

National policy for climate-smart agriculture: The Kenyan experience

Introduction

As the links between climate change and agriculture have become better understood in the scientific community, public policy efforts to support agricultural adaptation and mitigation have intensified. Support for bringing agriculture more centrally into international climate change policy-making has steadily strengthened since Copenhagen's 15th Conference of the Parties (COP 15), and the Subsidiary Body for Scientific and Technological Advice (SBSTA) included agriculture in its agenda at the 2012 meeting. The concept of climate-smart agriculture has emerged during this period to describe agricultural systems that provide not only agricultural production, but also climate change adaptation and mitigation benefits, and improved watershed and ecosystem management (FAO 2010).

To support climate-smart agriculture, policy and financing systems will need to adapt so that these multiple objectives – adaptation and mitigation as well as rural development, food security and ecosystem services – can be achieved simultaneously. Countries are beginning to recognize this reality, as agriculture is heavily represented in National Adaptation Programmes of Action (NAPAs) and Nationally Appropriate Mitigation Actions (NAMA). However, national policies throughout the world still largely separate climate and agriculture. Funding for climate-smart agriculture, and the closely related goals of food security and sustainable land management, also generally come from different sources. As a consequence, there is a tendency towards inefficiency, or worse, policies that work at cross purposes.

Kenya has responded to major challenges of climate change by becoming a leader in climate change policy development. This brief reviews Kenya's experience so far, to draw out lessons for

future national policy and institutional development in support of climate-smart agriculture.

Climate change, agriculture and land management in Kenya

With three quarters of Kenya's population dependent on agriculture for their livelihoods, it is a country in need of climate-smart agriculture. In addition to increasing average temperatures, Kenyan farmers face more prevalent droughts and floods, crop failures, rising rates of climate-related disease such as malaria, and the conversion of medium and high potential land to arid and semi-arid land. Economic impacts of climate change in Kenya across sectors are estimated to range from US\$1 to US\$3 billion per year (GoK 2010b).

With a fully developed National Climate Change Response Strategy (NCCRS), Kenya may become the first country in Africa to establish an independent climate change authority that will guide the implementation of a strategy of this kind (Chonghaile 2012). Agriculture will be a major focus on Kenya's NCCRS, with substantial needs for adaptation and mitigation identified. Kenya's early experiences, as it has worked to bridge sectoral divides within the context of climate change and agriculture, are instructive not only for Kenya's future development, but for other countries in Africa and throughout the world that face similar challenges. These lessons might also inform the efforts of Kenya in its shift towards landscape scale planning. Kenya is in the process of developing a national catchment management policy, in which agricultural landscapes would be managed to achieve not only agriculture and watershed management objectives, but also other related goals such as food security, climate adaptation and biodiversity conservation.

In this Brief, we first present the current national strategies and policies that are developing in Kenya to support climate-smart agriculture and review the institutional response within

government to these strategies. These experiences are then analyzed to identify critical lessons and recommendations for future action. The findings are based on twenty key informant interviews representing a range of government agencies, civil society and donors conducted in Nairobi in September 2011, as well as subsequent phone interviews and a review of published and unpublished literature.

The development of policies and institutions for climate-smart agriculture in Kenya

National Climate Change Response Strategy and agriculture

Kenya's NCCRS was developed as a framework for integrating climate concerns into development priorities, government planning and budgeting. The NCCRS development process, led by the Ministry of Environment and Mineral Resources (MEMR), ran from May 2009 to April 2010. It was developed through a participatory process conducted countrywide through a total of 13 workshops held throughout the country. The full range of stakeholders participated in these workshops including parliamentarians, government workers, private sector actors, environmental groups, youth groups, women's groups, faith based organizations, development partners and the media. The NCCRS includes indicative budgets and plans for line ministries. The implementation of the full strategy is estimated to cost US\$3 billion annually over the next 20 years, and roughly US\$100 million per year would be needed for adaptation and mitigation activities in agriculture (GoK 2010b). This would require nearly 20% of Kenyan government expenditures planned for agriculture and rural lands for the 2012-2013 fiscal year (Kenya National Assembly 2012).

Kenya's Agricultural Sector Development Strategy has included climate adaptation as a priority (GoK 2010a), but the agricultural components of the NCCRS provide more details on prioritized activities. On adaptation, it calls for accelerated investment in weather information systems, research on drought tolerant

crop varieties, soil and water conservation, water harvesting, and strengthening integrated pest management systems, among others. Kenya has already established itself as a leader in agricultural mitigation by hosting a variety of innovative land-based carbon projects, including Vi Agroforestry's Agricultural Carbon Project which turns sustainable agricultural practices into carbon credits, as well as biogas development programs. Kenya plans to build on this experience and others in mitigation by prioritizing activities such as proper management of agricultural waste, organic farming, mulching, agroforestry, and selected application of biotechnology. Although many adaptation and mitigation activities overlap, actions plans for implementation will be developed separately through the National Adaptation Strategy and the NAMA, respectively. In addition to the NCCRS, Kenya's national policy to support water catchment management approaches, now under development, could help to facilitate the kind of multi-objective landscape-scale planning that could deliver climate-smart agriculture.

Climate change bill

The NCCRS recommends that climate change legislation be enacted to support the mainstreaming of climate change within the national policy. The Office of the Prime Minister (OPM) initiated the development of a Kenyan climate change bill in collaboration with the Kenya Climate Change Working Group (KCCWG), a coalition of over 200 civil society groups advocating for action on climate change in Kenya. If passed into law, the bill would establish a national Climate Change Authority as the entity that would coordinate activities across sectors and guide the implementation of the NCCRS.

Government entities coordinating climate change activities

The NCCRS recognizes that current government institutions are inadequate to handle the complex challenges of climate change. To begin to fill these needs, a Climate Change Secretariat has been established within the MEMR to coordinate climate change



Women in Ngurumo Village use conservation agriculture to increase yield and protect soil. Photo credit : P. Casier, CGIAR



Photo credit : P. Casier, CGIAR

activities across sectors. In addition to the Secretariat within the MEMR, Climate Change Units have been established within the relevant government ministries, including the Ministry of Agriculture (MoA). The mandate of the MoA Climate Change Unit – staffed by four full-time officers and supported by desk officers from MoA's other five departments – is to act as a knowledge broker to support the mainstreaming of climate change into all of the Ministry's projects and programs. It will be involved in the development and implementation of policy on climate change in the MoA, the development of programs and projects, coordination and partnership building with relevant stakeholders, and the mobilization of resources for these activities. It has a plan in place to develop a Consultative Forum on Climate Change and Agriculture that would be an interdisciplinary group of experts to advise the Climate Change Unit.

Another recently created government institution leading on climate change is the Office of the Prime Minister's Climate Change Coordination Unit (CCCU). The CCCU is small, but it is able to provide high level political support to climate change activities in Kenya. Its existence is seen as evidence that the government is prioritizing climate change action. The CCCU has a small climate change fund which supports relevant activities within government agencies such as the National Environmental Management Authority (NEMA) and the Kenya Wildlife Service (KWS), as well as the civil society-led KCCWG. Although the CCCU has ambitions of scaling up activities, particularly through their flagship Greening Kenya Initiative – a broad-based green growth plan – it has not yet played a substantial role in supporting climate-smart agriculture activities.

Financing coordination for climate-smart agriculture

International donors are fairly well-organized within the context of the NCCRS. A donor working group chaired by MEMR and comprised of DFID, USAID, COMESA, CDKN and others, meet quarterly to consider how critical needs can be met. These donors have supported the development of NCCRS Action Plans

which divide the strategy into 8 sub-components. Another relevant donor-funded initiative is the climate-smart readiness mechanism funded by the World Bank. It would support Kenya to scale up some of its early success with climate-smart agriculture by supporting the institutional capacity of the CCU, a climate-smart agriculture investment facility, and the development of a monitoring, reporting and verification (MRV) framework for the national level. The Food and Agriculture Organization of the United Nations (FAO) is also supporting the development of a climate-smart readiness plan.

Lessons from Kenya's experience planning for climate-smart agriculture

Kenya's experience as a trailblazer in climate-smart agriculture policy development provides insights into the inherent challenges of building supportive institutions at the national level. These include lessons on integrated planning, financing, and institutional coordination stability.

Separate planning processes for climate adaptation, mitigation, and sustainable agriculture can complicate policy and program implementation for climate-smart agriculture.

The development of the NCCRS was driven by the United Nations Framework Convention on Climate Change (UNFCCC) process and follows its logic that strategies for adaptation and mitigation be developed on different tracks, even in the case of agriculture where many activities provide benefits for both. The NCCRS Action Plan calls for the development of a National Adaptation Program and an agenda for NAMAs, which are being created and financed through different processes. The separation of these processes can be important for planning purposes, and is often necessary to access different streams of funding. However, these different tracks can also lead to inefficiencies within the MoA's climate efforts as the CCU works to coordinate a wide array of climate and agriculture related programs. These programs frequently promote similar activities, including those traditionally known as sustainable land management practices that provide adaptation and mitigation benefits.

Funds are uncertain and insufficient.

Despite the estimated need of US\$100 million per year to support climate change activities in Kenya's agricultural sector, the funds currently dedicated to climate change activities within the agriculture budget are limited. Most of MoA's activities that do support adaptation and mitigation are currently categorized as sustainable land management activities, as they have been in the past. While substantial climate change-specific funds have not begun to flow to Kenya – this is not only the case with agriculture – there have been a smattering of adaptation projects that have

been funded directly with UNFCCC linked funds, such as the Adaptation to Climate Change in Arid Lands (KACCAL) project supported through the Special Climate Change Fund (SCCF) (ALM). However, these types of investments from international donors have been limited by the overall levels of international support. Pledges for the Green Climate Fund (GCF) and the associated 'fast start' financing, have been made for US\$30 billion by 2012 (US\$100 billion a year by 2020). From the promised fast-start funds, only 8% has been disbursed, in many cases drawing from development aid funds (Martone and Rubis 2012).

Institutional coordination and stability are necessary for long-term planning and investment.

As the Kenyan government works to respond quickly to the devastating impacts of climate change, it faces a parallel challenge of building climate change institutions within a context of rapidly developing and complicated international policy and funding processes as well as a dynamic domestic political environment, in which a new constitution is substantially altering the structure of many core government institutions. For example, theoretically, when fully implemented the new constitution will remove the position of Prime Minister and consolidate and reorganize the ministries, including the MEMR.

As government actors cope with this instability, there seems to be some confusion and tension regarding the responsibilities of the various institutions responsible for climate change, particularly the Office of the Prime Minister and the Climate Change Secretariat at MEMR. The creation of a Climate Change Authority, as proposed by the climate bill would also impact institutional dynamics. Confusion and perceived lack of consultation has the potential to lead to mistrust and sub-optimal coordination among agencies and stakeholders.

Actions to improve policy for climate-smart agriculture in Kenya

Although Kenya is still in the midst of the climate-smart agriculture policy development process and are operating within a highly dynamic political environment, there are still some important steps that could be taken by both the Kenyan government and international donors which would likely support Kenya's efforts to implement climate-smart agriculture.

Ensure that the Ministry of Agriculture is strongly linked with other climate change stakeholders throughout government, civil society and the private sector.

The MoA's Climate Change Unit appears to be a foundational policy development and planning body that will coordinate the Kenyan government's climate-smart agriculture activities. In order

for it to be most effective, it will need to cultivate strong lines of communications with other government agencies, civil society as well as the private sector. The MoA in general, and the CCU in particular, should be active in all national planning processes on climate change and participate in coordination bodies responsible for setting national priorities on climate, whether it be through the MEMR or a new Climate Change Authority. Success of the CCU will also require sustained coordination with other ministries working on related topics. One avenue for this kind of cross-sectoral engagement has been through the Agricultural Sector Coordination Unit (ASCU), a planning body that brings together ten ministries, and includes a working group on environment and natural resources. Strong engagement of the CCU with other departments within the MoA is also critical, as the CCU itself has a limited budget and will need to leverage the activities and resources of other departments to fulfill its mandate. The MoA could also play an important role at the international level as much of the discussion around climate-smart agriculture is occurring among international agencies and within international policy processes in which Kenya is already an active player.

In addition to intra-government coordination, the CCU will need to engage closely with civil society and the private sector. The effectiveness of the KCCWG as a participant in the climate bill development process bodes well for the ability of the civil society community to speak with a common voice on climate change. This organization can be a strong partner for government agencies to engage. The private sector, which ultimately drives the trajectory of agriculture in Kenya, will need to be well-linked into national and local climate-smart agriculture policy development and implementation. For example, tea producers in Kenya are already working to organize their responses to climate change. Meanwhile the government is working to figure out how best to support them, and what climate adaptation gaps in the industry will need be filled by the public sector. Linkages with civil society and the private sector can be institutionalized within the advisory

Actions to improve policy for climate-smart agriculture in Kenya

1. Ensure that the Ministry of Agriculture is strongly linked with other climate change stakeholders ;
2. Streamline finance mechanisms to support climate-smart agriculture ;
3. Improve measurement systems that allow for multi-objective programs;
4. Incorporate climate change strategy and national water catchment policy.

structure of the CCU. The Consultative Forum on Climate Change and Agriculture will serve to guide the unit's work, and these stakeholders should be well-represented in this body.

Streamline finance mechanisms to support climate-smart agriculture

Although financial support for climate-smart agriculture is insufficient, the provision of finance can be made more efficient. While donors have coordinated closely on the development of an Action Plan for NCCRS, they are also institutionalizing the separation between adaptation and mitigation on policy development and financing, which can be problematic for agriculture. Donors could simplify the provision of funds for climate-smart agriculture by creating dedicated financing windows that would integrate support for adaptation and mitigation along with those targeted for agricultural development, food security and sustainable land management. Countries, programs and projects could then access these funds directly in cases where they are meeting the multi-objectives.

These integrated climate-smart agriculture financial mechanisms, if they do materialize, will not be available in the short-term. In the meantime, program and project designers are innovating models to work within the current institutional environment and stitch together climate-smart agricultural projects drawing from diverse sources of funds. These initiatives are not necessarily branded as climate-smart agriculture, and they have a variety of entry points and framings including adaptation, mitigation, agricultural development, food security and sustainable land management.

Improve measurement systems that allow for multi-objective programs

Regardless of how the financing system is structured, a key to the growth of funding for climate-smart agriculture will be its ability to demonstrate results and to communicate impacts across the multiple objectives of climate-smart agriculture. A challenge to developing integrated systems up to this point has been that measurement systems for climate-smart benefits have been slow to develop within agriculture, and any integrated measurement systems will need to credibly demonstrate mitigation benefits. However, these mitigation measurement systems are advancing, along with the indicators of agricultural adaptation (Spearman and McGray 2011). As these monitoring systems mature, cost-efficiencies may be found if integrated indicators and tools are developed that track both mitigation and adaptation benefits along with other livelihood and environmental objectives of

climate-smart agriculture. Integrated measurement systems could also help clarify the full value of climate-smart agriculture to public and private investors.

Incorporate climate change strategy and national water catchment policy

Climate-smart agriculture extends beyond on-farm practices and ideally includes landscape scale management. So far, the adaptation and mitigation activities suggested by the NCCRS have not fully incorporated a landscape approach. The implementation of the NCCRS and the development of a catchment management policy in Kenya are proceeding in parallel. Taken together these strategies can provide the policy pillars for climate-smart landscape development in Kenya, and there should be a strong dialogue between them.

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