

## **Bretton Woods post-2015: New Mechanisms for Climate Change Finance**

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Climate change is transforming traditional notions of development. It amplifies challenges such as access to clean water, infrastructure financing and agricultural production. Climate change is a threat multiplier; when the threat of increased frequency and strength of hydro-meteorological events is considered alongside threats from rising sea levels and increased temperatures, it is clear that financing mechanisms must, like individual and communities, adapt to new realities. Similarly, newly industrialized economies are seeking greater influence on the international economic and political architecture. The Asia-Pacific is both the center of global trade and development and an increasingly vulnerable region threatened by climate change. Forward-thinking Bretton Woods institutions should prioritize financing mechanisms and projects related to disaster risk reduction and climate change adaptation in the Asia-Pacific.

Extreme weather events are an area of overlap for the fields of disaster risk and climate change adaptation. Those most vulnerable to climate-related hazards “will be at greater risk due to a projected increase in the frequency and/or intensity of those hazards and effects as a result of global climate change” (Turnbull et al. 2013, 5). Therefore the goal of achieving sustainable development will require mitigation of risks for and adaptation to climate hazards. The Intergovernmental Panel for Climate Change Fourth Assessment Report identified coastal cities in Asia as particularly susceptible to climate-related impacts. Risks to coastal cities include “accelerated sea level rise, increase in sea surface temperatures, intensification of tropical and extra tropical cyclones, extreme waves and storm surges, altered precipitation and runoff”

(Nicholls et al. 2007). UNISDR continues to emphasize that the natural starting point for adaptation is to examine natural disasters including floods, droughts and cyclones. These policies “typically involve strengthened disaster risk reduction action and the development of harmonised frameworks for adaptation and disaster risk reduction” (UNISDR 2009, 3).

Climate risk assessments are the first step in planning local adaptation efforts. Assessments identify the types of hazards faced and vulnerabilities of populations and areas that will then be used to create implementation plans. Adaptation is specific to local contexts, and there is “no single approach for reducing risks appropriate across all settings” (IPCC 2014, 25). However, regions can share best practices and learn from others based on similar climatic scenarios. In Asia, climate adaptation has typically been implemented through “mainstreaming climate adaptation action into subnational development planning, early warning systems, integrated water resources management, agroforestry, and coastal reforestation of mangroves” (IPCC 2014, 8). Planning is an iterative process, and there is room to improve assessments for adaptation.

Among other actors with an interest in climate finance, the World Bank supports a risk management approach to managing climate change adaptation and climate hazards in China. For example, “better management of disaster risk...maximizes use of available resources for adapting to climate change” (Pollner et al. 2010, 2). Planning that includes climate change adaptation not only helps maintain the benefits of development but it also “prepares a society for the range of uncertain environmental, economic, and social impacts associated with rapid urbanization and growth” (Sall 2013, 7).

The idea that disaster prevention is much less costly than disaster relief and reconstruction leads to an emphasis on non-structural prevention strategies like mainstreaming disaster risk reduction and burden-sharing. Traditionally, policies have focused on engineering feats such as dams or levees to mitigate hazards; however these projects may be a short-term fix which compromises longer-term investments. Moreover, structural mitigation can provide a false sense of security to residents. Therefore, the international community recognizes the value in disaster prevention and financing and a focus on 'risk and vulnerability' in their approach to disaster management (Shi, Okada, Linnerooth-bayer and Ge 2008, 297-298).

Bretton Woods institutions should place more weight on financial mechanisms to address losses stemming from climate change-related disasters. Whether the institutions promote sovereign or industry-linked insurance will depend upon the dynamics within a given country. The global catastrophe insurance market has risks which can make it difficult for countries to budget in a way that is sustainable; similarly hedging against climate change-induced disaster losses can create problems for governments and financing institutions (Pollner et al. 2010, 22). Therefore it is critical that Bretton Woods institutions both become experts at and develop the capacity of others for climate change adaptation and disaster risk reduction.

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