

Policy Processes on climate change and agriculture in Ethiopia: A Roundtable Discussion

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DRAFT REPORT

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1. Objectives

The objectives of the roundtable discussion were to:

- Discuss of policy implications of climate change in the agricultural sector in Ethiopia
- Inform research design for the case study in Ethiopia (2010-2011)
- Serve as a foundation for further policy dialogues and learning events

2. Background to the study on climate change and policy processes

Lars Otto Naess, FAC Theme Coordinator on Climate Change

Future Agricultures Consortium

The Future Agricultures Consortium (FAC) was established in 2005 “to encourage dialogue and the sharing of good practice by policy makers and opinion formers in Africa on the role of agriculture in broad based growth” through critical research and reflection, facilitating networking and partnerships, and building a platform for policy dialogue. The Consortium’s objective is to promote evidence-based policy dialogue on the future of agriculture & pastoralism and to contribute to better agricultural & pastoral policy making process. The

Consortium is currently working in Ethiopia, Malawi, Kenya and it has intention of starting operations in Ghana, Senegal and Zimbabwe. FAC core themes include:

- Policy Processes
- Agricultural commercialisation
- Growth and Social Protection
- Science, Technology, Innovation
- Climate Change & Agriculture
- Future Farmers: youth and agriculture
- Pastoralism
- Land

The policy processes conceptual framework

The policy processes conceptual framework helps to understand a policy and the identification of *policy spaces* as entry points to influence it. The main reason behind including climate change theme in the Future Agricultures Consortium is an observed gap in research and understanding of policy processes on climate change and agriculture in the current context of a large number of climate change activities in FAC countries and emerging climate change policies. There are plenty of opportunities that exist in order to bridge climate change and agriculture, including increasing funding and country level adaptation and strategies, that are driving climate change and agriculture.

The policy processes conceptual framework consists of three lenses that help understand the non-linear and “messy” processes leading up to a policy. These three lenses are actor and networks, narratives and evidence and politics and interests. They converge in *policy spaces* as entry points to influence a policy. Policy spaces are defined as “...opportunities, moments and channels (...) to potentially affect policies, discourses and decisions...” (Gaventa, 2006:26).

Understanding policy processes on climate change and agriculture: two initiatives

Thus, in order to influence the outcome of a policy, proper understanding and management of the above three factors is important. There are two initiatives that are being undertaken by DFID, in association with other organisations in order to understand policy processes on climate change and agriculture and their impacts at the local and national level in selected East African countries. These two initiatives are:

- a) *Research to Policy for Adaptation (RPA)*: Funded through the DFID/IDRC climate change-agriculture (CCAA) programme, the overall goal of this project is to increase the ability of CCAA programme partners in East Africa in order to understand climate change adaptation policy processes at local and national levels. We do this through case studies in three countries: Kenya, Tanzania and Malawi. This comprises analysis of the policy context where each of the client projects operates as well as engagement strategies to guide them in efforts to improve their policy influence.
- b) *Climate Change theme under the Future Agricultures Consortium*. What we are trying to do is to build on the project-specific experiences from the RPA project and to do first national level analyses of policy processes, and as a next step to look at how these processes manifest themselves at national and sub-national levels. Focus countries so far is Kenya and Ethiopia. In Ethiopia there is an ongoing a study on national level policy actors and processes

on climate change and agriculture carried out by Berhanu Adenew from the Ethiopian Economics Association.

Policy processes on adaptation and vulnerability in development: a continuum

Adaptation and vulnerability are two key concepts in understanding climate change impacts and climate change and development policies. Adaptation is defined as ‘adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities’ (IPCC TAR, 2001). There are key distinctions in adaptation measures, including:

- Reactive versus anticipatory adaptations. *Reactive adaptations* are those that happen after, and as a response to, climate change. In contrast, *anticipatory adaptation measures* are taken in advance of climate change (Smith *et al.*, 1991).
- *Planned adaptations* (deliberate intentional adaptive responses to a stimulus) versus *autonomous adaptations* (or spontaneous) (Smit *et al.*, 2000).

Vulnerability is a broad concept but it can be understood as a compound of three main elements: biophysical exposure, sensitivity and adaptive capacity. There is a spectrum of narratives on climate change adaptation policies that goes from a focus on technical solutions and management of climate change risks towards a more systemic view of adaptation that focus on building response capacity (not only to climate change) and on the underlying causes of vulnerability such as poverty, the lack of farmers’ agency, rights, inclusive institutions and political accountability. These different narratives across the spectrum lead to different focus, approaches, international funding streams and climate change knowledge:

- Focus (on vulnerability versus impacts)
- Approaches (climate resilient development versus discrete adaptation)
- International funding (ODA versus UNFCCC)
- Knowledge of climate change (Uncertainty, indeterminacy, ignorance versus risks)

This in turn brings a different set of solutions that range from those focused on the technical aspects of adaptation and getting things rights to those that increase agriculture’s resilience and enhance farmers’ agency and build political accountability.

The presentation concluded that evidence from different narratives, actors and interests on climate change adaptation policies leads to the question of how international climate change policy processes play out in national and sub-national agriculture sector contexts. This includes questioning to what extent local experience, practice and adaptation research inform policy at the national level. Entry points to influence policies exist when evidence from narratives is combined with proper understanding and management of the politics and interests among the different influential actors and networks. It was also argued that there is the need to understand and create policies that increase the adaptive ability of people and decrease their vulnerability.

Discussion Points

- We need more clarification on the understanding of the climate change and policy process from the point of the three angels or lenses on the model employed for this study.

- Global and national climate change policy discussions are related and they need to be interlinked and more synchronization between the global and national climate change policy discussions is needed.
- There is an observed gap in global and national climate change policy discussions. While most of global climate change policies focus on controlling carbon emissions, national climate change policies might focus on climate change events (such as floods and droughts) and other topics that are more prevalent in their country. National needs are more focused on climate change adaptation strategies and policies.

3. Climate Change projections for Ethiopia

Dr. Girma Mamo and Fekadu Getachew

Ethiopian Institute of Agricultural Research (EIAR) and Melkassa Agricultural Research Centre (MARC)

Ethiopia has recently been recognised as one of the most vulnerable countries to climate change, especially given Ethiopia's dependence on agriculture and the negative effects of climate change on crop and livestock production. Therein lies the need for a clearer understanding of climate change and its impacts on agriculture at the local level.

General Circulation Models (GCMs) are the most advanced tools and numerical models that represent physical processes in the atmosphere, ocean, cryosphere and land surface. These models depict the climate using three dimensional grid and help make predictions and gather data about temperature and precipitation levels. Even though GCMs can provide high quality temporal data, impact assessments require high temporal and spatial resolution (i.e.: crop simulation modeling¹) that provide information on local impacts of climate change.

A study was conducted to assess the possible climate change projections over the three Livelihood Integration Units (LIUs) consisting of agro-pastoral, pastoral, and cropping areas of Ethiopia. Different tools were used to understand and present climate change projections over three LIUs of Ethiopia. The projections show increases in temperature all over Ethiopia in the coming decades. Precipitation is also expected to increase nationally but the distribution and duration will vary across the country. For instance, pastoral and agro-pastoral areas in Afar and Somalia regions and pastoral areas in Tigray region are expected to be more vulnerable to climate change. Northern Ethiopia, some part of central Oromia and Central and Northern parts of the Southern Nations, Nationalities' and Peoples' (SNNP) regional state are likely to be the most vulnerable areas in the country. In addition, pastoral and agro-pastoral areas of Afar and Somali are especially vulnerable to climate change.

Possible adaptation options to the prevailing climate change were provided, including the expansion of the quality and quantity of agricultural packages, increasing size of water harvesting and small scale irrigation, improved land management, soil conservation as well as flood control and increased awareness raising on natural resource management as well as conservation and environmental protection.

¹Crop simulation models are mathematical representations of plant growth processes as influenced by interactions among genotype, environment, and crop management. They have become an indispensable tool for supporting scientific research, crop management and policy analysis (Fischer *et al.*, 2000).

Discussion Points

There were many discussion points raised following this presentation. Some of them include:

- The factors used in the methodology and study did not consider agro-ecological zones and altitude.
- It also uses old 1984 FAO data while there were other data available such as the National Meteorological Agency (NMA). 1984 FAO data were not given proper context and conditions that existed at the time were not discussed.
- A point was raised regarding the selection and number of LIUs. According to the current LIU unit, the number of LIUs is 178 and not 3 as suggested by the presenter.
- Rainfall change and not intensity was taken into consideration.
- The data focused on projection and prediction and not on adaptation methods at the national level and mitigation methods on a global level.
- The impact of climate change on livestock and crop production by livelihood zone was not shown.
- Even though the data claimed that both temperature and precipitation will increase, there was no discussion regarding the expected change in moisture level.
- The recommendations presented were very broad and are not aligned with the methodology used to come up with the recommendations and do not add any significant contribution toward operational strategy design.

4. Climate change and policy processes in Ethiopia: study outline

Dr. Berhanu Adenew

Ethiopian Economic Association

The presentation provided information on a recently commenced study on climate change policy processes in Ethiopia. Although climate change will impact differently throughout the country and while some areas will get drier, others will get more rain. Shifts in climate zones may lead to biodiversity loss and climate-related diseases such as malaria. Other climate change effects include decreases in water resources and deterioration of infrastructure (i.e.: roads). A majority of the Ethiopian population is involved in traditional forms of farming (i.e., rainfall dependent). In addition, economic development in Ethiopia is heavily reliant on agriculture and natural resources with 80% of the population employed by the agricultural sector and agriculture contributing to 40% of the GDP. Thus, with climate change-related extreme events, vulnerable livelihoods and national economic growth are likely to be affected, having negative effects on poverty and development. This is related to the increasingly pivotal role of agriculture as an engine for Ethiopian development within the last six years.

The presenter discussed the different constraints on the agriculture policy making process in Ethiopia concerning policy formulation, including the inadequate use of policy analysis, the lack of performance-based policy making processes (based on grassroot experiences and stakeholder debates). This was followed by an analysis on actors' participation where it was argued that although the main policy actor in agriculture is the government and there is a substantial lack of participation, there are growing consultation processes and popular participation is becoming an emerging culture. Policy spaces were also discussed as entry points for influencing policies,

discourses and decisions. The number of climate change initiatives in Ethiopia is growing and climate change impacts are increasingly being recognised as well as vulnerability and the need for social protection programmes. However, there is currently no clear policy framework related to climate change.

It was concluded that research can be used as an effective tool to generate evidence and knowledge to support policy and strategy making. There is a need to develop a culture and practice of participatory and knowledge-based policy and strategy making process to increase the role and effectiveness of policies. By increasing the understanding of local contexts, policy processes as well as by identifying policy spaces, research can influence climate change adaptation policies and strategies. Research also helps in validating development policies formulated by the government by offering objective and independent evaluation.

Discussion Points

The following discussion points were raised:

- Defined climate change policy at the national and sub-national levels do not exist, according to the presenter. Feedback from others indicated that there is a climate change policy discussions on national and sub-national levels even though there is not a framework present.
- The review did not consider and present pastoral area context. Adaptation schemes and strategies such as practicing small irrigation, mobility and crop farming in pastoral areas were not discussed.
- The role of opposition parties' contribution to climate change policy formulation has not been discussed. There were attempts by the previous government to address climate change and these were not discussed in the presentation.
- Early warning and response results were not reviewed and presented.
- There was a document developed by NMA and MoRAD commissioned by the Rockefeller Foundation. This document, which focused on climate change policy, was not discussed during the presentation.
- Policy revisions conducted by different actors can yield in different conclusions and outcomes even when the same documents are being reviewed.
- How can future agricultures be involved in policy making and influence policies?
- A method of applying one of the recommendations, i.e. conducting more participatory research, at the grass root level was not presented and discussed.
- Why is there a shift in decision making from NMA to EPA? What is the expected added value?
- There is a perceived perception that Kenya has good climate change policy formulation process. What can be learned, adopted and applied from Kenya or other countries that have good practices?
- Climate change issues are more of a natural science discipline issue and there needs to be more of a holistic and a participatory approach to coming up with solutions and strategies to climate change challenges.

5. Key Questions: Guide for Plenary Discussion

Dr. Berhanu Adenew
Ethiopian Economic Association

Dr. Berhanu presented the following three points for discussion during the key questions section of the discussion.

1. What are the key policy narratives (description of problems and solutions) on climate change in Ethiopia?
2. How do the climate change narratives fit/not fit with other agricultural sector (crop and livestock) narratives in the country?
3. Where are the key challenges and opportunities for the government?

Discussion Points

- **Coordination of Efforts:** The Government of Ethiopia (GoE) and its development partners make attempts to address climate change policy and formulate strategies. These separate attempts need a forum to discuss and share ideas and thoughts surrounding climate change policy discussions.
- **Long-term Investment:** The donors made a claim that they want to make a long-term investment to address climate change. Even if there is a desire to make a long term investment, how the process should be approached and implemented needs careful consideration.
- **Long-term vs short-term responses:** The discussion mentioned that one cause of vulnerability is a result of climate variability, which is a short-term scenario. Gradual climate change presents a different set of challenges and needs. There needs to be better understanding of these two changes and proper and effective methods of combating possible outcomes of these events needs to be formulated.
- **Early Warning and response:** Early warning information has been used for decades in Ethiopia. But the response was neither effective nor sufficient. The role of early warning and response in climate change adaptation is very important and there needs to be more of a concerted effort to increase the ability and the role of early warning and response systems in the climate change discussion. Local level early warning systems need to be given more consideration and place in national and sub-national level climate change discussions.
- **Local awareness:** Grass root level initiatives regarding climate change policy discussions need to be strengthened to include the thoughts and experiences of communities.
- **Monitoring system:** There is a need to have a designated body and capacity to compile and review the efforts of addressing climate change at different levels by different organizations and monitor the activities. This effort is expected to contribute national and sub-national level policy formulations.
- **Defined role:** There is a lack of clear role definition to coordinate efforts by different organizations. This has caused rework, duplication of efforts and wastage of human and other organizational resources. Therefore, there is a need to define the roles and responsibilities of different actors in the climate change policy discussion.

6. Roundtable Discussion – key points

There was proactive discussion and feedback during the roundtable. The participants, with their different disciplines and experience, added value to the discussion by raising discussion points and attached topics. The major takeaway points from the roundtable discussion are mentioned below:

1. Refining, deepening and contextualizing the empirical knowledge of the nature and magnitude of climate change is very useful towards sustainable and effective adaptation and mitigation measures. Hence, research, data generation and analysis on climate sciences and adaptation measures need to be strengthened.
2. Not only climate change and vulnerability, but there are more complex factors that underlay poverty, and these confounding elements and factors need to be brought up when discussing about climate change adaptation and mitigation. Climate change challenges, adaptation and mitigation need to be examined bearing in mind these complex factors that affect livelihood and development in Ethiopia.
3. The issues of climate change, adaptation and mitigation are gradually becoming popular and there are many consultations and discourses around them. The knowledge being generated, interventions being attempted, idea promotions and advocacies to influence policy and action need be guided and supported by well designed policy and strategic frameworks. In this respect, policy processes in Ethiopia with respect to climate change and intervention measures are evolving while the government and development partners are still working towards achieving a national policy and strategy.

Annex I: List of Participants

November 11, 2010, Ghion Hotel, Addis Ababa

No.	Name	Organization
1	Holly Welcome Radice	SCUK
2	Tegan Blaine	USAID
3	Dubale Admasu	USAID
4	Asefa Taa	OARI
5	Alemtsehay Aberre	AZ Consult
6	Belay Demissie	USAID
7	Girma Balcha	CCF-E
8	Tezera Getahun	PFE
9	Daniel Temesgen	PFE
10	Ahmed Alkadir	World Bank
11	Wubitu Abere	
12	Fikadu Getachew	EIAR/MARC
13	Mulugeta Handino	IDS
14	Bayou Aberra	ACF
15	Dula Shanko	NMA
16	Mohammed Yele	SOS-Sahel
17	Assefa Tewodros	PCDP
18	Dawit Abebe	Tufts
19	Dr. Gemedo Dalle	IBC
20	Praveen Wignarajah	DFID
21	Kidist G.selassie	Private
22	Kirsty Wilson	OXFAM GB
23	Gifawosen T	IDS (Student)
24	Andrew Catley	Feinstein International Center

Annex II: Agenda

Timing	Session
8:30 – 9:00	Registration
9:00 – 9:20	Welcome and Introductions (incl. introducing participants) Dr. Amdissa Teshome, National Coordinator, Future Agriculture Consortium
9:20 – 9:40	Introduction to the Climate Change and Policy Process Study Dr. Lars Otto Naess (IDS), Future Agriculture Consortium theme coordinator on climate change Plenary Presentation & Discussion
9:40 – 10:00	Climate Projections for Ethiopia Dr. Girma Mamo and Fekadu G. , Consultants Plenary Presentation & Discussion
10:00 – 10:20	Climate Change and Policy Process in Ethiopia: preliminary review results Dr. Berhanu Adenew, Ethiopian Economics Association
10:20– 10:40	Tea/coffee Break
10:40 – 10:50	Presentation of key questions: guide for plenary discussion Dr. Berhanu Adenew, Ethiopian Economics Association
10:50- 12:50	Plenary Discussion
12:50 – 13:30	Summary reflection, next steps and way forward (implications for the research) Closing remarks (Dr. Berhanu Adenew /Dr. Lars Otto Naess)
1:30 – 2:30	Lunch
2:30	End of the roundtable discussion