## CLIMATE MODELLING, SCENARIOS AND DOWNSCALING

### WHAT IS THE NAIROBI WORK PROGRAMME?

The Nairobi work programme, under the United Nations Framework Convention on Climate Change (UNFCCC), aims to assist countries that are party to the Convention, particularly developing countries, to improve their understanding and assessment of impacts, vulnerability and adaptation to climate change, and to make informed decisions thereon.

# WHAT ARE CLIMATE MODELS AND SCENARIOS, AND DOWNSCALING IN THE CONTEXT OF THE NAIROBI WORK PROGRAMME?

Work area 3 promotes the development of, improved access to, and use of information and data from climate models, scenarios and downscaling techniques, in order to effectively facilitate the assessment of climate change vulnerability, impacts and adaptation. This ensures a sound basis for adaptation planning and implementation. Climate models offer estimates of climate variables under a changing climate. However, they often operate at a much larger spatial scale than that required for adaptation decision making. Climate scenarios are constructed to characterize the likely states of climate parameters within an uncertain future climate, mostly based on outputs from climate models. Downscaling techniques are required to derive region- or location-specific climate information to support assessments.

## HOW DOES THIS WORK AREA CONTRIBUTE TO THE EFFORTS OF STAKEHOLDERS?

Undertaking activities in work area 3 can assist stakeholders at international, regional, national and local levels to share knowledge and identify gaps and opportunities to improve the temporal and spatial resolution and uncertainties of scenarios and model outputs and assist in the development and dissemination of regional and national scenarios to support policy-relevant assessments. It can help Parties and organizations identify practical ways to improve the availability of, access to, and use of climate model and scenario outputs, including through training and capacity building.



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## WHAT PROGRESS HAS BEEN MADE, AND WHAT UPCOMING ACTIVITIES CAN BE EXPECTED?

### Progress includes:

- Submissions by governments, modelling centres and agencies, and organizations including the Intergovernmental Panel on Climate Change (IPCC) on related activities.
- An in-session workshop in June 2008, Bonn, Germany.

### Activities mandated during 2008 - 2010 include:

 Consideration of relevant issues from this work area, along with information on methods and tools and data and observations, in a technical workshop on how regional centres and networks that are undertaking work relevant to climate change can collaborate.

The IPCC Task Group on Data and Scenario Support for Impact and Climate Analysis (TGICA) aims to enhance their outreach. It shares information on the development of new scenarios with a view to increasing awareness on ways in which these scenarios can, and will, be used for impacts, vulnerability and adaptation assessments. A Call for Action relating to this work area is available that highlights gaps and needs, and aims to catalyze a number of activities by stakeholders. These include: continuing to develop and disseminate climate information to help governments with decision-making for adaptation; increasing the availability of high-quality data; increasing the understanding of models and their outputs; improving the accuracy of climate projections; and strengthening the role of regional centres.

At the beginning of 2009, 8 Action Pledges related to this work area had been received. Action pledges provide an interactive way for Nairobi work programme partners to contribute actions towards the goals and objectives of the Nairobi work programme.

For the latest information on climate modelling, scenarios and downscaling, and accompanying documentation:

http://unfccc.int/3989.php



