



# Course Report: Climate Change Adaptation in Agriculture and Natural Resource Management

## Integrating climate change in policy making and programming for sustainable development - Addis Ababa, 15-26 June 2009

### Background

Although climate change is now on many agendas, enormous challenges remain in *capacity development for effective policy development and implementation of programmes*. It involves complex interactions between climatic, environmental, economic, political, social, institutional and technological processes, at global, national and local level. Research – policy interaction is crucial. While a number of climate change adaptation and mitigation initiatives are underway, much remains to be done to develop necessary knowledge and embed and mainstream appropriate practical responses in national agriculture and natural resource management policies and strategies.



Large benefit is to be expected from increased adaptive capacity, enhancing social learning and sharing lessons and experiences within and across countries, highlighting the complex and multiple scale setting and increased uncertainty. To address this effectively, the science-policy interface need to be addressed and policy makers need to be linked with the most up-to-date scientific and technical support available at national, regional and global levels.

### Capacity Development in East Africa

At the request of the Ministry of Agriculture, Nature and Food Quality (LNV) in the Netherlands, Wageningen UR<sup>1</sup> has initiated a support programme for climate change adaptation in Eastern Africa in 2008. In partnership with ASARECA<sup>2</sup>, IUCN – EARO<sup>3</sup> and RUFORUM<sup>4</sup> a scoping workshop and follow-up were organised. The focus was on capacities needed



<sup>1</sup> Wageningen University and Research Centre (Wageningen UR)

<sup>2</sup> Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA)

<sup>3</sup> World Conservation Union Eastern Africa Regional Office (IUCN – EARO)

<sup>4</sup> Regional Universities Forum for Capacity Building in Agriculture

to better integrated climate change adaptation responses into agricultural, rural development and natural resources policy processes. The initiative led, among others, to the development of a new training course in 2009, implemented by the partnership, in collaboration with HoA-REC<sup>5</sup> at Addis Ababa University, Ethiopia.

The regional training on Climate Change Adaptation in agriculture and NRM took place from 15 to 26 June 2009 in Addis Ababa. It was attended by 26 participants from Ethiopia (20), Uganda (3), Kenya (2) and Tanzania (1). Participants were drawn from universities, agricultural research institutes, non-governmental organisations and government departments. The course was coordinated and facilitated by a team from HoA-REC and Wageningen UR, complemented by presenters and lecturers from various universities and institutes, such as Prof. Richard Odingo (University of Nairobi), Dr. Jan Verhagen (Wageningen UR), Dr. Gebru Jember (National Meteorological Agency, Ethiopia), and Dr. Lulseged Tamene (Addis Ababa University).



### Course Overview and Results

#### Learning objectives

The aim of the course is to ensure that participants have a better understanding of climate change adaptation concepts within the framework of sustainable development. They should be able to effectively and meaningfully contribute to the debate on climate change adaptation, either in the policy process and/or in providing knowledge to the policy process. They strengthen their positions in these processes on the basis of newly acquired concepts, skills and methodologies.

#### Course programme

The course covered a variety of topics related to climate change adaptation, briefly elaborated below. Interactive training methods were used. Subjects were conducted in a combination of lectures, plenary and group work, study assignments and role plays. Experiences of participants were the entry point for interaction – and participants brought in their own examples



<sup>5</sup> Horn of Africa Regional Environment Centre



of climate change hotspots that were used for joint analysis. The course included field work to practice vulnerability assessment and an interactive seminar with policy makers to discuss and refine strategies for policy development and programming.



### Course topics

*Climate change concepts:* Introductions to climate change impact at global, regional and national levels. Introduction to key concepts and conceptual framework of climate change. Introduction to the work of the Intergovernmental Panel on Climate Change (IPCC), the National Action Plans on Adaptation (NAPAs) and related finance mechanisms.

*Hotspot approach:* Identification of climate change hotspots from different perspectives (environment, economy, people/livelihoods). Further analysis was made of four hotspots:

1. Pastoralists & land degradation in south eastern Ethiopia
2. Coffee producers and their forest environment in the highlands/Central Rift Valley
3. Short season maize varieties
4. Improved food security, health and livelihoods

Introduction to vulnerability and the link between climate change and sustainable development. Introduction to uncertainty and complexity of climate change. Introduction to environmental

impact assessment. Use of interactive methods for situational analysis. Practical field work was undertaken in Debre Zait where participants made an assessment of a lake area and the possible impact of climate change and the relation to other human induced environmental change. The rector magnificus of Wageningen UR, Prof. Martin Kropff, the director of HoA-REC, Dr Araya Asfaw, and representatives of the Netherlands' Embassy joined the group in this field work.



*Science-policy interface:* Paradigms and mindsets that drive our interventions on climate change were discussed and an introduction to policy making and policy windows in relation to climate change adaptation was given. Participants prepared policy messages and organized a seminar about the science-policy interface in which presentations were given on the role of NGOs, universities and research in Climate Change adaptation; the experiences of the Netherlands; networking with climate change experts and officials, and interactive debates on climate change hotspots took place.

*Climate change adaptation:* In the last part of the course a link between climate change adaptation, the use of indigenous knowledge, and sustainable development were further discussed. An introduction to adaptation strategies was given. Enthusiastically, all participants engaged in a role play about climate change adaptation and mitigation negotiations.

### Action orientation

The course included a large number of assignments that enabled the participants to work towards practical actions after the course. Every day participants reflected individually about the implications of the course for their work. At the end of the course all developed individual or group action plans with activities for their organisation.



### Joint action plans

1. Downscaling, vulnerability impact assessment, adaptation options
2. Curriculum development for universities
3. Secondary school education
4. Climate change mainstreaming in forestry
5. Information about fundraising
6. Approaching policy makers
7. Networking and awareness raising
8. Training course – planned for March 2010
9. Establish a network to share experiences on Climate Change Adaptation in Agriculture and NRM in the region of East Africa
10. National level capacity development on Climate Change Adaptation
11. Follow up on action plans
12. Website

### Follow up

As a follow-up to the course, Wageningen UR will continue to support the participants in the implementation of their action plans. In addition, the climate change programme will support initiatives for collaborative research between Wageningen UR and the course participants. Finally, there will be continued capacity building on climate change adaptation through different organisations in the partnership.

A next climate change adaptation course will be organized from 1-12 March 2010 (see the website below).