitor environmental thresholds such as drivers for vulnerabilities and pollution in the environment and unsustainable exhaustion of natural resources. Such a

mechanism would enable vulnerable people with sufficient time and information to take appropriate actions to mitigate the impact or loss to their livelihoods.

multi-lavered Developing **EWS** requires multi-stakeholder involvement and coordination. setting up mechanisms to monitor environmental information, forecasts for possible impacts on livelihoods. Locally led action and community participation are key parts of such an improvement.

#### Making EWS part of a holistic system

If improvement in EWS is not accompanied by efforts to develop resilient infrastructure and strengthened community capacity, then the results will not be as effective. This involves building cyclone shelters that facilitate different sections of a community -- accommodating differently-abled members, pregnant women, post-partum patients, and livestock animals too; and training community members to diversify their livelihoods -- be it developing floating vegetation beds in preparation for floods or underground food-stock in case of cyclones. EWS should be developed to enable community members with

information on when and how to utilize such mechanisms.

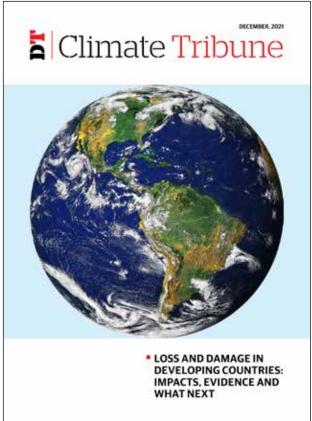
Addressing loss and damage through disaster management and disaster risk reduction is not a one-dimensional approach, and should not be limited to a one-dimensional approach. EWS is only one of its dimensions, and a very crucial one too. While saving lives should be a major outcome of improving EWS, equal emphasis needs to be given to protecting livelihoods too. But that cannot be accomplished alone, without any supporting infrastructure and system being developed. This is why it is imperative to create a multistakeholder and multi-layered approach with EWS at its core, to address loss and damage.

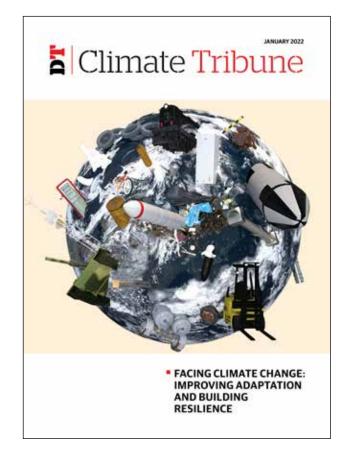


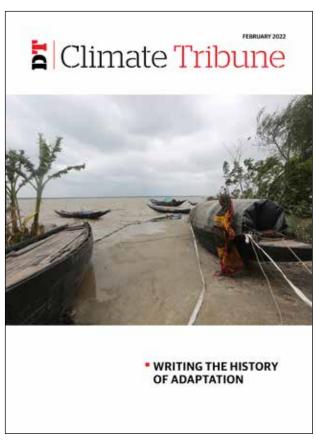


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