

Table of Contents

FOREWORD	3
INTRODUCTION	4
I. BACKGROUND	5
II. THE SCIENCE OF LOSS AND DAMAGE	5
III. THE IMPORTANCE OF ANCHORING LOSS AND DAMAGE IN ENHANCED NDCS	6
IV. RECOMMENDATIONS ON ANCHORING LOSS AND DAMAGE IN NDCS	7
1. LOSS AND DAMAGE IN THE NATIONAL CONTEXT	8
2. CURRENT AND PROJECTED POTENTIAL LOSS AND DAMAGE	8
3. ONGOING RESPONSE EFFORTS TO LOSS AND DAMAGE	8
4. SUGGESTED LOSS AND DAMAGE CONTRIBUTIONS (TARGETS) IN NDCS	9

Authors:

Sandeep Chamling Rai (WWF International Climate & Energy) and Sunil Acharya (Practical Action).

Contributors

Colin McQuistan (Practical Action), Fernanda Viana De Carvalho (WWF International Climate & Energy), Harjeet Singh (ActionAid International), Laura Schafer (Germanwatch), Lisa Plattner (WWF-Austria), Mandy Jean Woods (WWF International Climate & Energy), Oscar Javier Guevara (WWF-Colombia), Sabrina Marquant (CARE Netherlands), Sven Harmeling (CARE International), Sadie DeCoste (Climate Action Network) and Ugan Manandhar (WWF-Myanmar)

About WWF

WWF is an independent conservation organization, with over 30 million followers and a global network active in nearly 100 countries. Our mission is to stop the degradation of the planet's natural environment and to build a future in which people live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption. Find out more at panda.org/climateenergy

About Practical Action

Practical Action is an international development organization that puts ingenious ideas to work so people in poverty can change their world. We help people find solutions to some of the world's toughest problems – made worse by catastrophic climate change and persistent gender inequality. We're working in communities in Africa, Asia and Latin America. Additionally, our technical consulting experts work in many more countries, our publishing arm sells globally and our Practical Answers technical information service is available in many languages to anyone with access to the internet. Find out more at practicalaction.org

Publication date: October 2020

Design by 1tightship.co.za

Copyright © 2020 World Wide Fund For Nature (formerly World Wildlife Fund), Rue Mauverney 28, 1196 Gland, Switzerland – Tel. +41 22 364 9111 and Practical Action, The Robbins Building, 25 Albert Street, Rugby CV21 2SD, United Kingdom – Tel. +44 1926 634 400. Any reproduction in full or in part must mention the title and credit the above-mentioned publishers as copyright owners.

Front cover photography: Denis Onyodi: IFRC/DRK/Climate Centre

Back cover photography: © Katiekk / Shutterstock

FOREWORD

According to the Intergovernmental Panel on Climate Change (IPCC), human activities are estimated to already have caused 1.0°C of global warming above pre-industrial levels. Now this may not seem much, but this is already causing unprecedented climate impacts, especially in developing countries, placing people and nature at greater risk. Current climate plans are nowhere near ambitious enough to keep temperatures to 1.5°C above the pre-industrial level as recommended by science, and right now according to recent studies, we are heading towards at least 3°C of warming by 2100.

The consequence of this collective failure is that both the speed and intensity of climate change impacts are increasing at a dangerous rate. In many places adaptation and mitigation efforts have been too little and too late, with people and nature facing irreversible impacts. 'Loss and damage' results when climate change impacts exceed our capacity to respond. Loss and damage is accelerating, and the consequences of this are captured in the recent *IPCC Special Report on Global Warming of 1.5°C* and subsequent special reports on *Climate Change and Land and Ocean* and *Cryosphere in a Changing Climate*.

The year 2020 is a key milestone, as countries are revising their climate action plans - known as Nationally Determined Contributions (NDCs) - to be submitted to the UN Climate Change Secretariat on or before 31 December, 2020. Now is the best opportunity to ensure loss and damage is included as a core component of these national plans. At the very least loss and damage needs to be recognised as an indicator of progress on climate action, with the scale of loss and damage decreasing as our efforts to mitigate and adapt are ramped up.

Currently, there is no formal guidance on how to incorporate loss and damage in the NDCs. This policy brief provides guidance to countries and other interested stakeholders on how to include loss and damage in their respective NDCs, outlining four simple steps to integrate loss and damage into their climate plans.

Safeguarding people and nature from the impacts of climate change requires collective action from all countries and stakeholders. We are at a pivotal moment, we need to unite to address the climate crisis; to reverse loss and damage we must act now.

Mull

Manuel Pulgar-VidalGlobal Lead
WWF International Climate & Energy

M

Paul Smith Lomas, MBE Chief Executive Officer Practical Action

INTRODUCTION

In the context of escalating climate impacts, cutting down greenhouse gas emissions and measures to adapt against climate change will not be sufficient.

Some negative impacts are already locked in the climate system, and losses and damages are now unavoidable. The inevitable consequences of human induced climate change are known as 'loss and damage'. This is considered the 'third pillar' of climate action along with mitigation and adaptation.

There are broadly two event types, which result in loss and damage:

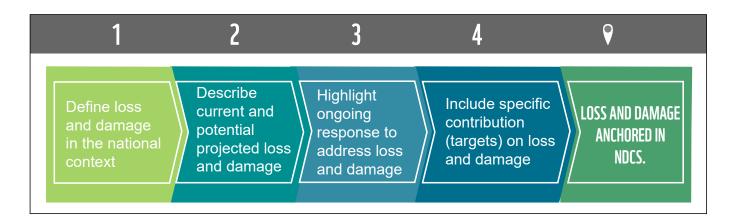
- (i) Extreme events, e.g. floods, cyclones, drought, heatwaves and storm surge; and
- (ii) Slow onset events, e.g. sea-level rise, ocean acidification, glacial retreat, land degradation, biodiversity loss, and/or desertification.

Addressing loss and damage is vital for people and nature at risk, and must not remain isolated from broader climate action. Anchoring loss and damage in NDCs provides the necessary attention to deliver policies and measures that drives climate actions at the national level to safeguard people and nature, and to achieve the long-term goals of the Paris Agreement.

It must be recognized that achieving reductions in greenhouse gas emissions serves as a clear indicator of progress in delivering on the Paris Agreement goals, so escalating losses and damages are a clear indicator of failure. This is the backdrop against which losses and damages need to be understood in order to drive action to implement the required corrective measures.

Ultimately, integrating loss and damage in the NDCs can be instrumental in mobilizing increasing ambition to implement the Paris Agreement. In addition, as loss and damage is comparatively a new issue, it has not been integrated at the national level planning and response. There is a need to link it with the NDC enhancement process to include it as part of holistic climate action.

Four Recommendations on Anchoring Loss and Damage in NDCs



I. BACKGROUND

Countries are reviewing and updating their NDCs¹ to be communicated to the UN Climate Change Secretariat by the end of 2020. These updated NDCs will inform the nature, scope, and focus of future global climate action.

This policy brief makes the case for anchoring loss and damage in the NDCs, and is intended to help governments do so in the context of their NDC enhancement processes for holistic climate action². The brief outlines four practical elements that can be considered during the process of reporting on current and future loss and damage, and the associated support needs.

What are NDCs?

Nationally Determined Contributions, or NDCs, are climate action plans and emission reduction targets of Parties to the Paris Agreement as communicated to the UN Climate Change Secretariat.

NDCs are expected to describe targets and policies for emissions reduction, adaptation plans, finance needs and commitments, loss and damage needs and actions, and other measures.

NDCs are vehicles to achieve the long-term goals of the Paris Agreement which are:

- reduce emissions to limit temperature rise to well below 2°C aiming to limit to 1.5°C above a pre-industrial level;
- · increase the ability to adapt to adverse impacts and build resilience; and
- · making finance flows consistent with pathways to low emission and climate-resilient.

II. THE SCIENCE OF LOSS AND DAMAGE

The Intergovernmental Panel on Climate Change (IPCC, 2014)³ reports have synthesized emerging scientific evidence on residual risks (despite the best efforts on adaptation to climate change impacts), limits to adaptation, and resulting loss and damage.

The Fifth Assessment Report (AR5) of the IPCC (2014) recognized that there will be barriers — biophysical, institutional, financial, social, and cultural — that can result in soft and hard limits to adaptation. Soft limits are exceeded when technological and socioeconomic options are not available to avoid risks through adaptation. Hard limits are exceeded when adaptation actions are unable to respond to the risks and, as a result, impacts become unavoidable.

The *IPCC Special Report on Global Warming of 1.5°C* (2018)⁴ provides robust evidence on the limits for systems, sectors and regions, including for different temperature scenarios. Some of the projected irreversible losses (hard limits) include up to 90 per cent of tropical coral reefs loss by mid-century under 1.5°C warming, and nearly total loss under the 2°C scenario; many irreversible losses of biodiversity; and sea-level rise combined with increased aridity and decreased freshwater availability rendering several small atoll islands uninhabitable. Examples of soft limits include populations driven into poverty traps due to climate-induced shocks, heatwaves affecting megacity dwellers, and coastal livelihoods rendered unsustainable in low-lying islands and along coastlines. Depending on the context, some soft limits may become hard limits if exposed populations have no means in time and space to move, which is particularly the case when intangible types of harm are considered.

The IPCC Special Reports on *Climate Change and Land and Ocean and Cryosphere in a Changing Climate* also report on limits to adaptation and loss and damage. Examples from the reports suggest that climate change-driven ocean and cryosphere changes will make some island nations uninhabitable⁵.

 $^{1\ \} https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement/nationally-determined-contributions-ndcs$

 $^{2 \}quad See \ WWF's \ checklist. thtps://wwfeu.awsassets.panda.org/downloads/wwf_ndcs_we_want_checklist.pdf \ on \ \#NDCsWeWant \ panda.org/ndcs_we_want_checklist.pdf \ on \ \#NDCsWeWant \ panda$

³ https://www.ipcc.ch/report/ar5/syr/

⁴ https://www.ipcc.ch/sr15/

⁵ https://link.springer.com/article/10.1007/s11625-020-00807-9#Ack1

III. THE IMPORTANCE OF ANCHORING LOSS AND DAMAGE IN ENHANCED NDCS

Climate change is causing impacts on both human and natural systems.

They manifest in the form of extreme weather events as well as slow-onset events. These impacts result in both economic and non-economic losses to human societies and ecosystems. Ultimately, their primary cause are the greenhouse gas emissions associated with the use of fossil fuels, produced by developed countries and richer population segments within countries. This imbalance between the sources of fossil fuel emissions and the countries that suffer most from the impacts of climate change highlight the deep inequalities and climate justice implications of loss and damage.

The capacity of humans and nature to adapt to climate impacts is not infinite. Some impacts are simply beyond the limits of adaptation, and some residual impacts will remain despite best efforts on adaptation and lead to loss and damage. In 2013, the United Nations Framework Convention on Climate Change Conference of Parties established the Warsaw International Mechanism⁶ to address loss and damage associated with climate change impacts. In 2015, the Paris Agreement⁷ recognized loss and damage in a separate Article, alongside mitigation and adaptation, giving loss and damage a profile it had not enjoyed before.

As countries prepare to submit enhanced NDCs by December 2020, it is critical that targets and contributions relevant to loss and damage are included in those revised plans, alongside much greater efforts to reduce emissions and scale-up adaptation actions, facilitated by increased action and support. Though there is no official guidance available on incorporating loss and damage, about 44 per cent of Small Island Developing States and 34 per cent of the Least Developed Countries made reference to loss and damage in their Intended NDCs (INDCs, or the first NDCs submitted in 2015⁸). These references included the articulation of escalating impacts of climate change and resulting loss and damage (also hampering efforts to deliver on the countries' mitigation and adaptation ambition), as well as plans to better understand loss and damage through research and assessments as well as possible actions.

Though many challenges remain, the science and practice of assessing and addressing loss and damage has progressed considerably since the first NDCs were submitted, as demonstrated through the examples above, taken from the recent IPCC reports. For this reason, taking a fresh look at the significance of loss and damage in the context of a country's effort to combat climate change seems warranted.

Consistent with this observation, front-runner and especially vulnerable countries have taken steps to embed loss and damage in institutional structures and policy processes. Indeed, some countries are setting up institutional mechanisms (e.g. Bangladesh) and refer to limits of adaptation, experienced loss and damage and importance of accessing loss and damage in their climate plans and policies (e.g. Saint Lucia, Fiji, Kenya and Kiribati).

Given the recognition in the Paris Agreement that loss and damage is distinct from adaptation and mitigation, and given that NDCs are intended to collect all types of national actions to address climate change, developing countries can and must incorporate measures primarily aimed at managing loss and damage, and include information related to financial support needed and received.

Similarly, developed countries can also include loss and damage in their NDCs, as it is not only happening in developing countries but in large parts of the developed countries too (e.g. wildfires in Australia, hurricanes in the United States, flooding in the United Kingdom and Japan.). Including loss and damage in developed country NDCs gives these countries the opportunity to specify funding already committed, as well as new and additional financial support for developing countries to address loss and damage.

It can provide an invaluable source of information in the context of the Global Stocktake (GST) process. Indeed, while reporting on loss and damage in the context of the transparency framework is voluntary, consideration of loss and damage in the GST is mandatory. Information on loss and damage will be needed for the GST, and national governments will be the main source. Providing this information in the updated NDCs can only speed up and increase the quality of the GST process and help identify gaps.

⁶ https://unfccc.int/topics/adaptation-and-resilience/workstreams/loss-and-damage-ld/warsaw-international-mechanism-for-loss-and-damage-associated-with-climate-change-impacts-wim

⁷ https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

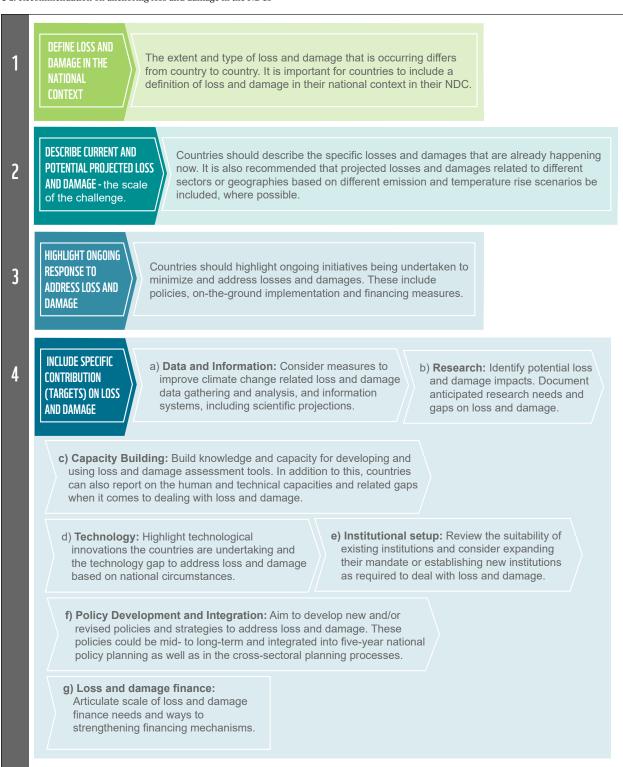
⁸ https://www.ucl.ac.uk/global-governance/sites/global-governance/files/policy-brief-loss-and-damage.pdf

IV. RECOMMENDATIONS ON ANCHORING LOSS AND DAMAGE IN NDCS

As climate change impacts and associated loss and damage vary in different contexts, geographies, climatic conditions and exposure to the type of hazards, there cannot be a blueprint for countries on how to address loss and damage, and how to incorporate such actions in the NDCs.

We have identified four broad sections in which countries can base their analysis and identify elements for including loss and damage in their revised NDCs.

Figure 1: Recommendation on anchoring loss and damage in the NDCs



1. Loss and damage in the national context

As mentioned previously, there are broadly two event types which result in loss and damage: extreme climate events and slow onset climate events.

These climate-induced events result in losses and damages for people's lives and their livelihoods, and degrade ecosystems (for example, through destruction of infrastructure and cultural sites, loss of harvests, loss of territories) leading to poor health, nutrition, increased instability, violence, and/or displacement (see figure 2 below). Many of these impacts are difficult to measure, and even more difficult to monetize. Some communities may be displaced from their ancestral lands, making them unable to practice their cultural traditions, a major impact, but one that cannot be easily appraised through economic metrics. Two categories of loss and damage have been established: economic and non-economic.

Figure 2: Economic and Non-Economic losses (Source: UNFCCC, 2017)



Economic losses can be understood as the loss of resources, goods and services that are commonly traded in markets



Non-economic losses can be understood as the remainder of items that are not commonly traded in markets

Despite the challenges described above, we know that loss and damage is already occurring. However, the extent and type of loss and damage differ from country to country. So it would be most useful for countries to include what loss and damage means for their national context in their NDC, along with the relevant specific losses and damages, both economic and non-economic.

2. Current and projected potential loss and damage

Loss and damage and the impacts are projected to increase in the near and long-term (for example, glacial retreat in mountainous countries like Nepal, Pakistan and Peru; sea-level rise in coastal and island countries; and drought in sub-Saharan Africa). In the revised NDCs, countries can describe the actual and specific losses and damages already being experienced. It would also be useful to reflect, to the extent possible, how different segments of the population - including a gender-differentiated perspective - are affected, in order to design and support targeted solutions. These examples can be collated from the national communication (Nat-Com), the national adaptation plans (NAPs), and other national assessment reports on climate change as well as related information on disaster risk reduction such as the Emergency Events Database (EM-DAT)⁹. Similarly, several countries have also conducted an economic impact assessment of climate change and have come up with already occurring or projected future impacts and costs associated both in the medium and long-term. If there are efforts underway or planned to understand climate change-induced migration and displacement, these can also be valuable information to include to report on ongoing or projected loss and damage in a country.

3. Ongoing response efforts to loss and damage

Several countries have already undertaken initiatives that support minimizing and addressing loss and damage (Figure 3). These include efforts to avert and minimize risk and increase preparedness to existing disasters such as early warning systems, creation of risk transfer, and risk pooling mechanisms at the national and regional levels. Some countries are piloting forecast-based financing so that there is adequate support available in the event of a disaster.

At the policy level, Bangladesh, for example, is in the process of establishing national mechanisms to address loss and damage. Many policies and climate-action plans (e.g. Fiji, Nepal, Myanmar, and St. Lucia) now explicitly refer to loss and damage or limits of adaptation and ways in which they can be addressed. All these initiatives can be highlighted under this section of the NDC.





4. Suggested loss and damage contributions (targets) in NDCs

This section provides examples of loss and damage contributions that countries can include in their NDCs. These contributions relate to data and information, research, capacity building, technology, policy integration, implementation activities, and finance. These contributions can be included as conditional and unconditional as appropriate.

- a) Data and Information: Improvements in climate change related loss and damage data collection (where possible in a gender-differentiated manner), analysis, monitoring, and observation systems. This can be achieved by institutionalizing and strengthening national capacity to collect and analyze data in a systematic manner. This could be done by developing tools and methods in estimating loss and damage and their associated costs. For example, the number of typhoons reached a record high in 2017 16 typhoons and 4 tropical depressions with 386 people dead or missing. Total losses were estimated at approximately US\$2.7 billion, with the majority coming from rice production and other crops. In the most affected areas, crop yields reduced by more than 50 per cent (Viet Nam updated NDC 2020)¹⁰.
- b) Anticipated Research: Document anticipated research needs and gaps on loss and damage. The gaps can refer to missing knowledge at the level of climate change impacts on biophysical systems and socio-economic systems, and the interactions between these two types of systems. Both current and predicted future conditions are of relevance. Gap can also refer to policy options (ideally, at the sectoral level). Not least, gaps can refer to knowledge about the types of, and management options associated with, intangible losses (such as impaired health, species extinction, loss of cultural heritage, or loss of agency and territory).
- c) Capacity-building: Build knowledge and capacity of disaster risk reduction and climate change adaptation on developing and using loss and damage assessment tools, particularly in identifying and documenting non-economic loss and damage. In addition to this, countries can also report on the human and technical capacities that they miss when it comes to dealing with loss and damage. For example, forecasting and warning capacity is still limited, especially for abnormal and irregular occurrence of extreme weather events; search and rescue still lacks specialized equipment and professional forces (Viet Nam updated NDC 2020).
- d) *Technology*: Recognize the importance of technology in countries' ability to reduce, retain, and transfer climate risk to address loss and damage along with equitable access to technology and knowledge. Countries can highlight technological innovations they are undertaking and the technology gaps to address loss and damage based on their national circumstance. This is useful for NDCs and also to inform the joint work of the Warsaw International Mechanism and Technology Executive Committee as part of the comprehensive risk management approaches. For

 $^{10 \}quad \text{https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Viet\%20Nam\%20First/Viet\%20Nam_NDC_2020_Eng.pd.} \\$

 $^{11\ \} https://unfccc.int/process-and-meetings/bodies/constituted-bodies/executive-committee-of-the-warsaw-international-mechanism-for-loss-and-damage-wim-excom/areas-of-work/comprehensive-risk-management-approaches/technical-expert-group-on-comprehensive-risk-management/policy$

- example, there is a strong need for technology in Viet Nam, especially advance technology in climate change and hydro-meteorological monitoring and forecasting, early warning of natural disasters and hazards, and technology for structural and non-structural climate change measures (Viet Nam updated NDC 2020).
- e) *Institutional setup:* Review the suitability of existing institutions, the possibility for expanding their functions and mandate, where applicable; or if required, set up new institutions at the national and subnational levels for addressing loss and damage. Such institutional mechanisms need to be inclusive and should include representatives from government, bilateral and multilateral, international and national non-government organizations, academia, and civil society.
- f) Policy development and integration: Building on existing climate change policies and strategies, in order to develop new and/or revised policies to take loss and damage into account. These policies could be mid and long-term and be integrated into five-year national policy planning as well as in the cross-sectoral planning processes.
- g) Loss and Damage finance: Articulate the scale of loss and damage finance needs; identify ways to strengthening financing mechanisms through a dedicated fund from the national budget if relevant; expand innovative, pro-poor, people centered financial instruments; and more importantly, call for enhanced international support beyond adaptation, especially the provision of and access to finance.







Sandeep Chamling Rai Senior Advisor, Global Climate Adaptation Policy WWF International Climate & Energy

Sunil Acharya Regional advisor, Climate & Resilience Practical Action

Sunil.Acharya@practicalaction.org.np