

THE URGENT NEED TO INCREASE ADAPTATIVE CAPACITIES

EVIDENCE FROM KENYAN DRYLANDS

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This policy brief outlines the development implications of findings from a three-year research project on 'Climate adaptation as a livelihood struggle: conflict and vulnerability among dryland populations in Kenya'. The aim of the project was to understand how conflict affects people's ability to adapt their livelihoods to climate constraints and how, within communities, the effects of conflict on livelihoods are experienced differentially. The project was funded by the Research Council of Norway and involved conceptual development as well as detailed fieldwork in two dryland areas of Kenya, Kitui and Turkana Districts. A multi-disciplinary team of researchers from the University of Oslo, Kenya Forestry Research Institute, the African Centre for Technology Studies and King's College London carried out the research from January 2004 up to December 2006. The main findings of the research were presented for feedback at a policy workshop in Nairobi in October 2006, the outputs of which are incorporated into the recommendations outlined here. A fuller report of research findings can be found at <http://www.cicero.uio.no/media/4135.pdf>

Introduction

The consequences of existing climate stress and future climate changes are becoming less manageable for a growing section of dryland populations due to diminishing capacities and options to adapt. In this discussion 'adaptive capacities' refers to the options and capacity of households to adjust their livelihoods to multiple and interacting stressors. Although people are continuously adjusting their livelihoods to stressors, the decline in dryland people's adaptive capacities is manifest in an eroded asset base, particularly in livestock; a lack of security that restricts access to key drought resources such as grazing areas, water and forests; statutory restrictions on resource uses; and localized degradation of resources in secure areas that are drawing growing numbers of people in search of safety. In many dryland areas of sub-Saharan Africa, conflict, referring to competition for resources, livestock raiding, banditry, violence against women and the vulnerable, and a generalized climate of criminality and impunity, influences livelihood decision-making in the short and longer term. This policy brief presents new research findings on the interactions between conflicts and climate change adaptation, and points out several recommendations for actions to address critical issues for assisting the adaptation and development process of people in a constant state of crisis.

Declining adaptive capacity in Kitui and Turkana Districts

A critical finding from the research into the adaptive behaviour of households in Kenya drylands is that people's adaptive capacity to climate stress is deteriorating. This means that a relatively minor meteorological drought now triggers catastrophic events. This trend is particularly worrying since climate change may lead to an increase in droughts and the unpredictability of rainfall. Insights from fieldwork in Kitui and Turkana Districts, two dryland areas in Kenya, are presented in this section to illustrate the processes and drivers of diminishing adaptive capacity in two local settings. Conflict and insecurity play an important part in these processes.

First, people adapt their livelihoods in relation to multiple and inter-related sources of insecurity, of which climate stress may not be the most important. Many Turkana people identify large scale livestock raids by neighbouring tribes as well as attacks by home grown *ngoroko*, or bandits, as the primary threats to their livelihood and well-being. In Kitui, there has been historical raiding of cattle between the agropastoralist (Kambas) and pastoralist (Orma and Somalis) that has led to migration and landlessness, as well as tension within villages over free access to water sources during drought and exclusion from forest resources by the government. In both areas, large areas of grazing are considered unsafe, for many inhibiting the keeping of large herds of cattle so necessary to survive drought.

Second, conflict has had a fundamental impact on adaptation to climate stress through the creation of absolute destitute groups. In Turkana, the loss of herds in violent attacks is a near universally shared experience. The population considered to be destitute, meaning people who are unable to meet their annual food needs even in 'good' years, has expanded greatly. With no livestock or regular source of livelihood, many destitute have routinised survival strategies such as burning charcoal, collecting wild foods and relying on irregular food aid distributions. In Kitui, raiding by pastoral groups as well as eviction from the forest has created a group of landless people who are unable to harvest well or keep cattle, therefore having to live from hand to mouth based on wild foods, casual employment and migration.

Third, vulnerability among dryland populations is shaped by the marginalisation of certain groups and areas, both in terms of the poor provision of policing and security by the state and in terms of low levels of investments in basic infrastructure like water, roads, schools and health facilities in remote rural areas. Furthermore, inequalities that date back to colonial times accentuate socially differentiated patterns of adaptation. In Kitui, a few families with superior land can benefit during drought period by generating additional income through renting out wells or by trading with visiting herders in search of water.

The policy implications: What does adaptation add to development?

These findings imply that the strengthening of adaptation encompasses a broad set of measures to support livelihoods, possibly including social protection efforts that aim to protect and enlarge the assets of the poorest and most vulnerable. Strengthening adaptation also involves enhancing the regulated access to resources that are important in coping with drought, such as forest resources in the case of Kitui, as well as measures to reduce conflict and insecurity. At the moment, Endau hilltop forest which has been providing the local population with most of their basic needs is a gazetted government forest to which the local population have no access right.

A comprehensive effort to support livelihoods, natural resource management and improve public services is certainly not only a climate change adaptation strategy, but also has many overlaps with good development efforts, taking peoples and communities' needs into account. Nevertheless, adaptation is a new dimension that needs to be added to development work, implying that development activities in many cases should be changed, because of the role of climate-related stressors. First, reducing climate risk by considering the sensitivity of new crops or technologies to climatic uncertainty and change and by building early warning and emergency management systems, needs to be considered in any development interventions. Second, measures to strengthen people's current coping strategies, such as storing food, grazing animals in areas of good fodder during drought, and forest product utilisation, also specifically contribute to adaptation. Third, adaptation can take place through targeting the causes of vulnerability.

This latter aspect of adaptation means that consideration of vulnerability should be brought to the center of development planning. Particular consideration should be given to how development action, unintentionally, may contribute to the creation of 'losers' by worsening the vulnerability of certain individuals and groups in society. There are many examples of development that has reinforced the vulnerability of destitutes who were meant to be assisted. Examples from the case of Turkana are the 'rise and fall' of Kalokol fish factory and Katilu irrigation scheme. The vulnerability of many beneficiaries was ultimately increased because the new sources of livelihoods proved unreliable and precarious, and the settled population no longer had livestock livelihoods to fall back on.

Although it is commonly appreciated that the livelihoods of beneficiary groups should be considered in development planning and design, there is still often insufficient understanding of people's adaptive strategies, livelihoods, potential of the sustainable use of natural resources and the ways that people respond to new and evolving threats. Without this understanding, development interventions may worsen an already difficult situation. But if based on sufficient interaction with affected populations and insights into their problems, strengths and potentials, interventions can improve local adaptation. In particular, it should be considered how existing development initiatives that support dryland livelihoods can more specifically target those who are most vulnerable to climate stress.

Critically, the research shows that targeting the causes of vulnerability involves addressing the economic and political structures that are making people vulnerable. For example, current economic structures encourage the spreading of precarious forms of cultivation into increasingly arid environments. Current economic structures reflect generations of land use planning and economic strategy that favoured the promotion of 'modernized' farming systems to the detriment of supposedly 'backward', customary forms of pastoralism or forest uses. Formulating land use policy for drylands that promotes pastoralist uses of the environment and use of indigenous plants and discourages the uptake of rainfed and irrigated farming involves a conscious policy shift, therefore. There is a need for incentives and structures to encourage the adoption of production systems that are adapted to normal climate stress such as pastoralism and investment in valuable trees in drylands. Encouraging and developing livestock keeping through better veterinary services, legal protection of access

to key resource areas for livestock keeping; opening migration paths and enhancing security among key migratory routes used by livestock herders, technical assistance and development of market infrastructure, would contribute to a more efficient and less climate sensitive use of drylands than cultivation. Furthermore, although forest resources in Endau are resilient to drought and potentially of a high commercial value, there are few efforts to encourage tree planting, nor processing, value adding or marketing of forest products. Here, creating and facilitating marketing outlets for processed forest products, provision of infrastructure including hospitals, schools and roads, and decentralizing watering points through piping water from the hilltop forest into different areas would lead to economic structures that are better adapted to climate change. Such measures would also address the economic marginalization that is contributing to vulnerability of dryland peoples.

Adaptation in conflict areas: What can be done?

The way that people adapt to climate stress in conflict areas demonstrates the importance of political structures, in terms of power relations and institutions, in shaping vulnerability. When adaptation is discussed, it is normally assumed that the area in consideration is peaceful. This research project however, has demonstrated that adaptation strategies possible in areas of conflict differ from the options in peaceful areas. Conflicts seriously affect coping and adaptation strategies. In Turkana, coping and adaptation, such as seasonal movement to borderland grazing sites in highland areas, are compromised by threats attributed to large-scale livestock raids and smaller-scale opportunistic attacks by armed bandits. In Kitui, the hills are particularly important for coping with drought, which has been ongoing since 2004. Nevertheless, conflicts in this area in the form of raiding and theft, as well as tension with authorities and between different groups over access to the forest and water, constrain the coping opportunities represented in existing sources of water, food, grazing and income during drought.

In the Kitui case, political motives by individuals were fuelling conflicts, made possible by the uneven power relations between visiting pastoralists

and local farmers on one hand and politicians and government administration on the other hand. Some few individuals are often able to manipulate customary and formal institutions to their end. As a response, civil society at the local level in Kitui has taken action to reduce conflict through informal peace committees consisting of elders and direct communication between pastoralist and farmer groups as well as with district administration. In addition, formal, government led peace committees are important institutions in resolving conflicts. Both in Kitui and Turkana, it was found that the extent to which these formal committees were accountable to local needs, rather than being perceived as pursuing 'outside' agendas, is critical to their success. These committees are able to link up with neighboring districts in order to manage peaceful interactions between people that migrate and use shared resources. The workshop revealed that useful measures implemented by USAID-supported peace initiatives include cross border programs, promoting common watering points, creation of market structure for mutual trade between competing groups, and cooperation on tree planting projects.

Conflict reduction and peace-building efforts can thus be turned into a way of promoting adaptation. However, both local administration, researchers, policy makers and development agency staff attending the workshop expressed the common concern that it does not suffice to address the conflict problem isolated from other problems. If implemented as isolated activities, neither peace promotion, improved roads, schools, water supply, health services nor the diversification of livelihoods will lead to the structural changes that are needed in order to reduce the overall vulnerability of people and communities in deep crisis. Instead, many activities should be implemented simultaneously, in a coordinated way. For example, while peace committees can contribute to reducing conflicts in general, they do not necessarily address the needs of the destitute. Welfare measures and safety nets are needed. In addition to conflict resolution, livelihood support should be a critical element in adaptation policies because the absolute destitution prevalent in these areas makes most adaptation options unavailable to the most vulnerable populations.

Furthermore, the strengthening of civil society is critical not only in the man-

agement of peaceful interactions, but also in ensuring types of local development that can contribute to adaptation. The extent to which politicians can be held accountable for the use of development funds that they govern, for example, depends on a strong civil society in terms of awareness of local people of their rights and ways to effectively influence decisions and counteract bad decisions. Efficient use of such funds enable the development of boreholes and water provision that enhance the accessibility of grazing and reduces competition over existing water and grazing resources. Currently, there is little political price to be paid for the failure to invest in arid and semi-arid areas in Kenya. Capacity building for local leaders, and strengthening and legalizing informal institutions, such as the informal peace committees, are ways of enhancing civil society in a way that promotes adaptation to climate stress and the management of conflict. Building up the strength of local organizations to be vocal is one such measure. In addition, provision of better transport and infrastructure for peace committees would address a major constraint to the rapid response of such committees to conflict incidences, and thus the effectiveness of their work.

National and international adaptation imperatives

Vulnerability and adaptation to climate change are problems that belong not only to the civil society and local level institutions. The national government is responsible for developing basic needs for its citizens, which makes adaptation a part of government responsibilities. If some of the economic and political structural causes of vulnerability are to be addressed, action is required both by national and international institutions. Since local adaptive capacity is overstretched and may be inadequate in the face of climate change caused by global emissions, the international community also needs to address adaptation. Outside assistance is required if people are to go beyond the current coping systems and proactively find more viable ways of adapting to climate stress. This does not mean that exotic solutions should be implemented that run the risk of increasing dependency and exacerbating vulnerability. Instead, mechanisms need to be found where adaptation is driven by community aspirations. Linkages between institutions at national and local level are particularly important for achieving such adaptation. It was

noted that research conducted on the ground regarding coping and adaptation can play an important role in promoting adaptation to climate change by providing empirical information of local situations and imperatives to such national policy efforts.

In Kitui, a diversity of institutions at local and national level has been involved at the ground level in managing conflict. These include the provincial administration, the formal peace committee, the informal peace committee, and the Arid Lands Resource Management Project (ALRMP). The Arid Lands project, under the Office of the President, exemplifies a type of effort that addresses a number of critical issues that together may contribute to adaptation, such as tapping of water and introduction of trees and crops, in addition to peace committees. At the same time as contributing to such local actions, the programme provides a link with national policies through its participation in their development. National policies relevant to adaptation that are currently being developed include the Disaster Risk Reduction Strategy for Kenya and the National Policy on Sustainable Development of Arid and Semi-Arid areas.

At the same time, several challenges exist even where such programmes and policies are under development. First, a project like ALRMP easily becomes overstretched, and cannot alone effectively carry out all the infrastructural, peace building and vulnerability reduction measures required to have a real impact. Active, informed and coordinated involvement by a number of government, NGO, church and aid agencies is therefore important. Second, adaptation is critical to all of Kenya and not just restricted to arid areas. Mechanisms to support adaptation efforts need to be in place that are not limited by their geographic focus. Kenya does not yet have a climate strategy, but intends to develop one where adaptation will form a big part. It was pointed out that because adaptation is a cross-sectoral issue, adaptation cannot be handled by the Ministry of Environment alone. While the importance of climate change implies that the status of the Ministry of Environment should be strengthened, adaptation must also be linked to and integrated into development. There is therefore a need for developing a framework for cross-sectoral linkages. One suggestion emerging from the workshop, is the forming of a multidisciplinary team (na-

tional steering committee) under the Office of the President, Ministry of Finance or National Planning to spearhead the issues of climate adaptation and ensure that it is mainstreamed in the national development.

The funding options for adaptation-related development activities is a new and undeveloped field. At the national level, sectoral budgeting systems allow for few funds for climate change adaptation as awareness and prioritization of climate change in individual sectors may be low. So far, there has been insufficient sup-

port through the UN climate change convention mechanisms for developing countries to implement adaptation measures. International negotiation over adaptation funding has been slow. It is also unclear whether or not such mechanisms can support broader, comprehensive type adaptation efforts represented by peace building and livelihood support. It has been argued that adaptation funding need to provide mechanisms that civil society and local communities can access. Few options exist where local communities can directly access such funding today, neither from na-

tional nor UN sources. At the moment, NGOs may be the most effective way of accessing funding for locally initiated adaptation measures.

Given the high vulnerability and declining adaptive capacity documented in this research, the need to get such funding in place is urgent. A critical message to the COP12 (twelfth meeting of Parties to the climate change convention) in Nairobi November this year is the extreme need for adaptation funds, particularly for Africa.

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