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**CLIMATE JUSTICE**



Focus: Policy Discourse on Loss & Damage



## **Troubled Journey towards CLIMATE JUSTICE**

**Tackling manifest climate injustice  
in the Loss and Damage negotiations**

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*Vast land area remains unproductive due to salinity ingress; Photo credit: S.M Saify Iqbal, CPRD*

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## ACRONYMS AND ABBREVIATIONS

AOSIS	Alliance of the Small Island States
APA	Ad-hoc Working Group on the Paris Agreement
COP	Conference of the Parties
DoDM	Department of Disaster Management
DMA	Bangladesh Disaster Management Act
ECHO	Humanitarian Aid Services of the European Commission
ExCom	Executive Committee (ExCom)
GCF	Green Climate Fund
GoB	Government of Bangladesh
IDMC	Internal Displacement Monitoring Centre
IOM	International Organization for Migration
IPCC	Intergovernmental Panel on Climate Change
L&D	Loss and Damage
LDC	Least Developed Countries (LDCs)
LDCF	Least Developed Countries Fund
MoDMR	Ministry of Disaster Management and Relief
MoEF	Ministry of Environment and Forests
NDC	Nationally Determined Contribution
NAPA	National Adaptation Programme of Action
NAP	National Adaptation Plan
NECI	National Centers for Environmental Information (NECI)
NELs	Non-Economic Losses
ODA	Official Development Assistance
PA	Paris Agreement
SCCF	Special Climate Change Fund
SCF	Standing Committee on Finance
SBI	Subsidiary Body for Implementation
SBs	Subsidiary Bodies
SFDRR	Sendai Framework on Disaster Risk Reduction
SST	Sea Surface Temperature
TWN	Third World Network
UNGA	United Nations General Assembly
UNEP	United Nations Environment Programme
UNISDR	United Nations International Strategy for Disaster Reduction
UN DESA	United Nations Department of Economic and Social Affairs
UNFCCC	UN Framework Convention on Climate Change
WIM	Warsaw International Mechanism
WEF	World Economic Forum

# Troubled Journey towards Climate Justice: Tackling manifest climate injustice in the loss and damage negotiations

## Executive Summary

Loss and damage (L&D) associated with the adverse impacts of climate change has now become a harsh reality in many parts of the world, especially in the low income developing countries. The consistent rise of global average temperature and inadequate mitigation pledges to limit Earth's average temperature rise well below 2 degree Centigrade from the pre-industrial era would further aggravate the situation causing L&D inevitable and irreversible. There are already many evidences of irreversible L&D resulting from the localized and unusual extreme and slow onset events.

Back in 1991 the Alliance of the Small Island States (AOSIS)-who feared to be drowned by the rise of sea levels-argued for addressing climate change induced L&D; however the UN Framework Convention on Climate Change (UNFCCC) adopted in 1992 didn't formally recognize this. Over the years, the developed country group denied any discussion despite the L&D has started to manifest given the context of feeble mitigation effort and inadequate adaptation support to the developing countries.

Against the persistent demand of the AOSIS and the developing country groups for addressing climate change induced L&D, the developed country group has long been able to hinder any progress in L&D negotiations as they feared to be liable for causing L&D and compensate those.

Over the years, the developed country group not only hindered L&D negotiations but also distracted the entire UNFCCC negotiation process with their structured policy shifting, which caused proliferation of 'manifest climate injustice' to the developing counties.

It is only in 2007, the COP 13 (Conference of the Parties) held in Bali in 2007 included L&D

as an issue for further negotiations, and the COP 16 held in Cancun in 2010 decided to establish a 'Work Programme' for addressing L&D. However, the major progress in L&D negotiations achieved at COP 21 held in Paris in 2015 that included a stand-alone article in the Paris Agreement with the provision of enhanced action and support for addressing L&D on the ground.

While inclusion of a standalone 'loss and damage' Article (Article 8) in the Paris Agreement is being considered a big step forward of correcting 'manifest climate injustice', yet there are major disagreements among the Parties on the key L&D issues, which might cause proliferation of 'manifest climate injustice' putting the climate vulnerable countries under more aggravated L&D situation.

To correct 'manifest climate injustice' this paper analyses the policy shifts of the climate change negotiations, provides an overview how L&D evolved in negotiation process, discusses the current debate and disagreement on L&D emerged in the post Paris COP negotiations, and finally concludes with five policy recommendations directed to the COP and to the national stakeholders.

The recommendations are: a) a standalone L&D agenda item under the SBI, b) a standalone L&D financing mechanism with multiple windows, c) strengthened institutional arrangement-global to national, d) new and additional L&D financing-not blending with the humanitarian assistance, e) separate governance and fund management mechanism under the COP.

The recommended policy positions may also guide the border policy stakeholders and CSOs to advocate for a justice-based response for addressing L&D on the ground.

## Context and Background: L&D in the UNFCCC negotiations

The discussion on L&D was first introduced to the United Nation's General Assembly in 1991, just a year ahead of agreeing the UN's Framework Convention on Climate Change (UNFCCC) at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992. Vanuatu, on behalf of the Alliance of the Small Island States (AOSIS) introduced this with a proposal for an 'International Insurance Pool' as a collective loss sharing scheme to compensate victims of the projected sea-level rise. The AOSIS feared losing of their territories by the predicted sea level rise –the loss that cannot be fully avoided and recovered. Over the years, since 1991, the L&D remained a contentious topic on the argument of the developing country group for 'compensation' from the 'liability' context of the development country group for causing harm. The argument was repeatedly rejected by the developed ones as they feared opening of the floodgates on legal liability (Künzel et al.2017).

Following the repeated arguments from the AOSIS and from other developing countries for L&D compensation, this issue finally entered to the UNFCCC negotiations at COP 13 held in Bali in 2007, however got true momentum since the COP 16 held in Cancun in 2010 that decided to establish a 'Work Programme' on L&D under the Cancun Adaptation Framework (Decision1/CP.16, Para 28).

The corresponding COP decision reads; the Conference of the Parties;

*'decides to hereby establish a work programme in order to consider, including through workshops and expert meetings, as appropriate, approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change; (...).'*

Establishment of the L&D Work Programme at COP 16 and the henceforth COP negotiations delivered several tangible outcomes on the approaches to address L&D. Those COP decisions include; a) agreement at COP 18 held in Doha in 2012 on the role of the Convention

in promoting the implementation of approaches to address L&D associated with the adverse effects of climate change (Decision 3/CP.18, Para 5), b) decision at COP 18 on the establishment of an institutional arrangement, such as an international mechanism, including its functions and modalities (Decision 3/CP.18; Para 9), c) establishment of an institutional mechanism called 'the Warsaw International Mechanism (WIM)' for L&D at COP 19 held in Warsaw in 2013 (Decision 2/CP.19/Para 1), d) decision at COP 19 on the role of the WIM under the Convention with of WIM's major functions, such as enhance knowledge, strengthen dialogue and coordination, enhance action and support including finance, (Decision 2/CP.19/ Para 5) and finally, e) inclusion of a standalone Article (Article 8) for L&D in the Paris Climate Agreement at COP 21 held in Paris in 2015 (Decision 1/CP 21/Paris Agreement/Art 8).

As stated above, the political disagreement of the developed country group on the 'liability and compensation' made constant delays in the L&D negotiations-more than one and a half decade since the COP process started. The relatively sudden progress on some of the core L&D issues since 2010 seems to be surprising. Arguably, such tangible outcomes on a highly contentious and politicized issue were succeeded just not with the moral intention of the developed country group to rescue developing country group from the unjustifiable L&D, rather compromise of the developing country group on 'liability and compensation' eased progress in L&D negotiations. The persistent denial of the developed country group on L&D compensation made the developing countries bound to trade off their long standing compensation demand. At COP 18 held in Doha in 2012 the developing country group swapped 'compensation' for having an 'institutional mechanism' and the 'compensation' was substituted by 'rehabilitation' by the COP decision (Decision 3/CP.18; Para 7/ iv), which reads;

*'....identify and develop appropriate approaches to address loss and damage ....including through risk reduction, risk sharing and risk transfer tools, and approaches to rehabilitate from loss and damage associated with the adverse effects of climate change'..*

At COP 21, the developing country group once again traded-off their compensation demand in

exchange of having a standalone L&D Article in the Paris Climate Agreement. Unlike the COP18, the developed country group at COP 21 explicitly confirmed that the Paris Agreement will not provide any basis for liability or compensation for L&D (Decision, 1/CP.21, para 51). Apart from the liability and compensation, the other achievements such as establishment of the WIM at COP 19 in Warsaw in 2013 and a standalone L&D Article in the Paris Agreement at COP 21 in 2015 in some way raised expectations of the developing countries as those decisions called the Parties to ensure enhanced action and support for addressing L&D on the ground. The corresponding decision of the Paris Agreement reads;

*'Parties should enhance understanding, action and support,... on a cooperative and facilitative basis with respect to loss and damage associated with the adverse effects of climate change'* (Decision 1/CP.21; Paris Agreement/ Article 8/Para 3).

Despite some noteworthy progress at COP 21, negotiations at the post Paris COPs indicate that the developed country group is yet to endorse 'L&D' as one of the key approaches, along with adaptation and mitigation. Although, there are some procedural progress at the post-Paris COPs for instance, enhancing understanding and knowledge, however no significant progress in strategizing action and support for addressing L&D. Both at COP 22 and COP 23 respectively held in Marrakesh in 2016 and in Bonn in 2017 (under the presidency of Fiji), the developing country group was demanding to open-up discussions on 'action and support' at the COP's biannual subsidiary body (SB) meetings as a stand-alone and regular 'L&D' agenda item.

However, the developed country group was in firm position of keeping L&D discussions aside, under the purview of the WIM and its Executive Committee, at least until the WIM review due at COP 25 in 2019. At COP 23, the developed country group was found seemingly afraid of reappearing compensation claim provided that the political position of the developing country group is shaped in a reinforced manner and 'L&D' further gets a breakthrough in the COP process (Die, 2017). At both the COPs, the developed country delegates repeatedly blocked any talks on the way forward of L&D negotiations. Especially at COP 23, the US was reportedly more vocal in the L&D discussions than in any other negotiation room (Lehr, Fuhr and Schalatek, 2017).

Though the COP 23 was publicized as the 'L&D COP', however ended with no considerable progress; no permanent agenda item for implementing 'action and support'; only 'encourages' parties to make available sufficient resources for the operation of the executive committee, and merely "encourages" the executive committee to mobilize and secure finances for L&D (ibid). The only achievement from the COP 23, yet trivial, is the decision of holding an 'expert dialogue' scheduled at the UNFCCC's 48th SB meeting in May 2018. This dialogue is expected to explore the ways of securing L&D finance and inform the outcome to the WIM review due in 2019. Such a bleak outcome raised significant concerns over the 'manifest climate injustice', especially to the low income climate vulnerable countries e.g. LDCs and AOSIS who are now incurring substantial L&D even not contributing to the present day climate induced havocs.

Given the context of such 'manifest climate injustice' and the murky political stand of some of the developed countries in the L&D negotiations, this policy paper provides considerate insights on the context and contentious issues on L&D, also presents a likely policy and institutional architecture from global to national level for addressing L&D on the ground. Such an analysis is believed to shape future discussions on L&D and would tackle climate injustice while agreeing a justice based solutions aligned to the equity principle of the UNFCCC.

## Climate induced L&D: What the policy makers should learn from the ground?

The COP 23 held in Bonn in 2017 was the second COP since the Paris Climate Agreement (PA) adopted at COP 21 in 2015, and was the first COP after the Paris Agreement entered into force in November 2016. As the country Parties agreed to start implementing PA from 2020, hence the negotiations at the post Paris COPs are usually expected to be more technical, with the responsibilities to the country Parties to develop 'Paris Rule Book' (i.e. devising implementation modalities of the PA decisions), to be adopted at COP 24 in 2018. Given the context, the COP 23 was the most transitional and technical one in

relation to finalizing 'Paris Rulebook', designing the 'Facilitative Dialogue' and to take stock on the collective efforts of the Parties. However, with the ever first presidency of an AOSIS member state- the government of Fiji- the COP 23 was also symbolized as the 'L&D COP' as this country group was persistent in pursuing L&D to the UNFCCC negotiations, and was severely affected by several consecutive extreme weather disasters during last few years.

Given the context, the COP 23 was considered not only to progress procedural aspects, but also to respond the growing demand for addressing L&D on the ground. However, the delegates at COP 23 were found seemingly eventful in devising country specific as well as aggregate target of GHG emission reduction, compatible to the global political goal of limiting Earth's average temperature rise well below 2 degree Centigrade by the end of this century from the pre-industrial level. Such efforts by the country Parties are obviously meaningful in the COP's procedural practice, however they are proved no to be so as the Parties so far couldn't undertake any effective emission reduction measures. And the GHG emission continue to rise instead of reversal. Already, the atmospheric concentrations of CO<sub>2</sub> had risen, for the first time in four years, to 403 parts per million, compared with a preindustrial baseline of 280 parts per million (NCEI, 2018).

In contrary to this, the CO<sub>2</sub> storage and sinking capacity of the Earth's natural ecosystems are declining. Ocean, one of the most potential natural systems of offsetting atmospheric CO<sub>2</sub> concentration and Earth's heat content, so far absorbed 30 per cent of the anthropogenically emitted carbon dioxide since the pre-industrial times (IPCC, 2012); also absorbed 93 per cent of the increase in global temperatures between 1971 and 2010 (Levitus et al. 2012). With the consistent rise of global anthropogenic CO<sub>2</sub> concentrations and the consequent global warming will continue causing frequent and intense rough weather events, including in the seas; however, the oceanic heat content as well as CO<sub>2</sub> absorbing capacity may be declining at a certain point of time (Insead, 2016). Worryingly, the other potential natural system e.g. the tropical forests are now releasing rather than absorbing CO<sub>2</sub> (Baccini et al., 2017).

While the Earth's major natural systems are about to be saturated by increased amount of

CO<sub>2</sub> concentrations, the rise of Earth's average temperature will be more obvious and faster unless the country Parties increase their emission reduction commitments and targets. Regrettably, the aggregate national emission reduction targets submitted so far by the countries under their nationally determined contributions (NDCs) is far below from the requirements of limiting temperature rise well below 2 degree Centigrade from the pre-industrial level (the overarching goal of the Paris Agreement). With the current emission reduction targets, the Earth's average temperature rather would shoot-up to 3 degree Centigrade (UNFCCC, 2016a).

Hence, limiting temperature rise has become undeniable both from the binding commitment of the Paris Agreement and from the requirement of stabilizing Earth's natural systems, yet already with 1.1 degree Centigrade temperature rise (WEF, 2018) from the pre-industrial era the Earth has been experiencing numerous incidences of localized extremes like the hottest non-El Niño year, hottest summer, wild fires, cyclones and typhoons, changes in the precipitation leading to early floods or flash floods etc. (ibid).

According to the Global Climate Risk Index (2018), over the years from 1997 and 2016, the direct consequences of more than 11000 extreme events globally caused death of 524 000 people and USD 3.16 trillion economic loss in terms of Purchasing Power Parities (Global Climate Risk Index, 2018). Analysis of the recorded disasters over this 20-year period (1997-2016) ranked Honduras, Haiti and Myanmar as the most affected countries, followed by Nicaragua, the Philippines and Bangladesh. This ranking is attributed considering the aftermath of exceptionally devastating extreme events, such as cyclone Roanu in India, Bangladesh and in Sri Lanka in 2017; category 4 hurricane Matthew and Nicole in Haiti in 2016; extreme drought and tropical storm Dineo in Zimbabwe in 2016; category 5 cyclone Winston in Fiji in 2016; hurricane Sandy in Haiti in 2012; cyclone Nargis in Myanmar in 2008; hurricane Mitch in Honduras in 1998. However, this ranking didn't consider the residual impacts of extreme as well as slow onset events, also didn't consider costs of the non-economic L&D (ibid).

Yet, the Global Climate Risk Index (2018) revealed some interesting findings; for instance,



among the most affected countries, nine belong to the low income or lower middle income country group. Though the rich countries have incurred much higher absolute monetary losses than the low-income countries, but the loss of life, personal hardship and existential threats are much more widespread to the later country group. Again, while the number of deaths caused by the usually occurred extreme events (e.g. tropical cyclone in Bangladesh) seems to be reduced, mainly through the consistent efforts in disaster risk reduction and preparedness, but the prevalence of unusual and localized extreme and slow onset disasters e.g. flashflood, landslide, heat wave, cold wave etc. are on rise and causing unavoidable L&D (including death of people) irrespective of the rich and the poor countries.

All the facts and figures of L&D through out the world demand urgent policy attention and undertaking of required strategies and actions, which should not be considered as an 'all alone' approach, rather should be complementary to other approaches. First, avoiding and minimizing L&D through robust mitigation action; second, minimizing the probability and extent of L&D through undertaking 'ex-ante' measures, such as enhanced adaptation action and comprehensive disaster risk reduction; and third, offsetting L&D incurred from both the sudden and slow onset events and from their residual impacts.

## L&D from the Unusual and Localized Disaster Events

One of the IPCC's special reports in 2012 confirmed that the anthropogenic climate change is triggering magnitude and frequency of the extreme weather events (IPCC, 2012), also causing prevalence of unusual disasters with considerable anomalies both in seasonal and geographical distributions. Certain disasters, for instance, drought, heat waves, cold waves, landslides etc. that once were not usual incidents in some particular geographical areas, are now becoming high-impact disasters causing substantial losses of lives and livelihoods. For instance, Bangladesh, which is globally known as a country of tropical cyclones and monsoon floods are now also being affected by certain unusual disasters to which the country is not prepared at all. Shamsuddoha et.al. (2012) reported that the climate change induced unusual and localized disaster events (both slow and

sudden) are becoming unique and dominant in some particular regions of Bangladesh. A recent study conducted in six agro-ecological and climate change exposed areas of Bangladesh also confirmed changes in the duration and extent of disaster along with the prevalence of new types of disasters (Islam and Shamsuddoha, 2017).

The study revealed that the Northern part of the country, usually prone to drought, are now being affected by late monsoon flood. The active floodplains of the lower Ganges-Brahmaputra-Meghna (GBM) river basin, usually and historically prone to monsoon flood and river erosion, are now being affected by drought. Fog, a common and usual weather event especially in the winter, has now turned to a disaster event as the density and time length of fog has increased causing harm to agriculture and also to the local cottage textile factories (handloom and power loom) in the flood plain regions (ibid).

The likely evidences of occurring unusual disasters are also observed in other countries. For instance, persistent heat wave and drought in South Asia in 2016 affected over 330 million people (CNN, 2017). The record-breaking temperature of 51 degree Centigrade in Rajasthan, India reportedly claimed 1800 lives primarily due to hyperthermia or dehydration (Hindustan Times, 2016). The remarkably high temperature also reported from parts of the southern Europe to eastern and southern Africa, South America, and parts of Russia and China (WEF, 2018). In contrary to this, hypothermia caused by the extreme cold wave claimed lives of 85 people in Chinese Taipei (ibid).

Changes in seasonal and geographical distributions of sudden onset events and associated loss and damages are also reported in many countries. For instance, landslide caused by the torrential rainfall claimed lives of at least 300 people in India in 2016 (Accu Weather, 2016), 152 people in Bangladesh in 2017 (Dhaka Tribune, 2017) while also affecting livelihoods of millions of people. On the other side of the coin, the USA-the present time climate denier- has now been experiencing adversity of almost all weather related extreme events, which include flash floods accompanied with torrential rains, extreme flooding, intense heat wave accompanied by wildfires, and a number of high impact hurricanes and typhoons. In 2017 alone, 16 weather and climate related multi-category, high impact events hit the USA. Each of the disasters

caused billion dollars economic loss, they also killed 362 people along with significant non-economic losses in the impacted areas (NCEI, 2017).

According to the US's National Centers for Environmental Information (NCEI, 2017), the cumulative damage of those 16 events was USD 306.2 billion, which shattered the previous U.S. annual record cost of USD 214.8 billion (CPI-adjusted) caused by the hurricanes Dennis, Katrina, Rita and Wilma in 2005. NCEI also reported rise in the frequency of extreme weather events from the annual average 5.8 events (during 1980 to 2017) to 11.6 events in the last five years from 2013 to 2017. Similarly, a trend analysis on the prevalence of Tropical Cyclones in the Bay of Bengal confirmed rise of rough weather events in the Bay, an annual average from 5.48 to 7.94 resulting from the rise of sea surface temperature by 0.30-0.48°C during the period from 1958 to 2009 (CPRD, 2012). Such rise of the rough weather events, which was unlikely even a few years ago, are directly affecting the only means of livings of 3.5 million coastal fishers (ibid). The prevalence of consecutive rough weather events in the Bay make the fishers bound to abandon fishing trips, incurring not only loss of fishing days (catch) but also loss of complete investment on a trip.

Essentially, addressing of such unusual disasters would require enhanced knowledge,

understanding and support to enable affected communities/countries to minimize L&D resulting from those disasters. The ExCom/WIM's technical expert group on comprehensive risk management approaches could develop a technical report on those unusual disasters, identify gaps in policy and practices and could develop a comprehensive risk management strategy to avert L&D associated with those disaster events.

However, ignoring the need for generating enhanced knowledge on the unusual disasters and undertaking measures to address those, the developed country group at COP 23 referred to the country commitments under the Sendai Framework on Disaster Risk Reduction (SFDRR) of the United Nations International Strategy for Disaster Reduction (UNISDR) where the countries voluntarily agreed to substantially reduce of disaster risk and losses in lives and livelihoods during the period from 2015 to 2030.

The manifestation of such unusual and localized disaster events implies that the existing 'theory' and 'practice' of 'disaster' and 'disaster risk reduction' as outlined by the UNISDR's Disaster Risk Reduction Framework may not be applicable for averting L&D caused by the climate change induced sudden and slow onset disasters. According to the UNISDR;

*'disaster is a serious disruption of the functioning of a community or a society at any scale due to*

### **Loss of Livelihoods by the Frequent and Intense Rough Weather Events: yet they are not disasters!**

This story depicts livelihoods erosion of a marginalized professional group 'the *Jaladas*- slaves of water' who earn their livings from fishing in the Bay of Bengal. In Bangladesh estimated 1.5 million households (3.5 million fishers) directly depend on fishing in the Bay. Most of them are functionally landless and lives below the poverty line. In the recent years, they have been pushed under more poverty situation as the increased number of rough weather events in the Bay of Bengal are reducing their fishing days, and thereby income. This situation is likely to be aggravated further as the 'rough weather events' would continue to increase in number and gravity along with the rise of Sea Surface Temperature-SST. The rise of SST favors development of frequent low pressure system in the Bay, however disfavors the fishers preventing them from fishing. According to the Bangladesh's Standing Orders on Disasters, fishers on fishing the trips must back to the shore or to the sheltered zone if signal number 3 or above is issued. During the period from July to November 2017, at the time of peak fishing season, there were eleven such warnings issued by the concerned authority. Usually a signal period lasts for 5 to 7 days. Hence, the more the signal days, the less the fishing days, so less the income. Those who tried to minimize the 'apparent loss' by defying signals, frequently put their lives at stakes.

Theoretically, a rough weather event cannot be considered as a 'disaster' unless it causes unmanageable devastation. Climate change induced rough weather event in the open sea should not be considered just as a perceptible 'Risk'. It's an ascertained disaster resulting from the climate induced risk that is affecting lives and livelihoods of millions.

*hazardous events interacting with conditions of exposure, vulnerability and capacity*’; and the disaster damage is what *‘that occurs during and immediately after the disaster’*. For instance, rough weather events in the seas may not be considered as disasters because apparently they do not cause serious devastation to the fishers’ community ‘as a whole’ rather affect the individual households putting them under severe poverty situation.

While the UNISDR and its Framework on Disaster Risk Reduction (e.g. the SFDRR) would address the post disaster damages, resulting from the unmanageable extreme events, this may not address the unavoidable and irrecoverable L&D resulting from the slow onset disasters such as sea level rise, salinity ingress, drought, and anomalies in precipitation etc.

Literally, the overlapping mandates of the global policy agendas are worthwhile for undertaking coordinated actions in national level. However,

there are certain limitations also; especially when the complementing global frameworks are conceptualized from different ideological basis, historical perspective and with of differentiated roles and responsibilities. The UNISDR’s Disaster Risk Reduction Framework (currently the SFDRR) has been contextualized from the humanitarian principles and largely by the voluntary actions/response of the countries. In contrary to this, the UNFCCC underscored the historical legacy of injustice by the developed countries on the developing ones, set the basis of actions on equity and in accordance with the common but differentiated responsibilities and respective capabilities of the country Parties.

Hence, referring to SFDRR, with an intention of avoiding historical responsibility is nothing but convenient distraction of the developed countries from their moral obligation- what they have accepted under the core ‘equity’ and ‘polluter pays’ principles of the UNFCCC.

#### **Unusual behavior of usual disasters: early flash flood in the north-east (Haor areas) and late monsoon flood in the northern part of Bangladesh**

The north eastern part of Bangladesh is characterized by its unique geo-physical features of ‘shallow depressions’-termed as ‘Haor’- spread over an area of 25,000 square kilometers. Bounded by the hilly ranges of India – Meghalaya on the north, Tripura and Mizoram on the south, and Assam and Manipur on the east- the Haor ecosystem annually experiences flash flood caused by the heavy rainfall in the upper hilly areas that ultimately discharges in the Haor basins with high velocity through downstream river network. This flood water remain stagnant quite a few months, enriches aquatic resources (e.g. Fisheries), however confines the Haor people to cultivate only a single rice crop ‘Boro’, planted in early January and harvested by April/May.

In 2017, the flash flood in the Haor areas occurred quite early, starting from the late March, and destroyed around 1.58 million tons of nearly-ready-for-harvesting Boro rice, which was 8.3% of the national average of Boro production equivalent to 3.7% of agriculture crop sector gross domestic product-GDP (Sadique & Bari, 2017). In monetary term this loss accounted to USD 662.5 million (ibid). The flash flood also caused loss of 214.57 MT of fish (Nirapad, 2017), 1.1 million cows and buffaloes, 270,000 goats and sheep and 3.2 million ducks and hens (FAO, 2017).

Later this year, in August 2017, the late monsoon flood affected around 8.2 million people living in 32 districts in the North of Bangladesh. This unusual monsoon flood damaged estimated rice production worth of USD 87.5 million to USD 225 million (taking into account the possible replantation costs of the next rice crop)-the figure likely about 0.35%-0.44% of the GDP of FY 2017-18 (Sadique & Bari, 2017). The sudden and complete loss of this rice crop forced Bangladesh to import rice in 2017 though Bangladesh has become a net rice exporting country since several years. While Bangladesh is predominantly exposed to risks of tropical cyclones and monsoon floods, the occurrence of such unfamiliar disaster events eventually establishes the casual link between those weather events and climate change.

For instance, the flashflood in the Haor areas in Bangladesh occurred evidently due to remarkably temperature rise at the upstream. The high temperature settling above 42-degree mark in the central and middle parts of India and the consequent heat-wave formed strong cyclonic circulation over Sub-Himalayan West Bengal and adjoining areas. This circulation brought moisture by the strong winds from the Bay of Bengal towards the Meghalaya and Assam regions. Cooling and condensation of the moisture due to the uplift over the Meghalaya hills caused heavy rainfall over this Meghalaya and Assam region, which resulted to the early flash flood in the *Haor* areas of Bangladesh..

## L&D from the Secondary and Tertiary Risks of Climate Change

The L&D scenario stated in the above chapters only accounted the noticeable economic L&D, mainly resulting from the sudden and extreme disaster events; however the non-economic L&D both from the sudden and slow onset events and their secondary and tertiary risks are not accounted to. While it is relatively convenient to quantify perceptible economic L&D caused by sudden onsets, the real challenge remains in establishing direct causal link between 'climate impacts' and 'non-economic losses, quantifying them and establishing interconnectedness among those losses with their secondary and tertiary risk/ loss category.

The secondary risks include food and water insecurity, spread of certain diseases associated with temperature and precipitation changes, loss of biodiversity, loss of ecosystem services, forced displacement and migration, loss of cultural goods (such as cult and burial sites that cannot be relocated for religious reasons) etc. The tertiary risks include regression in growth and development, widening inequality, competition and conflict in resource use, domestic and international tensions on displacement and migration etc.

Among a few studies that established interconnectedness between climate change impacts and its secondary risks, Kent et.al. (2017) estimated that the heat, drought, and flood events- now one-in twenty chance per decade- will cause a simultaneous failure of maize production in the world's two main growers, China and the United States. Sadique & Bari (2017) estimated loss of 1.58 million tons of nearly-ready-to-harvest Boro rice in about 290,000 ha areas by the early flash flood in Bangladesh in March 2017. The Global Climate Risk Index (2018) reported loss of standing crops and other physical assets caused by heavy rainfall and landside resulting from prolonged monsoon in eastern, western and central India.

The probability of such extreme rainfall and associated flash flood would likely to rise proportionally with the rise of Earth's average temperature. Lehmann et al. (2015) strengthened the scientific link between record breaking

rainfall events since 1980 and concluded that the likelihood of a new extreme rainfall event caused by climate change reached 26 percent in 2010. Blöschl et al. (2017) reported major shifts in the timing of floods due to climate change.

In contrary to the extreme rainfall, the lack of rainfall during the period from 2015 to 2017 hampered crop production in the Pacific countries (Reliefweb, 2017a). Severe drought in the Horn of Africa since 2015 rendered 15 million people food insecure, including 8.5 million in Ethiopia alone (Reliefweb, 2017b). While not discussed so in the global discourses, the significant non-economic loss would probably be the biodiversity loss, be largely due to habitat destruction, practicing monoculture in crop production and also for changes in weather pattern such as rise in temperature and variability in precipitation (WEF, 2018). A recent study in Germany estimated more than 70 per cent of loss in insects over 27 years (Hallmann et al., 2017) posing an impending fear of 'ecological Armageddon' while putting global food security at stake (WEF, 2018).

All these sudden and slow onset events and their secondary and tertiary risks are triggering displacement and migration, both internal and across borders. According to IDMC, each year since 2008 on an average 25.3 million people are newly displaced by disasters (IDMC, 2017); of which roughly 2 million are by the geological hazards and remaining 23.3 million are by the weather related disasters (IOM, 2018).

Among numerous instances of displacement and migration caused by the weather related events, 35 000 in Haiti by hurricane Matthew in 2016; 34,000 in Fiji by cyclone Winston in 2016 (The Weather Channel, 2017), several hundred thousand in Bangladesh by Cyclone Mora in 2017 (Time, 2017), around 2 million from the Horn of Africa due to severe drought induced food shortage (Reliefweb, 2017 b), and more than half a million in Sri Lanka by the indirect impacts like torrential rain, coastal flooding and landslide associated with the impacts of Cyclone Mora in 2017 (IOM, 2017). According to the IDMC, at the end of 2016, globally 31.1 million people were displaced in 125 countries; 76% (24.2 million) of those displacement were triggered by the sudden onset disasters (IDMC, 2017).

The great majority of the displaced people in the world is believed not to migrate across

borders. As anticipated by IOM, the international migrants would be 2.6 per cent of the global population or 230 million by 2050 (IOM, 2003). However, the latest global estimate on international migrants accounted to 244 million, 3.3 per cent of the global population (UN DESA, 2016) that already surpassed the IOM's earlier projection. With the constant rise of international migrants- both numerically and proportionally – the IOM revised its earlier projection estimating 405 million globally by 2050 (IOM, 2010). Such rise of cross border migration may significantly intensify present day migration crisis, also would rise tension between countries. However, it's the migrants who suffer most in either situation- staying with the known risk at the origin or escaping to elsewhere with unknown risks and uncertainties.

Again, in the course of migration the migrants face multi-category loss and damages ranging from the economic loss to non-economic loss, social loss to cultural loss; very often they also suffer from the denial of enjoying basic human rights (CPRD, 2015).

While, some of the L&Ds resulting from the extreme events, for instance, the crop loss by the early flash flood could be averted through enhanced adaptation actions (e.g. developing short maturing rice varieties, changing cropping pattern etc.), but the L&D resulting from the slow onset events such as sea-level rise, salinization of agricultural land, desertification, pest and disease outbreak etc. cannot be averted by the adaptation actions. The adaptation options to those slow onset events do not exist yet- the situation which is defined as the hard limits of adaptation (Klein, et al. 2014).

Among the evidences of the 'hard limits of adaptations,' Rabbani, Rahman and Mainuddin (2013) accounted rice yield loss worth of USD 1.9 million due to salinization of agricultural land in three villages of the South-west Bangladesh; Traore and Owiyo (2013) reported consecutive crop loss due to prolonged drought lasting from 2004 to 2010 in the Burkina Faso. CPRD (2015) reported mass migration from the Southern part of Bangladesh- the cyclone Sidr and Aila affected areas- as the residual impacts of those cyclones e.g. logging of saline water, contamination of drinking water sources and acute crisis of drinking water etc. become a persistent problem forcing people to permanent as well as to cross border migration.

Though the L&D scenario across the world are constantly becoming unavoidable and irreversible, the negotiations on the same is concentrating only on a few 'ex-ante' measures e.g. disaster risk reduction and risk transfer (insurance); however these 'ex-ante' measures cannot avert L&D, only can reduce the magnitude (or possibilities) of L&D before any predictable disaster occurs. With of high confidence, the IPCC warns that;

*....'without additional mitigation efforts beyond those in place today, and even with adaptation, warming by the end of the 21st century will lead to high to very high risk of severe, widespread and irreversible impacts globally (UNFCCC, 2013).*

Though the risk reduction, risk transfer and to some extent risk retention (e.g. through social protection measure) are being considered as the 'all inclusive measures' for addressing L&D but they only could solve part of the problem e.g. reducing the possibilities of L&D mainly from the extreme weather events.

Yet experts (Hirsch, Minninger, & Wiebe, 2017 and Roberts and Zakieldein, 2018) argues that the risk transfer and risk retention measures ( e.g. social protection) can play an important role in addressing L&D. The said measures are potential to avert and offset some of the loss and damages, however they have certain limitations. For instance, a risk insurance scheme will pay back partial cost/value of the damaged asset; hence the scheme is applicable for the products those have monetary value or could be converted to so. The risk insurance will not cover the non-economic losses, also will not serve the poor and landless households living in the most fragile and risk exposed environmental condition as most of them don't have any insurable asset.

Possibly, the social protection measure can play an essential transformative role for overcoming vulnerability in the long term (ibid) and can help the poor and landless households as an 'ex-ante' measure for financing disaster preparedness and coping with the aftermath of a sudden disaster event. However, the social protection measures are usually voluntary national measures, often aligned to globally agreed goals (e.g. sustainable development goals-SDGs) to reduce extreme poverty and inequality.

Paradoxically, climate change impacts will further aggravate poverty and inequality putting more stress on the development activities and

economic growth requiring the affected countries to make additional investments, primarily to make the development activities climate resilient and to minimize poverty gap with the expanded social protection measures.

The increased and incremental investments for the expanded social protection measures, on top of the investments for the climate resilient development, fundamentally will divert country's revenue income and development assistance (ODA) from the essential services- the situation may challenge full realization of sustainable development goals. Eventually, the climate induced irreversible and permanent L&D will irreversibly affect country's strive towards sustainable development and growth if the development efforts are overwhelmed by the climate change impacts (Klein et al. 2017).

## The UNFCCC Negotiation on L&D: Major ideological detraction from the justice and equity principles

L&D associated with the adverse climate change impacts was first conceptualized based on the primary understanding that the global warming will cause ice-sheets melting and the consequent sea level rise. This understanding alarmed the small island states and the coastal countries as

the rise of sea level would grab their national territory. With this understanding, Vanuatu's proposal to the UN General Assembly for an 'International Insurance Pool' demanded mandatory contributions from the industrialized countries based on their ability to pay as well as responsibility of contributing to the climate change through greenhouse gas emission.

However, the Convention only acknowledged (Art 4.8) the need for 'insurance' to address adverse effects of climate change, not specifically to compensate climate induced L&D (UN, 1992).

Presumably, the AOSIS proposal for L&D compensation failed to mobilize adequate support from the other country group, however the Convention put noteworthy importance for addressing the root cause of climate change, i.e. emission reduction, which is affirmed by the overarching objective of the UNFCCC; that reads,

*.....to stabilize emissions at levels and within a timeframe that will allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner' UN (1992).*

Such specific objective made the country parties responsible to stabilize global emission, which ultimately would reduce adaptation



*Forced displacement*

requirement and would avoid L&D. Within two years of the COP negotiations, the country Parties unanimously agreed to a legally binding emission reduction Protocol at the COP 3 held in Kyoto in 1997. The Protocol termed as the 'Kyoto Protocol-KP' came into force in 2005 and made the developed countries listed under 'Annex 1' legally bound to reduce their economy-wide emission reduction by 5.2 percent from their 1990's emission level during the period ranging from 2008 to 2012 (UN, 1998)-the first commitment period of the KP.

Reasonably, the initial years of the COP negotiations put much emphasis on the implementation of the Kyoto Protocol. However, the denial of emissions reduction by the major polluters of the 'Annex I' Parties and, at the same time increasing of emissions by the advanced developing countries have caused rise of atmospheric GHG concentrations, so to the Earth's average temperature. The consistent rise of the Earth's average temperature started causing dramatic increase in the frequency and intensity of disasters, narrowing the options and feasibility to adapt and to recover from the costs and shocks of economic, human, social and cultural losses.

Such observed impacts of climate change, especially to the poor and vulnerable countries, provoked adaptation discussions as a necessary complement to the mitigation. However, adaptation received less attention than mitigation, as Parties requested more certainty of the impacts of, and vulnerability to, climate change before agreeing on concrete adaptation measures. With the publication of the IPCC's Third Assessment Report in 2001, adaptation started to get importance than before as the science established a proven link between 'anthropogenic climate change' and 'the impacts associated with the change'. Hence, to support adaptation actions in the developing countries the COP 7 held in Marrakesh in 2001 established climate funds e.g. the Special Climate Change Fund (SCCF), the Least Developed Countries Fund, (LDCF) under the UNFCCC.

The steady rise of global average temperature, basically due to inaction and delayed action of the developed country group in emission reduction, as well as inadequacy in providing adaptation support put unjustifiable burden to the developing countries with frequent and intense disaster events and associated L&D.

Such a situation reinforced AOSIS demand for 'liability and compensation' supported by the

other country Parties and groups. For instance, at COP 11 held in Montreal in 2005, Bangladesh, on behalf of the LDCs, asked for compensation from the developed countries for changing the climate and causing harm (Earth Negotiation Bulletin, 2005). After the massive destruction caused by Cyclone Sidr (a Category 4 Cyclone) in November 2007, Bangladesh again raised its rightful demand for compensation at COP 13 held in Bali in 2007 (Mukta and Hossain, 2008). Both AOSIS and LDCs came to a common position that the countries responsible for doing harm should be held liable not only to support adaptation actions but also to compensate incurred L&D in the developing countries.

The AOSIS further argued that;

*'[w]here adaptation cannot fully address the impacts of climate change on countries and their communities, impacted countries are justified in seeking compensation from those countries most responsible for the greenhouse gas emissions that have led to those impacts'* (AOSIS, 2007).

With the increased demand for addressing L&D the COP 13 held in Bali in 2007 undertook a L&D specific decision (Decision 1/CP.13/ Bali Action Plan) that reads;

(...) Enhanced action on adaptation including, inter alia, consideration of:

*'disaster reduction strategies and means to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change'*.

According to the Bali Action Plan, the L&D was put under adaptation actions and the measures are considered basically through the management and reduction of risks associated with extreme climate events. The COP 13 also decided to establish another fund for adaptation under the Kyoto Protocol. Those years of negotiations from 2001 to 2007 are marked by the formulation of NAPAs, establishment of the adaptation fund under the Kyoto Protocol and essentially the Bali Action Plan to guide future negotiations.

Inclusion of L&D to the Bali Action Plan provided of legitimacy of the climate induced L&D in the UNFCCC negotiation process. With the provided scope of Bali Action Plan, AOSIS at COP 14 held in Poznan in 2008 put a proposal for a 'Multi-Window Mechanism' for addressing L&D. The proposal included a rehabilitation

and a compensation component as the basis for future negotiations; the other components were risk transfer (insurance) and risk management. AOSIS further put this proposal to their submission for a legally binding agreement that was expected to be agreed at COP15 in Copenhagen in 2009; so did the African country group. The increased support of the LDCs and the African Country Group to the AOSIS proposal resulted establishment of a SBI 'Work Programme' on L&D at COP16 held in Cancun in 2010.

The debate around 'liability and compensation' as an approach of addressing L&D again created heated debate among the Parties. The developed country group, led by the United States, recurrently denied any discussions on compensation and liability. There was also disagreement in defining the role of the Convention in addressing L&D. Developing countries wanted establishment of an international mechanism under the Convention, while the developed country Parties wanted to put all the L&D related issues under the Adaptation Committee and the Cancun Adaptation Framework.

Finally, at COP 18 held in Doha in 2012, developing country Parties traded off their core demand i.e. 'compensation' for having an institutional mechanism, which was established at COP 19 in 2013 as 'Warsaw International Mechanism (WIM)', along with an Executive Committee (ExCom) to oversee WIM's activity and functions. As decided at COP 19, the WIM is established to address loss and damage associated the impacts of climate change in developing countries particularly vulnerable to the adverse effects of climate change (UNFCCC, 2014). The COP 19, by its decision (2/CP.19) also elaborated functions of the WIM, based on which WIM prepared its two-year work plan. The work plan was approved at COP 20 held in Lima in 2014 and concluded by submitting an end report at COP 22 held in Marrakesh in 2016. The function, mandate and institutional structure of WIM also was reviewed at COP 22.

In parallel to WIM's procedural work on the L&D issues, the developing country group at COP 21 held in Paris in 2015 further raised demand for L&D compensation, which didn't sustain eventually. Developing country group once again traded off 'compensation' demand

in exchange of having a standalone Article at the Paris Agreement (Article 8). This time the 'compensation' demand is nailed by the developed countries through the COP Decision that reads

*'that Article 8 of the Agreement does not involve or provide a basis for any liability or compensation'* (Decision 1/CP.21; Para 51), and the word "compensation" is replaced by "action and support."

Though one of the decisions of the COP 21 nullified L&D compensation, the other decision fervently justified, yet controversial, risk transfer measure. By the decision '1/CP.21, Para 48' the COP 21 requested the ExCom;

*'to establish a clearing house for risk transfer to serve as a repository of information on insurance and risk transfer, in order to facilitate the efforts of Parties to develop and implement risk management strategies'* UNFCCC (2016a).

The said clearing house called 'Fiji Clearing House for Risk Transfer' launched at COP 23 in Nov 2017. The dazzling launch of the 'InsuResilience Global Partnership for Climate and Disaster Risk Finance and Insurance Solutions' at the sideline of the COP 23 alerts how the private sector is becoming dominant in 'risk transfer' business. Such undue emphasis on risk transfer measure might shift historical liability and responsibility of the developed country group to the market mechanism, also would privatize of disasters risk reduction measures while also obliging the climate victims to pay out the incurred L&Ds by themselves.

The analysis of the nearly three decades of UNFCCC negotiations, as summerized in the Figure 1, clearly shows its distracted focus from one to another; in the initial years the focus was on mitigation, then shifted to adaptation, and now on loss and damage- as befitted with the interest of the developed countries. However, none of them got adequate political priority as was required to combat global warming. The miserably weak political commitment on the structurally detracted climate agendas not only aggravated the present day climate crisis but also grossly undermined the ideological basis of the Convention that literally is based on the historical legacy of injustice and unfair footprint of the developed countries to the global ecological space.



1992-2000	2001-2007	2008-2014	2015 & onward
<b>Mitigation Major COP Decisions</b> <ul style="list-style-type: none"> <li>Establishment of the UNFCCC with the ultimate objective of emission reduction (Article 2)</li> <li>Koyoto protocol adopted in 1997</li> </ul>	<b>Adaptation Major COP Decisions</b> <ul style="list-style-type: none"> <li>Formulation of NAPA</li> <li>Least Developed County Fund (LDCF)</li> <li>Special Climate Change Fund (SCCF)</li> <li>Adaptation fund under the Kyoto Protocol</li> </ul>	<b>Enhanced Adaptation Major COP Decisions</b> <ul style="list-style-type: none"> <li>Cancun Adaptation Framework</li> <li>Decision on the development of NAPs</li> <li>Work Programme on L &amp; D</li> <li>Establishment of WIM/ExCOM</li> </ul>	<b>Loss &amp; Damage Major COP Decisions</b> <ul style="list-style-type: none"> <li>Global goal to limit temp rise well below 2°C</li> <li>A standalone Article on L &amp; D in the Paris Agreement</li> <li>Decision to enhance action and support for L &amp; D</li> </ul>
Initiatives and commitments for mitigation	Delayed action, lack of mitigation ambition and inadequate resources for adaption actions	Inaction in emission reduction and limited resources for adaptation	Provided that the Paris agreement is implemented in full
Negotiation under the premise of justice Principle of the UNFCCC	Denial of the justice principle of the UNFCCC	Manifest climate Injustice	Correcting manifest Climate injustice

**Figure 1:** UNFCCC negotiations: from the justice to manifest climate injustice; Developed by the authors

## L&D negotiations at the post Paris COPs: A misleading attempt to perish the Paris outcomes

A standalone L&D Article (Article 8) in the Paris Agreement is being considered as a big way forward, however disagreement of some developed countries on the key issues of negotiations, especially on the L&D finance, resulted impasses in the post Paris COP negotiations. With the scope of having Article 8 in the Paris Agreement, the developing country group wanted to institutionalize L&D to the Paris doctrine, however the developed countries favored keeping ‘L&D’ issue aside-meddling with the pre-Paris doctrine such as WIM and its Work Plan. Referring to the COP 21 decision on enhanced ‘action and support’ and quoting the already incurred L&D around the world, the developing country group at COP 22 in 2016 demanded dedicated financial recourses, which was opposed by the developed country group and refused any discussion on L&D finance until the

WIM review in 2019. Debate on L&D finance become more intense at COP 23. Under the presidency of Fiji-that suffered USD 1.4 billion loss by an ever strongest full-on cyclone Winston in early 2016- the COP 23 amplified voices of the small island nation states, also put a moral weight on L&D negotiations especially on the provision of L&D finance.

According to TWN (2017), the developing countries namely the Bahamas, Cuba, Group of LDCs and AOSIS raised their concerns on the WIM’s budgetary constraints and proposed a financing provision from the Secretariat’s core budget. They also proposed the WIM becoming a permanent agenda item of the subsidiary bodies of the COP negotiations. The developed country group opposed those proposals with their procedural response: such as-budget issues belong to the budget consultations; resources are more than finance; and a WIM standing agenda item might inhibit the progress already made by the ExCom. In contrary to this, the developing country group termed the WIM not a mechanism in true sense, only playing a facilitating role in developing tools for action.

Again, while the developing country group was arguing for a permanent agenda item under the SBI and the Paris Agreement, a few of the developed countries namely Australia and the USA were found insistent keeping L&D under the mandate of Cancun Adaptation Framework and asked developing countries to include measures for addressing L&D to their National Adaptation Plans (NAPs) that the developing countries will be preparing by next few years. Such a misleading proposition disregards the theoretical understanding of L&D that refers people's incompatibility to adapt (Warner et al. 2012). Also would perish the Paris outcome that functionally established 'loss and damage' as one of the standalone approaches while untying with adaptation.

Given those points of disagreement, the COP 23 finally didn't include any permanent agenda item for L&D, especially on 'action and support'. However requested the Secretariat, under the guidance of the ExCom and the SBI Chair, to organize an expert dialogue in parallel to 48th SBI meeting in May 2018. The aim of this expert dialogue would be securing of expertise, and enhancement of support, including finance, technology and capacity building.

The COP 23 outcome on L&D was just reiteration of earlier issues; knowledge generation, WIM review and its strengthening, development of technical papers etc. Moreover, discussion at COP 23 surfaced the old debate and suspicion on the 'theoretical perspective' of L&D and associated financing.

## Addressing L&D on the Ground: Recommendations for correcting manifest climate injustice

As discussed above, since adoption of the Paris Agreement at COP 21 in 2015, many of the previously debated issues started to arise in the subsequent COP negotiations. Yet there are achievements; some are procedural while less significant, and some are political while more significant. Decision for holding an expert dialogue during the UNFCCC's 48th SB meeting in May 2018 and establishing a national L&D Contact Point are procedural, but the more significant achievement is the strong political

coherence of the LDCs and AOSIS established in the process of negotiations at the post Paris COPS. The other significant dynamics of the COP process, especially observed at COP 23, is the strong presence of 'non-state actors' who just not chased the government's delegates but also challenged them with new research findings, solutions and commitments for establishing climate justice.

Those achievements might not so noticeable, yet achieving such progress in the procedural miniature and political polarization of multilateral climate policy should not be undermined as these could be referenced from now on in the future rounds of negotiations (Die, 2017). Based on the achievements so far, and considering the growing need for addressing climate induced L&D, this chapter presents five specific recommends to be considered at the forthcoming COP negotiations as well in the national policy processes to effectively address L&D on the ground.

### A standalone L&D agenda item under the SBI

In the COP negotiations, L&D was legitimately introduced at COP 13 in 2007 (Decision 1/CP.13/ Bali Action Plan), then included as a SBI agenda item at COP 16 with a decision of establishing a 'Work Programme' to identify feasible approaches to address climate induced loss and damage (Decision 1/CP.16 para 26, 27, 28).

However, with the growing evidences of 'hard limits of adaption' this has been made clear that existing adaptation options are no more adequate to avert climate induced L&D. Moreover, not all climate change impacts can be successfully adapted to, be it due to financial, technical or physical constraints (Künzel, et al.2017). Finally, the Paris Agreement made a clear distinction between 'Adaptation' and "Loss and Damage" placing them under separate Articles; Article 7 for adaptation and Article 8 for loss and damage.

Understandably, the effective implementation of emission reduction and adaptation strategies essentially will reduce potential risks of L&D and vice-versa. Even though, the L&D specific strategies and measures are required to offset incurred L&D, particularly in the climate vulnerable developing countries.

Hence, according to the decisions made under the Paris Agreement, the global policy

stakeholders should give immediate attention for addressing L&D unless the situation becomes entirely irreversible. So far, the two approaches of addressing climate change e.g. mitigation and adaptation have been streamlined or so with their global goals, required national strategies with identified measures and targets, financing mechanism etc. Similar to mitigation and adaptation, L&D also requires very specific national and international measures aligning to the decisions of the COP negotiations.

And, this would be possible if country Parties i) include L&D as a standalone and regular agenda item in the COP negotiations, ii) include L&D in the Paris Rule Book, iii) establish a dedicated L&D financing mechanism and, iv) facilitate enhanced action and support for strengthening national institutions and mechanism.

Figure 2 shows the approaches for all three pillars that would contribute implementation of the Paris Climate Agreement in a comprehensive and justifiable manner.

### Strengthened institutional arrangement-global to national

With the establishment of the WIM at COP19, the L&D has so far been institutionalized in

the global climate change regime. A typical governance mechanism also has been established under the authority of the COP that has constituted a Party based representational body called 'Executive Committee (ExCom) mandated to guide and oversee WIM's functions and activities. (UNFCCC, 2015). Given such mandates, the ExCom meantime has established an expert group on non-economic losses (NELs), a technical expert group on comprehensive risk management approaches, and a task force on displacement.

On institutional and technical aspects, the ExCom also made some progress, which include; a) completed its two-year work plan, b) developed five-year rolling work plan (2017-2021), approved at COP 23 in 2017, c) established Fiji Clearinghouse for Risk Transfer at COP 23.

In parallel to WIM/ExCom's procedural work, the importance of addressing L&D is also being increasingly raised in the discussions under the Ad-hoc Working Group on the Paris Agreement (APA), also in the global stock take discussions.

While the COP negotiations on L&D have been consistently shaping-up, the national policy process and response mechanisms are yet to ready to undertake appropriate measures and

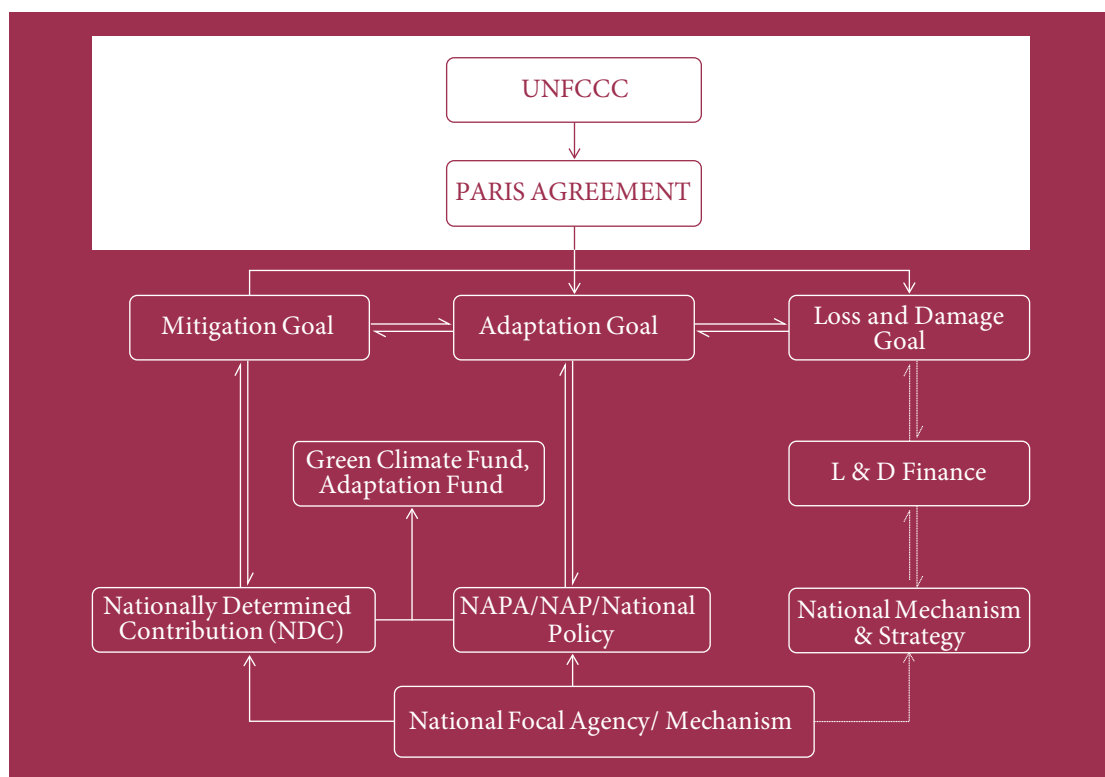


Figure 2: Approaches and pillars under the Paris Agreement: post 2020 scenario; Developed by the authors

actions-where they are most needed. Realizing the importance of strengthening national mechanism, the COP 23 by its decision (Decision 5/CP.23) requested Parties to establish a L&D contact point to actively engage in the work of the WIM and its ExCom. As per 'roles of business' country's national focal point to the UNFCCC will nominate L&D contact point, reasonably from the national agencies/ministries that has institutional mandate and expertise to deal with the loss and damages resulting from the climate change induced sudden and slow onset events.

For instance, in Bangladesh, the Ministry of Environment and Forests (MoEF) serves as the focal point/ ministry to the UNFCCC. The MoEF has several agencies and departments to implement its mandate of environmental and natural resource management, however they are not mandated to undertake measures for disaster risk reduction as well as addressing L&D. It's the Ministry of Disaster Management and Relief (MoDMR) that serves as the focal

ministry for implementing DRR policies, and its allied department 'Department of Disaster Management -DoDM' is responsible for coordinating national disaster management efforts across all agencies down to the ground (GoB, 2010).

According to the mandate and expertise, the DoDM could be the appropriate national contact agency (for Bangladesh) for L&D to the UNFCCC, however a coordinated institutional mechanism with other national agencies/ ministries is also required to mainstream L&D into national as well as sectorial policies and plans. Already a likely national mechanism is in place with the Planning Commission to integrate climate change into the Annual Development Programme and the Economic Relations Division (under the Ministry of Finance) to facilitate access to the climate finance. The Planning Commission prepares five year plans (FYPs) through multi-sectoral input-output models, makes macro-economic projections and sets output targets for sectoral activity at different

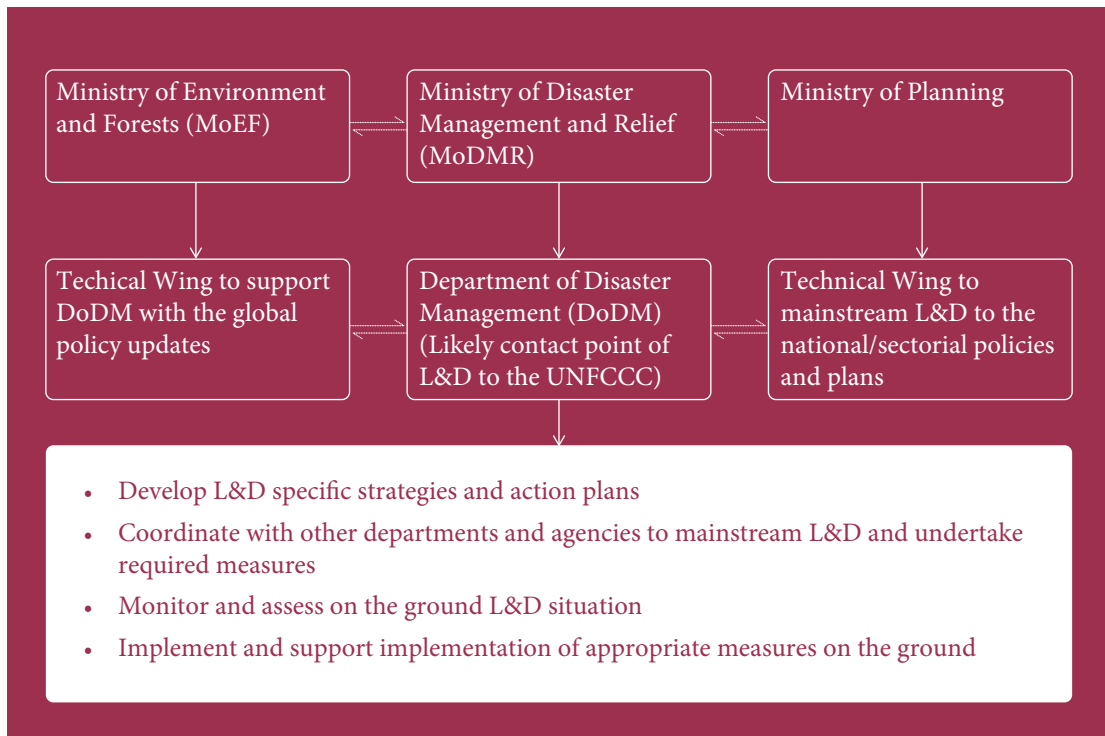
#### Department of Disaster Management (DoDM): its mandate and expertise on DRR and L&D

In Bangladesh, the Ministry of Disaster Management and Relief (MoDMR) and its allied department 'Department of Disaster Management (DoDM)' oversee and coordinate all activities related to 'disaster risk reduction' and 'disaster response' from national level to down to the ground. The MoDMR is also responsible to mainstream measures for disaster risk reduction (DRR) into sectorial policies, plans and programmes of other ministries and departments. While the MoDMR has been mandated primarily to undertake national risk reduction programmes, however, the ministry constantly reforms its mandate and response measures based on the country commitments to the global frameworks and on the ground requirements.

The recently adopted 'Disaster Management Act 2012' of Bangladesh (DMA) drives such reform to the mandate and activities of the Ministry of Disaster Management and Relief (MoDMR), as the Act recognizes climate change induced loss and damage within the ambit of disaster risk reduction. The Act expanded the scope of disaster response, which now includes both natural and man made disasters (disasters associated with climate change). The Act also puts due emphasis on the post disaster rehabilitation measures such as income generation through livelihoods support, infrastructure restoration, provision of need-based resettlement and planned relocation for the disaster affected people (DMA 2012)

Hence, the Act gives clear mandate to the MoDMR and its allied department (e.g. DoDM) to assess, minimize and avert climate change induced L&D. The Act also mandated the DoDM to set up an institutional mechanism to respond to the disasters, reduce vulnerabilities, undertake actions and measures for post disaster rehabilitation and provide humanitarian assistance to the victims of both disasters and climate change (ibid).

With this mandate, the DMA already established a Disaster Management Fund to support disaster management efforts, and established a National Disaster Management Council to formulate required policy, strategy and implementation guideline for addressing both natural and climate change induced disasters.



*Figure 3: Likely institutional setting for addressing L&D in Bangladesh; Developed by the authors*

time-frames. With the first FYP in 1973, the Planning Commission has completed the seventh five year plan (7FYP) for the period from 2016 to 2020.

On the other hand the Economic Relations Division of the Ministry of Finance serves as the National Designated Authority (NDA) to the Green Climate Fund (GCF) and facilitate access to the GCF through the national implementing entities (NIEs) and the multi-lateral implementing entities (MIEs).

Based on the mandate, function and expertise of the existing ministries/ agencies, figure 3 presents a likely institutional setting for establishing a national mechanism for addressing L&D in Bangladesh.

### A standalone L&D financing mechanism with multiple windows

The COP 23 experienced an intense debate on L&D financing, which might become more intense in the upcoming COPs. Despite the decision (Decision 2/ CP.19) for mobilizing L&D finances by the WIM, and reinforcing the same i.e. enhanced action and support by the Paris Agreement, currently there is no recognized financing mechanism or entity to support

measures to avert and offset respectively the perceptible and the incurred L&D.

Studies indicate that by mid-century, the global L&D costs may exceed USD1 trillion per year, with developing countries shouldering the majority of the burden. Climate Analytics (2015) estimated climate change induced economic loss annually USD 428 billion and USD 1.67 trillion respectively by 2030 and 2050 with 3 degree Centigrade rise in global average temperature. UNEP (2014) estimated adaptation and L&D cost annually USD 50 billion and USD 100 billion only in the LDCs by 2030 and 2050.

Even with the effective adaptation, UNEP (2015) estimated annual L&D costs USD100 billion and USD 200 billion by 2050 for Africa alone with average temperature rise respectively at below 2 degree Centigrade and at the trail to 4 degree Centigrade. Against the projections above, the current pledges to the existing funding entities are rather meager; only several hundred million to the Adaptation Fund and around 10.3 billion to the Green Climate Fund. However both the financing mechanisms are to support mitigation and adaptation activities only.

As the Paris Agreement clearly makes a distinction between adaptation (Article 7) and

L&D (Article 8) therefore, L&D must be seen as separate and distinct from adaptation finance and in addition to the existing commitment of mobilizing USD100 billion in each year from 2020 for adaptation and mitigation.

Again, considering the nature of the response measures (e.g. risk reduction, risk transfer, social protection and offsetting the incurred risk) the L&D financing mechanism should be comprised with several windows.

## New and additional L&D financing, not blending with the humanitarian assistance

While the COP 23 failed to raise any hope for establishing L&D financing mechanism, it fueled another debate on the addition of L&D finance. As argued by the developed country group, they are already supporting countries in need through humanitarian assistance, which is in other way L&D financing. In fact, the Humanitarian Assistance (as it is called so) is completely different from any climate related finance, not only from their differentiated nature but also from the context of establishing the funds. By nature, humanitarian assistance is voluntary relief (mostly in the form of goods and services) provided to the people in crisis e.g. disaster. A country in dire humanitarian crisis may request for assistance however other countries are not obliged to respond to the request. Hence, from the climate justice perspective 'L&D finance' should not be considered as relief assistance, rather it's an obligation of the rich countries to provide new and additional resources.

Counting humanitarian assistance as L&D finance essentially may also will undermine the very basic criteria of climate finance e.g. new, addition to the ODA, not tying with any conditionality etc.

## Separate governance and fund management mechanism under the COP

On channeling L&D finance, the developed country group proposed ECHO, the Humanitarian Aid Services of the European Commission to channel finances to the

developing countries. The Standing Committee on Finance (SCF) to the UNFCCC reported that the Green Climate Fund (GCF) could play a role in supporting financial approaches to address loss and damage (UNFCCC, 2016 b). Mandate of ECHO is just not addressing climate change rather to provide aid during core humanitarian and civil crises. On the other hand, the GCF already turned similar to a traditional multilateral bank; less amount of grants, mandatory co-financing from the recipient countries, senior loans, subordinate loans etc. Such complexity of accessing to the GCF's funding mechanisms may not be helpful meeting urgent and need based funding requirements for addressing L&D on the ground.

Therefore, it would be useful to keep the governance mechanism of LD finance separated from the other funding body/institution. The L&D finance could be administered helpfully under the direct guidance and the authority of the COP.

## Concluding Remarks

Compared to mitigation and adaptation, L&D is relatively lately inclusion to the COP negotiations. With the growing evidences of 'climate injustice' to the developing countries- as discussed in this policy paper-L&D attracted utmost priority and finally got the status of a standalone agenda item in the Paris Agreement. However, the impasses of the L&D negotiations in the post Paris COPs symbolizes that the inclusion of L&D in the Paris Agreement was not to correct the 'manifest climate injustice' rather to appease collective argument of the developing country group-supported by the global CSOs.

If the country Parties and the other relevant policy stakeholders fail to ensure full implementation of the Paris Agreement encompassing its all three stand-alone, yet complementary, approaches then situation would continue 'proliferation of climate injustice' in the developing countries.

Hence, the Paris Agreement should be implemented in full for ensuring 'climate justice', this should not be overlooked only from the conservative and nationalistic standpoints of the developed country group.

## Notes

### Alliance of the Small Island States (AOSIS)

Established in 1990 under the leadership of the Maldives and Trinidad and Tobago at the Second World Climate Conference in Geneva, AOSIS has been one of the most active regional groupings under the UNFCCC. The alliance comprises 39 members and 5 observers, grouping low-lying coastal and small island countries located in the Atlantic, Pacific and Indian Oceans. Most of AOSIS members are also part of the G-77 and China.

### Warsaw International Mechanism (WIM)

The COP 19 held in Warsaw in 2013 established the Warsaw International Mechanism to address L&D associated with climate change impacts, including extreme events and slow onset events, in vulnerable developing countries (Decision 2/CP.19). The Mechanism aims at : i) enhancing knowledge and understanding of comprehensive risk management approaches to address L&D; ii) strengthening dialogue, coordination, coherence and synergies among relevant stakeholders; iii) enhancing action and support, including finance, technology and capacity-building.

### Executive Committee of the WIM

Along with the establishment of the WIM, the COP 19 established an Executive Committee to guide and oversee functions and activities on WIM. According to the decision (23/CP.18) at COP 18 in 2012 the ExCom shall be composed of the following, taking into account the goal of gender balance; (a) Ten members from Annex I Parties; (b) Ten members from non-Annex I Parties, comprising two members from the African States, two members from the Asia-Pacific States, two members from the Latin American and Caribbean States, one member from the Small Island Developing States, one member from the Least Developed Country Parties, and two additional members from non-Annex I Parties.

### Paris Rule Book

The Paris Agreement's "rule book" is aimed to create the rules and processes which are needed to provide the operational guidance for fulfilling the goal of the Agreement and providing clarity on countries' efforts to reach the global goal to limit the temperature rise well below 2 degree centigrade.

The 'rule book' will include details on several topics: a) how countries will communicate their efforts with regards to adaptation, climate finance, transfer of technology and capacity building, and how they will be held accountable for their commitments; b) how collective efforts will be reviewed, leading to scaled-up actions and support every five years; and c) how to create a process to facilitate implementation and promote compliance.

### Global Stock Take

The Paris Agreement establishes a Global Stock Take to facilitate a periodic review of parties' collective progress towards achieving global climate change goal of limiting the Earth's average temperature rise well below 2 degree Centigrade from the pre-industrial level. Under the Paris Agreement, the first global stocktake will happen in 2023. This will assess whether the net result of the climate actions being taken under the 'nationally determined contributions' (NDCs) are consistent with the goal.

### Facilitative Dialogue

The Facilitative Dialogue is a process to ensure that the country commitments made under the Paris Agreement are implemented in an effective manner. This is also to encourage parties to strengthen their ambition over time. The process begins at COP 23 and will take stock of the progress that has been made and the actions that are still needed to achieve the goals of the Paris Agreement.

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*Struggle for collecting drinking water; Photo credit: Mr Joyanta Ghosh, CCDB*

## Challenging Manifest Injustice

‘This is evident enough in our day-to-day life, with inequalities or subjugations from which we may suffer and we have good reason to resent, but it also applies to more widespread diagnoses on injustice in the wider world in which we live. It is fair to assume that Parisians would not have stormed the Bastille, Gandhi would not have challenged the empire on which the sun used not to set, and Martin Luther King would not have fought white supremacy in ‘the land of the free’ and the home of the brave, without their sense of manifest injustices that could be overcome.

*Amartya Sen, Winner of the Nobel Prize in Economics in ‘The Idea of Justice’,*

As argued in this policy paper, the present day climate crisis has been instituted through the chronological legacy of injustice to the poor countries by the developed ones, and by their unfair footprint on the global ecological space. Such ‘manifest injustice’ may not be battled (as cited above from Sen) in this ‘neoliberal economic theory’ dominated world where wealth-power dominates political will, yet we can mobilize peoples’ opinion for justice; may be not with an aim of having a perfectly just world but for a fairer world. Why shouldn’t we try to establish a just and fairer world with climate justice to the extent we can.

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