

EXPLAINER

Developing New Financing Tools for the Climate Vulnerable



One of the challenges faced by the global community is how to cover the loss and damage from climate change that cannot be prevented by mitigation and adaptation efforts. Photo credit: ADB.

The lack of a dedicated financial mechanism to address climate-related loss and damage underscores the need for innovative ways to address this funding gap.

Introduction

There is a need for more innovative tools to finance initiatives that address loss and damage associated with climate change impacts given woefully inadequate funding and lack of formal mechanisms to help vulnerable countries. According to the World Bank, the global price tag of adapting to climate change would reach \$70 billion to \$100 billion annually by 2050.

The 2016 Forum of the Standing Committee on Finance of the United Nations Framework Convention on Climate Change (UNFCCC) in Manila called for more discussions on funding for loss and damage from innovative and new sources.



In this video, UNFCCC Executive Secretary Patricia Espinosa called for increased collaboration in developing financial instruments to help the climate vulnerable.

In her welcoming remarks, UNFCCC Executive Secretary Patricia Espinosa noted the need for financial instruments to help the vulnerable. “Financial instruments to address loss and damage must be forged in collaboration with investors and insurers, [and] those who will face many of the frontline financial impacts from climate change. Together, we can build the instruments of response. The global response to climate change is about improving the lives of billions of people. And that simply is not possible if lives and livelihoods are lost or irreparably damaged.”

She urged participants to look at instruments that are best suited for various economic sectors, vulnerability profiles, and national circumstances, and turn theory into practical products that fit countries’ financial architecture.

The call for urgency comes as the world grapples with increasing frequency and intensity of natural disasters. In the past 10 years alone, extreme weather events worldwide have caused 346,070 deaths, affected 1.98 billion people, and resulted in direct physical damage totaling \$924.097 billion, according to statistics from the EM-DAT International Disaster Database.

Meanwhile, the 2015 United Nations Global Assessment Report on Disaster Risk Reduction reported that the economic costs of disasters average \$250 billion to \$300 billion annually.

The Executive Committee of the Warsaw International Mechanism for Loss and Damage Associated with Climate Change Impacts has called for submissions on best practices, challenges, and lessons learned in relation to financial instruments that may be used to address loss and damage associated with climate change impacts. It received submissions on a wide range of financial instruments. These include resilience bonds, attribution bonds, blue bonds, sea level rise bonds, district development fund,

disaster risk financing analytics single donor trust fund, forest resilience bonds, fossil fuels levy, carbon pricing, natural capital financing facility, and remote sensing-based information and insurance for crops in emerging economies, among others. Some of these instruments may already be used, but many are still under development.

Existing Funding Schemes

The following existing funding schemes may be applicable for addressing loss and damage associated with climate change impacts.

District Development Fund

Implemented by the United Nations Development Programme (UNDP) and the United Nations Capital Development Fund in Lao People's Democratic Republic (Lao PDR), the District Development Fund provides discretionary, incentive-driven and performance-based block grants that help Lao PDR's rural communities build and repair rural infrastructure.

In its submission to the executive committee, UNDP said the fund may be used for climate adaptation finance. Funding criteria may include siting guidelines to minimize exposure to extreme events, choice of material, elevation and structural reinforcements for infrastructure like small connecting roads, bridges, floodgates, water collection reservoirs, and water supply and irrigation canals.

Disaster Risk Financing Analytics Single Donor Trust Fund

This is a program of the European Union (EU) to help partner countries develop tools on disaster risk financing. Pakistan, Bangladesh, India, Cambodia, Myanmar, Philippines, Indonesia, Lao PDR, Fiji, Salvador, Nicaragua and Jamaica have all expressed interest in the project, but EU will only select three countries for the pilot.

Natural Capital Financing Facility

The facility was launched in 2015 to provide loans and investments to support green projects that promote the preservation of natural capital, including adaptation to climate change in EU member states. The European Investment Bank implements the project. A total of €100 million to €125 million is available to public and private entities including landowners and businesses.

Remote Sensing-Based Information and Insurance for Crops in Emerging Economies

This scheme helps rice smallholders in Asia by giving them access to remote-sensing technologies that can help speed up insurance payouts in the wake of typhoons and other weather-related events. The program was initiated in 2012 with funding from the Swiss Development Cooperation and the German Federal Ministry for Economic Cooperation and Development.

Emerging Financial Instruments

The following instruments are still under development:

Resilience bonds

Designed as an insurance product, resilience bonds may be used to help manage financial risk from catastrophes. The goal is to make vulnerable cities more resilient to natural catastrophes and encourage investments in protective infrastructure, such as flood barriers or seawalls.

Resilient bonds will be similarly structured as catastrophe bonds, which allow the transfer of risks to bond investors as a way to raise funds. Like cat bonds, these can be structured so bond payments will be made when certain thresholds are triggered, such as a storm surge height, during the bond term. Resilience bonds however will have longer maturities.

Attribution bonds

These aim to cover the climate change component of the probability of a climate-related catastrophe.

Blue bonds

This financial instrument is designed to finance the development of sustainable fisheries. The World Bank approved in September 2017 a package of over \$20 million to enable the future issuance of the world's first blue bond by the Republic of the Seychelles. The blue bonds are expected to mobilize public and private investments to finance the country's transition to sustainable fisheries.

Sea-level rise bonds

The rise of sea levels of an average of 7.5 inches since the end of the 19th century has made it compelling to develop a financial instrument that can help countries manage risks from this slow-onset weather event. Similar to catastrophe bonds, the payout would be made when pre-determined thresholds for sea level rise are triggered.

Forest resilience bonds

The concept of forest resilience bond is anchored on using private capital to finance efforts to make forests more resilient to the warming climate. American startup Blue Forest Conservation is developing the financial instrument with support from the Rockefeller Foundation and Packard Foundation, and in partnership with New York-based asset management firm Encourage Capital and global environment think tank World Resources Institute. The group's aim is to reduce the intensity and frequency of wildfires in the United States.

Fossil fuels levy

Also called carbon levy, the fossil fuels levy is an extraction tax levied on producers of coal, oil, and gas.

According to Climate Action Network, an umbrella group of environmental nongovernment groups, the levy could provide a new source of finance for addressing loss and damage, with the added benefit of putting a price on carbon. It said the levy could raise approximately \$50 billion per year based on a \$2 per tonne tax on carbon dioxide equivalent.

This article is part of a series of explainers developed based on discussions and contributions at the 2016 Forum of the Standing Committee on Finance of the United Nations Framework Convention on Climate Change, which focused on financial instruments that address the risks of loss and damage associated with the adverse effects of climate change. The forum was held at the Asian Development Bank in Manila on 5-6 September 2016.

Resources

Centre for International Government Innovation. 2016. *Thinking Outside the Boat about Climate Change Loss and Damage*. Washington, DC.

Climate and Development Lab, Brown University International Centre for Climate Change and Development. 2016. *Financing Options for Loss and Damage: A Review and Roadmap*. Rhode Island, USA.

Re.bound. 2015. *Leveraging Catastrophe Bonds as a Mechanism for Resilient Infrastructure Project Finance*. San Diego, CA.

UNFCCC. 2012. *A Literature Review on the Topics in the Context of Thematic Area 2 of the Work Programme on Loss and Damage: A Range of Approaches to Address Loss and Damage Associated with the Adverse Effects of Climate Change*. Bonn.

UNFCCC. 2016. *Information Paper: 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*. Bonn.

Related Links

explainer: *Understanding the Risks of Loss and Damage from Climate Change*

explainer: *Understanding Different Approaches to Managing Climate Change Risks*

explainer: *Ways to Pay for Climate-Related Loss and Damage*

explainer: *Catastrophe Bonds Explained*

explainer: *What Countries Are Doing to Protect against Climate-Related Loss and Damage*

explainer: *Mobilizing Contingency Funds for Climate-Related Disasters*

Explainer: *Key Lessons for Addressing Unavoidable Impacts of Climate Change*



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