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Supporting local climate adaptation planning and implementation through local governance and decentralised finance provision

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Policies developed at national levels can be unresponsive to local needs. Often they do not provide the rural poor with access to the assets and services they need to allow them to innovate and adapt to the ways that increased climate variability and change exacerbate challenges to basic securities – food, water, energy, and well-being. In development deficit circumstances, common pool resources are important for climate adaptation purposes. In order for climate adaptation actions to deliver resilience, local perspectives and knowledge need to be recognised and given due priority in formal planning systems. Basing formal adaptive development planning on local strategies can support and strengthen measures that people have been tested and know to work. Local climate adaptation through collective action can address current increases in climate variability, future incremental changes, and the need to transform existing systems to deal with qualitative shifts in climate. These types of adaptation can work in cumulative ways. The results of local adaptation collective action that have benefits of low rivalry between users while being highly inclusive can be considered "local public goods". Evidence is beginning to emerge that when local governance systems facilitate high levels of participation in planning collective action for climate adaptation, and direct access to resources for implementing local plans, "local public goods" can be created and common pool resources better managed.

Les politiques générales élaborées au niveau national ne répondent pas toujours aux besoins locaux. Souvent, elles ne fournissent pas aux pauvres ruraux l'accès aux biens et aux services dont ils ont besoin pour pouvoir innover et s'adapter aux manières dont la variabilité et le changement climatiques accrus exacerbent les difficultés rencontrées pour satisfaire les besoins de base – aliments, eau, énergie et bien-être. Dans les contextes de « déficit de développement », les ressources communes sont importantes aux fins de l'adaptation au changement climatique. Pour que les actions d'adaptation au changement climatique donnent lieu à la résilience, les points de vues et les connaissances locaux doivent être reconnus et se voir accorder la priorité qui leur revient dans les systèmes de planification formels. En basant la planification formelle adaptive du développement sur les stratégies locales, on peut soutenir et renforcer des mesures que les populations ont testées et dont elles savent qu'elles fonctionnent. L'adaptation locale au changement climatique à travers des actions collectives peut permettre de lutter contre l'augmentation en cours de la variabilité climatique et les changements progressifs futurs, et satisfaire le besoin de transformer les systèmes existants pour faire face à l'évolution qualitative du climat. Ces types d'adaptation peuvent fonctionner de façons cumulatives. Les résultats de l'action d'adaptation collective locale qui présentent des avantages accompagnés de faible rivalité entre utilisateurs tout en étant très inclusifs peuvent être considérés comme des « biens publics locaux ». Des données factuelles commencent à se dégager qui indiquent que, lorsque les systèmes de gouvernance locaux facilitent un fort degré de participation à la planification d'actions collectives pour l'adaptation au changement

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climatique, et un accès direct aux ressources permettant de mettre en œuvre les plans locaux, des « biens publics locaux » peuvent être créés et les ressources mises en commun mieux gérées.

Las políticas desarrolladas a nivel nacional pueden resultar inapropiadas para las necesidades locales. Con frecuencia, no brindan el acceso a los recursos y a los servicios que permitirían innovar y adaptar ciertas prácticas a los pobres del campo, debido a que la variabilidad y el cambio climático exacerban los retos implicados en la consecución de los satisfactores básicos, es decir, alimentos, agua, energía y bienestar. En ámbitos subdesarrollados, resulta importante tener acceso a aquellos recursos considerados comunitarios, a fin de que sea posible implementar adaptaciones al clima. Para que las acciones orientadas a la adaptación al clima tengan resiliencia, los sistemas de planeación formales deberán reconocer e incorporar las opiniones y los conocimientos locales. En este sentido, si la planeación formal para el desarrollo adaptativo se basara en estrategias locales, podría apoyar y fortalecer las medidas que los campesinos han comprobado ya que resultan eficaces. A través de la acción colectiva, la adaptación ante el cambio climático local puede hacer frente a los actuales aumentos en la variabilidad del clima, a los futuros cambios incrementales y a la necesidad de transformar los sistemas actuales para hacer frente a los cambios cualitativos del clima. Dichas modalidades de adaptación pueden funcionar de manera acumulativa. Por otra parte, si las acciones colectivas dirigidas hacia la adaptación local se caracterizan por la reducida rivalidad entre quienes participan en ellas y si, además, son muy incluyentes, pueden ser consideradas como "bienes públicos locales". Ya existe información en el sentido de que, cuando los sistemas de gobernanza locales promueven altos niveles de participación en la planeación de acciones colectivas para la adaptación al cambio climático así como el acceso directo a los recursos necesarios para implementar los planes locales, pueden ser creados "bienes públicos locales" y los recursos comunitarios pueden ser administrados con mejores resultados.

Keywords: Governance and public policy; Civil society – Participation; Environment (built and natural) – Climate change; Sub-Saharan Africa

Introduction

Local people, especially the poor and marginalised, often have little direct influence on the policies that affect their lives. Policies that are developed at national levels are seldom responsive to local needs and do not provide the rural poor with access to the assets and services they need to enable them to innovate and adapt.

In order for climate adaptation actions to deliver resilience, local perspectives and knowledge need to be recognised and prioritised in formal planning systems. Basing formal adaptive development planning on local strategies is effective as it supports and strengthens measures that people have tested and know to work. The case study presented in this paper describes a pilot project in Isiolo County, Kenya, that tests a structure for harmonising government and local planning processes through the generation of "local public goods"[1] for climate resilience. A core theme of this work has been the recognition, on the part of local people, that poor governance of common pool resources undermines adaptive capacity.

Defining climate adaptation as separate from and additional to development is impractical – particularly where development and adaptation deficits coincide. All climate adaptation must be underpinned by development that seeks to address the underlying causes of vulnerability (Ayers and Huq 2008). Development can facilitate climate adaptation and build resilience. However, development can also be largely "resilience neutral", and there can be "maladaptive development" that increases vulnerability to climate variability and change, albeit conferring other benefits, i.e., time-bound increases in productivity.[2]

Climate adaptation actions creating local public goods

Climate change is regarded as the most negative effect of the significant advances in economic development and well-being in the last century (Stern 2006). The impact of climate change on the organisation of human societies has been the subject of speculation by classical economists, political theorists, and policy analysts. Under conditions of increased resource competition conventional economic theory predicts social non-cooperation[3] (see, for example, Hardin 1968). However, empirical findings demonstrate local people's capacity to overcome such social dilemmas and create effective governance systems (Ostrom 2010).

Supporting the improvement of resource governance is regarded as a "public good" in the sense that the effectives and benefits of the better governance is non-rival and non-excludable.[4] The case study in the following section describes an approach based around the provision of "local public good" type investments in support of climate resilience.

Factors that increase the likelihood of cooperation and collective action to create public goods in the face of social dilemmas include (adapted from Ostrom 2010):

- available and reliable information about the immediate and longer term costs and benefits of actions;
- the individuals involved see the shared resources as important for their own achievements and have a longer term time horizon for rights of access and use;
- those involved have or are able to gain a reputation for being a trustworthy reciprocator;
- individuals can communicate with at least some of the others involved;
- informal monitoring and sanctioning is feasible and considered appropriate;
- social capital and leadership exist, related to previous successes in solving joint problems; and
- rules and sanctions imposed by external authorities are viewed as legitimate and enforced equitably on all.

Transposing these findings on collective responses to CPR management onto how collective action for climate adaptation might be best facilitated at the local level shows that such facilitation needs to enable the following:

- Many of those affected can agree on the need for collective action and see themselves as jointly sharing responsibility for future outcomes.
- The strengths and weaknesses[5] of climate information are well understood by local actors. Information must be tailored to their needs and accessible.
- Participants know who else has agreed to the rules and governance of the collective action and that their conformance is being monitored.
- Accessible and clear communication occurs among at least subsets of participants on a regular basis.

The case study presented below enables an analysis of how concerted adaptation action by local people can create local public goods. The hypothesis tested is that when concerted action is prioritised by the community and supported by local and national government the opportunity arises to achieve local public good climate adaptation.

The case study

The case study (drawing from Pattison, Hesse, and Anderson 2013) takes place in a largely pastoral economy of northern Kenya where customary institutions have lost much of their authority but are still recognised as the most appropriate structure for managing community resources. The authority of customary institutions for governing resource access has been compromised by the emergence of parallel, overlapping, and often contradictory systems of governance (national laws and regulations). Other broad trends among rural communities, such as greater engagement with the market economy and increasing social differentiation, have compromised the ability of customary institutions to achieve community consensus and enforce regulations. In most cases these institutions are no longer able to manage resources effectively.

The current process of government devolution in Kenya provides an opportunity to mainstream a more bottom-up approach into government planning structures. The approach described in the case study is supported by the emergence of evidence (see for example UNDP 2003; Mapesa and Kibua 2008) that when governments develop expertise in facilitating greater levels of participation, it leads to more appropriate public service provision and development interventions that address the priorities of the rural poor and climate vulnerable.

An inclusive approach to adaptive development planning is being piloted in the drylands of Kenya,[6] where mobile livestock keeping is the mainstay of the local economies. The adoption of a new national constitution in August 2010, and the realignment of local governance systems provide an ideal opportunity to transform decentralised development planning and introduce a focus on local climate adaptation. Decentralisation can provide opportunities for greater efficiency in the delivery of services tailored to local needs (see for example Mehrotra 2006; for the effects of decentralisation on intermediate variables affecting service delivery see Ahmad et al. 2005; Conyers 2007), better management of natural resources, and more active involvement of local people in the development planning system (as in Nyanjom 2011, who notes that devolution is likely to improve coherence between perceived needs and strategies for meeting them).

Under conditions of increased climate variability, improved resource governance will be required to ensure that available resources are managed in an efficient and equitable manner. Local people's capacity to adapt relies heavily on provision of appropriate and accessible public services (health and veterinary care, education, transport and communications infrastructure) in addition to robust governance of the resources upon which livelihoods depend.

The approach used in Isiolo County supports bottom-up prioritisation of investments to build adaptive capacity and support resilience.[7] "Shared learning dialogues" bring a range of stakeholders together on an equal footing to discuss and analyse specific development issues. Community resource mapping that combines local and formal knowledge of landscapes and pasture and water management in GIS-generated maps proved to be a powerful medium for exchange and dialogue.[8] In addition to building knowledge around climate change, this has fostered a greater appreciation on the part of government staff of the value of indigenous and local knowledge and the rationale behind key pastoral management strategies. It has also built the capacity of local people to articulate these issues in a way accessible to other stakeholders, and to understand the challenges faced by government staff (e.g., the constraints of budgetary cycles and mobilising resources in a timely way).

This approach was born out of a partnership with the government. In 2009 IIED was invited to work in partnership with the then Ministry of State for Development of Northern Kenya and Other Arid Lands (MSDNKOAL) to design and pilot an approach to mainstreaming climate change into planning in Kenya's drylands using Isiolo District (now Isiolo County) as the starting point. DFID

provided financial and technical support. The approach developed with the MSDNKOAL is predicated on the recognition of the previous political and socio-economic marginalisation of Kenya's arid and semi-arid lands (GoK 2012).

The work in Isiolo corresponds to the way support to climate adaptation was proscribed in the Kenya National Climate Change Action Plan (GoK 2013, 227[Action 8]).

Isiolo has a population of approximately 145,000 people and a surface area of 25,000 km^2. Due to the predominant mobile livestock production system in the region, both human and livestock populations fluctuate during the year. The climate is semi-arid with an average daily temperature range of 12 to 28°C, and annual rainfall varying between 160 and 560 mm. The majority of the population are from the Borana community. Others are the Samburu, Turkana, Somali, and Meru, and a small proportion of immigrant communities from other parts of Kenya. Young people (0–14 years) account for 44.4% of the population, while the elderly (65 and above) account for 3.6%. A large proportion of the labour force (those aged 15–64 years) is either unskilled or semi-skilled and engaged in livestock-related activities (GoK 2013).

Five of the most rural wards within the larger district – corresponding to over half of the population – were chosen for the development and piloting of a bottom-up approach to climate adaptation planning. Locally prioritised adaptation investments are supported by a county-level climate adaptation fund (CAF). The CAF was initiated with £0.5 million in the first year from the UK International Climate Fund channelled through DFID. The CAF is topped up as resources are drawn down annually for local adaptation investments. The CAF approach is set out in Figure 1.

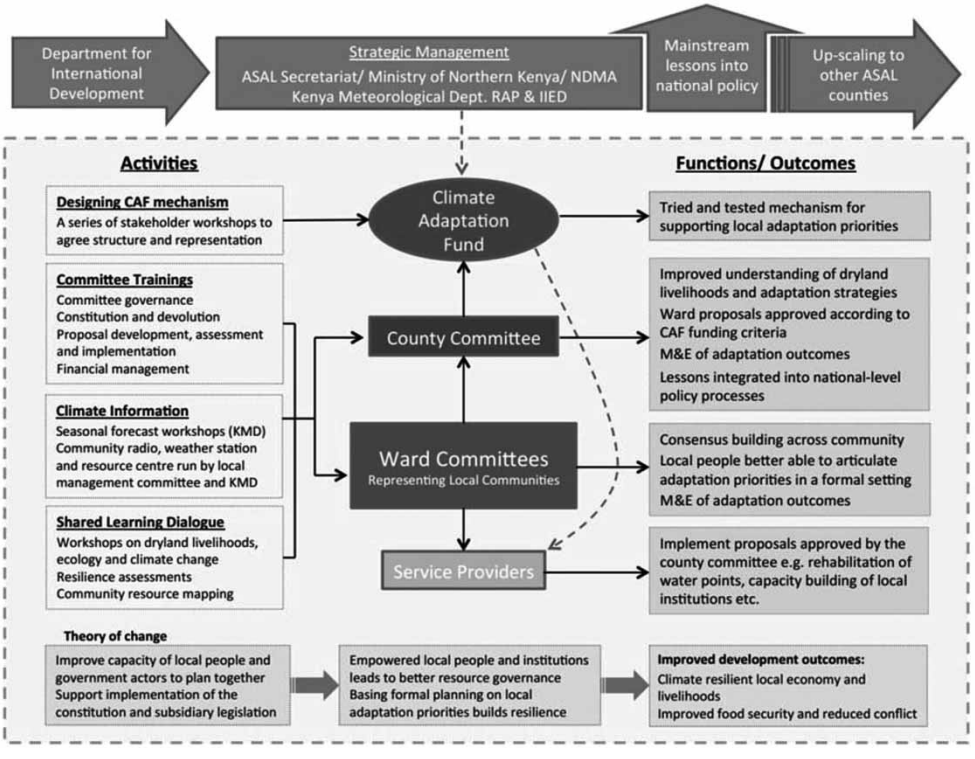

Figure 1. The climate adaptation fund approach.

The principles for the operation of the CAF were agreed with stakeholders including representatives of Wards and of local and national government. These principles include:

- The CAF supports local public good investments prioritised by communities through participatory processes.
- The CAF is managed by a county-level committee including Ward representatives, County government, and national line ministry officials.
- The CAF committee does not have the power of veto over community prioritised investments if they adhere to prioritisation criteria. The role of the CAF committee is to support, facilitate, and improve community proposals – e.g., ensuring value for money, technical feasibility, and coordination of investments within and across counties.
- Investments by the CAF must be relevant to building climate resilience.
- Investments must contribute to building harmony and peace between different communities and actors.
- Investments must support and contribute to county and national development objectives and strategies.[9]
- Investments must be viable, achievable, and sustainable.
- Investments are cost-effective and render value for money.

The CAF process can be distinguished from conventional participatory community development planning in terms of (1) the provision of climate information (seasonal forecasts and future projections) by the Kenya Meteorological Services to the local community and to local technocrats that later informed choices of interventions; (2) upstream investment in capacity building so local people were able to engage in climate-related planning; (3) the identification and prioritisation of interventions using a climate change perspective (the climate resilience assessments made in each Ward provided this focus and evidence upon which to base intervention plans); and (4) the involvement of county level technocrats to help shape viable climate-related interventions.

In 2012, ward-level climate resilience assessments were conducted.[10] These assessments used methods specifically designed to enable local people, across all ages, genders, livelihood types, and wealth statuses, to articulate the rationale underpinning their livelihood systems, and to identify solutions for strengthening their adaptive strategies and capacities. All groups highlighted the issue of improving resource governance. Inevitably, there were some areas where the priorities of marginalised groups diverged from those articulated in community meetings. Addressing these differences without causing tensions within the community was essential. A structured process of consensus-building was designed, which sought to highlight the advantages of supporting marginalised groups (e.g., women or young people) to the wider community, and ultimately led to more equitable priorities for action. The outcome of this process was a set of actions that reflected the priorities of the whole community. These actions were designed through the use of tools including scenario planning under future conditions projected from climate models. These were then used as the basis for Ward-level climate adaptation action prioritisation (see Table 1).

Based on the involvement of local and national government staff in dialogue with local people on livelihood dynamics and adaptation priorities, the pilot CAF approach to climate adaptation planning has been used to plan key actions. The first round of Ward-level planning has led to a number of projects being approved for implementation by a County-level committee of planning officials and Ward representatives. A list of the first round local adaptation projects is shown in Table 1.

Table 1. First round projects funded by the CAF.

Ward	Project description
Merti	Construction of Bambot borehole
Merti	Capacity development for the Rangeland Users Association (RUA)
Merti	Rehabilitation of Bulesa and Muchuro farm canals
Merti	Rehabilitation of Yamicha water pan
Garbatulla	Fencing HurrBuyo water pan
Garbatulla	Strengthen natural resource management by Dedha[a] Committees
Garbatulla	Fencing Belgesh water pan
Kinna	Construction of livestock handling facilities
Kinna	Strengthen natural resource management by Dedha Committees
Kinna	Rehabilitation of veterinary laboratory
Oldonyiro	Rehabilitation and construction of sand dams
Oldonyiro	Training of water management committees
Sericho	Rehabilitation of water pans
Sericho	Rehabilitation of Hawaye wells
Sericho	Strengthen natural resource management by Dedha committees
County-level plans	Isiolo County livestock disease control programme
	Construction and establishment of locally managed radio station for the county in order to deliver climate and weather information, etc

[a]*Dedha* refers to the Borana customary institution for management of natural resources. As noted above, these institutions retain broad community support while in practice being redundant in some cases.

The selection of Ward-level CAF committees was a very transparent and well publicised process that incorporated public scrutiny of each candidate based on their record of serving the community and their skills (this process is referred to as "public vetting"). In part this process was motivated by a desire on the part of local people to move away from reliance on the usual suspects who sit on many different committees and are able to position themselves as gatekeepers to community participation (with the personal benefits and influence that such a position provides).

Despite the decline in the authority of customary resource management institutions described above, these institutions do still offer a model for managing natural resources that retains legitimacy in the eyes of the vast majority of local people. With the exception of the Rangelands Users Association (RUA) in Merti Ward (which with donor support has transformed itself from *Dedha* Committee into a relatively effective hybrid *Dedha*/NGO organisation), most *dedha* committees are ineffective at managing resources for the benefit of the community at large and require improvements in capacity in parallel with formal recognition by County government. Without the existence of these institutional structures the support required under CAF to improve resource governance would have been significantly larger and more time consuming.[11]

Analysis of the process

The case study was analysed using qualitative assessments of the public good attributes of the climate adaptation categories arising from the case study planning process and the conditions achieved in the case study to engender collective action. The results are presented in Tables 2 and 3.

Table 2. Assessment of the public good attributes of the climate adaptation categories arising from the case study planning process.

Categories of climate adaptation actions	Public goods attributes of adaptation measures	
	Rivalry of use	Exclusion from use
Natural resource access measures (new or rehabilitated)	Low – more efficient resource use such that climate-related scarcity is reduced	Low – rights-in-use for access determined by customary institutions
Protection of natural resources	Low – intended to conserve resources in the face of degradation	Low – rights-in-use for access determined by customary institutions
Human capacity development of post holders in customary institutions	Medium – candidates for capacitation are representatives from the community. They receive private benefits as well as providing public good	Low – benefits of better performance by institutions should be open to entire community
Physical infrastructure (creation or rehabilitation)	Low – public infrastructure to increase resource accessibility and reduce rivalry	Low – utility of public infrastructure subject to asset holdings
Public service provision	Low – provision according to demand	Low – intended to be free at the point of access

Table 3. Conditions achieved in the case study to engender collective action.

Conditions for adaptation collective action	**Attributes of the case study** – all activities involve representatives of marginalised groups in local communities including women-headed households, poorest, young, and elderly
Stakeholders agree on need for collective action and shared responsibility for outcomes	Climate resilience assessments carried out with communities. Co-design of local climate adaptation planning and implementation processes. Governance agreed and local committees established through a transparent nomination and vetting procedure
Regular and accessible information about the effects of increased climatic variability and change	Kenya Met. Dept. provides seasonal forecasts, climate change awareness information and early warning information of extreme events. A local radio station is being established to disseminate this information more widely and in a timely way
Stakeholders know who has agreed to governance of collective action and conformance monitored	"Town hall" meetings (barazas) held where representatives of communities and members of Ward planning committees can discuss progress and priorities
	Local NGO monitors process in all Wards and issues reports to stakeholders. Information will be broadcast on local radio
Accessible and clear communication among stakeholders on a regular basis	Regular meetings held at Ward and County levels to socialise information on progress of processes

Initial lessons

The action research carried out in Isiolo County during the establishment of a local climate adaptation planning and implementation process has been documented (Hesse and Pattison 2013) and subjected to a collective analysis and reflection process among the partners involved. The main lessons drawn from the experience so far are described below.

Awareness creation

Local people were provided with information on the increasing climatic variability and longer-term change, and the implications for planning. Seasonal forecasts were presented and discussed at Ward meetings in terms of what they meant for different livelihoods.

Moving toward climate adaptation from development deficit

Planning climate adaptation in a development deficit situation reveals the compounded nature of development needs with adaptation priorities. As local climate adaptation planning becomes institutionalised into the formal development planning cycle, so the distinctions and complementarities among development and climate adaptation can become clearer to local people and formal planners.

Local/formal links

The roles of local, customary, and informal institutions in bottom-up planning for adaptation and resilience are vital. Local knowledge on adaptive practices, particularly on the management of natural resources, should be central to planning.

Local plans can be aggregated across households, groups, enterprises, and communities, and then proposed as components of local development plans at the county and national scale. In this way local priorities and strategies are mainstreamed first into decentralised and then national development planning.

For inclusive policy-making based on the priorities and knowledge of local people there must first be some level of shared understanding of the key issues with local government staff. Elected officials have a role in representing community concerns and priorities to the county assembly but in terms of planning local public good investments, local government must have a mechanism for engaging directly with local people. Sustained dialogue over extended periods of time allows a range of stakeholders adequate time for reflection and learning. Change – transformative change – does not happen overnight.

Institutionalisation as an imperative and funding access

Building a more coherent development planning system cannot be done through the standard "projectised" approaches used by NGOs that create parallel processes and structures to the detriment of the development of local government capacity. Transformative climate adaptation requires that local government is pivotal to the process. The sustainability of an effective planning and policy process ultimately depends upon this.

The process in Isiolo started before county governments were in place but nevertheless worked with existing structures – district government officials and the county council. The adaptation planning committees drew membership from state and non-state actors and worked closely with District Development Committees, District Steering Groups, etc. A lot of effort is now being made to institutionalise the CAF and related planning processes into the County governance architecture.

For effective local to national policy development, funds must be channelled through demand-side determined measures in national development systems that enable local people to identify their development needs and address their climate vulnerabilities. It is for this reason that mainstreaming the CAF approach into County government planning processes is the goal of the pilot. The intention is that CAF will not exist as a parallel structure beyond the pilot phase. Strong government engagement at the County and National-levels will ensure that lessons learnt are both mainstreamed and up-scaled to other arid and semi-arid counties.

Local public goods climate adaptation

The concept of climate adaptation through support for local public goods is accessible to stakeholders and useful in framing dialogue toward local climate adaptation planning and implementation where local people are involved in and/or support customary governance systems for shared common pool resources management.

Scale of planning for climate adaptation

The CAF approach emphasises that planning for climate adaptation needs to occur at appropriate scales rather than being restricted to administrative boundaries (for example, planning for domestic water supplies may be done at the village level whereas planning for livestock mobility and water point governance may need a county or cross-county approach). This is sometimes referred to as landscape-level planning and necessitates a structure for county planners to coordinate across county and even national borders. As CAF expands into neighbouring counties, this will be an important element to develop and test further (Hesse and Pattison 2013).

Challenges

Finding local partners with whom all groups within the wider community, customary institutions, and local government are happy working can be challenging. A significant upstream investment in building inclusive dialogue around this issue drew out potential tensions and allowed the formation of strategies to minimise friction between different groups. There is a real danger of partial community participation if local partners are not fully representative.

Conclusions

Analysis of the experience of establishing planning and implementation processes for local climate adaptation, based on county-level CAFs in northern Kenya leads to the following conclusions:

- Local collective action can be concerted on climate adaptation through a combination of stakeholder consultation, participative climate resilience assessments, regular climate information provision, resource mapping across landscapes to identify climate resilience attributes, and establishing mechanisms for drawing down resources to cover the investments costs of adaptation actions.
- Local public goods can be created through local climate adaptation planning and implementation in situations where community-supported customary institutions can be included in the process.
- Initial local adaptation priorities[12] will inevitably address the development deficits that impair climate adaptive capacity to perceived increases in climatic variability.
- If such collective actions are recognised by local government as legitimate contributions to the formal planning process (on an iterative basis) local adaptation can be transformative.

The approach used in the case studied here for supporting local climate adaptation looks both at addressing risks due to increased climatic variability, and by doing so, the opportunities to improve formal development planning at decentralised and national scales. The success of the work in Isiolo and elsewhere has led to it being up-scaled through an “Adaptation Consortium”, where a hybrid of similar approaches is being generated and implemented across four other semi-arid counties of Kenya. This unified approach works across institutional barriers and allows comparability in delivery costs by different implementing partners.

Notes on contributors

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Notes

1. "Local public goods" refers to processes and resources that are largely non-rival (use of the resource or investment does not diminish that amount left for other potential users) and non-excludable (use of the resource or investment is not restricted to certain people).
2. In practice these conceptual categories are rarely discrete. However, the categories do provide a useful summary of how adaptation can differ from, or be additional to, "business as usual" development.
3. Where uncoordinated decisions motivated by the pursuit of individual benefits generate suboptimal payoffs for others and for self in the long run.
4. Goods that are both non-rival (a rival or "subtractable" good is one where consumption by one user does not prevent simultaneous consumption by another) and non-excludable (no one is prevented from consuming) are called public goods. It is generally accepted by mainstream economists that the market mechanism will under-provide public goods, so these goods have to be produced by other means. "Local public goods" refer to rivalry and exclusion among a specific community or stakeholder group. Both "rivalry" and "exclusion" are considered continuous variables.
5. The reliability of seasonal forecasts is reduced by poor weather station coverage (Africa has only one weather station per 26,000 km^2 – one-eighth the recommended minimum). Climate projections concerning likely conditions one or several decades into the future are considered of moderate reliability. Flooding forecasts based on rainfall further up the catchment can be considered highly reliable and can trigger emergency responses that protect key assets.
6. Building on the LAPA framework developed in a partnership among the Government of Nepal, DFID, and IIED (see Government of Nepal 2011).
7. This approach differs from the majority of participatory planning which in practice is often no more than a process of consultation by government or NGOs to legitimise their own programmatic focus. Through a process of shared learning dialogue, local people not only prioritise their own adaptation investments but they also monitor and evaluate implementation.
8. Ced Hesse "Responding to climate change in East Africa by strengthening dryland governance and planning." Accessed November 10, 2013. http://www.iied.org/responding-climate-change-east-africa-strengthening-dryland-governance-planning.
9. This initiative is piloting an approach to be mainstreamed into wider government planning processes. Hence, it is essential that investments align with government policy at all levels.
10. Climate resilience assessments for the Wards of Kinna, Sericho, Gafarsa, Merti and Oldonyro were carried with representatives of the residents in 2012. Summaries of the resilience assessments can be found at http://pubs.iied.org/pdfs/G03464.pdf; http://pubs.iied.org/G03467.html; http://pubs.iied.org/G03468.html; http://pubs.iied.org/G03465.html; and at http://pubs.iied.org/G03466.html. Accessed October 1, 2013.
11. The Isiolo CAF was initiated before County governments came into being in mid-2013. But the CAF establishment process worked with the District Council and local government officials. The Council allocated 10 acres of land for building the community radio and weather observation station in Garbatulla; the County government allocated Ksh10million (€82,990) to building staff houses. Ward committees made submissions during preparation of County Integrated Development Plan based on the Ward resilience assessments. Perhaps the more important than the tangible investments has been the sense of ownership built within Isiolo among both officials and community members:

    "Our Isiolo map used to be plain with very little features of dots representing small towns. This time thanks to RAP and their partners our Isiolo map is full of resources … We will incorporate this great work as the Isiolo county resource map and give all the support it requires." (HE Hon. Godana Doyo, Governor, 7 November 2013)

12. Addressing the development deficits revealed by the effects of increased climatic variability is considered to be "adaptive development". This differs from "business as usual development" in that the likely impacts of climate variability and change are given due consideration in planning investments such that maladaptive actions are avoided and steps are taken to climate proof development.

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