

## **The Global Water Initiative Workshop: Implications of regional climate variability on water resources in Africa**

21-23 September 2009

With support from the Gordon and Betty Moore Foundation, the University of California, San Diego (UCSD) and the University of Cambridge have developed a partnership relating to the science, technology, and policy of environment and sustainability. The partnership's first project, the Cambridge-UC San Diego Global Water Initiative (GWI), is intended to help stimulate adaptation to the impacts of climate change on water availability.

The University of Cambridge, in collaboration with UC San Diego, convened a workshop from September 21 – 23, 2009, at the Cambridge University campus where more than one hundred multidisciplinary experts from Africa and around the globe met to discuss the impacts of climate change on water resources in regions across the African continent.

Workshop experts represented regional institutions including the Drought Monitoring Centre in the South African Development Community, the University of Ghana Legon, and national African meteorological (met) offices. The keynote speaker for the workshop was Ms. Hanny Sherry Ayittey, Honourable Minister for Environment of Science and Technology from the Government of Ghana.

The three-day workshop brought together these experts in order to:

- \* Understand the impacts of local climate change and climate variability across the world, with a particular emphasis on water resources in African regions;
- \* Identify research, technology, and climate data management needs for integrated policies for sustainable development;
- \* Improve connections and develop partnerships to promote regional climate initiatives and exchange of climate data, best practices, policies, and technologies for adaptation with the involvement of local policy makers and communities.

The first three days of the workshop were devoted to an assessment of variability and predictability of climate change in Africa, including connections between regional climate data and modelling of extreme events; the impacts of climate change and variability on water resources and subsequent effects on ecosystems, agriculture, health and resource supply chains; and the impacts on society from a changing climate and water availability. Participants also discussed applying new sources of data and data management practices to link climate change to societal impacts and policy solutions; and the role of the private sector, NGOs, and information and data networks in current decision-making processes and future developments.

Breakout groups placed particular emphasis on practical and systemic obstacles to information exchange and open knowledge transfer in linking climate research with policy and decision making for adaptation in Africa while enhancing existing systems for achieving integrated responses to climate change impacts by applying new sources of data and data management.

The third day of the workshop was devoted to drawing conclusions of the workshop. African and international colleagues stayed for a series of focused meetings after the workshop to determine next steps for climate change adaptation in Africa based on the results of the workshop.

Conclusions based on discussions held at the workshop include:

\* Climate change adaptation in Africa must be linked with the broader human rights and development agendas.

\* Knowledge Action Networks for dynamic adaptation to climate change and climate variability are necessary to facilitate communication and action between physical and social scientists, policy makers, and the communities of practice in regions that will be hardest hit by climate change. They must make the right environmental and social data available at the right place at the right time to constructively engage decisions makers at the smallest scales;

\* For regional adaptation to be successful, attention must be focused on capacity building to train African scientists on African problems in Africa, with appropriate support from international organizations;

Workshop leaders presented these findings, as well as findings from an earlier GWI workshop held at UCSD last May on climate impacts on glaciers in the Himalayas, at the 2009 Forum on Science and Technology in Society in Kyoto, Japan, in October 2009. The University of Cambridge and UCSD will continue facilitating the discussion of the global water crisis with the long-term goals of developing partnerships, sharing best practices, promoting common monitoring and assessment standards, and expanding regional capacity to adapt to the impacts of climate change.

- **UCSD Workshop Materials:**

- [http://esi.ucsd.edu/gwi/index.php?option=com\\_content&task=view&id=17&Itemid=26](http://esi.ucsd.edu/gwi/index.php?option=com_content&task=view&id=17&Itemid=26)

- **UCSD Workshop Report:**

- [http://esi.ucsd.edu/gwi/report/webC\\_WorkshopReport.pdf](http://esi.ucsd.edu/gwi/report/webC_WorkshopReport.pdf)