

PROJECT

Adaptation

Climate

International Development

Economic Aspects of Climate Change Adaptation

Rising sea levels, altered rainfall patterns, extreme weather events, and their socioeconomic consequences (economic crisis, migration, infrastructure loss, etc.) are only some of the effects of climate change that will hit hardest in developing and industrializing countries. Some of these countries in Asia, Africa and Latin America are home to the most vulnerable populations in the face of climate change. At the same time, they offer many opportunities to link climate change adaptation to sustainable economic development. In this study, commissioned by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Ecologic Institute researchers identified the factors that most limit developing countries' ability to adapt to climate change. They also proposed economic instruments that focus on private sector mobilization to strengthen adaptation capacity and make recommendations for how future development cooperation projects can integrate these instruments.

Background

One of the main reasons why developing countries are more likely to suffer from the effects of climate change than industrialized ones is that they are heavily dependent on agriculture, which is probably the most vulnerable economic sector. In Ethiopia for example, three fourths of the population work in the agricultural sector, which in turn relies almost solely on rainfall. Widespread poverty and weak governance (although this is changing in some industrializing countries), further weaken these regions' ability to adapt to climatic challenges.

At the same time, though, developing and industrializing countries provide many opportunities for low-cost, easy-to-implement measures which not only strengthen climate change adaptation capacity but also have positive effects on economic development.

For example, measures that focus on enhancing developing renewable energy sources will not only strengthen climate change adaptation but also further energy security, poverty reduction and economic diversification.

It is also important to make more efforts to exploit synergies between mitigation and adaptation. In agriculture, for example, measures such as no-till farming and carbon sequestration in agricultural soils improve the ground and water conditions, which in turn, make plants more resilient to droughts and floods. International cooperation projects are well positioned to identify and support similar measures that serve such double or multi purpose(s).

Objectives of the project

The goals of this project were, therefore, to identify the challenges that different economic sectors face when trying to adopt climate adaptation efforts and to propose economic instruments that could help overcome those challenges while promoting sustainable economic development. The authors concluded with recommendations on how German development cooperation projects can better support the political decision-makers in their partner countries in the development of climate resilient economic structures. The report was based on literature analysis and interviews with experts in developing countries.

Ecologic Related Websites

- Project: Climate Change, Hydro-conflicts and Human Security (CLICO)
- Project: Economics of climate change: costs and benefits of adaptation measures for climate change
- Project: Climate change — water scenarios, impacts & adaptation measures (ClimWatAdapt)

Funding

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Duration

September 2012 to December 2012

Project ID

2395

Keywords

climate adaptation, climate change, developing countries, development policy,
international development cooperation, economic instruments, cost-benefit-analyses,
global

Source URL (modified on 08/09/2017 - 16:26): <https://www.ecologic.eu/7596>