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Adapting to Climate Change through a Paradigm Shift in Rural Development: The Case of Westgate Conservancy in Samburu County, Kenya

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Abstract
Climate change poses a plethora of challenges to agro-pastoral production in Africa resulting in different adaptation practices; some household-based, others community-based; many studies focus on the former. This paper focuses on the latter exploring a community adaptation project, the Westgate Conservancy with a view to positioning climate change as an arena of contestations for cultural values and valuations of ecology and landscape. This project is a response to climate change through revaluing a changing landscape to locate new value in wildlife and beauty. The community nurtures and protects the value, marketing it globally for a premium price. This new rural development practice transcends the traditional agro-pastoral modernization paradigm, which climate change halted. This project has enhanced physical security for people, livestock and wildlife, developed tourism and provided social services to the community. This success underscores the view that climate change confronted positively and creatively may be a development opportunity.

Keywords: Africa, Climate Change Adaptation, Rural Development, Landscape, Tourism.

1. Background
Since the Second World War, development in rural areas has been driven by agriculture and allied activities in what may be referred to as an agricultural modernization program everywhere. However, this modernization program is fast closing shop. The reasons for closure vary from one region to another. In Europe change has been precipitated by what is described as the 'cost-price' squeeze experienced in modernized agriculture

(O'Connor, et. al. 2006: 9; Ploeg, et. al. 2000). In this scenario, gross revenues have been falling while costs have been rising, hence literally 'squeezing' profits to the very minimum and unsustainable levels. Farmers have thus responded by taking up other non-agricultural activities in order to boost their returns from the rural landscapes. These changes represent a shift of paradigm from agricultural modernization to engagement in multiple activities or what has come to be known as (new) rural development (see Clark et. al. 2000: 134). The so-called new rural development activities include hiring out pasturelands as camping and picnic sites. This is a major activity in Europe because rural areas are increasingly attractive to urban populations traveling out of cities for week-ends out or for longer holidays during early and late summer. This is what Marsden (2003) refers to as the 'post-productivist paradigm' in terms of public external access to the farm resource and thus the aesthetic character of the agricultural landscape. Marsden further shows that sixty percent of British people visit the country-side on day visits at least once a year and forty percent of the population constitutes regular visitors going at least once a fortnight.

It is clear that the agricultural modernization project in Europe is in large measure weakening and in some instances giving way steadily to multi-functionality – the existence of multiple commodity and non-commodity outputs that are jointly produced by European agriculture and countryside (O'Connor, et. al. 2006) – a subject that has widely been studied (see for instance Haartsen et. al. 2000; O'Connor et. al. 2006; Haan and Long, 1997; Ploeg, et. al. 2000; Marsden, 2003 and Ploeg, 2003).

In contrast similar changes taking place in ecologically marginal areas in Kenya have hardly been studied. Large parts of these lands are converting from pasturelands and farms into wildlife conservancies under the management of community groups mainly for purposes of engaging in eco-tourism enterprises to raise revenues for respective community members and more importantly to conserve the fragile environments, biodiversities and landscapes. These shifts in livelihood construction constitute endogenous responses to the impacts of climate change in the marginal areas and global tourism dynamics in which high-end tourists prefer semi-private game safaris and accommodation away from the mass market in beaches, game reserves and parks. Therefore, the Westgate community in Samburu East District noting that crop and livestock production were under threat from climate change in the shape of pro-longed droughts, and erratic, shorter but intense rains causing destructive floods, have resorted to a wildlife conservancy complete with a nineteen-bed resort. Consequently, global forces, local ingenuity and climate change have contributed to the emergence of a multiplicity of livelihood activities that constitute a redefinition of nature and landscape, new forms of their valuation and commoditization that resonate with changing climate to which nature readily appears to adjust for the time being. In general then, the Westgate Community is de-emphasizing pastoralist and crop production activities in order to improve their resiliency to climate change and adapt more readily.

1.1 Climate Change Adaptation

Climate change constitutes any change in climate over time, whether due to natural variability or as a result of human activity (Alliance of CGIAR – Consultative Group on International Agricultural Research, 2009). A change in climate relates to the key elements of climate i.e. temperature and precipitation. As a result of climate change temperatures rise and precipitation become erratic often leading to longer and harsher droughts, and shorter and more intense rain seasons that result in floods. Thus climate change is disruptive to people's livelihoods to varying degrees depending on their location.

In line with the foregoing, Prowse (2010:6) has argued that climate change is likely to have the greatest negative impact on the poorest sections of any population because they inter alia derive most of their income directly or indirectly, from agriculture or natural resources, have few assets and limited political voice or representation. Oxfam International (2009) concurs with Prowse, arguing first that creeping, insidious changes in weather such as a steady rise in temperatures, shortening growing seasons and unpredictable rainfall patterns will undermine rural livelihoods. And second, that the cumulative effect of more frequent climate related disasters will send poor people tumbling into a downward spiral of increasing vulnerability as their assets are eroded, resulting in longer emergencies and longer recovery times. This brings developing countries such as Kenya into the focus of research and policy making processes nationally and globally.

The connection between international policy and science debates has dominated climate change to date; however, national and local-level implementation is emerging as a key issue (Ahmed, 2009: 1). The challenge of climate change to development discourse and practice is to relate country-specific susceptibilities to global scientific and policy best practices in order to arrive at more resilient livelihood practices. Intervening at local levels on the bases of global knowledge can be problematic. Hence, the need for research into emerging climate change adaptation practices and the mapping out of vulnerability at the appropriate spatial scale as a key step in developing and documenting adaptive best practices and responses that are effective, and that focus on both development issues, and the needs of the poor (Sullivan and Huntingford, 2009: 39-86).

Therefore, it is crucial to understand how climate change has affected agro-pastoral production systems and how affected communities have adapted to such changes. What has motivated the emergence of community conservancies? And how have the conservancies supported local livelihoods? This paper aspires to explore a case study of an endogenous community adaptation project with a view to positioning climate change as an arena of contestations for cultural values and of valuations of ecology and landscape. This project, the Westgate Conservancy in Samburu County, Northern Kenya, constitutes a community's response to climate change through revaluing a changing landscape and locating therein new value in wildlife and beauty.

2. Methodology

2.1 The Study Area

The study was conducted in Samburu East District, Samburu County. The county covers an area of about 21,000 square kilometers and is home to the Samburu people, a Nilotic Maa speaking society closely related linguistically and in terms of socio-economic and cultural organization to the Masai of Southern Kenya and Northern Tanzania. The 1999 Kenya Population Census put the county's population at 154,442 and the 2009 put it at 223,947 (KNBS, 2010). The latter translates to a population density of about 10 persons to the square kilometer. The altitude ranges from 1000 meters in the plains to 2,752 at the peak of Oldoinyo Nyiro Hill (Kenya, 2005).

According to Kenya (2007) rainfall in the county is bi-modal and its occurrence is determined by geographical location. The highlands receive their long rains in between March and May and the short rains between July and August. The lowlands receive their long rains between March and May and the short rains between October and November. Average rainfall for the county is about 500 millimeters and temperatures vary with altitude and are generally between 21 degrees centigrade mean minimum and 35 degrees centigrade mean maximum (Kenya, 2007).

Samburu County is part of Kenya's Arid and Semi-Arid Lands (ASAL) that mainly support pastoralist livelihoods. Pastoralists in the county keep mainly cattle, sheep, goats, camels and donkeys. Residents reported that they started rearing camels in the last fifteen years to get milk for domestic use as cattle rearing increasingly failed due to persistent droughts. They mainly imported the camels from the Borana and the Somali of neighboring counties. Kenya (2007) indicates that 83 percent of the population in Samburu County lives below the poverty line. This is attributed to the fact that the people have a total dependency on nature for their survival.

The study focused on the pastoralist communities around Westgate Conservancy in Samburu East District. This part is lowland with limited livelihood activities other than pastoralism. Therefore, the commencement of the Westgate Conservancy was an important step in diversifying livelihoods and adapting to the fangs of climate change in the county.

2.2 Methods of Data Collection and Analysis

Data for this study were collected over a period of three weeks in the conservancy and in the communities around it through two main methods, namely: Key Informant Interviews (KII) of Westgate Conservancy management and staff, and Focus Group Discussions (FGDs) with Westgate Community members. The key informants interviewed were the conservancy manager, chief security officer, a security scout and a clerk. Three focus group discussions were conducted, namely for women, men and *morans* (young men). Data from the two sources were transcribed and manually analysed to tease out the main themes and outcomes of the work of the Westgate Conservancy.

3. Results and Discussion

3.1 Local Understandings of Climate Change

The Men's focus group discussion reported that in the early 1960s when some members in the group were *morans* the weather was predictable. The rainy seasons occurred between April and June, and between October and December each year, with dry spells in between. They said that in those years, foot rot disease was common with sheep each year due to heavy rains. This implies that sometime during living memory, the Samburu supported their livelihoods with their land without any need for famine relief. Therefore, the changes observable in the weather in terms of longer drought seasons lasting more than a year as was the case in 1984-86; 1994-5; 2000-1 and 2008, are new phenomena. There is a change in the weather.

On the change the men's focus group reported:

Serious changes in the seasons started around the time we started seeing a star in the East with a long tail that looked like a fire ball in the early 1970s. The star appears at about 5 am and moves from the East to the West

disappearing overhead in the sky. With that drought set in and the Samburu people started moving around with their cattle in search of pastures and water.

It is possible that the stars being referred to are Jumbo Jets descending towards the Jomo Kenyatta International Airport in Nairobi which is to the west of Samburu County. If this is the case, it points not just to the increase of airplanes in the sky to the extent of the Samburu spotting a regular one, but more importantly to massive contribution of the aviation industry to global warming and climate change in general. Therefore, the change occurring in the weather is noticeable to pastoralists and climate scientists alike.

The Samburu pastoralists have responded to the change in a variety of ways. All the focus groups reported that they had adopted camels bought from the Somali in the east because they cope better with drought. The women said that the camels are their only source of milk during the long and harsh drought seasons because they go for months without drinking water. They explained that when the cattle, goats and sheep have died away, the camels become the mainstay of their livelihoods; providing the much needed milk especially for children and elderly and means of transport to move around in search water. Toulmin (2009) supports these findings arguing that each livestock species and breed has a different capacity to deal with heat, water and nutritional stress; camels and goats demand much less water as temperatures rise compared to Africa's commonest cattle breed, *Bos Indicus.* The adoption of camels is an example of community-wide adaptation implemented in households and essentially part of what passes for livestock development. An important adaptation venture conceived and implemented at the scale of community in the study area is the Westgate Conservancy.

3.2 The Westgate Conservancy

The Westgate Conservancy (hereafter the conservancy) was established in 2004 and has operated since 2005. It is operated on one group ranch that was registered in 1981 and owns 35,000 hectares of land. Therefore, the conservancy is owned by the Westgate Community which started wildlife conservation with the support of Lewa Conservancy and the Samburu National Park. West Gate Community Conservancy borders Samburu National Reserve to its south, Kalama Community Wildlife Conservancy to its east and Namunyak Wildlife Conservation Trust to the north; its southern and western boundary is the Ewaso Nyiro River[1]. The conservancy is run by a board elected by community members. The board employs 26 conservancy staff including a manager, a chief security officer, a clerk and several security scouts deployed in various blocks of the ranch to secure wildlife and ensure security for people and livestock.

In partnership with a private developer operating as Tamimi Company Limited the conservancy has constructed a nineteen-bed lodge. Hoole (2010) found a similar partnership between Torra Conservancy and Wilderness Safaris (a South African Company) in Namibia. The lodge has nine rooms fitted with the nineteen beds. The lodge has a separate management from the conservancy under the company's directors; one Dutch and two Kenyans. Besides the lodge the conservancy has developed camping sites for hire by tourists. Westgate Conservancy is not keen on mass tourism; their focus is on high-end products emphasizing privacy. The aim is to have a maximum of ten rooms with twenty beds. There is a revenue sharing agreement between the conservancy and Tamimi Company Limited with the conservancy receiving US $ 31 per client per night[2]. In 2008, the conservancy earned 2.7 million[3] Kenya shillings from the lodge. The lodge clients are a part of a large number of mainly international tourists to the conservancy for game drives and relaxation.

In starting the conservancy the Westgate Community was reconstructing her relationship with nature – the Westgate Landscape. For over a century the people had known no other way to earn livelihoods from the landscape than hunt and gather, till the land and graze and/or browse their livestock on it. Because of climate change which led to longer droughts and a sustained paucity of water, pasture and browsing material in particular, livestock and crops were unsustainable and largely of little benefit. It is therefore, as a result of a relook at the landscape that the conservancy was born.

It dawned on the community that the grey landscape endowed with a variety of wildlife including the rare Grevy's zebra, Grant's gazelle, Somali ostrich, elephants, hyenas and antelopes constituted beauty for the tourist market. It therefore meant that the landscape though the subject of continuing climate change had a unique value. In nurturing and protecting this value, the community through the conservancy had repackaged the landscape for sale to a niche tourist market at a premium price. In this repackaging of the landscape, the Samburu culture was critical. The Samburu like their Masai cousins did not traditionally hunt for food except during very lean times and even then they hunted sparingly. Therefore, protecting wildlife in the conservancy is

[1] www.nrt-kenya.org/west gate.html Accessed on May 30, 2011
[2] The exchange rate on the day of interview February 10, 2009 at www.oanda.com/currency/converter was KES 76.1420 to USD 1.
[3] At the exchange of KES 76.1420 to USD1, the amount is equivalent to USD 32,738.40.

an important cultural continuity from the past. Goldman (2006) confirms these findings with regard to the Maasai alluding to the continued existence of wildlife in village lands. This was the case with the Samburu as observed during fieldwork. Kahindi (2001) also confirms the findings showing that the Samburu people have co-existed with elephants since time immemorial and regard them as moral beings capable of hurting and being hurt. Therefore, in a sense the beauty that tourists seek in the Samburu landscape is not alien to the people. The Samburu equally enjoy it and have protected it throughout history only that a time had not come for them to exploit its commercial value.

The conservancy is thus the result of negotiations and contestations between the impacts of the waves of climate change and the people's culturally ordered livelihood pursuits. In this contest climate change takes away pastures and other sustenance for livestock, but the Westgate community turns to the wildlife that survive the change to reconstruct their livelihoods. As already indicated the conservancy does not constitute an attack on the people's culture as there were no taboos related to seeing or protecting wildlife. Furthermore, it would be possible for the morans and police reservists to hunt the elephants for their tusks as an adaptation strategy, but this is apparently culturally anathema. The Samburu do not wage war on wildlife, they protect themselves and their livestock from their harm. The thorny hedges around Samburu *manyattas* (homesteads) and especially the livestock pens inside testifies to the great effort and skill deployed to keep the wildlife out and the livestock in during the nights. In embracing the grey landscape as a community resource the community members are turning climate change on its head at least in the short run by creatively locating livelihood opportunities in the wake of its ravages.

In taking advantage of these emerging livelihood opportunities, the conservancy board is the Westgate Community's focal point, linking the community to local opportunities and with the outside world. Because of its formal organization and efforts to protect the environment, the conservancy is visible to donors interested in community development and natural resources management. The conservancy board has four main sources of revenue, namely: revenue shares from the lodge; revenue from letting camping sites; donor money, and a KES 1,500,000 per annum[4] revenue share from the Samburu National Game Reserve, for protecting wildlife that benefit the latter. The conservancy board uses her revenue in two programs, namely wildlife conservation and community development.

3.2.1 Wildlife Conservation

The conservancy property of 35,000 hectares is divided into six blocks for purposes of wildlife conservation and management. Each block is under the care and watch of two to three wildlife scouts employed by the conservancy. The scouts patrol their respective blocks providing security for wildlife, livestock and people. This way they control fires, cattle raiding, banditry and poaching. They have communication links via radio and cell phones to the local police department and the Kenya Wildlife Service staff who support their security operations. Miller (1998: 27) asserts that true 'ideas have consequences'. The conservancy is an idea with tangible security consequences for people, livestock and wildlife. Because fires are noticed early by scouts and put out in time, the fragile environment is more productive for wildlife and for livestock. Poaching and banditry are twin problems in northern Kenya and the conservancy scouts with their networking arrangements with the police and Kenya Wildlife Service (KWS) has reduced the menace, freeing time for people to engage in productive activities rather than engaging in preparing to defend communities.

The fight against poaching of wildlife has the support of the Westgate Community members because the scouts create awareness on the importance of wildlife to the community. Thus the community has come to view wildlife as their important resource just like livestock. The scouts said morans helped them fight off poachers even before KWS staff or police officers arrived to help. This is because of the high level of awareness in the community on how important the landscape and the fauna and flora therein has become to the livelihoods of community members.

The scouts also provide information to community members on impending dangers with regard to wildlife in the community such as location of lionesses with cubs as they become highly aggressive in defense of the cubs. They also provide information on migration trends such when large herds of elephants are expected to move through the community. The conservancy also mitigates the conflicts between wildlife and humans. For instance the conservancy had worked with donors and researchers to develop a *boma-proof* fence to keep the spotted hyena out of the *bomas* (homesteads). The scouts' awareness creation efforts have helped create a robust Westgate community that has a shared understanding of the value of their landscape and who cooperate to protect and defend it as a source of their livelihoods.

[4] At the exchange rate reining on February 10, 2009 (around the field work period) of KES 76.1420 to the USD as shown at www.oanda.com/currency/converter the KES 1,500,000 equals USD 19,700.03 per annum.

In order to sustain the emerging source of livelihoods, the scouts also keep wildlife monitoring data for management in the conservancy. They keep records on deaths and births in the conservancy. They take a keen interest in the cause of deaths and to the extent possible they work closely with KWS to establish causes of death in order to plan remedies. They also monitor causes and hotspots of conflicts between humans and wildlife. The scouts were also monitoring trends of twenty three species of wildlife common in the conservancy in order to plan and take any necessary remedial measures to ensure resource sustainability. Hoole (2010) similarly reports that guards carry out similar activities in Namibian community conservancies, although they deal more with poaching which is more rampant in Namibia than in Samburu County.

Overall, the Westgate Community members have fully appreciated and collectively bought into the redefinition of the landscape as a community resource that benefits them. They are active in the management of the landscape and in those efforts have woven their interests and efforts into the larger natural resource management and security community including KWS and the police department in ways that are fresh and beneficial to both the community and the nation. Therefore, the conservancy has reordered community relations so that members participate in community-wide activities smoothly. This is a good a foundation to the devolution of power and resources to the counties in Kenya as provided for in the constitution promulgated in August 2010 (Kenya, 2010). Boudreaux (2010) supports this showing that devolution in Namibia worked smoothly in the natural resource management arena as local community conservancies took charge of local resources and benefits.

3.2.2 Community Development

Community development is the larger program of the conservancy in the community. The program links the community with the benefits that flow from the landscape and more particularly from wildlife through tourism. The program entails education, water development, health, range management and livestock marketing.

In the area of education the conservancy provides full tuition bursary to all members' children in secondary school, middle level college or university. The total expenditure of this varies from year to year. However, the numbers of students in the specified categories were very few – five in secondary school, three in middle level colleges and one in university in 2009. In 2010, the conservancy supported 28 students in secondary schools. There were none in tertiary or higher education institutions. By 2009, one had completed a bachelor of education degree with sponsorship from the conservancy and was already working for it. Therefore, the full tuition bursary provided for students at secondary school level and above is also an incentive to attract local children to education careers beyond primary school.

The conservancy also runs eight pre-primary schools in the community and thus pays eight early childhood education teachers. Each teacher is paid 3000 shillings (USD.40) per month, hence spending 21,000 shilling (USD 280) per month on the teachers. The conservancy makes a varying allocation each year to each of the five primary schools in the conservancy to help build classrooms. This means that the conservancy is investing in basic education with a view to attracting children to schools early in life. These efforts are expected to lead to higher enrollments at secondary and college levels in the future. This is because even with the much talked about government sponsored free primary school education program; schools in Samburu County are still generally far apart and lacking in infrastructure, furnishings and equipment. This is the case in all counties in Northern Kenya due to economic and political marginalization of the region since the colonial days.

The main source of water for the Westgate community is the Ewaso Nyiro River. According to the conservancy manager, there is no capacity for bore holes in the area. The conservancy had implemented the Ngutuk' Ongiron water project serving a dispensary, a school and a community kiosk. The water is pumped from Ewaso Nyiro River using wind and solar energy. The project was funded by the United States Agency for International Development (USAID). The conservancy was planning other water projects for the community. The conservancy had positioned itself strategically as the development partner of choice in the community by showing a clean track record of delivering on bursaries and natural resource management. This visibility promises to attract resources for the community especially because of the opportunities the conservancy presents for popular participation in project implementation.

The conservancy had set aside resources to offset hospital bills for needy families in the community. The aim was to deepen healthcare services in the community and to particularly encourage the poor secure care for sick children. The conservancy was keen in fighting the spread of diseases including AIDS – Acquired Immuno-deficiency Syndrome, and has also partnered with a USAID Health Program; AIDS, Population and Health Integrated Assistance (APHIA II) to establish a mobile clinic in the community and to commence community health outreach work. The conservancy runs two dispensaries in the community in partnership with government. The government provides drugs and personnel while the conservancy has provided buildings and maintains them. The conservancy thus values the human resource in the community and through these efforts in improving their health, releases them to better participate in productive activities.

Productive activities such as livestock keeping in the face of climate change can only succeed if the community rangeland is managed efficiently. The conservancy had created zones in the range – one set aside for wildlife where livestock and human settlement was not allowed followed by a buffer zone where no human settlement was allowed and finally the grazing areas. The USAID had provided funding for clearing acacia in the buffer and grazing zones and introducing grass seed. The aim was to increase the quality and quantity of grass in these zones in order to deal with the conflicts between humans and wildlife. Furthermore, increasing the quantity of pasture locally would reduce the distance to grazing areas and release more children to attend school. Additionally, planting more grasses was meant to curb soil erosion in the area.

Even in the face of climate change, the Samburu people generally rebuild their livestock numbers fast during good years. A major drawback to their livelihoods was losing all their stock to emancipation and death during prolonged drought seasons. The conservancy responded to this problem by providing marketing advisory services such as asking community members to sell their livestock early in the drought seasons before they lost weight. They connected members to markets in Laikipia County to sell their livestock. Although the conservancy earned their revenue from tourism and wildlife, it did not disregard pastoralism. Instead the conservancy serviced pastoralism better and strengthened it. This helped increase community ownership of the conservancy because community members did not feel alienated from it.

Besides the foregoing program activities that benefited community members directly through service provision, the conservancy offered other opportunities to the community mainly through tourism. Community groups had formed dancing troupes and entertained tourists on game drives around the expansive conservancy. They earned from those entertainment activities. The tourists also bought artifacts from community members who produced and displayed them at strategic points of the game drive routes. Boudreaux (2010) supports these findings arguing that the community conservancies in Namibia have succeeded in increasing the income and human capital of rural Namibians. Overall, the conservancy had created a gamut of livelihoods avenues for community members. In particular, the conservancy has helped develop entrepreneurship skills among ordinary Samburu people as they locate and develop business opportunities beyond pastoralism.

Hoole (2010) has reservations on the benefits of conservancies to community members due to power imbalances. However, the benefits from the conservancy revenues that flow to the community are more equitable than in Namibian conservancies the Hoole studied. Hoole (2010) found out that power imbalance within conservancy villages on the one hand and between the conservancy, and non-governmental organizations (NGO), governmental institutions and the partner companies on the other, interfered significantly with the flow of benefits to villagers. In the case Westgate Conservancy, however, the services provided were varied including water, education, health and livestock management; hence, a more equitable distribution of benefits. Besides, the Westgate Conservancy dealt with donors directly without NGOs and statutory bodies mediating as was the case in Namibia.

4. Conclusions

The conservancy represents a paradigm shift in rural development from agricultural and livestock modernization to creative landscape-based endogenous efforts. The paradigm shift in the case of the conservancy was triggered by the hand of nature through climate change that threw agro-pastoral activities into disarray. What emerges from the shift is a conservancy that reinterpreted, revalued and repackaged the landscape for consumption by an elite tourist clientele at a premium price. The conservancy enterprise took a holistic approach to local development mounting nearly every ladder for people out of poverty. The ladders include education, health, water supply, range management, livestock marketing and art.

In mounting the ladders of community service, the conservancy is not indiscriminately throwing money at problems. The services such as education and health were targeted in a form of affirmative action. This helped direct resources where need was highest. The conservancy was thus handling the issues at hand professionally and their efforts were approved by the community members who showed a strong ownership of the enterprise.

The emphasis on education in particular was striking because it sought to direct attention away from the precarious pastoralism to formal employment, commerce and industry. This is an important adaptation to climate change in the long-term. This is because the poorest in the marginal areas of developing countries are the most vulnerable to climate change impacts; and education opportunities are likely to help some families in Westgate out of poverty and ultimately out of vulnerability.

In fighting poverty and vulnerability, the conservancy has emancipated community members from the helplessness that the impacts of climate change impose to lives of hope in assured education, health support and infrastructural development hitherto unknown in Westgate community. The conservancy has thus helped the

community scan livelihood opportunities in the midst of the chaos wrought by climate change. This reinforces the view that encountered creatively climate change presents new opportunities in some situations.

The success of the conservancy to turn around hopelessness into hope in this remote and marginal village deep in the backwaters of politically and economically peripheral Kenya is testimony that devolution works and that local talent matches local resources. This success provides the needed assurance that the new Kenyan Constitution whose centerpiece is devolution of power and resources to county governments will work. However, devolution works where popular participation abounds and where participants have access to all the necessary information. Devolution units will thus succeed only to the extent that they are accountable to the citizenry within their jurisdictions.

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