## A funding mosaic for loss and damage

n the context of climate policy, "loss and damage" refers to unavoided climate change impacts, including those from extreme weather events and slow-onset events such as sea-level rise, increasing temperatures, and loss of biodiversity. Some argue that focusing on loss and damage distracts industrialized countries from attempts to avoid losses and damages in the first place through decarbonization and adaptation. Others argue that insufficient mitigation by industrialized countries has unleashed an unfair burden on developing countries, so developed countries alone must address loss and damage financially. The impasse was broken at the 27th Conference of the Parties (COP27)—the international climate negotiations—in November 2022, through a decision on new funding arrangements for loss and

damage, including a new fund. Reflecting on the funding needs, Maldives' Environment Minister Aminath Shauna argued at COP27 that the world requires a "mosaic of solutions." As a transitional committee begins to assemble recommendations to operationalize this mosaic of funding arrangements, several critical questions require insights from the scientific community.

To address major needs, what solutions can resolve gaps? Climate change is anticipated to have enduring effects on the real economy,

manifesting as depressed production, decreased employment, diminishing social coherence, and cultural loss. All of these stress societies and public and private budgets. Climate-related emergencies could involve displacement or relocation (planned or unplanned) and may necessitate climate-resilient reconstruction and recovery. Slow-onset events may involve redistribution of populations through migration. This will require insights from social, economic, and climate data. Addressing these needs should improve peoples' situation, not keep them at the brink of survival.

What steps will improve coherence and coordination across the landscape of global, regional, and national institutions that fund activities to address loss and damage? Support in response to climate-related emergencies is currently channeled through humanitarian funding; emergency payouts inject cash and support for temporary shelter, food, and basic life support. Debt instruments such as loans, bonds, and budget reallocations currently finance reconstruction and recovery. But future climate impacts are needed that

"... improve peoples' situation, not keep them at the brink of survival."

foster demand for public and private investments in ways that buoy people's ability to navigate disruptions across their life cycle, such as investments in health, vocational education, social safety nets, and restoration of ecosystems.

Regional and global monetary coordination will increasingly be invoked to provide fiscal space for governments when disruptions affect their finances. For example, regional financing arrangements allow groups of countries to pledge mutual financial support to members experiencing financial difficulties in their regions. Special drawing rights from the International Monetary Fund can help stabilize exchange rate volatility, which can be a measure of a country's economic health. Considerable research is needed on economic

tools that provide stability in spite of disruptions.

How can current financial modalities better address needs and promote stability? New and additional capital from a new fund alone will not solve the loss and damage finance issue. The decision recognizes that a variety of mechanisms—including through international financial institutions, multilateral development banks, central banks, and social safety net programs—are required to shape and channel support to

address needs. Research is necessary for the design of systems and structures to provide stability and enhance well-being in the face of progressive upheaval and uncertainty. Operationalization of funding arrangements raises questions about how to adjust timing, eligibility requirements, and access to promote stability. Information is needed about funding gaps, and creative and effective solutions for filling those gaps to help vulnerable populations and ecosystems on which they depend.

The scientific community can bolster operationalization of loss and damage funding arrangements through insights about these three questions. Analysis about the real economy will deepen understanding of the full dimensions of escalating, nonlinear impacts. Developing this mosaic of solutions means harnessing the strength of the global economy to deliver stability in robust, flexible ways that can anticipate and address societal needs in the face of advancing adverse climate impacts in every region of the world.

-Koko Warner and Michael Weisberg

## Koko Warner

is a visiting fellow at Perry World House, University of Pennsylvania, Philadelphia, PA, USA, and director of Global Data Institute at the International Organization for Migration, Berlin, Germany. kkwarner@iom.int

## **Michael Weisberg**

is Bess W. Heyman President's Distinguished Professor of Philosophy and director of Postgraduate Programs at Perrv World House. University of Pennsylvania, Philadelphia, PA, USA. He is also nonresident senior adviser at the International Peace Institute. New York. NY, USA. weisberg@ phil.upenn.edu