HOW TO BEST SELECT PERTINENT ADAPTATION MEASURES?

METHODOLOGY FOR PRIORITIZING ADAPTATION MEASURES



The *National Policy on Climate Change in Mexico* has an extensive institutional framework which includes the creation of the Interministerial Commission on Climate Change (CICC), the Law of National Climate Change (2012), the National Climate Change Strategy, 10-20-40 Vision (ENCC, 2013) and the Special Climate Change Program 2014-2018 (PECC), as well as recently published INDCs.

In order to achieve national goals and responding to the need to strengthen institutional and social capacities for climate change (CC) adaptation in Mexico, the German Development Cooperation Agency (GIZ) together with the Ministry on Environment and Natural Resources (SEMARNAT) and other institutions developed the Methodology for Prioritizing Climate Change Adaptation Measures (SEMARNAT/GIZ 2013) presented below.

WHAT DOES IT WORK FOR?

It facilitates, based on the criteria defined in the ENCC, the decision making to better allocate human and financial resources for adaptation.

TO WHOM IS IT ADDRESSED?

To decision makers in public administration at federal, state or municipal level.

WHAT IS THE FOCUS OF THE METHODOLOGY?

- Identifies using qualitative and quantitative analysis which adaptation measures are appropriate to prevent risks and reduce vulnerability of the population, the ecosystems, infrastructure and/or productive sectors against the negative impacts of climate change.
- **Promotes** transparent decision making through the participation of diverse actors.
- Encourages capacity development of participating actors and is flexible and adaptable to different territorial and sectorial contexts.

HOW DOES IT WORK?

The methodology consists of seven steps that allow having a list of prioritized adaptation measures for future implementation:

1. Process Design

Defines the objectives of the process, the resources available and the role of the stakeholders.

2. Criteria

Selects and defines criteria related to the adaptation objective (Mexico has criteria defined in the ENCC)

3. Identification of Measures

Defines the adaptation measures considering local vulnerability conditions of the territory and its population; the duration of this step depends largely on the results of the diagnostics and the proposals of actions that exist before starting the prioritization process, i.e. whether one is to work with predefined measures or if it is necessary to start identifying new measures.









4. Review and Adjustments

Measures are reviewed; those that do not meet the basic requirements will get adjusted. Stakeholders are included and the criteria reviewed.

5. Prioritization

Prioritizes identified adaptation measures using the criteria previously defined in step 2 and applying a **multi-criteria analysis**.

6. Economic Valuation

Performs a **cost-benefit or cost-effectiveness analysis** of the priority measures that resulted in step 5.

7. Monitoring and Feedback

Documents and systematizes lessons learned during the process in order to promote transparency and learning.

HOW HAS IT BEEN DEVELOPED?

The methodology has been designed between 2012 and 2013 with a group of experts on climate change, biodiversity, agriculture, the water sector, and environmental economics. It included civil servants, consultants and researchers. Since its introduction in 2013, its divulgence and socialization has started, people have expressed its potentials to fill in a perceived gap not only for decision makers in Mexico but also expressed by participants from other countries in the region.

How to use it?

The methodology has a CD-ROM that includes spreadsheets and step-by-step instructions. In printed form it has a report-guide in development. It can preferably be applied to processes in decision making with groups but also individually if necessary.

To disseminate its knowledge and strengthen capacities for adaptation to climate change, GIZ's program, the *Mexican-German Climate Change Alliance*, developed a training strategy, designed for both national government sectorial entities, as well as for states and municipalities.

Relevant Websites:

Ministry of Environment and Natural Resources of Mexico: http://www.semarnat.gob.mx/

National Institute of Ecology and Climate Change of Mexico:

http://www.adaptacion.inecc.gob.mx/

Blog Climate Change Alliance Mexico-Germany: http://climate.blue/es/

AdaptationCommunity.net. https://gc21.giz.de/ibt/var/app/wp342deP/1443/

Contacts

For more information on the methodology and its application contact the following persons:

GIZ, Mexican-German Climate Change Alliance:

- Andrea Kuhlmann; Senior Advisor on Adaptation. andrea.kuhlmann@giz.de
- Camilo de la Garza; Advisor on Adaptation. camilo.dlgarza@giz.de

SEMARNAT

 Biol. Gloria Cuevas Guillaumin; Advisor on Vulnerability and Climate Change Adaptation to Climate Change of the General Directorate of Climate Change Policy gloria.cuevas@semarnat.gob.mx