

Submission by the
Loss and Damage Network

to the **call for submission under AA7(d)** ‘best practices, challenges and lessons learned from existing financial instruments at all levels that address the risk of loss and damage associated with the adverse effects of climate change’ by the Executive Committee of the Warsaw International Mechanism for Loss and Damage

Authors

Surminski, Swenja; Huggel, Christian; Linnerooth-Bayer, Joanne; Mechler, Reinhard; Schinko, Thomas

Affiliations

Surminski: Grantham Research Institute, London School of Economics

Huggel: Glaciology and Geomorphodynamics Group, Physical Geography Division, Department of Geography, University of Zurich

Linnerooth-Bayer: International Institute for Applied Systems Analysis

Mechler: International Institute for Applied Systems Analysis; Vienna University of Economics and Business

Schinko: International Institute for Applied Systems Analysis; University of Graz

1. The Loss & Damage Network

The Loss & Damage Network, currently comprising 15 institutions, was founded in November 2015 under the lead of researchers from the International Institute for Applied Systems Analysis (IIASA), Deltares and the Grantham Research Institute on Climate Change and the Environment. The objective of the Loss and Damage Network is to provide actionable input on policy options for the Warsaw International Mechanism for Loss and Damage (WIM) that is now fully endorsed by the Paris Agreement under the United Nations Framework Convention on Climate Change. It strives to bring together researchers, policymakers and practitioners in a trans-disciplinary science-informed forum for the following purposes:

- *Support* the science-policy dialogue on the WIM;
- *Identify* practical and evidence-based policy and implementation options for its operationalization;
- *Articulate* principles and definitions of Loss and Damage (L&D), such as the space for L&D;
- *Highlight* ethical and normative issues central to the discourse;

- *Inform* the broad debate by offering and discussing multiple perspectives on L&D, with a particular focus on climate extremes and climate risk management.

As a network, we plan to focus broadly on managing climate risks by proposing and informing policy options and best practices while keeping the climate justice debate in close consideration. We suggest building on a long history of managing climate and weather related extremes by employing a broad portfolio of different disaster risk management tools, including financial instruments such as insurance or regional risk pools. As identified also by the IPCC's 5th assessment report, building on this body of knowledge and practice for comprehensively tackling existing and increasing extremes holds a lot of promise and has seen international support, e.g. by the Sendai Framework for Action.

This submission response primarily focuses on extreme or sudden-onset events and the use of insurance in response to those risks, however we also recognize the importance of slow-onset events and processes and their relevance for loss and damage. Our submission represents the views of the authors listed.

2. Increasing attention on comprehensive risk management

By formally endorsing the Warsaw L&D mechanism, the outcome of the Paris climate negotiations reconfirmed support of climate negotiators for addressing climate-related risks beyond adaptation. The debate is proceeding, and the second meeting of the Executive Committee on the L&D Mechanism early February discussed arrangements for moving forward towards operationalization of the Mechanism. The debate among negotiators and observers, including researchers and civil society, is currently focusing on non-economic losses, displacement related to adverse impacts of climate change and damages, facilitating comprehensive risk management, and how to deal with risk transfer. One focus of attention has been to consider a clearinghouse for risk transfer to facilitate the implementation of comprehensive risk management strategies. Central to the discussions has been that comprehensive management of climate risks has to move beyond focusing solely on risk transfer and that the link between the current DRM practice and climate adaptation needs careful attention, as there are important overlaps and hence potential synergies between both concepts. In line with the demands voiced by negotiators and observers, the Loss and Damage Network suggest to give ample attention to considering risk transfer more broadly and as an integral part of comprehensive approaches to managing risks beyond adaptation.

3. Experience with financial instruments in the context of climate risks

Financial risk-transfer instruments, such as micro- and sovereign insurance, catastrophe bonds, risk pools and related mechanisms, are tools to manage the risks of extreme weather. They offer risk spreading over space and time; risk smoothing; faster and more

efficient reconstruction; certainty about post-disaster support; and reducing immediate welfare losses and consumption reductions (Benson and Clay, 2004; Hallegatte 2011). However, their application is uneven across the developing and developed world. In general terms the penetration of insurance cover, and risk-transfer more generally, is determined by income levels - with insurance in most low-income and middle-income countries still in its infancy. Across our Loss & Damage Network, we have a significant amount of expertise and knowledge on the role of insurance in the context of climate. Below we highlight key aspects for considering risk financing in the context of climate change and L&D:

- The monitoring of and learning from existing applications of financial instruments are essential; yet, the large evidence on operational as well as political and economic aspects of risk transfer is not fully embraced when designing new schemes or reforming existing ones. For an overview of the current use of financial instruments for climate risks see Linnerooth-Bayer and Hochrainer Stigler, 2015, and for a review of risk financing and other economic instruments used in disaster risk reduction in a European context see Koehler et.al., 2014. Surminski et al., 2015 introduce several mechanisms that can be used to investigate the risk reduction implications of different insurance schemes and apply it to several European countries. The ClimateWise Compendium on disaster risk transfer documents 123 existing initiatives in middle-income and lower-income countries that involve the transfer of financial risk associated with the occurrence of natural hazards such as flooding (Surminski and Oramas-Dorta, 2011). The most common example of insurance scheme across all countries is agricultural insurance, although specific geographical preferences are visible, for example, micro-insurance for natural disasters in Asia. This may reflect cultural difference or local traditions and may also be linked to the availability financing tools such as micro-finance (Surminski and Oramas-Dorta, 2014).
- Experience from developed countries shows that insurance can play a cost-effective role in a country's efforts to increase its disaster resilience, especially when compared to ex post disaster aid (Collier et al., 2009), while recent cost-benefit assessments indicate that risk financing may be most viable for large and residual risks that cannot be reduced or managed otherwise (Mechler, et.al. 2014). However, insurance also has limitations and may not be available for certain risks outside a considered probability of occurrence or beyond what would be deemed 'acceptable' by those underwriting the risks.
- Experience from developing countries shows that micro-insurance not only can provide a much needed safety net for vulnerable households and businesses, but can also render them more creditworthy, thus increasing productive investments. Yet, insurance is costly and is typically viable to the most vulnerable only with subsidies. It has been suggested that the international donor community provide

these subsidies as an effective alternative or addition to post-disaster aid (Linnerooth-Bayer et al., 2009).

- Climate insurance thus offers many opportunities for improving climate risk management and supporting climate resilient development, but it is far from clear if the current momentum will lead to genuine progress in making the most vulnerable more resilient to climate change (Surminski, Bouwer and Linnerooth-Bayer, 2016). This follows observations by a recent study for the Climate Investment Fund (Vivid Economics, 2015), which suggests that climate insurance can play an important role in climate adaptation, but warns that inappropriately set-up insurance schemes can have unwanted consequences and may not benefit the poor nor foster climate resilience.
- It is therefore important to recognise the benefits as well as the limitations of risk financing tools. Risk transfer and risk-sharing schemes do not directly reduce the risk of negative impacts from climate risks, although they can provide incentives for this purpose. Ex-ante prevention and preparedness measures remain the main instruments for reducing fatalities and limiting damage from disasters. In a warming world, without efforts to reduce risks, both post-disaster assistance and insurance will become increasingly expensive and ultimately unsustainable. Furthermore, insurance alone, particularly in its traditional form, is not practical or viable everywhere; there are barriers to, and practical constraints on, its adoption on a scale that might make other tools more effective. (Linnerooth Bayer and Mechler, 2008)
- The design of any new risk financing scheme should adhere to certain principles:
 - First, it should be assessed whether existing financing mechanisms can be adapted to the needs of the target population, thus avoiding a proliferation of institutions and mechanisms that may be ineffective;
 - Second, for the most vulnerable, the costs should be assessed in relation to “ability to pay” keeping in mind that many vulnerable households and businesses have less costly informal insurance options, such as relying on distant relatives;
 - Third, there should be an appropriate balance of risk reduction and risk transfer that recognises the changing nature of risks over time;
 - Fourth, risk transfer mechanisms should be designed to incentivise good risk management behaviour;
 - In general, mechanisms addressing L&D should consider the lessons learnt from initiatives to reduce and transfer risks in the current climate, both in developed and developing countries;
 - It is also important to reflect how future climatic impacts may change the suitability of those response strategies. Theory and evidence from existing insurance markets suggests that a ‘riskier and more uncertain world would

be associated with an increase in insurance demand, at least until some local threshold were reached where the affordability of insurance or the insurability of risk were threatened' (Ranger and Surminski, 2013). If and how risk transfer could be utilized beyond this point remains unclear.

4. Integration of financial instruments for L&D with comprehensive risk management: the role of risk layering

It is evident that insurance does not provide a solution to all climate risks, and risk financing measures need to be integrated into a comprehensive risk management framework. For example, the use of insurance is not suitable for changes in 'average' conditions or slow onset events such as sea-level rise (Ranger et al., 2011a and 2011b). In light of changing liability for climate risks, insurance may also not be the most equitable solutions: *"As the intensity and frequency of climate extremes increase, is it fair to shift responsibility onto those least responsible, least able to shoulder the premium, and in many cases least able to reduce the losses?"* (Surminski, Bouwer and Linnerooth-Bayer, 2016) Subsidies can help to avoid shifting the burden to those most vulnerable, however this also means that insurance may not offer value for money compared to other mechanisms: with transaction and capital costs, premiums can be far higher than expected losses. This suggests that funds might be better spent on other types of safety nets rather than buying insurance cover from international insurance markets (Suarez and Linnerooth-Bayer, 2011).

We suggest that a key to moving forward is an actionable concept of risk and comprehensive risk management. This involves identifying efficient and acceptable interventions based on recurrence of hazards—a concept known as risk layering. Risk layering considers the different risk management and risk financing tools and mechanisms as complementary and allows for a combination of hard and soft DRM measures. It can be used to comprehensively consider linking risk prevention, risk reduction, risk retention, risk transfer (including insurance), as well as ex-post relief and reconstruction to effectively tackle different layers of climate risks (see Mechler et al., 2014).

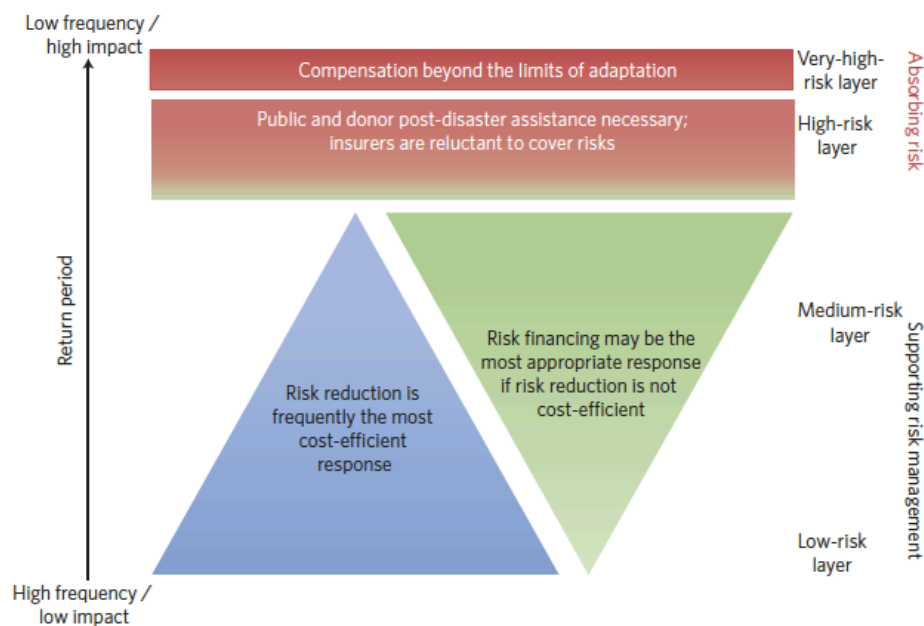


Figure: Layering approach to comprehensive risk management. Source: Mechler et al., 2015

For example for flood risk, this could mean identifying physical flood protection to deal with more frequent events, considering risk financing for infrequent disasters as well as relying on public and international compensation for extreme catastrophes. Risk layering overall points towards considering risk comprehensively as determined by climatic and non-climatic factors as well as considering portfolios of options that manage risks today and in the future. The concept of risk layering underlies many areas of risk policy and management in agriculture, finance and insurance. It has been applied for disaster risks, mostly for insurance options, but not informed thinking on comprehensive risk management portfolios. Such broad understanding of risk management can be particularly helpful in identifying risks that are beyond adaptation—which is basically the remit of the L&D debate.

The Loss and Damage Network stands ready to further support thinking on risk layering as a useful methodological framework for identifying needs for managing risks as well as apportion responsibilities for dealing with risks beyond adaptation.

A first key outcome of the initiative will be a multi-authored resource book to inform and document discussions regarding the WIM. Other products that will be realized in the short to medium term include presentations at side events, blogposts and policy briefs to be circulated e.g. prior to and at ExCom meetings. The long-term goal of the Loss and Damage Network, building on these intermediate steps and products, is to provide sound scientific support and policy advice for the L&D process.

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