

Loss and damage from climate change

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An open access special issue of the *International Journal of Global Warming* brings together, for the first time, empirical evidence of loss and damage from the perspective of affected people in nine vulnerable countries. The articles in this special issue show how climatic stressors affect communities, what measures households take to prevent loss and damage, and what the consequences are when they are unable to adjust sufficiently. The guest-editors, Kees van der Geest and Koko Warner of the United Nations University Institute for Environment and Human Security (UNU-EHS) in Bonn, Germany, introduce the special issue with an overview of key findings from the nine research papers, all of which are available online free of charge.

'Loss and damage' refers to adverse effects of [climate variability](#) and [climate change](#) that occur despite mitigation and adaptation efforts. Warner and van der Geest discuss the loss and damage incurred by people at the local-level based on evidence from research teams working in nine vulnerable countries: Bangladesh, Bhutan, Burkina Faso, Ethiopia, The Gambia, Kenya, Micronesia, Mozambique and Nepal. The research papers pool data from 3269 household surveys and more than 200 focus groups and expert interviews.

The research reveals four loss and damage pathways. Residual impacts of climate stressors occur when:

1. existing coping/adaptation to biophysical impact is not enough;
2. measures have costs (including non-economic) that cannot be regained;

3. despite short-term merits, measures have negative effects in the longer term; or
4. no measures are adopted – or possible – at all.

The articles in this special issue provide evidence that loss and damage happens simultaneously with efforts by people to adjust to climatic stressors. The evidence illustrates loss and damage around barriers and limits to adaptation: growing food and livelihood insecurity, unreliable water supplies, deteriorating human welfare and increasing manifestation of erosive coping measures (e.g. eating less, distress sale of productive assets to buy food, reducing the years of schooling for children, etc.). These negative impacts touch upon people's welfare and health, social cohesion, culture and identity – values that contribute to the functioning of society but which elude monetary valuation.

The publication of this set of research papers is very timely as loss and damage will be a key topic during the climate negotiations in Warsaw next month (11-22 November 2013), and [empirical evidence](#) is still scarce. The findings also contribute to the emerging body of literature on adaptation limits and constraints, a topic that – for the first time – is discussed in a separate chapter of the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Working Group 2 (IPCC AR5 WG2).

The issues that have arisen through this research point to an even greater urgency for ambitious mitigation and adaptation that are sufficient to manage climate stressors. If this goal is missed, loss and damage will undermine society's ability to pursue sustainable development.

"The special issue of the *International Journal of Global Warming* focuses on a crucial topic: 'Loss and damage' which refers to adverse effects of climate variability and climate change that occur despite mitigation and adaptation efforts," Editor-in-Chief Ibrahim Dincer of

the University of Ontario Institute of Technology says. The issue reports on the first ever multi-country study on this emerging topic from the perspective of vulnerable communities in Africa, Asia and the Pacific. The [research papers](#) included show that current mitigation and adaptation efforts are not enough. People across the study sites were not passive victims of climate change. A large majority implemented a wide variety of adaptation and coping measures to avoid impacts of [climate](#) stressors, but these measures were often insufficient or came at a cost. The negative effects were not simply monetary, there were cultural losses and non-economic costs, in terms of time investment, social-cohesion and livelihood security, were also widespread. "IJGW positions itself uniquely by addressing the issue and offering solutions," Dincer adds.

More information: "Loss and damage from climate change: local-level evidence from nine vulnerable countries" in Int. J. Global Warming, 2013, 5, 367-386. [www.inderscience.com/info/inar ...r=2013&vol=5&issue=4](http://www.inderscience.com/info/inar...r=2013&vol=5&issue=4)

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