

Shaping climate resilient development - open-source adaptation

Pilot studies in Barisal, Bangladesh and San Salvador, El Salvador using Economics of Climate Adaptation (ECA) methodology, realized within KfW's financial cooperation on behalf of Germany's Federal Ministry for Economic Cooperation and Development (BMZ), implemented by various consultancies (see references) and Swiss Re.

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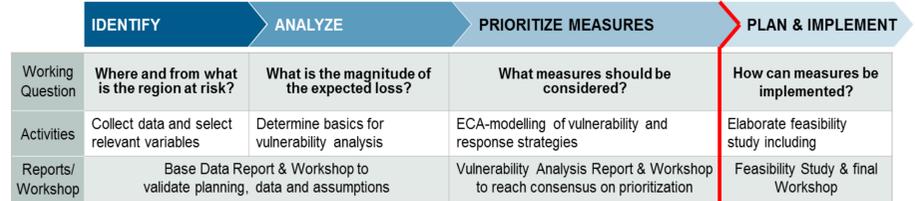
INTRODUCTION

Climate adaptation is an urgent priority for the custodians of national and local economies, such as finance ministers and mayors - as well as to leaders in the private sector. Such decision makers need the facts to identify the most cost-effective investments and ask:

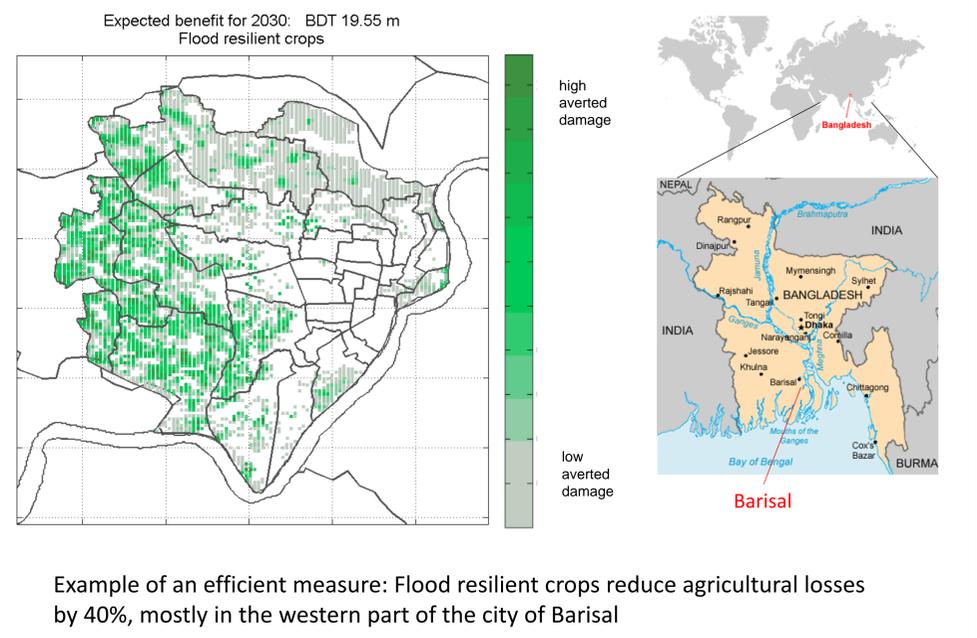
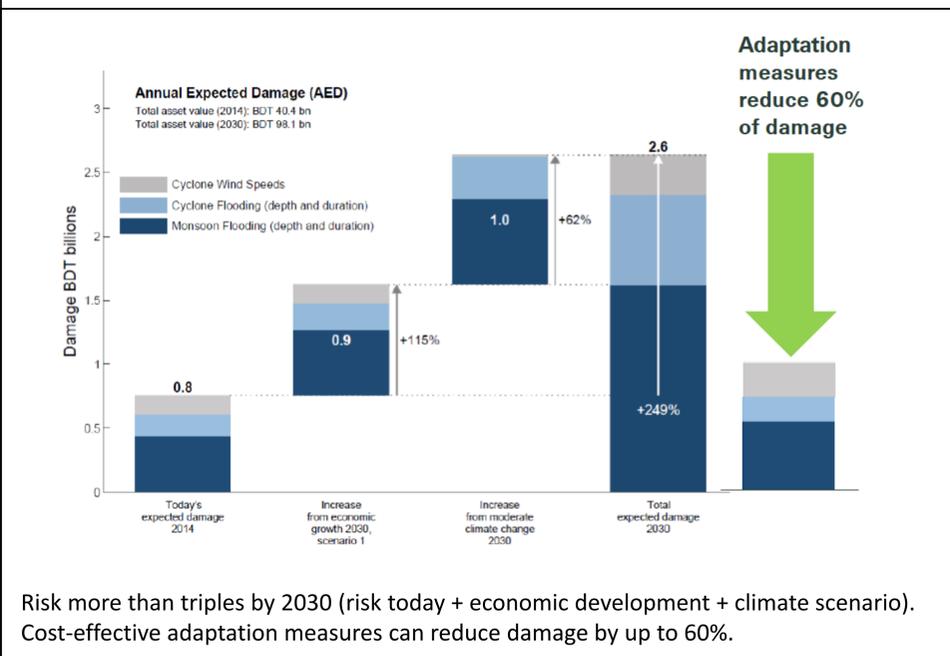
- 1) What is the potential climate-related loss to our economies and societies over the coming decades?
- 2) How much of that loss and damage can we avert, with what measures?
- 3) What investment will be required to fund those measures - and will the benefits of that investment outweigh the costs?

ECONOMICS OF CLIMATE ADAPTATION (ECA) - METHODOLOGY

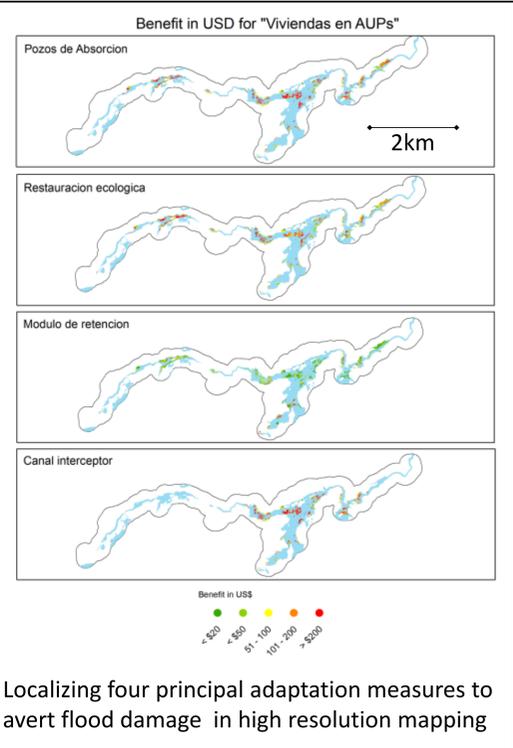
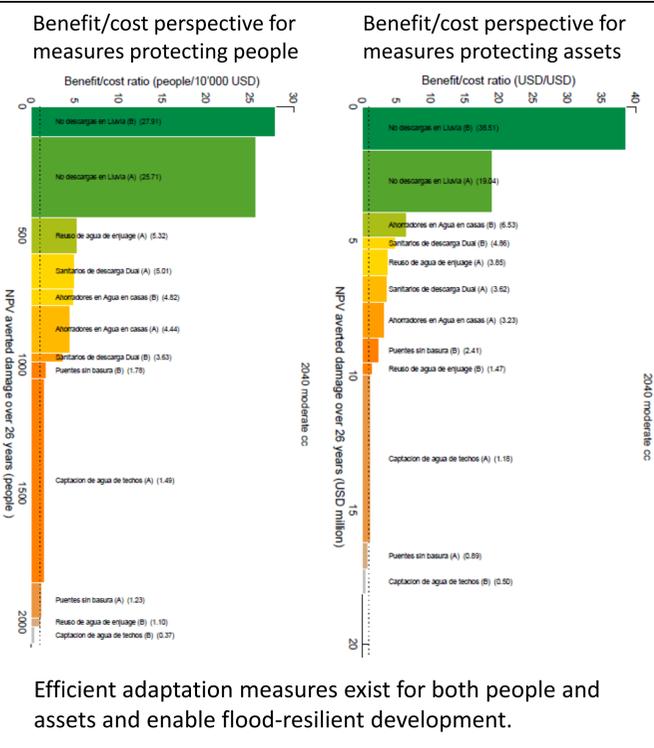
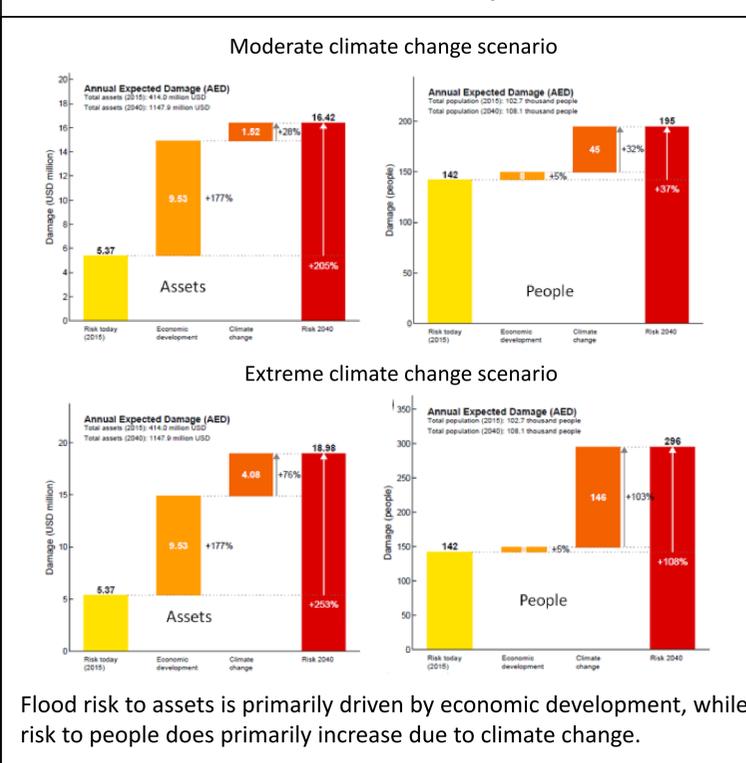
The ECA methodology provides decision-makers with a systematic way of answering above questions - building on the open-source *climada*-tool on github. With a time horizon of e.g. 2030, the ECA provides decision-makers with a fact base to understand climate risk and to design an appropriate adaptation strategy. The ECA identifies actions to minimize hazard impacts at the lowest cost to society and enables to pro-actively manage climate risk. It therefore allows decision makers to integrate climate adaptation with economic development and sustainable growth. Application of the methodology fosters cross-sectoral thinking and collaboration of all stakeholders.



RESULTS FROM BARISAL, BANGLADESH: FLOOD AND WIND RISK



RESULTS FROM SAN SALVADOR, EL SALVADOR: FLOOD RISK TO PEOPLE AND ASSETS



OUTLOOK

By means of these two pilot studies the ECA-methodology was tested and further developed in the context of Germany's Financial Cooperation (KfW) in order to analyze practicability and added value for program preparation. The ECA approach is considered useful - particularly for climate adaptation strategies and strategic investment plans in adaptation finance including insurance approaches. In the future, it shall be discussed how standardization can facilitate a more efficient application of the ECA approach and eventually, how a reduced form of ECA modelling can be utilized as an optional pre-screening tool for adaptation projects - building both, on the strength of the comprehensive methodology and the transparency of the open-source model.

REFERENCES

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- Ecorys et al (2015): Consulting Services for a Base Data report, Vulnerability Analysis and Feasibility Study for the city of Barisal.
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- ECA working group (2009): Shaping climate-resilient development, http://media.swissre.com/documents/rethinking_shaping_climate_resilient_development_en.pdf (2nd QR code →)

