Designing a Comprehensive Institutional Structure to Address Loss and Damage from Climate Change in Bangladesh

Makher Char, Pirojpur, Bangladesh, 2014. Photo by Istiakh Ahmed.

Introduction

After more than two decades of discussions in international climate negotiations, institutional arrangements to address loss and damage was finally institutionalized under the UNFCCC with the establishment of the Warsaw International Mechanism on Loss and Damage (WIM) (UNFCCC, 2013). The Paris Agreement established Loss and Damage as a separate article to adaptation, which was significant and important for developing countries. The Paris Agreement also recognized "the importance of averting, minimizing, and addressing loss and damage associated with the adverse effects of climate change" which highlights the importance of scaling up mitigation and adaptation to avoid and reduce loss and damage.

The Santiago Network is aiming to build on this by providing technical assistance to countries vulnerable to the adverse effect of Climate Change (UNFCCC, 2019b). The IPCC Special Report on 1.5°C includes a chapter called, "Residual risks, Limits to adaptation and Loss and Damage," and for the first time, this report reviewed literature on loss and damage, building on robust evidence demonstrated in the 5th Assessment Report (AR5) and from various geographical and cultural contexts (Roy et al., 2018)

KEY MESSAGES

1. Build a centralized climate change database to collect the data required to address losses and damages attributed to climate change.

2. Improve baseline field data collection and analysis on various aspects of socio-economic vulnerability and resilience to climate change.

3. Increase autonomy for local governments in making decisions on finance, planning and implementation.

4. Co-produce knowledge between local communities and local organisations of knowledge generation and practice, to engage with decision makers about the needs of the community.

5. Streamline financial services and increase the availability of funds to the most at-risk people by expanding the reach of risk transfer tools and risk retention tools to help households and communities avoid loss and damage before it occurs.

6. Integrate DRR and CCA under the Comprehensive Risk Management Framework in local and national disaster management committees.

7. Finance Loss and Damage[1] by utilizing national, international, and other innovative funding mechanisms.

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1. Loss and Damage (L&D) in capitalized letters refer to the range of policies which can be implemented to address loss and damage while lowercase letters loss and damage refers to the range of harm from observed and projected impacts of climate change. (IPCC, 2018)

Developing a National Mechanism of Loss and Damage in Bangladesh - A two-year pilot project

Bangladesh has over the years developed institutions, enacted laws and has put procedures into place to address the very many climatic disasters it faces on a regular basis. Reducing vulnerability, and increasing resilience through DRR and ensuring livelihoods, food security for at risk communities through CCA have been a top priority for the Government of Bangladesh. However, a scoping study commissioned by various non-governmental organizations and research institutes found that existing frameworks provide limited scope to address current and future climate induced loss and damage in Bangladesh (Haque, Pervin, Sultana, & Huq, 2019a). The current climate-related framework lacks not only institutional, legislative and policy mechanism to address current and future loss and damage but also lacks a framework to measure slow-onset processes or address non-economic loss and damages accrued from climatic events. In order to provide oversight and guidance to all relevant sector and institutions and take specific initiatives to address loss and damage the Government of Bangladesh established the National Mechanism on Loss and Damage.

The Government of Bangladesh has taken initiative to set up a national mechanism on Loss & Damage through a two-year pilot project (Haque et al., 2019a). Addressing loss and damage will require capacity building in certain key sec-tors especially in data poor Bangladesh. Drawing on the conversations with policymakers in Bangladesh, a review of scientific journal articles and technical reports, this policy brief describes the purpose, goals, and potential outcomes of Bangladesh's national mechanism. Bangladesh currently has limited access to high-definition technology to collect data, technical expertise to handle technology, limited finance, no policy or legislative framework, and poor linkages with institutions from the local to the national levels. In addition to what Bangladesh is expecting to achieve from the two-year pilot project, this policy brief offers suggestions of what is needed to report and eventually address L&D in Bangladesh. Although these suggestions are no repla-cement for official governmental guidance, they provide insight on a number of central aspects associated with what needs to be done by governments to address L&D in a holistic and comprehensive manner.

1. A CENTRALIZED CLIMATE CHANGE DATABASE:

Around 20 million people living in the coastal belt of Bangladesh will be affected by sea level rise (World Bank, 2013) which will impact drinking water, human health and cause a loss of local fish and rice varieties. According to an estimate by the World Bank (2015), by 2080, the southern coastal belt is expected to face on average a sea level rise of 65 cm resulting in 40% loss of agricultural land. Yet no infrastructure or database exists that takes current and future climate change projections into account. The Ministry of Disaster Management and Relief (MoDMR) is responsible for addressing disasters in Bangladesh operates Early Warning Systems (EWS) that are suitable for monitoring storms and other extreme events, but these mainly focus early warning and immediate response and relief for communities and does not consider future climate projections. For local and regional governments to make valid estimations of losses and damages, more data is needed.

Building an evidence base which can be drawn on to develop policies, plans and strategies to address L&D is difficult because:

(i) Bangladesh lacks extensive network of appropriate technology and infrastructure to generate adequate data;

(ii) no centralized database exists to record loss & damage across all sectors;

(iii) data collection is not standardized across all sec-tors but often collected within the institutional siloes of the various ministries;

(iv) policy making is not always evidence based, or risk informed; and

(v) evidence of extreme events is widely recorded but slow onset events are not.

The Bangladesh Meteorological Department (BMD) together with Ministry of Defense is expected to assist the L&D pilot project in collecting the relevant data from the four geographical zones where this study is expected to be carried out.

2. THE TECHNICAL CAPACITY TO BUILD RELIABLE BASELINE FIELD DATA, ANALYSIS, AND DISSEMINATION

Apart from quantitative data, loss and damage data collection will also involve qualitative data sets involving qualitative tools such as household questionnaires, expert interviews, focus group discussions, participatory rural appraisals, briefings, and personal stories from people affected by loss. Currently work is underway to train local government officials in Bangladesh to have the technical expertise to carry out loss and damage assessments, separate from damage assessment after disaster, utilizing the "ward shobha" structure already in existence from DRR.

Furthermore, due to the unpredictable nature of Global Climate Models, it is imperative to have fine-scale data to support decision making in agriculture, water, energy, and disaster management. Merely having access to remote-sensed data is not enough. Learning how to operate the physical tools needed to collect data, analyse and translate data sets to support decision making is vital for facilitating the formation of a national mechanism on L&D.

3. INCREASE AUTONOMY FOR LOCAL GOVERNMENTS IN FINANCING, PLANNING, AND IMPLEMENTING DECISIONS

A team of community-based technicians trained in interactive decision support tools can, not only foster stakeholder engagement in improving communications but also prepare plans to detect and respond to emergencies.

However, local governments have very little autonomy in making decisions as they suffer from chronic underfunding. Budgets are decided by the national government leaving local government with very little autonomy in planning for long term efficient and effective work. Local governments therefore at the union and ward level have very little choice in terms of which development projects to fund leaving them with little opportunity to create a plan that is risk informed. More work needs to be done to build their capacity through a combination of methods such as workshops and briefings in understanding loss and damage, training of technicians and local trainers, and their ability to collect socio-economic data, strengthening the organizational capacity of local governments.

4. LOCAL ORGANIZATIONS OF KNOWLEDGE GENERATION CAN PARTNER WITH LOCAL COMMUNITIES IN GENERATING INFORMATION ON LOSS AND DAMAGE

Local research centres and public universities are chronically underfunded and thus unable to contribute to developing state of the art technologies that help produce knowledge on climate change. In order to address L&D in the long-term, financial support from national government, international donors and regional partnerships is needed to develop Bangladesh's knowledge and technology base. Additionally, they also need funding to develop their ability to collect data, for training of their technicians to analyse data collected and to systematically build capacity at the local level to understand loss and damage specific to a region, landscape, or ecosystem.

5. STREAMLINE FINANCIAL SERVICES SUCH AS RISK TRANSFER TOOLS AND RISK RETENTION TOOLS TO PEOPLE MOST AT RISK

According to the fifth IPCC report (2014), Bangladesh is expected to experience increased poverty rates of approximately 15% by 2030, impacting development investments and challenging the capacity of the marginalized to adapt and eradicate poverty. Risk retention measures such as social safety net protection schemes and microfinance can be used to build resilience to slow onset processes like sea level rise, while contingency funds can offset the financial burden of unpredictable extreme events (Roberts & Pelling, 2018; UNFCCC, 2012). These can cushion the blow for most at risk communities and can also help the country stay on track to meet development goals.

Government-run social safety nets and NGO-run microfinance programmes in Bangladesh are still limited to addressing poverty but can be broadened to include slow onset processes such as sea level rise in order to soften the blow of loss and thus build resilience to climate change and help communities to cope when losses and damages cannot be avoided. By building capacity of local government to access international climate finance, the national government can facilitate better access for their communities to funds from the Adaptation fund (AF), the Green Climate Fund (GCF), the Least Developed Countries Fund (LCDF), etc.

6. INTEGRATE DRR AND CCA

The communities driving DRR and CCA approaches in Bangladesh have been operating in institutional silos with little cross-sectional cooperation or collaboration among the ministries. The UNFCCC calls for a combination of approaches that integrates the existing framework of adaptation & risk reduction with that of response and reconstruction. The Comprehensive Risk Management Framework (CRMF) is a series of tools and measures that works to build resilience from the micro level to the macro level building on foundations of sustainable development (Roberts & Pelling, 2018). The framework therefore aims to: (i) empower the vulnerable by reducing the drivers of vulnerability through targeted interventions; (ii) increase participation of the most vulnerable in the planning, implementation and development of tools addressing marginalization and disempowerment of communities; and (iii) utilize risk transfer and risk retention tools such as insurance, microfinance and social safety net programmes at the national level, reducing the burden posed by loss and damage on the most vulnerable.

7. FINANCE LOSS AND DAMAGE

The Government of Bangladesh has formed the Bangladesh Climate Change Trust Fund (BCCTF) of which 1/3 has been allocated to address L&D, but it is not nearly enough to address the range of losses expected in Bangladesh. Financing L&D attributed to climate change is still very limited to national government who can access funds for L&D through regional risk transfer tools, but these are extremely limited. These do not cover slow onset processes, future extreme weather events nor are they affordable for LDCs.

International climate funds provided by the LCDF, AF and GCF etc. provide funding to finance some measures to address loss and damage but the amount of funding provided is inadequate to cover the range of losses suffered. The GCF has agreed to fund a small number of L&D programmes in vulnerable countries but the fund allocated is a drop in the ocean in terms of what is actually needed. Accessing money from the GCF is a lengthy and a complicated process - one that is often beyond the limited resources and skills of many LDC government teams. Moreover, the funds allocated are for specific projects only. L&D finance should also include: (i) funds to build up the technical capacity of local governments to address L&D; and (ii) funds for the creation of a centralized database on climate change.
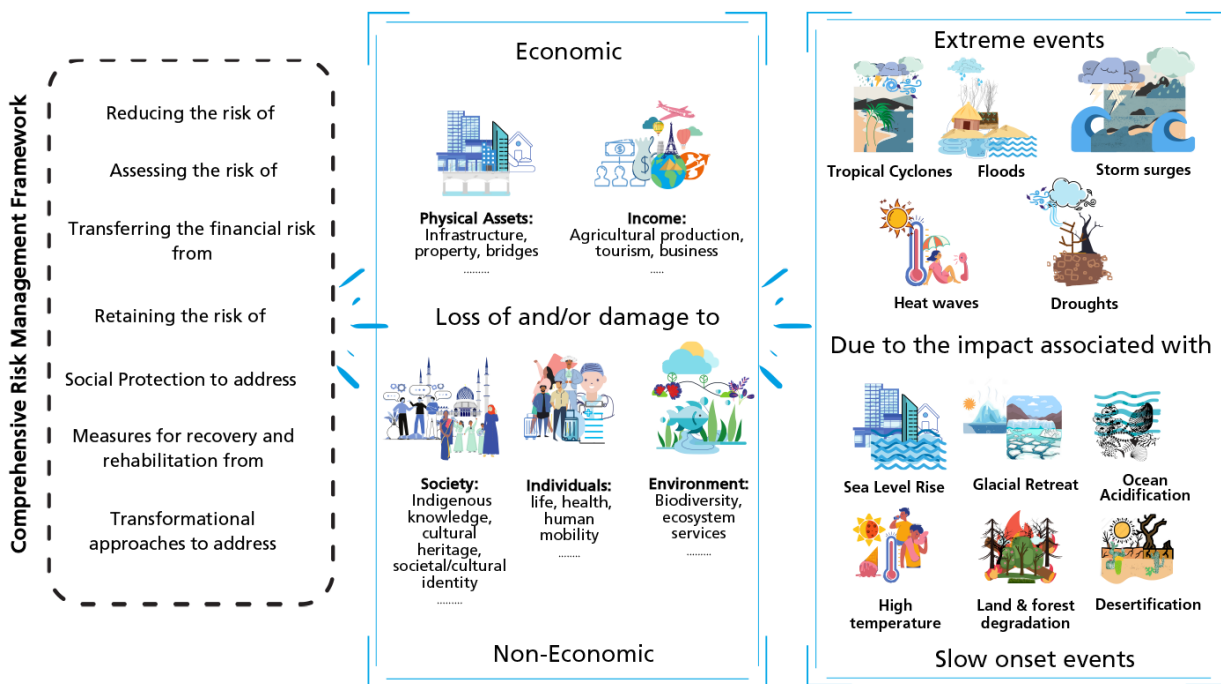

Figure 1:Approaches to addressing loss and damage under the Comprehensive Risk Management Framework.
Source: UNFCCC Technical Paper (UNFCCC, 2019a)

Policy recommendations

To effectively address L&D at the national level policymakers would need to implement actions at multiple levels to ensure sustainable development. Drawing on from the discussions above this section highlights some of the key policy recommendations to address L&D in a holistic and comprehensive manner.

1. CREATE A CENTRALIZED, RELIABLE CLIMATE CHANGE DATABASE, WHICH INCLUDES HYDROMETEOROLOGICAL DATA, PROJECTIONS, AND WARNINGS, AND ALSO ARCHIVES, FOR FURTHER ANALYSIS

National governments, research institutes need to have access to hard technologies such as EWS, geospatial technology, numerical modelling information, flood mapping infrastructure with a greater resolution and accuracy levels to collect data not only during extreme events but also for trends that require a historical time scale often complex and changing e.g., river and coastal morpho dynamic trends.

2. MORE FUNDING FOR LOCAL GOVERNMENTS TO DEVELOP ITS TECHNICAL CAPACITY

In order to make informed decisions local government should have access to more funding to develop their technical capacity in generating socio-economic data at the local level of population, assets, infrastructure, economic activity and how it has historically changed or how it is likely to change in the future.

3. MORE INTER AND TRANSDISCIPLINARY RESEARCH

i) Researchers can partner with local communities in co-producing knowledge and engage with decision makers across all relevant sectors.

ii) Increased funding for research on climate change and L&D more specifically at local universities and research centres from public funding sources, international donors', and private sources to ensure Bangladesh has access to the most current ideas and technologies available globally.

4. IMPROVE THE CAPACITY OF THE GOVERNMENT TO UNDERTAKE INTERNATIONAL AND REGIONAL NEGOTIATIONS ON CLIMATE CHANGE AND LOSS & DAMAGE TO:

i) Influence L&D financing to be based on grants and concessional loans.

ii) Increase the overall funding for L&D through comprehensive risk management frameworks rather than only humanitarian assistance after loss and damage has already been incurred.

iii) Diversify the funding mechanisms going far beyond the status quo, to include new and innovative sources to address L&D.

5. DIVERSIFY THE OPTIONS FOR FUNDING MECHANISMS TO ADDRESS LOSS & DAMAGE

i) Multilateral Development Banks (MDBs) and National development Banks (NDBs) have significant potential to address climate-induced loss and damage (both extreme events and slow onset processes), through Loss and Damage trust funds.

ii) Diversify the means of social protections measures to ensure direct access ex-ante and ex-post to redress for those populations and communities who are most climate vulnerable.

iii) Funding can be obtained through the introduction of an international airline passenger levy and the carbon tax etc.

6. TOOLS AND METHODOLOGIES TO ADDRESS NON-ECONOMIC LOSS & DAMAGES

The current climate-related policy framework lacks specific measures to address loss and damage through a coherent process, especially to loss and damage arising from slow-onset processes and non-economic loss and damage.

In order to address non-economic losses local, regional, and national government need targeted data, over longer time scales to develop policies and plans to avoid and reduce loss and damage ex-ante and address loss and damage ex-post. Situated research methods based on anthropology, archaeology, and critical heritage studies all of which deal with understanding human relationships, societies, and loss, can serve a dual function in communities in minimizing both economic and non-economic loss (Barnett, Tschakert, Head, & Adger, 2016). Through continuous engagement communities have the potential to stimulate collective action, learn new skills and plan for resettlement options. Planning for resettlement and directing resources to it ensuring social networks and social cohesion are maintained can transform perceived losses to something less existentially disconcerting.

Some of the ways in which communities can be supported at the local level include:

i) Improved housing and living condition in climate vulnerable zones

ii) Livelihood protection in ecologically fragile areas and protection of vulnerable socio-economic groups

iii) Monitoring of internal and external migration and providing support for rehabilitation

iv) Improving the education and work skills of migrants and financing of resettlement costs and rehabilitation

Conclusions

Addressing L&D involves multiple sectors and would require close cooperation, collaboration, and communication between government departments, within the multilateral system, and between levels of government. The longer we delay action and support to address loss and damage the more costly it will be for Bangladesh. It is therefore of utmost importance that policymakers mobilize action and support to address loss and damage.

The upcoming COP26 in November 2021 is a critical juncture in the global discussion of how to address loss and damage in vulnerable developing countries, particularly on the topic of financing measures to address loss and damage. The Bangladesh pilot project on the national mechanism on loss and damage has the potential to play an important role in showing possible ways forward to deal with loss and damage both practically in developing countries as well as in global negotiations.

Nikli haor, Kishorganj, Bangladesh, 2017. Photo by Istiakh Ahmed.

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PHOTOS
Photo 1 (cover): Makher Char, Pirojpur, Bangladesh, 2014.
Photo 2: Nikli haor, Kishorganj, Bangladesh, 2017
Photo 3: Makher Char, Pirojpur, Bangladesh, 2014.

Makher Char, Pirojpur, Bangladesh, 2014. Photo by Istiakh Ahmed.

Recasting the disproportionate impacts of climate change extremes (DICE)

DICE focuses on non-economic loss and damage (L&D) caused by climate change, and who it affects, how, why and at what scale. It aims to advance the conceptualisation, measurement and governance aspects of L&D.

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