

# Title: Supporting Capacities for Climate Change Adaptation In Eastern Africa

Project leaders: Jouwert van Geene / Catharien Terwisscha van Scheltinga

## **Background**

At the request of the Ministry of Agriculture, Nature and Food Quality (LNV), Wageningen UR has initiated a support programme for climate change adaptation in Eastern Africa. In partnership with ASARECA<sup>1</sup> and IUCN<sup>2</sup> a scoping workshop on was held in Nairobi in mid June 2008. The focus was on capacities needed to better integrated climate change adaptation responses into agricultural, rural development and natural resources policy processes.

Adapting to climate change is emerging as a critical concern for countries in East Africa. Changing climatic and weather patterns are predicted to have severe negative impacts on food production and security, current land uses and incidence of disease. More regular and extreme weather related natural disasters are expected. There may also be some positive impacts in relation to agriculture production and water availability. Without appropriate adaptation responses climate change is likely to constrain economic development and poverty reduction efforts and exacerbate the difficulties of realising the Millennium Development Goals.

Developing adaptation strategies and the capacities of all sectors to respond was a key outcome of the Bali Action Plan of the UNFCCC. A first step in this regard has been the development of National Adaptation Programmes of Action (NAPAs). The Commission on Sustainable Development Session 17, which is being chaired by the Netherlands, will focus on Agriculture, rural development, land, drought, desertification, and Africa. Climate change adaptation is central to this agenda. The need to mainstream adaptation into sustainable development is obvious. In many cases climate change will have an impact on achieving development goals through temperature increases, water scarcities, and through weather variability and extreme events. And development programs will be less effective when they overlook potential synergies and tradeoffs between development and climate change. Climate change adaptation policies therefore, should be intrinsic elements of development policies.

## **Scoping Workshop**

The scoping workshop was a joint initiative of Wageningen UR Institutes involving Wageningen International, Plant Research International and Alterra. The workshop was conducted in a highly interactive and participatory way with much dialogue between the participants. This was highly appreciated and seen as a very appropriate way for dealing with what was recognised as a highly complex issue.

The workshop was attended by 35 participants from Kenya, Ethiopia, Uganda, Tanzania, Rwanda and Burundi. There was a cross-section of representation from policy makers, researchers, education and non-government organisations. Representatives of the FAO and the Netherlands Embassies in Kenya and Rwanda also participated.

The workshop started with presentations introducing different perspectives on the following issue:

- Climate change adaptation with an overview of impact based on the latest IPCC<sup>3</sup> report.
- Biodiversity and Natural Resource Management and the work of IUCN in East and Southern Africa to raise awareness about climate change issues.
- Implications for agriculture from an East Africa perspective: the examples of RUFORUM, a regional forum for capacity building at university level and ASARECA, a regional research network. Rural development – strengthening smallholder capacities to reduce the impact of climate change from the UN perspective.



The presentations were followed by group discussions. The groups were divided according to agro-ecological zones to look at how vulnerable people and ecosystems are to climate change. We also identified hot spots in the zones. Key message from this discussion was that **climate change is real**, it creates **uncertainties and opportunities**, and it is a **complex** issue.

Next the policy challenges in adapting to the vulnerabilities identified during the earlier discussion. This was introduced with a presentation by Hayo Haanstra (LNV) presenting the case of the Netherlands. Groups of participants then explored the policy challenges within the East African context. The key challenges are:

1. Having access to relevant (scientific) knowledge for decision making
2. Integrating climate change into economic and development strategies (mainstreaming)
3. Participatory policy making
4. Engaging with global negotiations
5. Cooperation across sectors
6. Political commitment to act

The group also explored current relevant initiatives in the region and had a discussion on what is capacity development. Many initiatives are currently being undertaken, some specifically addressing climate change issues, others integrating climate change in their focus. There is no place with an overview of all current initiatives and it is developing and changing all the time<sup>iv</sup>.

The workshop then focused on capacity development. It was established that **adapting to climate change requires new knowledge and capacities**. It is not just about delivering scientific knowledge on climate change but applicable knowledge, and the support to develop the capacities to act adequately. The participants also thought that there is a need to develop more capacity to deal with uncertainties, both in science and in policy development and implementation. Consequently the different capacity needs were identified for the different ecological zones. A wide agenda emerged with a clear request from regional actors for input and support from Wageningen UR. Ideas for such support included a follow-up high level forum for policy makers, specific technical advice, capacity development for researchers and policy makers, greater integration of climate change into university curriculum, regional network development, training programmes, improving public awareness raising and enhancing international negotiation capacities.

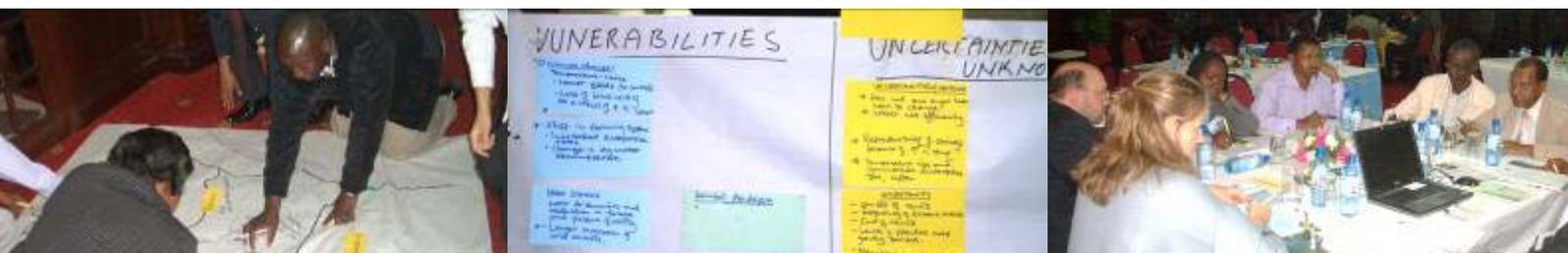
## Conclusions and Way Forward

A clear message emerged from the workshop - that much **more effort is needed to fully integrate climate change adaptation into agriculture and natural resource sector plans and economic development policies and strategies**. Limited understanding of climate change and weak capacities for adaptation, across government, civil society and private sector actors, was seen as critical constraint to developing and implementing an appropriate policy response. Substantial capacity development was also seen as being critical for implementing the NAPAs.

A steering group involving 6 regional organisations and Wageningen UR was established. In consultation with the Ministry of Agriculture, Nature and Food Quality, a set of follow up initiatives are now being planned and the resources to support this are being sought. Climate change adaptation will be a key theme in the 2009 Policy Support Cluster International Programme of the Ministry.

In the follow-up of the scoping workshop there is an important role for international and local knowledge institutions to provide support in capacity development for climate change adaptation policy development in East Africa. It is not just about delivering scientific knowledge on climate change but applicable knowledge, and the support to develop the capacity to act adequately, and in line with sustainable development objectives.

**Capacity development for climate change adaptation is about learning to deal with uncertainties, both in science and in policy development and implementation.** This includes capacities to assess and analyze climate change and identify possible impacts on agriculture and NRM at different scales are needed. It may be necessary to develop different scenarios and develop a kind of adaptive management both for policy development and implementation. This builds on the skills to find information and to do research on these issues. It also requires the capacities at the level of government staff to deal with a variety of stakeholders, to cooperate in a complex environment, create the necessary institutional set-up and to deal effectively with possible conflicts. In order to find solutions to very complex issues different stakeholders may need to come together in constructive dialogue and joint learning, informed by scientific understanding and technological opportunities.



This initiative will continue to build on and strengthen the existing links between research, policy and practices in and between the countries involved.

The objectives for follow-up already during 2008 are:

1. To maintain and develop the network of potential East Africa partners initiated in the June scoping workshop
2. To prepare a high research/policy forum to be held in East Africa during the first quarter of 2009
3. To prepare for training and capacity development activities to be carried out in 2009
4. To ensure coordination and linkages within Wageningen UR and with other regional and international climate change adaptation initiatives

### Further Information

More information and background documents about this initiative and on climate change adaptation:  
<http://portals.wi.wur.nl/climatechange/?Welcome>  
 Full report of the workshop:  
[http://portals.wi.wur.nl/climatechange/?Output\\_workshop](http://portals.wi.wur.nl/climatechange/?Output_workshop)  
[Jouwert.vangeene@wur.nl](mailto:Jouwert.vangeene@wur.nl) / [Catharien.Terwisscha@wur.nl](mailto:Catharien.Terwisscha@wur.nl)

### Short statements



**Dr. Jan Verhagen, PRI, Wageningen UR**

*Adaptation is not new, we have always done this, now we have to take it forward in development strategies. Government should look at long term development like investments, high dam power, etc. It is about making decisions taking*

*risks and uncertainty into account. (...)*

*There are two components to climate proof development: it should be climate safe and climate friendly. We need to understand what people are already doing. And whether their solutions would be sufficient, given the developments at hand. We need to take vulnerability into account, e.g. how vulnerable are your investments, policies, etc. Increasing resilience means reducing vulnerability and is therefore important.*

### Dr. Excellent Hachileka, IUCN-ESARO

*Communication between researchers, policy-makers, managers, politicians and communities about the threats of climate change for biodiversity and natural resources must be improved. There is the need to raise awareness on the implications of climate change for sustainable natural resources management and develop adaptation strategies and improved climate risk management options. We need to build capacity to improve the understanding of the implications of climate variability and climate change for ecosystems and biodiversity and find working knowledge of methods and selected tools for assessing climate change impacts to ecosystems, species and human livelihoods. Support is needed for natural resources managers and policy-makers at the local, national and regional levels to start to design adaptive policies for adaptation to climate change impacts on biodiversity and natural resources.*



### Dr. Oliver V. Wassonga, RUFORUM

*RUFORUM is a regional university forum for capacity building in agriculture. The objective is building capacity for capacity development (e.g. train the 'trainer' at universities). Addressing problems for agricultural development in Sub Saharan Africa by placing universities into development context to cause impact. Points of attention are quality and focus of higher education and how to recreate African universities for relevance to development. Challenges currently being faced are that the staff is not competent, although everybody knows climate change is a cross cutting issue and is very important. Furthermore there is a lack of partnerships, most organizations operate on their own, but there should be more collaboration.*

### Dr. Fina Opiyo, ASARECA



*ASARECA is "the Association for strengthening Agricultural Research in Eastern and Central Africa". 10 African countries are part of ASARECA. ASARECA is interested in climate change because they agree with the UNDP Human Development Report (2006) that states: "nowhere is the*



challenge of developing effective strategies for adaptation to climate change more pressing than in rain-fed agriculture, where livelihoods of millions of the world's poorest people will become more precarious as rainfall patterns become more variable and in some cases, water availability declines". This observation is more pertinent in Sub-Saharan Africa where it is estimated that more than 90% of the poor depend on rain-fed agriculture (i.e. crops and livestock) for livelihoods and reduction of poverty (UNDP, 2006). The ten ASARECA countries are part and parcel of this Sub-Saharan Africa. The focus of ASARECA is agriculture and the changes in climate change are likely to affect agriculture negatively in future. Climate change is predicted to make agriculture more risk prone.

#### Dr. Alemneh Dejene, FAO



Smallholder and subsistence farmers are highly vulnerable to slight shift in climate variables and require immediate attention. Building resilience at farm level is the first step towards food security and sustainable and continuous adaptation.

At the 16<sup>th</sup> meeting of the UN Commission on Sustainable Development (CSD-16) it was stated that the food crisis is the biggest concern, followed by bio-fuel. Therefore, we need to address the food issue, and we need direct action.

The way forward is to work now for the Post-Kyoto Process for financing climate issues building on adaptation. There is the need to support and strengthen the NAPA-process, and particularly its implementation.

#### Hayo Haanstra, Ministry of ANF, the Netherlands



For climate proofing in the Netherlands, the Ministry of Agriculture, Nature and Food Quality was involved in the initiation of the ARK programme on Adaptation, Spatial planning and Climate. It started in 2005 and government and non-government organizations at

different levels are working on a joint policy agenda. In the Netherlands, consequences on safety are expected (risk of flooding), on economy (agriculture, tourism, energy, etc) and consequences for the living conditions

like health problems (lime disease, blue algae, etc) and biodiversity.

Important when considering how to deal with risks, is, to discuss with all partners in society to understand what they see as risks.

#### Dr. Everline T. Komutunga (NARO, Uganda)



In order to address climate change adaptation, the incorporation of gender aspects is essential. In agriculture in East Africa, women play a most important role

Internationally, two third of the people living on less than 2 dollars a day, are women. Therefore, we

need to address gender issues while addressing climate change adaptation in order to make it sustainable.

#### Remarks about Government involvement

There is a very big gap between the international level and the national level regarding the understanding of climate change issues. The parliament has to be convinced that climate change is an important issue. Why do the African ministers of finance don't come to climate change meetings – what is the missing info to convince them to come? Also the other ministries, like agriculture, environment, etc. need to be convinced, as the Ministers of agriculture and environment should convince the Minister of Finance, about the importance of the issue! There should be coordination between line ministries, they should know there is a real need. The threat of climate change is real so ministries should come out with actions.

<sup>1</sup> Association for Strengthening Agricultural Research in Eastern and Central Africa

<sup>2</sup> The World Conservation Union – East and Southern Africa Regional Office

<sup>3</sup> Intergovernmental Panel on Climate Change - <http://www.ipcc.ch/ipccreports/tp-climate-change-water.htm>

<sup>iv</sup> A database with examples can be found at the UNFCCC website: <http://maindb.unfccc.int/public/adaptation/>. Another website with information is the ELDIS website, <http://www.cba-exchange.org/>

<sup>v</sup> Consortium of 12 Universities in Eastern and Southern Africa: Kenya – 5, Zimbabwe – 2, Uganda – 1, Mozambique – 1, Tanzania -1, Malawi – 1, Zambia - 1

<sup>vi</sup> Burundi, DR. Congo, Ethiopia, Eritrea, Kenya, Madagascar, Rwanda, Sudan, Uganda, and Tanzania.

