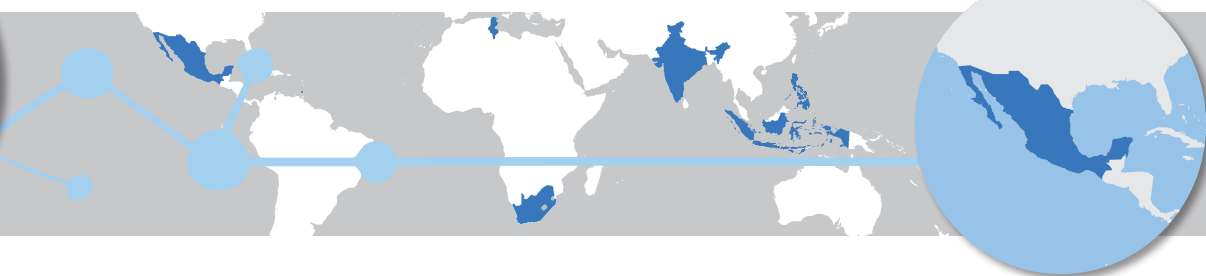


MAINSTREAMING



Method Brief

Mexico: Piloting an MCA for prioritising adaptation measures for three sectors in Mexico

Tool

A Multi-Criteria-Analysis (MCA) is a methodology for prioritising adaptation measures which does not rely purely on economic calculations but rather on qualitative assessments of criteria. In Mexico, an MCA is being piloted in three sectors (irrigated agriculture, water, forest ecosystems). It is part of the larger process of creating a prioritisation tool. This process comprises four phases: phase 1 – identification of adaptation measures; phase 2 – MCA; phase 3 – detailed Cost-Benefit Analysis (CBA) for measures ranked highest by MCA; phase 4 – design of the final tool to be used by government bodies. The MCA is based on the UNEP MCA4Climate policy evaluation framework and the utility index *Índice de Utilidad de Prácticas de Adaptación* (IUPA) used at the national level.

Scope and entry points

The Mexican Government's long term vision regarding adaptation to climate change is manifested in the Climate Change Law, which was enacted in June 2012. The law gives special attention to adaptation to climate change, which allows for the formulation of policies in this field. As established in this legislation, the Mexican Government is responsible for formulating the National Climate Change Strategy (*Estrategia Nacional del Cambio Climático, ENCC*) as well as the second Special Programme on Climate Change (*Programa Especial del Cambio Climático, PECC*). The former aims to establish a framework for national climate change policies, programmes and actions, while the latter establishes specific goals for sectorial ministries relating to both adaptation and mitigation.

Other policies, programmes and projects within this policy framework will be designed, but due to a lack of human, technical and financial resources, not all will be implemented. The prioritisation of measures using an MCA approach ensures that important criteria are met and that decisions in favour of specific measures are harmonised. The Ministry of Environment (SEMARNAT) has commissioned its independent bodies to carry out specific tasks: the National Wa-

ter Commission (CONAGUA) is to implement the methodology for water policies, while the National Forestry Commission (CONAFOR) and the National Commission for Natural Protected Areas (CONANP) are to develop the prioritisation tool in the Forest Ecosystem sector. The ministry of Agriculture (SAGARPA) has also applied to prioritise adaptation measures in irrigated agriculture as a pilot sector.

Specifics of Application

Stakeholders and institutional set-up

Several stakeholders, including the Ministry of Environment (SEMARNAT) and its independent bodies the National Forestry Commission (CONAFOR) and the National Commission for Natural Protected Areas (CONANP), as well as government and academic consultants, were involved in preparing steps 1 to 3. In May 2013 a workshop was held for implementing steps 4 to 7. Representatives from CONANP, CONAFOR, the National Institute for the Environment and Climate Change (INECC), the World Wildlife Fund (WWF), the National Autonomous University of Mexico (UNAM), the National Commission for Knowledge and Use of Biodiversity (CONABIO) and SEMARNAT participated in the workshop. With support from GIZ, CONANP and CONAFOR are leading the process of developing the tool.

Input

For each step in the process, from identifying adaptation options to the final selection of options, several stakeholder meetings were convened which needed to be prepared, organised and documented. The degree of resource intensity associated with identifying the adaptation options depends on the level of institutionalisation. In the case of Mexico the process took five months. In addition, a good facilitator is needed to moderate, draw conclusions from, and document discussions. Basic spreadsheet software (e.g. Excel) is required for calculating and visualising the scoring and weighting.

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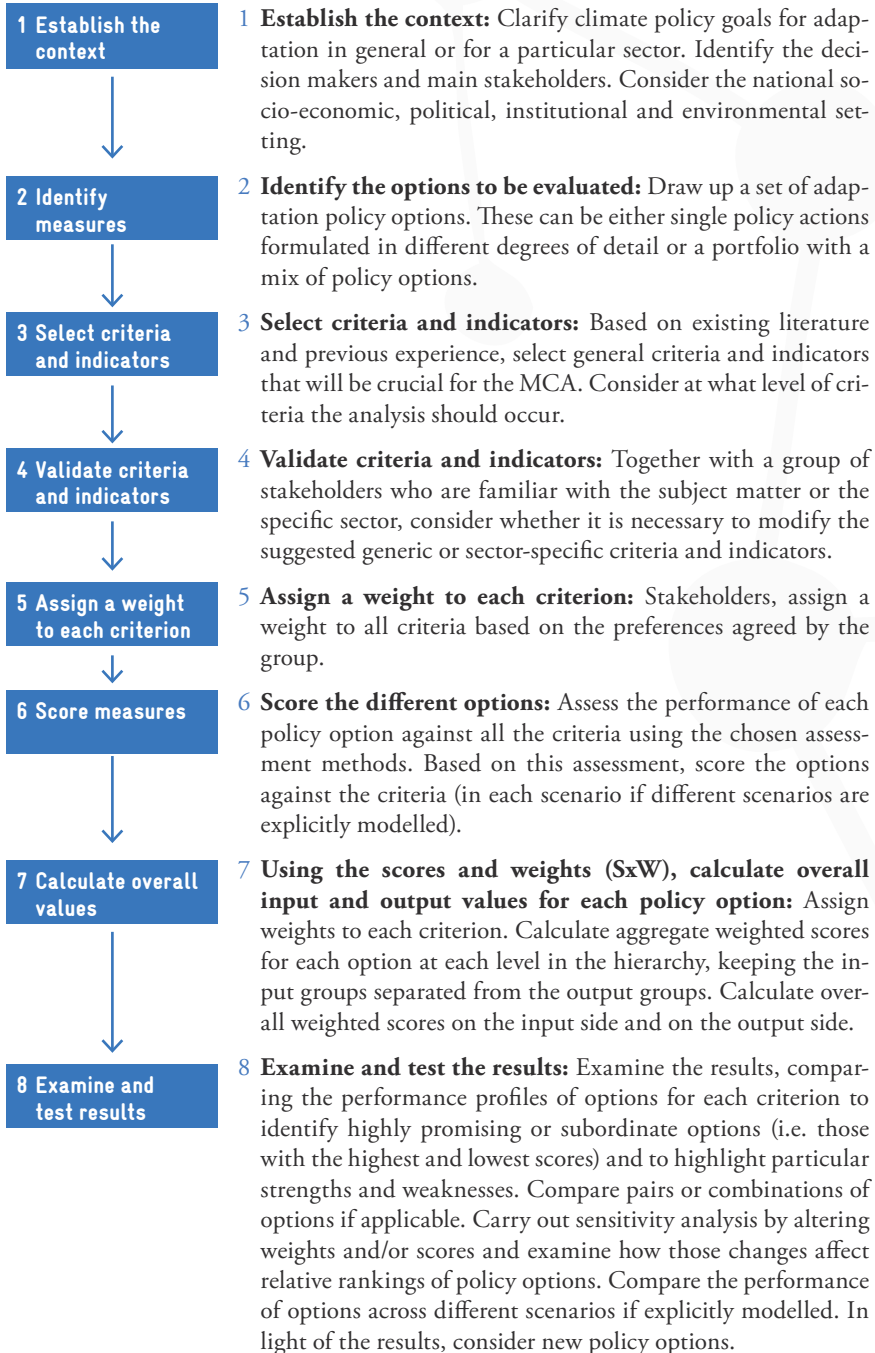


Federal Ministry for the
Environment, Nature Conservation
and Nuclear Safety

of the Federal Republic of Germany

How it works

The MCA is comprised of several steps that are carried out in a participatory way with relevant stakeholders.



Specifics of Application

Output

Once the criteria are validated and weighted, and each adaptation measure has been assessed against the criteria, the information is entered into a software application. A spider diagram or another form of visualisation (e.g. x-y-graph) is used to show the result of the assessment. In order to ensure transparency, good documentation of the discussions and decisions that contributed to the development of the criteria and the weighting is equally important.

Capacity required and ease of use

As this tool builds on participation with various stakeholders, several workshops have to be held at the different stages before the tool can be fully validated. As is the case with other participatory processes, general facilitation plays a key role. Especially at the beginning, but essentially at every workshop, a good introduction and explanation of the need for the tool is required to build understanding amongst all parties involved. In addition, participants need to have an understanding of adaptation. For those who were inexperienced in the field, the adaptation background was laid out in one of the first workshops and was recapitulated at the beginning of the following workshops. The software that is needed to display the results of selecting and weighting the criteria is easily replicable and can be developed using a simple spreadsheet program. An appropriate individual needs to be trained in using the tool in order to carry out the workshops. At a later stage there should be one responsible person in each institution who is trained to handle the software.

Conclusions for future application

Outcome and added value

Since this MCA application for climate change adaptation is a pilot, it is not yet possible to definitively predict the changes the tool will imply for the institutions. However, CONANP and CONAFOR intend to use this tool to improve their decision-making processes so as to implement adaptation measures in a more transparent way and create acceptance for those measures.

Cost-benefit ratio

Users of the tool do not need to purchase resource-intensive appliances. However, preparing, organising and documenting the stakeholder workshops is time-consuming and requires significant personnel. In the case of Mexico, expenses included costs for consultants who were brought in to prepare the adaptation measures, establish the first set of indicators, develop the spreadsheet and compile the workshop reports. The benefits of this process are high levels of transparency and acceptance.

Potential for replication

This tool is currently being piloted for the water and forest ecosystem sectors. It has already been carried out successfully in the agricultural sector. The final product of this prioritisation pilot project (including MCA and CBA) will be presented in a handbook in simple and accessible form to help ensure it can be replicated in other sectors and institutions.

References

UNDP (2011). A Practical Framework for Planning Pro-Development Climate. United Nations Environment Programme

GIZ (2013). Workshop Report/Memoria del Taller 'Hacia el análisis multicriterio para la priorización de medidas de adaptación en ecosistemas forestales.' (Spanish)

Reference person for further information

Andrew Rhodes

Director for Climate Change Strategies,
Mexican National Commission of Natural Protected Areas (Comisión Nacional de Áreas Naturales Protegidas, CONANP)

arhodes@conanp.gob.mx

Carmen Gómez Lozano

Subdivision for Forest Carbon Markets,
Mexican National Forest Commission
(Comisión Nacional Forestal, CONAFOR)

cgomez@conafor.gob.mx

Sofía Muñoz

sofia.munoz@giz.de

Camilo de la Garza

camilodlgarza@giz.de

Alianza Mexicana-Alemana de Cambio Climático,
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH
Calle Odontología No. 1
Colonia Copilco
Delegación Coyoacán, CP 04360



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Registered offices
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Inventory of Methods for Adaptation
to Climate Change – IMACC
Dag-Hammarskjöld-Weg 1-5
65760 Eschborn, Germany
T +49 6196 79-0
F +49 6196 79-1115
E info@giz.de
I www.giz.de

Contact

Michael Hoppe, GIZ
E michael.hoppe@giz.de
T +49 6196 79-2597
I www.giz.de/climate/adaptationcommunity.net

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