

## CLIP OUTREACH

The CLIP findings are particularly fascinating to people in East Africa because they are the first climate model results presented at a higher resolution than the coarse grids of general circulation models (GCMs). GCMs results tend to indicate that East Africa will generally become wetter whereas the experience of people in the region is that rainfall is more variable which is affecting crop production, and that surface water and vegetation resources are shrinking.

In the last year, the project team prepared policy oriented reports and policy briefs based on CLIP results geared towards the research, donor, governmental and non-governmental organization communities. The briefs were prepared by Olson, Maitima, Yanda and Andresen. They have been widely distributed in paper format, and are available on the websites of CLIP and the International Livestock Research Institute.

Policy workshops were held in Nairobi, Kenya and Dar es Salaam, Tanzania in June 2008 to present CLIP research findings and to discuss implications for the countries' policies and programs. Two MSU faculty, Olson and Andresen, along with Yanda in Tanzania, and Maitima and the climate expert in the Kenyan government (Masawe) in Kenya made presentations. The level of interest was high due to the already recognized effects of climate change (warmer temperatures, unpredictable rainy seasons, etc.) and the previous lack of climate modeling results at meaningful resolutions.

The Tanzania workshop was organized by the Institute of Resource Assessment of the University of Dar es Salaam and held in a well known downtown hotel. Participants included representatives from several ministries (Agriculture, Infrastructure, Livestock and Fisheries, Planning), non-governmental and community based organizations (NGOs and CSOs), and researchers from the University. Among the issues that came out of the workshop was the impact of higher rainfall and stronger storms along the Indian Ocean coast, and the inadequacy of the infrastructure of Dar es Salaam. This problem is currently being experienced and the simulations project that it will intensify.

The Kenya workshops was co-hosted by the Ministry of Environment and the International Livestock Research Institute, and held in a large downtown hotel. It was opened by the government's National Coordinator of Climate Change Enabling Activities (she also made a presentation). Representatives from Ministries (Agriculture, Lands, Livestock), the National Environment Management Authority, NGO's and CSO's (IGAD Climate Prediction and Application Centre, Health and Economics Development Consortium, Climate Network Africa, Olare Orok Conservancy) and from the University of Nairobi participated. In the discussions, the impact of projected climate change on already scarce surface water availability was of great concern. Most of the country's electric power is generated by hydropower and stream flow is already declining, while the demand for power is increasing dramatically. CLIP results show that temperatures and evaporation rates will continue to rapidly increase. Discussed was the critical need for developing alternative power sources, improved watershed management, afforestation, and more efficient urban and agriculture water use and infrastructure. Critical however is the issue of water rights, the problem of bush encroachment and declining grass forage in pastoral areas, and the need to develop new agricultural technologies.

The workshops generated much interest. Representatives from the governments requested copies of the findings to use in their planning and in their reports to the UNFCCC. We have received queries for more information from various sources including the World Bank and a private company investing in solar energy in Kenya. The University of Dar es Salaam distributed news of

the workshop to Tanzanians news outlet, and two Tanzanian newspapers published a story on it with an interview of Yanda. ILRI put a press release on the front page of its website. The story was picked up by the Science and Development Network (an international online science news outlet), Kenyan and Ugandan newspapers, the World Agroforestry Institute as a newsletter item, etc. A story was aired on NTV, a Kenyan evening TV news show, with an interview of Maitima. See links below.

CLIP has not generated the same level of interest in the U.S. media. However, the team has presented its findings at various scientific conferences, including at a CLIP panel at the Association of American Geographers 2008 annual meeting. Team members have made presentations of results at several campus-wide groups, and at professional meetings. Some of these have generated widespread interest. For example, a new initiative of the MSU International Studies Program, the Partnership for Sustainable Communities, will start its work in northern Tanzania due to the CLIP team presence and research results. It will develop climate change adaptation projects and learning opportunities at primary schools around the climate change theme.

CLIP models and data results are being used in other major research projects. For example, NIH funded the project, “Dynamic Ecological Simulation Model of Tsetse Transmitted Trypanosomosis in Kenya” (PI Messina) that is modeling the effect of climate and land use change on tsetse fly habitat and trypanosomosis distribution. The CLIP team is using its coupled regional climate and vegetation models to focus on the effects of climate change on savanna vegetation composition and productivity, and the impacts on livestock and livelihoods in a CNH project, “Dynamic Interactions among People, Livestock, and Savanna Ecosystems under Climate Change.” Finally, the CLIP team with human medicine and veterinary epidemiologists are developing new research that will be examining the effects of climate and land use change on Bovine tuberculosis, an emerging zoonotic disease, in Uganda.

CLIP News Links:

<http://ugpulse.com/articles/daily/news.asp?ID=6401>

<http://allafrica.com/stories/200808130500.html>

<http://www.ilri.org/ILRIPubAware/Uploaded%20Files/TheEffectsOfClimateAndLandUseChanges.pdf>

[http://www.ilri.org/ILRIPubAware/Uploaded%20Files/NC\\_DailyNation\\_2008Aug\\_SevereWeatherComing.pdf](http://www.ilri.org/ILRIPubAware/Uploaded%20Files/NC_DailyNation_2008Aug_SevereWeatherComing.pdf)

<http://www.ilri.org/ILRIPubAware/News.asp?CategoryID=NC> .

<http://www.ilri.org/ILRIPubAware/ShowDetail.asp?CategoryID=TS&ProductReferenceNo=TS%5F080722%5F001>

Science and Development Network, SciDev Net, August 13, 2008. Climate cropland change “raising temperatures” in East Africa

<http://www.scidev.net/en/climate-change-and-energy/news/climate-cropland-changes-raising-temperatures-in-e.html>

[http://www.uea.ac.uk/dev/climate/impacts\\_8.htm](http://www.uea.ac.uk/dev/climate/impacts_8.htm)

[http://infoagro.net/en/apps/news/record\\_view.cfm?vsys=a2&id=14435](http://infoagro.net/en/apps/news/record_view.cfm?vsys=a2&id=14435)

<http://www.treesofchange.org/af1/fileadmin/Transformations/Transformations%20%2022%20August%202008.pdf> Newsletter of ICRAF, *Transformations*, 22 August 2008. Science story of the week.