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Commentary: Loss and Damage

Huq, Saleemul

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vulnerability. Current analysis of Flood Re assumes that flood risk remains the same over time without accounting for changes in risk due to deterioration of existing flood defences, development in flood risk areas or climate change[3]. Studies such as those of Aerts and Botzen[10] give an indication of how far insurance premiums would deviate from a true representation of risk if insurers use the wrong climate change scenarios or make incorrect assumptions about socio-economic development.

Moving to risk-based pricing requires mechanisms to ensure that insurance premiums accurately reflect flood risk and that high-risk properties can be identified with acceptable confidence. Flood Re will need to develop a common approach to identify properties to be subsidized by the fund and estimate the annual likelihood and severity of flooding to these properties. In the US, flood risk, and thus flood insurance rates, under the NFIP are determined by Flood Insurance Rate Maps (FIRMs), which have been developed and refined since the programme began in 1968. However, the extent to which FIRMs accurately reflect flood risk is often questioned[11,12], and developing and updating FIRMs is both challenging and expensive. The US Flood Insurance Reform Act of 2012 authorized US$400 million per year from 2013 to 2017 to improve FIRMs.

As flood insurance in the UK moves towards risk-based pricing, another potential issue is how policyholders will react to high insurance costs. In late 2013, the US will start increasing flood insurance rates to reflect the actual level of flood risk of properties that have been subsidized for decades. The US Congress is already experiencing pressure from constituents who will not be able to afford risk-based premiums. The level of flood insurance rates has social and political implications that could overwhelm the benefit of promoting sustainable development in flood-prone areas. Risk-based rates could lead to the gentrification of desirable flood-prone areas — such as coastal property that only the wealthy can afford — and blight in non-desirable flood-prone areas where homeowners are unable to buy flood insurance. Owners of mortgaged properties in high flood-risk areas may see their property value adjust downwards to account for increased insurance premiums, and perceptions of widespread removal of cover could cause instability in local housing markets[3].

The first responses to the consultation exercise, which concluded on 8 August 2013, demonstrate that there is a need to improve the structure of Flood Re. With a general election in the UK on 7 May 2015 and Flood Re scheduled for implementation in summer 2015, the ABI does not wish Flood Re to be seen as an election issue, nor will the government, giving both an incentive to resolve the outstanding issues as quickly as possible.

Our view is that Flood Re (or any flood insurance scheme on its own) cannot serve as the primary mechanism for climate adaptation, but must be integrated with structural flood defences and policies to control floodplain development and improve flood resilience. These policy dimensions are absent from the Flood Re proposal at present, and government involvement is required to ensure effective floodplain management and thus risk reduction. Although the structure of Flood Re may change as a result of the consultation, the original design of the fund is such that the cost of insurance to consumers will be more firmly within government's control, without the government taking on any financial liability. Flood Re represents an approach to flood insurance that has not been tried anywhere in the world, and the experiment will be watched with interest by other countries facing large flood losses. ❐

Diane Horn is in the Department of Geography, Environment and Development Studies, Birkbeck College, University of London, Malet Street, London WC1E 7HX, UK. Michael McShane is in the Department of Finance, Insurance and Financial Services Center, Old Dominion University, 2026 Constant Hall, Norfolk, Virginia 23529, USA.
**e-mail: d.horn@bbk.ac.uk*

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COMMENTARY:

Loss and damage

Saleemul Huq, Erin Roberts and Adrian Fenton

Loss and damage is a relative newcomer to the climate change agenda. It has the potential to reinvigorate existing mitigation and adaptation efforts, but this will ultimately require leadership from developed countries and enhanced understanding of several key issues, such as limits to adaptation.

In recent years loss and damage has gained prominence in the global climate change arena[1]. At the 18th Conference of the Parties (COP), held in Doha in 2012, Parties agreed to establish institutional arrangements — such as an international mechanism — to address loss and damage under the United Nations Framework Convention on Climate Change (henceforth 'the Convention').

As an emerging policy issue 'loss and damage' does not yet have a universally agreed definition. A recent literature review defined loss and damage as "the actual and/or potential manifestation of impacts

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associated with climate change in developing countries that negatively affect human and natural systems"[2]. 'Loss' was characterized as the negative impacts of climate change that are permanent, and 'damage' as those impacts that can be reversed[3]. A distinction has also been made between avoidable (through mitigation and adaptation efforts) and unavoidable loss and damage[4].

Empirical research has shown that loss and damage is incurred when the costs of adaptation are not recuperated; or when adaptation efforts are ineffective, maladaptive in the long term or altogether impossible[5]. Even if current mitigation and adaptation efforts are successful, some residual losses and damages will occur.

Tackling loss and damage has two aspects: first, decreasing avoidable losses and damages by reducing carbon emissions (mitigation) and averting climate change impacts (adaptation and risk reduction); and second, addressing unavoidable losses and damages through risk transfer strategies such as insurance, and risk retention mechanisms (for instance, contingency funds and social safety nets)[6].

Loss and damage under the Convention

The concept of loss and damage first appeared in global climate change negotiations in 1991, when Vanuatu proposed an international insurance pool to compensate small island developing states for the impacts of sea-level rise[7]. This proposal was ultimately rejected, but the word 'insurance' was incorporated into Article 4.8 of the Convention[8]. For the first decade of its existence, negotiations under the Convention centred on mitigation but there was a shift to include adaptation in the mid-2000s, when the Fourth Assessment Report of the Intergovernmental Panel on Climate Change made it clear that mitigation efforts were insufficient to avoid all impacts of climate change[1]. In 2007 loss and damage re-emerged at COP 13 in Bali with the 'Bali Action Plan', which highlighted the need for enhanced action on adaptation, including "disaster risk reduction strategies and means to address loss and damage"[9]. The following year the Alliance of Small Island States proposed the Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts, which included risk management, rehabilitation/compensatory and insurance components[10].

At COP 16 in Cancún, 2010, the Work Programme on Loss and Damage was established under the Subsidiary Body for Implementation (SBI)[11]. At the 34th session of the SBI in Bonn, 2011, the work programme was structured into three thematic areas: assessing the risk of loss and damage; approaches to address loss and damage; and the role of the Convention in enhancing implementation of approaches to address loss and damage[12].

Negotiations at COP 18 in Doha, 2012, focused on the role of the Convention, which Parties decided is to enhance knowledge and understanding of comprehensive risk management approaches to address loss and damage; strengthen dialogue, coordination, coherence and synergy among relevant stakeholders; and enhance action and support, including finance, technology and capacity building to address loss and damage. Parties agreed to continue the work programme to improve understanding of several key issues, including non-economic losses and slow-onset climatic processes such as sea-level rise[13]. After two weeks of intense negotiations a landmark decision was reached in which Parties agreed to establish institutional arrangements to address loss and damage under the Convention at COP 19 to be held in Warsaw in late 2013.

This decision — known as the Doha Gateway — was a surprise to many, and a lot more needs to be worked out in advance of Warsaw. Unfortunately, negotiations on loss and damage stalled in Bonn in June 2013 as Russia, Belarus and Ukraine — citing the need to review procedural matters — refused to accept the agenda for the 38th session of the SBI. Thus Parties could not formally discuss the activities to be undertaken as part of the work programme in 2014, nor begin negotiations on potential institutional arrangements to be established at the upcoming COP. This puts even more pressure on the loss and damage agenda in Warsaw.

Looking ahead to Warsaw 2013

Negotiations in Warsaw will focus on establishing institutional arrangements that enable the Convention to fulfil its agreed role. However, the form that those institutional arrangements will take will be the focus of debate. Developing countries will continue to advocate for an international mechanism as an overarching body to address loss and damage under the Convention. Developed countries will resist attempts by developing countries to include compensation as a component in the new institutional arrangements, although for many developing countries — especially for small island developing states — this is an important element of the agenda.

Although there is disagreement over what kind of institutional arrangements should be established, there is widespread consensus on several issues, such as how closely loss and damage is linked to mitigation and adaptation efforts.

Mitigation is the first line of defence against loss and damage, but so far pledges to reduce emissions have been woefully inadequate — and according to a recent report could put the world on a path to warming in the magnitude of 4 °C by 2100, which will inflict significant losses and damage across the globe[13]. To avoid this scenario, mitigation ambition needs to increase significantly.

However, even if mitigation efforts were increased today, some climate change impacts have been 'locked in' by historical emissions. Adaptation can reduce loss and damage through both incremental and transformative change[14]. Support for adaptation in developing countries should therefore be enhanced to avoid loss and damage where possible.

Ultimately, loss and damage should reinforce rather than diminish the importance of mitigation and adaptation. Institutional arrangements to address this problem should establish strong linkages with the bodies that are overseeing mitigation and adaptation under the Convention.

That said, eventually limits to what humans can adapt to will be reached, and in fact have already been reached in some parts of the world. As a result, decision-makers are facing critical choices, which have opportunity costs. Developing countries need guidance and support to implement approaches to avoid loss and damage where possible through adaptation, and address those impacts that cannot be avoided with a broader set of tools that may include risk transfer and risk retention measures, as well as policies to promote migration and facilitate resettlement. Institutional arrangements to address loss and damage under the Convention must meet this need.

Beyond Warsaw

Although the global climate negotiations take place at the international level, loss and damage is being incurred at the local level. Thus countries will continue to grapple with how to develop policies and frameworks at the national level long after negotiations in Warsaw come to an end. Although the international process can, and should, help countries implement approaches to address the residual impacts of climate change, these efforts will be most successful when supported by institutional frameworks at the national level. National institutions should integrate disaster risk reduction and climate change adaptation policies, and promote cross-sectoral collaboration to manage both avoidable and unavoidable loss and damage. International support will be important, but political will is also an essential element in ensuring that these efforts will be successful.

Providing policymakers with the information they need to make good

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decisions is integral to success, and research can contribute to this knowledge base. In Doha, Parties recognized several research gaps, including the need to better understand non-economic losses, slow-onset processes, and linkages between loss and damage and patterns of migration and displacement. Parties also agreed on the need to enhance coordination, synergy and linkages, strengthen regional coordination and build capacity to address loss and damage. If both developed and developing countries come to the table with those needs in mind they should be able to work together to establish institutional arrangements that best meet them.

Conclusion

For negotiators, Warsaw represents an opportunity to move the agenda forward by creating institutional arrangements that help developing countries to address loss and damage. However, comprehensively tackling this problem will require significant increases in mitigation ambition, support for adaptation and the development and implementation of tools to address avoidable losses and damages. A 4 °C warmer world must be avoided at all costs. This will be difficult given the current state of the global climate talks, but it can be done if developed countries take the leading role that they promised to assume when the Convention was established in 1992. ❐

Saleemul Huq[1], Erin Roberts[1,2] and Adrian Fenton[1,3,4] are at [1]International Centre for Climate Change and Development, Independent University, Bangladesh, Aftabuddin Road, Bashundhara, 1229 Bangladesh, [2]Department of Geography, King's College London, Strand Campus, London WC2R 2LS, UK, [3]Sustainability Research Institute, School of Earth and Environment, University of Leeds, Woodhouse Lane, Leeds LS2 9JT, UK, [4]Centre for Climate Change Economics and Policy, School of Earth and Environment, University of Leeds, Woodhouse Lane, Leeds LS2 9JT, UK.*
**e-mail: saleemul.huq@iied.org*

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