

Research Update

Climate Chaos, Policy Dilemmas

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For a country like Kenya, in which agriculture is so central to the economy, climate change is a critical cause for concern. It is, then, no surprise, to find that there is a considerable amount of activity occurring in the agricultural sector in relation to climate change. As the production of Kenya's National Climate Change Response Strategy (NCCRS) demonstrates, the issue has acquired the status of a key national policy challenge. A climate bill is being prepared to go before the Kenyan Parliament, and a large number of actors are engaged across government, the private sector and civil society.

Evidently, getting the policy response right is a critical part of dealing with climate change, in Kenya as elsewhere. Yet if we want to understand the policy process more fully, with a view to creating more effective and inclusive outcomes, we need to move beyond the idea of policy as a linear, technical process in which experts provide advice, techniques and technology to inform policy decisions, which are then translated into action. Policy is better described as an inherently chaotic, often antagonistic mix of narratives, actors, networks and spaces in which competing ideas and interests vie for influence and control over decision-making processes, and the resources which accompany them. This approach, which sheds light on the political economy of policy processes, is common to research conducted within the Future Agricultures Consortium. We deploy it in the Kenyan context with a view to shedding light on the following questions, very much at the heart of our research:

- What are the key narratives on climate change among agricultural sector actors in Kenya, and what are the associated actors and political processes?
- What are the key policy spaces in which important decisions relating to climate policy on agriculture are made and how are they likely to unfold in future?
- What are the implications of national Kenyan policy process for action on the ground in the agricultural sector?

In this research update, we argue that whilst the critical mass building up around climate change policy is clearly to be welcomed on many levels, there are a number of issues which may adversely impact both the efficacy and the legitimacy of climate policy processes. Taken together, these make up a 'policy quandary' that needs to be unravelled in order for policy to make a more meaningful and more appropriate difference in practice to the Kenyan farmers most vulnerable to climate change impacts. We present in this update the following key issues:

- Coherence and coordination between different actors
 - Questions of capacity related to the incipience of responses to climate change within the agricultural sector
 - A tendency to focus on the 'technical fix'
 - Questions of additionality around climate financing.
- We then proceed to make recommendations for change.

Coherence and coordination between different actors

Part of this research sought to ascertain who was working on climate change and agriculture in Kenya. The list of actors that we generated is not exhaustive, but goes to show the multiplicity of efforts geared towards climate change and climate variability in the country. While these actors are important in Kenyan climate change policy processes, few appear to make concerted efforts to link climate change and agriculture. Each actor undertakes their mandate independently and few make specific reference to agricultural productivity, the country's backbone.

In fairness, the agricultural sector ministries do align their climate change activities and plans to the National Climate Change Response Strategy (NCCRS). While this seems to ensure engagement from upstream interests at national, regional and international levels, the local level context may be neglected. Moreover, the on-going efforts at implementation of the NCCRS are happening in the absence of a climate change policy to guide the process. While this is not necessarily a hindrance certain concerns with regards to division of roles and responsibilities as well as the framework for coordination and mechanisms for redress can be raised. This makes the on-going development of the climate change action plan all the more urgent.

Questions of capacity related to the incipience of responses to climate change within the agricultural sector

Thinking on climate change and agriculture is still relatively incipient in Kenya. This is wholly understandable and indeed still prevalent in many developing country contexts, which have a great many urgent priorities to juggle and which may not have sufficient knowledge or resources to undertake the actions they propose. What needs to be kept in mind in the Kenyan context, then, is the potential for the rhetoric on climate change to run ahead of the reality. There are many suggestions and plans for action, but there

is significantly less that is actually being done, and this is often a result of a lack of clarity on how to get to the implementation stage.

These difficulties relate in part to gaps in scientific capacity to project climate impacts. There is need for sound scientific data or evidence to guide activities nationally. Most of the data used are global estimates, and are not downscaled to a more Kenya-specific level. Nor are they specific to agriculture. Current and future policy implications/scenarios require sound scientific data. However, it is worth bearing in mind that given the difficulties in producing reliable downscaled projections even where there is a wealth of data, decisions for adaptation and mitigation cannot rely solely on such projections.

With or without the science, there are differing levels of technical backing to the adaptation initiatives under implementation. However, in the view of one interviewee, many of these are constrained by a lack of technical capacity: *“Efforts on the ground on climate change seem to be ad-hoc and opportunistic – many are not aware exactly what climate change is, the impacts, linkages etc.”*

The adaptation efforts may have limited impacts because Kenya lacks a clear policy on climate change and agriculture. In the view of another interviewee, this may not simply be a question of technical capacity, but also related to the various vested interests as suggested by some stakeholders. One, for instance, suggested *“I am not sure actually whether we have good policies. I suspect that we have bad policy implementers, personal interest takes precedence over national interest and that happens in almost every Ministry. So we can have policies designed to propagate that kind of situation”*.

It will be critical, then, to see *which actors* can position themselves as capable of plugging the gap, as this will have important implications for what adaptation and mitigation will look like as a consequence, who will benefit from them as well, of course, as who will not.

A tendency to focus on the ‘technical fix’

The third message very much leads on from this consideration of what responses to climate change will look like and whose interests they will serve. Many of the policy instruments tend to focus on technical fixes, techniques and modernisations, driven by the strength of the narrative that technology is the key to Kenya’s agricultural problems. Such interventions are often posited without tackling underlying reasons which explain why farmers in Kenya are vulnerable in the first place. These include political leadership, supportive and coherent government policies and strategies, land tenure arrangements that make investments worthwhile and, importantly, access to markets and inputs. These are not new challenges. On the contrary, they have been at the heart of debates on agricultural development for many decades, and it is clear that there are no quick fixes for any of them. Moreover, there could be a disconnect between the technical fixes proposed and what is happening ‘on the ground’. Local contexts are often quite dynamic: the static and linear character of some technical fixes may not necessarily fit with these. We list three examples below.

Drought tolerant maize versus drought tolerant “orphan crops”

Pest and disease incidence among crops is considered a factor of temperature and climate change and the need for drought and pest-resistant crops is viewed as a viable option in dealing with the effects

of climate change and variability. With a ‘**modernization**’ drive in agriculture, households have adopted diets based on crops that may not be well-suited to conditions brought about by climate change – maize is a case in point. One influential response has been the development of drought-tolerant varieties of maize and/or water efficient maize varieties. This approach runs the risk of overlooking other options. Most drought tolerant crops like cassava, millet, cowpeas or green grams, which traditionally were widely consumed are now sometimes considered *“the poor man’s crop”*, and have become orphan crops. This is not unrelated to the rising socio-economic importance of maize. There is a concern, then, that changing attitudes, resulting in changes in consumption and diet could confound the on-going move towards promotion of these traditional drought tolerant crops.

There are other concerns with too strong a focus on maize. Future Agricultures Consortium-related research on maize and environmental change in Kenya (Brooks et al 2009) has highlighted the dangers of ‘pipeline’ technology supply models which may obscure not just orphan crops, but the informal systems and seeds farmers use and are also interested in. These may present pathways in and out of maize, in combination with orphan crops, and indeed of livelihood activities not always related to farming. The interests of private seed distributors working through a formal seed distribution system are not necessarily the same as those of local farmers. Therefore, if the narrative surrounding a new ‘Green Revolution’ based on this type of drought resistant maize holds sway, we should not necessarily expect local farmers’ interests to be served. On this front, though, our research does demonstrate that there is increasing engagement on the government side with some of the other strategies farmers are finding useful, such as a greater government commitment to work on orphan crops, and to reframing them more in terms of ‘sibling crops’.

Livestock: small ruminants and dairy farming

Kenya is a regional hub for dairy technology. Kenya was identified, in the context of the East Africa Agricultural Productivity Program (EAAPP), as the host for the dairy centre of excellence due to its comparative advantage in the dairy sector in terms of superior genetics, feeding technologies, animal health technologies and organization of farmers’ producer units. The dairy industry in Kenya is a major income earner for a large proportion of the population in highly productive areas. It is also an industry in which many technocrats and top level decision-makers in the country have invested in. The industry thereby enjoys social, economic and political patronage. It is unlikely for the country to curtail its development.

Unfortunately, however, the focus on the dairy industry might be at the expense of the small ruminants that are widely utilized and that support many poorer livelihoods over the expansive arid and semi-arid lands (ASALs). This raises a crucial question: are current efforts for development of dairy production, versus those given to small ruminant development, commensurate with the need to focus on the people most vulnerable to climate change impacts? Some actors were of the view that, with increased consumption of meat, farmers need not lose out on the opportunity to make money and therefore emphasis should be on promotion of small ruminants and to a lesser extent the larger beef animals.

However, this view was contradicted by other stakeholders who were of the view that emphasizing small ruminants, especially the grazers, could lead to greater environmental damage through large

scale degradation of grazing lands. There is little scientific evidence to support or discredit these arguments and there remains considerable scope for conjecture. Nevertheless, the challenges associated with climate change make it important to ensure that the interests of the poor, and the livelihoods associated with these, are not squeezed by policy efforts in other sectors.

Production of bio-fuels instead of food production

Agriculture is increasingly competing with biofuels. There is a school of thought that Kenya should not grow biofuels because this takes the space of food production. Others argue that current crop production does not cover all the cultivable land available and therefore the country has enough land to grow food and fuel. While this may be true, the prices of the oil seeds have been on a downward trend and the buyers of the seed are few causing concern about its sustainability. Furthermore, whilst biofuels are seen as an attractive option by some, the risk is that it leads to conflicts over land use in which some of the people already most vulnerable to climate change lose access to farming land, as other wealthier interests hold more sway. For example, Future Agricultures research in the Tana River Delta, illustrates the grave implications for 25,000 people living in 30 villages, who were set to be evicted from their ancestral land due to land deals struck to produce biofuels and other intensive land uses (Nunow 2011). Losing access to key productive resources is known to diminish agricultural capacity.

Climate financing

Whilst donors are clearly very keen to influence the climate change debate in Kenya, there are frequent examples of relabeling already-allocated funds as climate finance, in order to give the appearance of meeting with pledges made in the international climate negotiations (i.e. the Copenhagen accord that emerged from COP 15). However, this is done without necessarily demonstrating that they are adequate for the purposes of dealing with climate change policy. This puts Kenyan policymakers in a difficult situation. Because Kenya does not itself possess the funds to finance climate intervention, those working on the issue are dependent upon external funding sources, and may end up aligning themselves with international interests; yet these do not automatically coincide with local interests. Owing to a lack of clout and voice to counter this tendency Kenyan policy makers may find also themselves relabeling existing policy initiatives as climate policy. Some local actors are opposed to this but allow it to happen in recognition of a lack of alternative sources of funding.

Recommendations

Our recommendations build, then, upon an awareness of the narratives, interests and politics that affect the chaotic, contested character of climate policy processes in Kenya, but also recognise that this is an issue the agricultural sector is still getting to grips with. We highlight the following:

1. There is a need for more awareness creation, knowledge creation which is Kenyan and agriculture-based. Thus, actors working on issues of agriculture and climate change adaptation in Kenya should endeavour to better facilitate processes that lead Kenyans to perceive, to feel, or to be conscious of events, or patterns; and have cognitive knowledge of and reaction to conditions or events brought about by climate change and climate variability. Some of this knowledge will be scientific, related to climate projections for instance. However, there is also a need to develop and share new knowledge that is less reliant on technical fixes but that which gives more space to experiential, local knowledge. Future Agricultures Consortium work on harnessing local and scientific knowledge around seasonal forecasting demonstrates some of the lessons that have been learned (Guthiga and Newsham, 2011, Newsham et al 2011). In this regard, knowledge creation needs to be framed in terms of whose knowledge counts and also on how to gain better balance between the use of 'technical fixes' and experiential, local knowledge to deal with impacts of climate change and climate variability in agriculture. The nature of institutional collaboration between the Kenya Meteorological Department, the IGAD Climate Prediction and Applications Centre (ICPAC), the Great Lakes University of Kenya and the Nganyi people, was key to the bringing together of meteorologists and rain makers. This way of working opened up a policy space in which the legitimacy of Nganyi knowledge could be recognised. This led to a division of labour between meteorological forecasts and those produced by the Nganyi themselves, which resulted in climate information at the local level which was more relevant to, because more in tune with, the needs of local users.
2. This requires more coordination between the many actors working in agriculture to present a clearer, stronger voice which allows local, not international, interests to determine what climate finance should be spent on. This process should begin with the identification and recognition of the office/institution which is best placed to coordinate the many actors working on climate change adaptation in agriculture. Does this role lie, for example, with Ministry of Agriculture; with ASCU; with Office of the Prime Minister or with Ministry of Environment or even with a civil society organization? The appropriate placement of this office will bring about concurrence among actors and support the development of necessary mechanisms for coordination where they are not already in place.
3. Finally, the process of developing policies to guide climate change and agriculture is not a linear and technical one. This process should acknowledge and embrace the complexity and uncertainty that inherently surrounds policy making where chaotic and often antagonistic and competing ideas and interests of different actors, networks and spaces influence and control different decision-making processes and related resources. Such a process would function to build effective bottom-up and top-down feedback loops. It would also facilitate and promote policy processes that 'embrace complexity and uncertainty' at a time of limited financial, technical and institutional resources.

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