

Method Brief

The Indicator and Reporting System of the German Adaptation Strategy

The Approach

The German Adaptation Indicator and Reporting System aims to monitor climate change impacts as well as responses along the fifteen priority themes of the German Adaptation Strategy. An extensive expert and stakeholder consultation process has been undertaken to identify key indicators for both climate change impacts and responses in each of the priority themes, taking into account existing sectoral monitoring systems.

Scope and entry points

The main entry point was the adoption of the German Adaptation Strategy (Deutsche Anpassungsstrategie, abbreviated 'DAS') in December 2008. The process of developing the Indicator and Reporting System is coordinated by the Federal Environment Agency. The function of the system is to simultaneously monitor climate change impacts and document progress made towards adaptation in the fifteen priority sectors identified in the DAS.

Indicators can be allocated to the components of impact (i.e. climate change impacts) and responses (i.e. results of adaptation measures) as shown in the Figure.

In order to be considered, indicators need to fulfil a number of criteria (e.g. reflect the current state of knowledge). In addition, all suggested indicators have been classified according to whether data is readily available or if additional calculations and/or data collection is required. A detailed description of the process can be accessed through the links provided in the references section below.

As of the end of 2012, the suggested indicators are under review by the respective government authorities and data providers. The format and frequency of reporting based on the indicator system is still under discussion, and reporting is expected to start in 2014.

How it works

An extensive consultation process was started in 2010 involving federal and state government authorities, academic institutions and NGOs to identify indicators for each of the fifteen 'action fields' of the DAS (e.g. human health, agriculture, water, energy). The development of the Indicator System was based on the DPSIR (=Drivers, Pressures, State, Impacts, Response) System as originally developed by the OECD for Environmental Quality Monitoring. Accordingly, in-

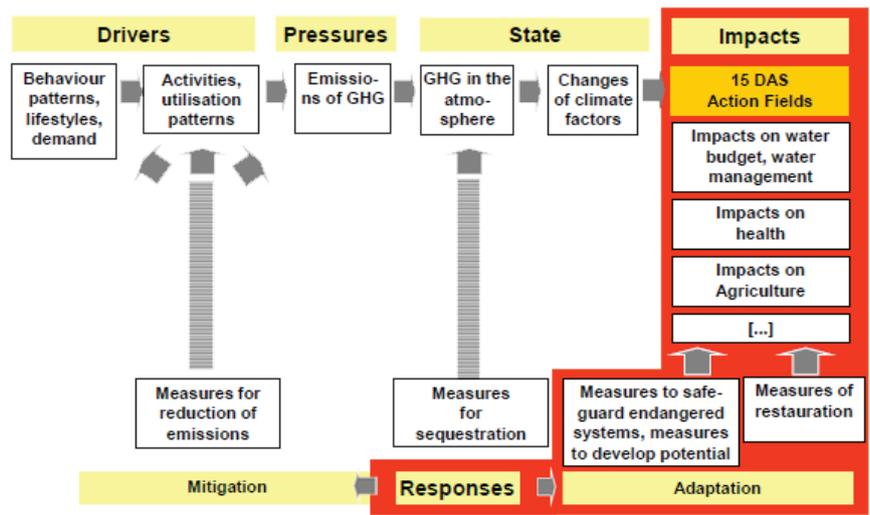


Figure: Impact and response indicators of the German Adaptation Strategy.

On behalf of



Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

of the Federal Republic of Germany

Specifics of application

Stakeholders and institutional set-up

The indicator development is organised in a multi-stakeholder process led by the German Federal Environment Agency. Active cooperation of and acceptance by all Federal Ministries throughout the entire process is ensured through an Inter-ministerial Working Group. Multi-stakeholder consultations are being held on selected action fields and groups of indicators.

Input

The process of developing the indicator system has evolved in multiple phases from initial research over stakeholder input to the selection of indicators. This very sophisticated process has taken five years and required extensive personnel resources. Additional resources will be needed for implementation of the Indicator and Reporting System but these cannot be specified as of now.

Output

The main output of the development process will be a set of Fact Sheets elaborating all essential information on the selected indicators in accordance with international requirements and national practice regarding the documentation of indicators, including calculation formulas, data sources, allocation and interpretation aids, analysis of strengths and weaknesses, responsible actors, costs etc. A second output will be the reporting structure as such, i.e. format, frequency and communication channels.

Capacity required and ease of use

Concept development and technical specifications for the Indicator and Reporting System are ambitious and require substantial scientific support and inputs by various experts from a variety of institutions and sectors. The implementation of the system will also require significant capacity, e.g. for coordination, data housing, analysis etc. Relying as much as possible on existing monitoring capacities reduces the extent of additional capacity that will be required.

Conclusions for future application

Outcome and added value

The approach will enable tracking of the progress towards adaptation along the goals and measures as defined in the Adaptation Strategy. It will further document crucial climate change impact indicators and, thus, validate assumptions made in the Adaptation Strategy.

Cost-benefit ratio

An M&E system for the German adaptation strategy (DAS) was seen as indispensable by the involved authorities. The approach chosen by Germany's government is sophisticated and requires substantial resources, yet it seems appropriate considering existing institutions involved in monitoring and their available capacities, data and expertise.

Potential for replication

While the overall approach (five-year timeframe requiring a lot of existing capacities and scientific expert input) may not be possible to replicate directly, basing the M&E system as much as possible on existing data and monitoring systems is useful, especially in countries with limited resources. This will help to adjust an M&E system to the available resources and capacities. Involving experts, policy-makers and stakeholders in the development process also benefits the applicability, use and acceptance of the system.

References

The recent status of the M&E system development including the draft table of indicators is being documented in the following report (including a detailed English summary): http://www.anpassung.net/cln_339/nn_1472172/Shared-Docs/Downloads/DE/Arbeitsstandsbericht_Indikatoren_2011.html

The overall process of the M&E system development is documented in the following report: <http://www.uba.de/uba-info-medien/4031.html>

Reference person for further information:

Ms. Petra van R uth

Federal Environment Agency

T: +49 340 2103 2127

E: Petra.vanRueth@uba.de



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Registered offices
Bonn and Eschborn, Germany

Inventory of Methods for Adaptation
to Climate Change – IMACC
Dag-Hammarskj ld-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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