



Economics of Adaptation to Climate Change: Study Update

Recognizing that current estimates of the cost of climate change in developing countries and of the needed adaptation measures are in very short supply, and that an understanding of the full array of adaptation options, including institutional and policy changes, is crucial to prioritize the most effective adaptation strategies, a partnership was formed between the governments of Bangladesh, the Plurinational State of Bolivia, Ethiopia, Ghana, Mozambique, Samoa, Vietnam and the World Bank to undertake a study on the Economics of Adaptation to Climate Change. The study is being funded by the governments of the Netherlands, the UK, and Switzerland.

This study has two broad objectives. The first is to help decision makers in developing countries to better understand and assess the risks posed by climate change and to better design strategies to adapt to climate change. This requires costing, prioritizing, sequencing, and integrating robust adaptation strategies into their development plans and budgets. The second objective is to develop a “global” estimate of adaptation costs to inform the international community’s efforts, including UNFCCC and the Bali Action Plan, to provide access to adequate, predictable, and sustainable support, and to provide new and additional resources to help the most vulnerable developing countries meet adaptation costs.

These study objectives are, in turn, being pursued through a two-track approach – a global track that uses sectoral country-level but global data sets and a structured framework to produce the global estimate, and a case study track that uses more disaggregate country-level analysis to prioritize national investment strategies and to develop country-level adaptation cost estimates.

The analysis for the global track was launched in January of 2009. Under this track global sectoral adaptation cost estimates are being developed for infrastructure, water resources, coastal zones,

agriculture, forestry, fisheries, and ecosystem services. Costs of cross-cutting issues such as extreme weather events and social safety nets are also being developed.

The second track includes seven county-level case studies (Bangladesh, the Plurinational State of Bolivia, Ethiopia, Ghana, Mozambique, Samoa, and Vietnam) to illustrate how countries can integrate adaptation to climate change within sustainable development plans. While all seven studies utilize a common framework of analysis they are differentiated through the diversity of climate risks and impacts that the countries are likely to face and their ability to adapt to these risks. The scope of each case study was discussed and agreed to by the respective participating governments. Further, each of the case studies builds on existing local data and knowledge of the impacts of climate change to identify potential adaptation measures and to evaluate their costs. While key economic sectors such as agriculture and water are included in all case studies, specific sectors such as forestry or coastal areas have been added where these components are important. The sectoral analyses are integrated through macroeconomic models to examine the broader cross-sectoral implications of climate impacts and adaptation measures. One of the most important aspects of the study is the use of participatory scenario development approaches to examine the climate risks and responses from a diverse set of perspectives including most importantly from those that are most vulnerable to climate change.

Some early lessons from the study are as follows:

1. Existing estimates of adaptation costs are crude and simplistic in large part due to a lack of an operational definition.
2. A dual track, global and country case study, is needed to get robust measures of global and national costs of adaptation.
3. National Adaptation Plans of Action focus on short-term adaptation priorities and that there is a need to build on these to develop long-term climate resilient development plans and budgets.
4. Planning across scales (i.e. links and synergies across national, regional and local levels) matters for pro-poor adaptation programming.