

Rangeland Privatization and the Maasai Experience: Social Capital and the Implications for
Traditional Resource Management in Southern Kenya

Running head: Rangeland privatization and the Maasai experience

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Abstract

Using qualitative research methods we examined how group ranch privatization and settlement of individual Maasai households across the landscape have affected traditional livestock herding and social capital mechanisms of Maasai livestock herders. This process has altered decision-making processes, social networks, and cooperation of Maasai herders and limited access to water and pasture. It has disturbed community cohesion and created conflicts over resource access between neighboring landowners and communities. While subdivision has given secure land tenure to many Maasai, they can now sell land to outsiders who may come with other

traditions and land uses that conflict with Maasai traditions. Despite shifting from communal to individual decision-making regarding livestock and natural resource management, many Maasai landowners are adapting some customary practices, adopting new, more individualistic and commercial practices, often blending both in new networks and arrangements that reflect the continuing importance of social capital and the reciprocal use of natural resources.

Key Words: Group Ranches, Livestock, Pastoralism, Subdivision, Social Capital, Land Tenure Change

The authors wish to acknowledge the generous support of the African Conservation Centre, the South Rift Association of Landowners, the African Conservation Fund and private donors, and Oregon State University. We appreciate those who were interviewed for this project and all of our colleagues in Kenya who assisted with this project, especially Simon Sankale, Paul Meiliara, and John Kamanga. This project was approved by the Institutional Review Board at Oregon State University and complied with regulations on research involving human subjects.

Introduction

For centuries, Maasai have been pastoralists who relied primarily on cattle, goats, and sheep for their economic, social, and political interactions (Doherty, 1987). Customary Maasai land tenure was based on communal land ownership and reciprocal grazing rights. Elders and community members collectively manipulated grazing strategies and natural resource use by directing grazing to selected areas during the dry and wet seasons (Doherty, 1987; Peacock,

1987; Seno and Shaw, 2002) and allocating specific pastures to different ages and species of livestock (Galaty, 1992).

In southern Kenya, much of the landscape is arid and semi-arid and rainfall is scarce and unpredictable. Here, livestock herding is an efficient form of land use when herds and people can move seasonally from dry-season grazing areas based at permanent water sources to temporary wet-season pastures (Fratkin, 1994). This mobility, like that of the migratory wildlife that share this landscape with Maasai pastoralists, increases access to good forage, increases the digestive efficiency and weight gains of livestock, reduces exposure to food shortages in dry seasons and droughts (Western, 1982; Western and Manzanillo-Nightingale, 2004), and helps livestock avoid disease (Homewood, Kristjanson, and Trench, 2009).

Today, Maasai livestock herders face many challenges including rangeland degradation, agricultural development, land fragmentation, and associated losses in mobility (Reid et al. 2004; Western and Manzanillo-Nightingale, 2004). Land tenure changes, including the privatization and subdivision of Maasai group ranches in particular, are considered a major threat to traditional livestock herding in Kenya (Graham, 1988; Grandin, 1986; Homewood et al., 2009; Seno and Shaw, 2002).

Many studies have looked at the reasons for rangeland privatization and subdivision in Kenya and others have begun to address the ecological, social, and economic impacts. Based on the personal experiences of Maasai livestock herders, we describe how land subdivision has affected traditional organization and social relationships concerning livestock herding and access to natural resources, and how herders are adapting to these changes under a new private property regime.

Colonial Land Policy and Group Ranch Development

Beginning in the early 1900s, the Maasai were removed from the most productive areas of their land to make way for white settlers (Hughes, 2005; Munei and Galaty, 1998). Additionally, the creation of national parks and other protected areas by colonial governments and later by the Kenyan government (Hughes, 2005; Reid et al., 2004; Western and Manzanillo-Nightingale, 2004) further restricted access to critical pastoral resources and altered traditional patterns of land use.

In the 1960s, after it became clear that there was insufficient land to allocate individual ranches to all Maasai pastoralists (Graham, 1988) the national government of Kenya established group ranches by assigning property rights to a group of individuals (Grandin, 1986; Munei and Galaty, 1998). Group ranches were to be managed by committees elected from the membership (Galaty, 1980; Grandin, 1986). By 1979, fifty-seven group ranches had been established throughout Kenya's Maasailand (Mwangi, 2007). The group ranches varied in size from 10-20,000 acres in the more populated, highly productive areas to 100,000 to 300,000 acres in the drier, less populated areas (Galaty, 1992). Group ranches, by allocating joint property rights, "intended to encourage producers to sedentarize, to commercialize, to conserve the range, and to invest in infrastructure. The group ranch proposal followed national development thrusts as a compromise between the planners' preference for individuated tenure and production requirements of a semi-arid zone that necessitates greater flexibility than can be attained under private tenure," (Grandin, 1986, p. 10). Although seldom acknowledged as an objective, group ranches opened up pastoral lands for Kenya's growing population through privatization where parcels of group ranches could be subdivided and sold (Galaty, 1992).

Many group ranches failed to include year-round grazing and settle Maasai within the boundaries of the ranches (Doherty, 1987; Graham, 1988; Seno and Shaw, 2002). Group ranch committees did little to limit livestock numbers and/or control seasonal grazing (Bekure and Ole Pasha, 1990). Most families were only able to maintain their livestock herds by moving beyond group ranch boundaries (Doherty, 1987; Kimani and Pickard, 1998; Peacock, 1987). Many group ranch committee members and others with political influence, seniority, influence, business acumen, and education, secured title deeds to some of the best lands carved out from group ranches (Doherty, 1987; Galaty, 1992; Munei and Galaty, 1998) and siphoned off community revenues and development funds.

Group Ranch Subdivision

The failure of group ranches increased the drive toward individual private land tenure (Bekure and Ole Pasha, 1990; Campbell, 1993; Grandin, 1986; Mwangi, 2007). From the mid-1970s through the 1980s, group ranch members in northeastern Kajiado district in southern Kenya began subdividing their ranches and catalyzed a push for subdivision elsewhere in the district from the mid-1980s onwards (Mwangi, 2007).

Internal support for subdivision was driven by the desire to secure access to land and individual property rights (Campbell, 1993), the fear of losing yet more land to outsiders (Western and Manzollilo-Nightingale, 2004), a desire to manage one's own affairs (Doherty, 1987), and a way to end the inequities of the group ranch system (Mwangi, 2007, Rutten, 1992). Active government policies and a presidential decree also encouraged group ranch subdivision (Campbell, 1993; Galaty, 1992; Grandin, 1986). According to Campbell et al. (2003), the motivations of the political and wealthy elite in Kenya for promoting subdivision were driven by the opportunity to acquire land and take advantage of wildlife-related and beef ranching income.

In recent years, land speculation has become a dominant motive of Maasai cognizant of Kenya's rising property market.

Many authors have suggested that subdivision and associated sedentarization of pastoralists may lead to socio-economic and ecological marginalization of the Maasai (e.g., Boone et al., 2005; Campbell et al., 2000; Munei and Galaty, 1998; Seno and Shaw, 2002; Western and Manzolillo-Nightingale, 2004; Western et al. 2009). Most relevant to this paper, subdivision reduces access and degrades natural resources, and leads to a loss of traditional knowledge and collaborative management practices that increases livestock production and resilience to drought (Curtin and Western, 2008; Seno and Shaw, 2002; Western and Manzolillo-Nightingale, 2004; Western et al., 2009). The sale and loss of land to outsiders following subdivision threatens indigenous cultural traditions and the mobility necessary for extensive livestock husbandry. It also increases economic insecurity among poorer families (Munei and Galaty, 1998). As the definition of wealth shifts from cattle ownership to land holdings, there is great uncertainty for the Maasai and their cultural identity (Campbell, 1993).

Early research conducted on the effects of group ranch subdivision found that much of the land been acquired by non-Maasai (Galaty, 1992; Kimani and Pickard, 1998; Rutten, 1992). Subdivision and sedentarization reduced the number of households living together in common homesteads (*enkang* in Maa, *boma* in Swahili) and increased individually controlled pastures, leading to the isolation of individual households and conflict over access to pasture and water resources (Grandin, 1986; Talle, 1988). Fencing by non-Maasai and increasingly by newly settled Maasai families has raised concerns about livestock and wildlife mobility, especially in times of drought (Kimani and Pickard, 1998; Rutten, 1992). According to Homewood (2009), livestock herds have suffered from lack of seasonal mobility, especially during droughts. The

severe drought of 2009, however, resulted in a countrywide loss of pastoral livestock and mass movement from the worst affected lowland areas (Western, 2009).

In many cases Maasai no longer able to subsist off their herds have turned to wage employment, crop production, and commercial ranching (BurnSilver and Mwangi, 2007; Rutten, 1992). Livestock improvements have proved difficult due to the scarcity and cost of new breeds and their vulnerability to drought and disease. Dependence on livestock, market access, lack of commercial skills, and conflict between herders and farmers are among the many factors making it difficult for Maasai in rural areas to diversify their economy and commercialize (Campbell, 1999; Thompson and Homewood, 2002; Thompson et al., 2009).

The subdivision and privatization of communal lands has not necessarily brought an end to collaborative herding practices. Many individual Maasai ranches remain undeveloped and are still being used collectively (Grandin, 1986). Following subdivision, some livestock herders are sharing pastures and cooperating with each other to develop water sources, schools, and roads (BurnSilver and Mwangi, 2007). Pasture-sharing and swapping agreements are usually based on preexisting relationships with family and friends. Worden (2007) found that while normal daily and seasonal movements of livestock were constrained in subdivided areas, drought-induced movement of livestock over large geographic areas remains an important strategy.

Social Capital, Property Rights, and Natural Resources

Social capital consists of social bonds and social norms that benefit individual and collective well-being (Pretty and Ward, 2001) and is generated through social ties among networks of individuals (Wilson, 1997). Often, natural resource management strategies among pastoral societies, and the Maasai in particular, are heavily governed by social relationships and networks among individuals and groups (Galvin, 2008).

According to Galvin (2008), social networks include bonding ties among families and friends within a community and bridging ties to outsiders for ancillary help and information. When natural resource users share environmental knowledge, social capital is generated, often resulting in natural resource management practices adapted to local ecosystems (Katz, 2000). Pretty and Ward (2001) highlight four integral components of social capital that promote cooperation and sustainable livelihoods. These are relations of trust; reciprocity and exchanges; common rules, norms and sanctions; and connectedness, networks, and groups.

In the developing world, where tenure rights over land and natural resources are often insecure or ambiguous, trusted, long-term social networks and relationships can enforce property rights and sustain natural resources in either common or private property regimes (Katz, 2000). The Maasai and other pastoral peoples in East Africa have relied on complex, highly adaptable social networks based on adherence to traditional decision-making systems and reciprocal relations between individuals and communities to help maintain traditional pastoralism (Doherty, 1987; Galvin, 2008; Seno and Shaw, 2002; Spencer, 1988). In these traditional systems, regulated access by various users to common pool resources like water and grazing land occurs in a variety of spatial and social contexts, depending on the resource, group membership, and rights determined by birth, kinships, labor investment, or social contract (Homewood et al., 2009).

Galvin (2008) suggests that when pastoral groups like the Maasai are faced with land privatization and fragmentation, social capital and mutual assistance networks can help maintain access to resources. Although pastoral groups tend to function locally, traditional bonding ties may no longer be sufficient for pastoralists to acquire access to resources. Bridging assets may

be required to access valuable information and help pastoral groups gain or maintain access to resources including pasture and water.

In this paper, we argue that although land privatization has altered traditional Maasai livestock herding practices and weakened customary social capital, like-minded individuals in this community are generating new social capital mechanisms in order to maintain access to the natural resources necessary for their survival as pastoralists. In many cases, these new mechanisms are based on bonding ties and a shared sense of traditional norms and values. New bridging ties based on access to distant pastures, development opportunities, markets, jobs and educational background are also being developed.

Methods

The study site was the former Mailua Group Ranch in southern Kenya, located in the *Matapato* section of the Maasai along the border with Tanzania. The group ranch was created during Phase III of the Kenya Livestock Development Project begun in 1979 and was approximately 63,026 ha (Rutten, 1992). Mailua lies west of Amboseli National Park and the Tanzania border to the south. The area is predominantly arid and semi-arid with an average rainfall of approximately 600 mm. The habitat is a mix of grasslands, shrublands, and savannah woodlands. Prior to subdivision there were approximately 1,200 registered group ranch members. In 1992, the group ranch was given consent by the government to subdivide (Rutten, 1992). At the time of this study in 2008, subdivision of the remaining lands was underway, giving each of the members approximately 150 acres of grazing land and five acres of irrigated land for cultivation. Livestock herding remains the dominant land use.

Qualitative Research Methodology

We relied on qualitative case study research methods for this study. Qualitative methods have been commonly used to gain a deeper understanding of land use practices and tenure changes in other natural resource and livestock dependent communities (Theobald et al. 1996; Yung and Belsky, 2007). Narrative data were collected in 2008 using semi-structured interviews with former Mailua Group Ranch members. Interview participants were purposively selected based on place of residence and livestock herding experience. Only adult men were chosen to participate because they traditionally make the livestock herding and land use decisions. Participants ranged in age from 26 to 68 years and many of them held other jobs besides livestock herding at some point in their lives.

An initial visit to the study area and discussions with key informants including community members, other researchers, and government officials informed the development of the interview questions. All interviews were conducted with the help of a local research assistant and translator fluent in local languages. The interviews were either conducted in English or in the traditional language of the Maasai, depending on the participant's preference and comfort level. Some interviews were conducted with more than one participant at a time. In this way each participant was able to respond within the context of the group discussion. This process resulted in 18 participants and a total of 12 digitally recorded interviews. Supplemental sources of data included informal discussions with key informants, direct observations, and participation in local and regional meetings with community members and local and regional conservation nongovernmental organizations.

Primary narrative data analysis was conducted in a manner consistent with qualitative analysis strategies suggested by Berg (2007). This involved coding recurring concepts that occurred in the data by assigning narrative passages to thematic categories. Data interpretation

involved the constant comparative method espoused by Strauss and Corbin (1998). Quotes used throughout the results section denote passages from Maasai interviewees.

Results

The Maasai experience in Mailua prior to subdivision is consistent with prior research conducted elsewhere in Maasailand (e.g., Doherty, 1987; Peacock, 1987; Seno and Shaw, 2002; Spencer, 1988; Talle, 1988; Western, 1982).

Subdivision Effects on Traditional Organization of Maasai Livestock Herders

For many livestock herders in Mailua, the system of communally managed grazing reserves has been replaced by individual decision-making on privately owned land. Some landowners are using some or all of their smaller, five acre *shambas* allocated for cultivation as grazing reserves. Others are developing water sources on their larger parcels of grazing land.

Across the landscape, especially on Maasai-owned parcels, the tradition of not putting up permanent wire fencing continues. However, individual plots of land are often fenced with brush to indicate the boundaries between plots of land, but only as visual indicators of boundaries, not necessarily to keep out livestock and wildlife.

Several residents interviewed for this study welcomed the concept of privately owned land and controlling their own affairs.

I thought [subdivision] was a good thing, because now I can own my own land, I can plan for my own land, so I saw it as a benefit. You are sure of your place. I can do anything I want, I can build, I can keep my children here without any disturbance, so it is somewhere I can plan for my own.

Others said that they were initially excited about controlling their own land including using it as collateral to obtain loans, only to discover subdivision was not good after it happened.

After, we saw it's a loss, because you cannot go anywhere, because you have your own land, you cannot share with another person. So the system doesn't go the way you want, because sometimes you don't have rain, and your cows cannot migrate to another land.

... So you try to go to another place but you cannot go because individuals own all of the land so you don't have any place, so it's a loss. So we rush to bring loans with our title deeds we cannot return because you buy cows and then drought comes and all of them die and the government wants your money and you have the loan until the day you go and sell your land. So instead of getting the benefits that we were expecting you get a loss.

One elder complained that after subdivision there is a lack of community leadership, and people are just doing things on their own, making it very difficult to get the community to work together.

For some residents, the sense of community, security, and sharing that comes with living with others has faded with subdivision. For example, "when subdivision came I got my own land, my goat became only mine, my child became only mine, and the other person, my neighbor, his child will not belong to me anymore." Another landowner feared for the safety of his family and livestock and being unable to get help when needed.

[Before,] we lived in a community. Now, because we don't live in the town, we live in the bush [alone]. If anything happens, you don't have anybody to help you because maybe I have to go to town because of children, I leave my wife here. If anything happens, nobody is here to help.

Subdivision has changed how individuals relate with each other. Despite subdivision, livestock herders often have no choice but to move their animals; yet, it is no longer culturally acceptable to move livestock without permission. Moving animals from one place to another without landowner permission has created conflict between neighbors. Without fences it can be difficult for residents to prevent livestock from trespassing. This can lead to landowner disputes.

Some livestock herders complain they have to beg for grazing land when theirs can no longer support their livestock. Asking permission to graze livestock on another's land is described as a major change brought about by subdivision. When everybody controls their own

land, asking permission does not guarantee access to another's grazing land and can cause enmity.

[Before subdivision] people had good relationships, but people nowadays have bad relationships because we can get rainfall here and some places get no rainfall. So you see, right now, the other places can get rainfall and other places have no rainfall, so it can be difficult for you to move freely without asking, because some can give you grass and others will not. That is how it has affected us.

Sometimes, wealthier landowners with large herds, including those with larger ranches acquired before the group ranch was created, graze their cattle without asking and there is little others can do. Other conflicts over boundary disputes occur between neighbors and with other Maasai communities that have not subdivided their lands.

Subdivision has made it difficult for some livestock herders to migrate to other Maasai communities in both Kenya and Tanzania during times of drought. Sometimes they have to beg for access to grazing land in other communities where lands are not subdivided; others have been refused outright even during the major drought of 2005-2006. Regarding sharing grazing land with the neighboring *Ilkisongo* section of Maasai, who did not subdivide, one livestock herder said:

When I move, they refuse to let me go there, because they say 'it is you who created your problem by subdividing your land, so I will not allow you to come to my land because I am ok....If you want to come to my place, it is you who bring your own problem.' It is hard for us to go there because they don't like that we subdivided and say it is our problem. And it is hard for them to come to here because they are in a group and we have many individuals and they cannot bring all of their cows to one small place.

Cooperation among Landowners after Subdivision

Many landowners realize that despite legal subdivision they must cooperate together as individuals and share pastures to survive as livestock owners and managers. Some see this type of cooperation as a benefit of subdivision and private land ownership.

I find that it is easier now, to manage things the way we want and the way we are treated rather than before you had to talk to people from other locations for help. It is now easier to get people circled together. Before the subdivision, it took longer for any type of bringing people together. Otherwise, it could take five to ten years, but right now you can solve a problem in two to three weeks.

They see sharing land as a continuation of the Maasai traditions of open access to pastures without permanent fences. Similarly, many see the boundaries between individual ranches as a formality and share land without any problems.

Landowners with few animals may choose to share their land with others who have more livestock. This sharing is accomplished through various formal and informal pasture sharing agreements, sometimes as simple as asking another landowner if you can graze your livestock on his land. Water sources are often few and far between and sharing grass with other landowners along the way to water is easier on livestock.

Negotiations over allowable numbers of livestock are necessary because of the ecological limitations of the smaller, 150 acre plots and the number of different landowners in the area.

The main problem with that is when...people...ask for a place to graze... [landowners] will control the amount of cattle you bring to their land. Sometime they can tell you, we need only 50 cattle, and sometimes they can tell you that we need only 20 cattle, and maybe you have 100 cattle. So subdivision changed things, because they will control the amount of cattle they will take for you, even if it is a friend, or your relative.

Sometimes, family members and/or friends and neighbors co-mingle their herds and share individual ranches, deciding together when and where to graze their livestock. Together they maximize the availability of forage for different classes of livestock throughout the seasons. For some, sharing land is a way to help friends, family members, and even strangers who are in need. One livestock herder said he would offer land to a stranger badly in need of pasture because he believed they would do the same for him if the circumstances were reversed.

Before you move, you come to my *boma* and ask me, can I get a place please because we are suffering, we are dying, can you please help me. Yeah, because we knew each other, I

don't like him to die.... Yeah, even if I don't know them, because he will apply the same care to me, when there is no rain, I can [go to him].

Even though individual landowners control their own land, sometimes groups of landowners and elders gather and decide whether or not people traveling from other areas are welcome to bring their livestock to a particular area. They determine if there is enough forage to accomodate more livestock and if they come from an area that is free of livestock disease.

You [are] an individual with your own shamba but if you come to a different settlement which has leaders, elders...they must all sit, agree..., discuss about you, and where you come from...then we all decide yes or no. If it is no, we collectively say no and they have to go back.

Some residents are selling or leasing grass to others. For those Maasai with few animals, selling access to grazing land may be a good source of income and a viable alternative to selling land.

Other examples of post-subdivision cooperation include several landowners forming committees and/or pooling their resources to develop boreholes and water dams for domestic and livestock uses. Local village committees have also been formed to bring people together to develop churches and schools and deal with conflicts that arise in the community in lieu of the group committee that existed before subdivision.

Selling Land and the Effects on Maasai Traditions

When Maasai landowners get title to their newly-subdivided land, for the first time they can sell land. Some in the community consider selling land as a breach of Maasai traditions and “not the Maasai way.” Nevertheless, for a number of reasons, land has been sold after subdivision. People may sell land because they cannot meet their financial obligations or have lost cattle in the droughts and have no other income. Others may sell for extra income or to buy more livestock or they sell their five acre farms because they are not interested in cultivation.

Many local Maasai believe selling land after subdivision “is the most dangerous thing we can see.” Besides not having any place to graze cattle or having to move to town where it might be hard to find work, the ability to buy and sell land is another advantage for wealthy livestock herders, including those who have large land holdings acquired before the creation of the group ranch. They can sell livestock to buy more land, exacerbating differences in wealth and power.

When land buyers are non-Maasai or have little connection to the community, their ideas and traditions may conflict with Maasa traditions. One Maasai landowner said, “Subdivision is very bad, because it brings us to live with people who are not our tribe, people who are non-Maasai, and that makes us even to abandon our culture and our traditions because of that mixup, you see.” For example, according to one Maasai, the idea for selling grass came from non-Maasai who were approached by livestock herders looking for grass and the non-Maasai charged money for grazing access, which is something the Maasai had never done before.

Livestock herders complain that when non-Maasai buy land they do not share resources with others. Specifically, “the danger that the subdivision has brought is that other tribes bring another tradition that if you have, you don’t share with others. So the Maasai are adjusting to that way of life.” Many of these new landowners are not livestock herders and use the land for things like exotic tree plantations or cultivation. This has led to conflict over trespassing between livestock herders and the new, non-Maasai landowners. These outsiders not only don’t share their lands but they also put up fences, effectively blocking access to these lands forever.

When a Maasai buys, we don’t have a problem with that because he will not fence, but when other tribes, when they buy, the moment they buy, you will never step on that land again, because they will fence it, some even with an electric fence. So you will not go to that land again.

Fencing not only prevents livestock herders from accessing these lands, it makes it necessary for livestock to circumnavigate the fences to get to water sources or other shared pastures.

Future Implications and Opportunities

Despite the difficulties brought about by subdivision, and although some landowners have jobs, are cultivating crops, or selling trees to burn for charcoal, livestock herding remains the main source of income and livelihood for most Maasai. Some fear that if they cannot raise livestock, they will be driven into poverty and have no financial capital to pursue other activities.

It is our source, our way. We don't have any other source. You can see other people have many sources, but our only option is livestock. Those people, who have no cows, or livestock, they may end up [in] poverty.... We don't have other ways that we can get our food. If you don't have any livestock your life will be miserable.

Many locals strongly support reaching outside of the community for help adjusting to subdivision, maintaining their traditions, coping with drought, and embracing new opportunities like community-based wildlife conservation. For example, many landowners have learned about larger, more productive exotic livestock breeds by traveling to other parts of Kenya or to agricultural seminars. Others have reached out to farms elsewhere in Kenya where they buy Sahiwal and Boran bulls to crossbreed with their traditional Maasai cows, hoping to increase milk and meat production while reducing overall herd numbers to better utilize the resources of individually owned ranches.

According to one local, some Maasai who attend school realize the importance of Maasai traditions and are returning to help organize their communities to deal with issues like subdivision and wildlife conservation. The South Rift Association of Landowners (SORALO) is one such organization bringing Maasai communities together for mutual benefit, primarily through the development of community owned and operated wildlife conservancies and ecotourism ventures. SORALO considers that conservancies not only create jobs and generate revenue on the land, but also capture Maasai grazing practices and collaborative management.

This, in turn, increases resilience to drought and reduces the impact on pastures caused by sedentarization and unsustainable charcoal production, sand harvesting, and other practices.

In 2008, SORALO met with Mailua residents to establish a cattlemen's association aimed at increasing the commercial production of indigenous livestock through cross-breeding with higher yielding beef cattle. The plans include setting aside dry season pastures, water development, and veterinary services to reduce disease losses. Many Mailua landowners see such projects as a way to combine individual entrepreneurship with communal programs and benefits.

Discussion

Prior to subdivision, the Maasai had rich, social, reciprocal arrangements that governed livestock movement and access to rangeland resources. Our results show that land subdivision among the pastoral Maasai has altered customary social networks and resource governance in many ways. At a local and individual level, privatization and subdivision have reduced community cohesion and created boundary conflicts between neighboring landowners. More politically influential and economically connected individuals have exploited subdivision. They have benefitted largely by acquiring the best lands and excluding other herders, while continuing to graze their livestock on other individually-owned lands, often without permission. As a result, subdivision has strained relationships among formerly reciprocating clans and sections in southern Kenya and across the boundary in Tanzania. Prior to subdivision, seasonal mobility beyond group ranch borders was important to herd productivity and drought survival (Bekure and Ole Pasha, 1990). Similar conflicts following subdivision have occurred in Uganda following rangeland privatization (Kisamba-Mugerwa et al. 2006).

By limiting the movement of livestock and people in search of pasture and water, the subdivision of Maasai group ranches like Mailua represents the greatest challenge to traditional Maasai pastoralism since Kenya was first colonized by the British in the late 1800s. According to Western et al. (2009) the subdivision and associated sedentarization of pastoralists across southern Kenya is the greatest danger to the ecological health of these important rangelands.

Subdivision is viewed as a double edged-sword by many Maasai. On the one hand it secures them legal title to their traditional lands and preempts further land grabs by outsiders and, more recently, Maasai leaders. For many poorer families, land sales are a way of avoiding immediate poverty. Subdivision nonetheless has adverse consequences for many families, including loss of land to non-Maasai, and loss of culture, social networks, herd production, and drought resilience. These findings echo results from research conducted elsewhere in Maasailand (Galaty, 1992; Kimani and Pickard, 1998; Rutten, 1992).

Privatization of American Indian reservations in the United States during the late 1800s resulted in many similar consequences. In Oregon, by 1895, ninety-percent of the arable land on the Umatilla Reservation was being farmed by non-Indians. Today, much of the best farmland on Indian reservations is owned or managed by non-Indians (Kennedy, 1977). There are other parallels in the western United States where the subdivision of large working cattle ranches has brought an influx of new landowners and changed the social and ecological fabric of the West. In the valleys of the Colorado Rocky Mountains, for example, ranch sizes have shrunk, leading to conflict between old and new landowners over access to lands and the disruption of seasonal livestock movements (Theobald et al., 1996). In Montana, new landowners are challenging the cooperative customs of established ranchers, causing tensions among neighbors (Yung and Belsky, 2007).

Even though past development policies have ignored and tried to supplant customary cultural and ecological adaptations of the Maasai in the dry rangelands of southern Kenya (Ellis and Swift, 1988), communal traditions and mobility have persisted. Maasai persistence was evident through the earlier phase of group ranch subdivision beginning in the 1970s (Grandin, 1986; Kimani and Pickard, 1998; Peacock, 1987), and through more recent individual land allocations where livestock herders continue to move their herds over large geographic areas, especially during times of drought (Worden, 2007).

The example of Mailua Group Ranch provides insight into how the Maasai, in their own words, view the pros and cons of land privatization. The findings suggest that the Maasai are adapting some customary practices, adopting new, more individualistic and commercial practices, and often blending both in new networks and arrangements that reflect the continuing importance of social capital and reciprocal use of natural resources. Fencing, for example, where it is practiced, is seen as a way of demarcating individual land without necessarily severing social bonds or resource sharing. In many cases, however, fencing is discouraged for this very reason. Such de facto bans on fencing correspond with results from earlier research in other subdivided group ranches in Kenya (Kimani and Pickard, 1998; Rutten, 1992), as well as with research findings of pastoralists in China (Zhaoli et al., 2005).

Many Maasai landowners recognize the need to share grazing land and water resources in order to continue keeping livestock. Landowners and their neighbors have adapted and developed social networks to pool their lands and manage them communally. Like other analogous pasture sharing agreements, cooperative development, and movement of livestock across boundaries elsewhere in Kenya and among pastoralists in China, these arrangements are usually based on traditional bonding ties with friends and family (BurnSilver and Mwangi, 2007;

Ning and Richard, 1999; Worden, 2007; Zhaoli et al., 2005). They are an extension of long established, reciprocal Maasai traditions.

Many community members recognize the importance of reaching outside the community to more distantly related Maasai, non-Maasai, and development assistance. Such bridging ties are seen as a way to strengthen and extend customary practices, make the transition to commercial livestock practices, and generally take advantage of new developmental opportunities. This increasingly, outwardly directed network of opportunities closely tracks similar trends in the western United States. There, ranching families threatened by development, environmental degradation, and conflicts over natural resources, are also reaching outward in new, cooperative arrangements with other ranchers and diverse stakeholders including conservation groups (White, 2008). The similarity has led to a series of “over the horizon” exchanges (Curtin and Western, 2008) aimed at creating strong collaboration across individually owned lands .

Despite all of these challenges, livestock herding remains the most important land use for these Maasai and still plays a major role in their local culture and economy. However, the threat of subdivision, combined with the recent increase in the occurrence and severity of droughts in southern Kenya, calls for new cooperative arrangements that reach far beyond the borders of Maasailand. The Maasai of the Mailua area reflect how communities see and respond to the opportunities and threats of land privatization. Unless the new social networks and reciprocal land and resource arrangements that are emerging are encouraged in rangeland and livestock policies in Kenya, pastoralists and wildlife are likely to suffer more than they gain from subdivision and settlement (Western et al., 2009). Policies that encourage the new social networks and resource arrangements stemming from land privatization in Maasailand can, on the other hand, ensure a successful transition from communal to private land ownership (BurnSilver,

Worden, and Boone, 2008; Curtin and Western, 2008; Worden, 2007; Manzollillo-Nightingale and Western, 2006).

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