

Meaning, practice, and rethinking the conservation story in the Maasai communities of Olkiramatian and Shompole, Kajiado County, Kenya

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Abstract

In the history and landscape of Kenya, misinformed narratives suggesting the incompatibility of Maasai pastoralism and biodiversity conservation together have pervaded national policy and informed public opinion, actualized in what I refer to as 'mainstream conservation'. Maasai voices and cultural viewpoints, which privilege pastoralist rangeland management, have been lacking in the mainstream conservation conversation in Kenya. It is within and beyond mainstream conservation discourse that this thesis explores the Maasai communities of Olkiramatian and Shompole group ranches (Kajiado County) as a complex social-ecological system that functions through strong governance institutions, adaptive pastoral management, the integration of conservation-related practices, and the support of a grassroots non-governmental organization, the South Rift Association of Land Owners (SORALO). I present the Maasai concept erematare as a pastoralist non-Western ethic of environmental care and management which can help us rethink the 'conservation story' as it applies to Kenya's Maasailand. Through the lens of erematare, pastoral values related to management of land, livestock, and people are centered in a new understanding of how adaptive pastoral systems, managed well and holistically, can render pastoralist development and wildlife conservation goals compatible. By thinking toward erematare and beyond conservation, a more culturally-relevant, pro-pastoralist vision emerges that adequately attends to the complexities of rangeland management for the shared benefit of pastoralists, land, livestock, and wildlife.

Resumé

Dans l'histoire et le paysage du Kenya, politique nationale et opinion publique ont été imprégnés de récits qui suggèrent que le pastoralisme masaï et la conservation de la biodiversité sont incompatibles. Ces récits sont actualisés sous la forme de ce que j'appelle le 'courant dominant de conservation' ('mainstream conservation'). Le courant dominant de conservation au Kenya n'inclue pas suffisamment les voies et perspectives culturelles masaïs, qui eux privilégient la gestion de pâturages par les éleveurs pastoraux eux-mêmes. C'est au sein et au-delà du discours du courant dominant de conservation que cette thèse explore les communautés masaïs des 'groupranches' Olkiramatian et Shompole (Kajiado County) comme étant un système social-écologique complexe qui fonctionne grâce à des institutions de gouvernance robustes, une gestion pastorale adaptive et l'intégration de pratiques reliées à la conservation, ainsi qu'avec le support financier du South Rift Association of Land Owners (SORALO), un ONG grassroots. Je présente le concept masaï d'erematare comme étant une éthique pastorale et non-occidentale de soin et de gestion environnementales qui peut nous aider à repenser 'l'histoire de la conservation' et comment elle s'applique au Maasailand kenyan. À travers la lentille d'erematare, valeurs reliées à la gestion des terres, du bétail et des gens sont centrés dans une nouvelle compréhension de comment des systèmes pastorales, bien gérés de manière holistique, peuvent rendre compatible les buts du développement pastoral et de la conservation de la faune et flore. En pensant vers erematare et par-delà la conservation, on fait émerger une vision pro-pastoralisme et ainsi plus culturellement appropriée. Cette vision émergente porte attention aux complexités de la gestion de pâturages pour le bien partagé des gens pratiquant le pastoralisme, des terres, du bétail et de la faune et flore.

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Lastly, to Dan Sepis ole Lemanyi, a true friend, teacher, and inimitable force of positivity in the world, I am grateful to know you.

Ashe oleng. Asante sana. Thank you.

List of acronyms

ACC African Conservation Centre CBC Community-based conservation

CBNRM Community-based natural resource management

IK Indigenous knowledgeKWS Kenya Wildlife ServiceLRC Lale'enok Resource Centre

NGO Non-governmental organization

NP National park
PA Protected area

PCP Private-community partnership
PES Payment for ecosystem services

PPP Public-private partnership

SORALO South Rift Association of Land Owners

TEK Traditional ecological knowledge

Note on images

• • • At the beginning of each thesis section there is a photograph, totaling three images. Each one provides the reader with a snapshot of the social-ecological context that I am working in, literally adding color to the monochromatic form that the majority of this document takes. Together, they do not provide a complete picture of daily life in Kenya's South Rift, the diverse landscapes and natural resources therein, the complexities of Maasai pastoralism, or conservation practices per se; they are not meant to be read as political statements. They have been chosen for aesthetic purposes and to enhance the reader's experience. However, they do offer a different view, or story, of conservation: charismatic mega fauna (e.g., lions, elephants, giraffes) have been excluded intentionally to convey a re-centering of conservation practices and goals on livestock, land, and people.

• • • SECTION ONE • • •

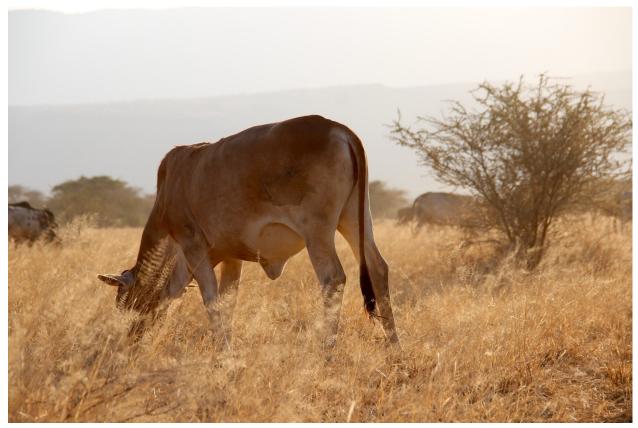


Figure 1. Cattle grazing in the Olkiramatian 'grass bank' (conservation area), the Nguruman Escarpment rising up in the background. Photo by author (2016).

Chapter I

Introduction

We bounce along the newly tarmacked road out of Nairobi, turning at *kona baridi* (cold corner [Kiswahili]), with the Great Rift Valley opening up below us. The landscape is vast, dotted with acacias, settlements, and as we pass the sign for Oltepesi, sheep and goats (shoats) dot the roadside, nibbling on shrubs, brush, and garbage. Young Maasai herders in red *shukas* sit in small clusters, seeking refuge in the little shade offered by older trees. The air is parched, the sun pulsing down at me through the open car window, and as we approach Lake Magadi, the rotten smell of hydrogen sulfide assaults my nostrils. The Lake appears pink and flickering from the hundreds of

flamingoes probing for algae. I take in the familiar scene as we speed over the new route that cuts through salty pools, travels up a steep cliff-side, and will soon deliver us to Olkiramatian and Shompole group ranches¹. Olkiramatian, specifically, is my destination as the location of Lale'enok Resource Centre (LRC). LRC is the information gathering and sharing hub of the South Rift Association of Land Owners (SORALO), a land trust and non-governmental organization (NGO) that represents fifteen Maasai communities whose land makes up part of what is colloquially known as the South Rift² of Kenya. SORALO's mission is to promote effective management of resources in order to improve livelihoods and spur pastoral development in the South Rift. LRC is also where I spent three months during the summer of 2016 working with SORALO at the intersection of conservation, pastoralism, and rangeland development.

The thatched roof turrets of Lale'enok welcome me, and after supper I watch the last light tuck itself behind the Nguruman Escarpment. After settling in to my tent, I lay in bed thinking about the following morning. I had asked my SORALO colleagues, Samantha Russell, Joel Njonjo, and Albert Kuseyo to meet with me and give feedback on my project. Officially, Samantha is the Research Coordinator at the LRC, Albert is the Camp Manager, and Njonjo is the Operations Manager. As is often the case, these titles do not adequately describe the diverse tasks each carries out daily—coordinating researchers, school groups, cultural festivals, fixing car tires, strengthening partnerships, and organizing ecological monitoring data are just a few examples.

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¹ On September 21, 2016 the Community Land Act (RoK 2016) was passed. This Act repealed the Land (Group Representatives) Act (RoK 1968) and the Trust Lands Act (RoK 1938); the former provided the legal basis of the label 'group ranch', which was introduced by the Lawrence Report in 1965 (RoK 1966). All group ranch lands are now held in trust by the County office until they are re-registered as 'community lands', and there is a 10-year window during which group ranches are to establish formal land use plans. The implementation and completion of this registration and planning process is likely to take years.

² This name is gaining traction in academic and public literatures. It refers to the area between the Maasai Mara National Reserve and Amboseli National Park (Fig. 2).

The next morning, we gather at a long metal table, creaking into the collapsible safari chairs, and stirring milk and sugar into our coffee or tea.

"So," I begin, "This summer I hope to learn all about conservation, what it means to people here, and what experiences of conservation have been like. That's the basic outline of it."

It is clear that Samantha has already given thought to my proposal when she responds: "It would be very hard for you to approach community members with 'conservation' because it isn't a Maa word. We've worked with community members to try and find a Maa word or concept that comes close, and the best we've gotten is *erematare*³, which in its simplest definition means husbandry. We've learned that it has a much broader scope, though. So you might want to start there."

I recall Neumann's (1998) book, *Imposing Wilderness: Struggles Over Livelihood and Nature Preservation in Africa*, considering how conservation, like the idea of wilderness, gets imposed onto different cultural and ecological frameworks, despite being an often exogenously-developed, external, and thus alien idea. As we continue to discuss my project, mapping out the connections between conservation and *erematare* on a dry erase board, I respond to Samantha, "Alright, so perhaps I can start by asking about land, people, livestock—tangible and meaningful things that make up the everyday experience of Olkiramatian and Shompole. And wildlife will come into the story too, right?"

Samantha, Albert, and Njonjo nod, smiling at the dry erase board full of squiggles and arrows.

³ I have encountered this word being spelled both *erematare* and *eramatare*, but will spell it *erematare* throughout this thesis as the original spelling provided to me by SORALO colleagues.

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Today, with myriad anthropogenic forces causing irreversible damage to the Earth, the urgency that underpins environmental and biodiversity conservation⁴ is becoming more pronounced (Ceballos et al. 2017). Landscapes and ecosystems that are relied on for the perpetuation of human and non-human life are being cultivated, deforested, fragmented, polluted, and urbanized. Global responses to these changes have taken different forms (Rands et al. 2010). Among other trends, we have seen the establishment of state or privately owned protected areas (PAs), the proliferation of environmental NGOs, the neoliberalization of nature⁵, and an integration of human development and welfare into conservation programs and policies (Hughes & Flintan 2001). Many of these global efforts align with what Brockington et al. (2008) call "mainstream conservation", a "particular historical and institutional strain of western conservation" which "dominates the field of conservation in terms of ideology, practice and resources brought to bear in conservation interventions" (ibid.: 9). In this thesis, I represent mainstream conservation as a Western-inspired discourse, practice, stakeholder network, knowledge system, and 'global story'—one which has influenced the study and practice of conservation since its conception. Mainstream conservation was born out of 18th century environmentalism and the national parks (NPs) movement in the West, which embodied a system of environmental governance that separated human and natural spheres and was subsequently exported and imposed across the globe during European colonialism. Throughout its long history, mainstream conservation has privileged particular groups and interests, livelihood practices, and

⁴ Conservation can be understood at a number of scales, applied at the environmental, ecosystem, population, or species levels, and is practiced with different foci. For the purposes of this thesis, conservation is broadly understood to include environmental and biodiversity approaches. Preserving biodiversity is especially relevant in so-called 'hotspots' of the world, like Sub-Saharan Africa (Marchese 2015; Myers et al. 2000).

⁵ For an overview of this topic see Heynen & Robbins (2005).

knowledge systems over others. Further, as an expression of values, mainstream conservation has often prioritized the wellbeing of wildlife and plants over that of people. As a dominant discourse developing in the West, mainstream conservation narratives—bolstered by ecological sciences, economic development plans, and ill-informed assumptions—have obscured other stories of, or approaches to, environmental care, specifically those that are more attuned to unique cultural contexts.

In Kenya's Maasai-inhabited rangelands, mainstream conservation values and aims were imposed and pursued by the British colonial administration starting in the late 1800s, and embedded themselves within the post-independence framework, continuing to shape the national agenda to date (Lankester & Davis 2016; MacKenzie 1988; Matheka 2008). Somewhat ironically, during colonization conservation initiatives were first implemented in pastoral rangelands through the establishment of game reserves, the sole purpose of which was to conserve wildlife so that white settlers could hunt and kill them (Steinhart 2006). These reserves were wildlife-only spaces which displaced pastoralists from ancestral lands and important pasture for their livestock (ibid.). NPs and wildlife-only PAs arose during the 1940s and 1950s, with PA coverage continuing to grow after independence. The creation of these areas was premised on introduced configurations of nature-human relationships and governance through separation, which criminalized customary practices of local populations such as pastoralism in the name of biodiversity conservation and tourism (Hughes 2006, 2007; Mwangi 2007; Neumann 1997, 1998; Rutten 1992; Williams 1980). In pastoral settings, these configurations were based on misinformed narratives of environmental degradation, overstocking, and overgrazing in Africa, which in the Maasai context led to vilification of pastoralism (Hoben 1995; Lamprey 1983; see Ellis & Swift 1988 for a critique). Throughout this history, the discourse of irrational pastoralism, whereby "pastoralists and their livestock, rather than being viewed as integral to [rangeland] landscapes, were often considered to be living incompatibly with wildlife" (Lankester & Davis 2016: 475) has featured prominently in mainstream conservation attitudes and policies. These models of exclusionary wildlife conservation through state territorial control, which are still a popular approach to environmental protection today, represent what is now known as the "fortress" mode of conservation (Brockington 2002, 2015; Brockington & Igoe 2006; Igoe 2004). As places that dispossessed indigenous Maasai communities of customary land, who were prohibited access to and use of natural resources, and which have generally yielded few benefits for local communities globally, the separation of humans from nature by creating wildlife-only spaces has long served exogenous, mainstream conservationist goals (Adams & Hutton 2007; Brockington 2002; Brockington et al. 2008; Brockington & Igoe 2006; Neumann 1998; West et al. 2006). It is important to stress that in Kenya, mainstream conservationist ideas stemming from non-local ideologies were woven into the fabric of post-independence policy and practice by Kenyans. While informed largely by the American West and colonial administration, today mainstream conservation represents a dominant, heterogeneous group of Kenyan and non-Kenyan stakeholders and interests.

To attend to the negative social impacts⁶ of fortress models such as the disenfranchisement of indigenous or local populations from their lands, in the 1970s mainstream conservation ideology and practice moved toward increasingly participatory, community-based, and development-oriented solutions⁷ (Berkes 2004; D. Western 1984; Western et al. 1994). The transition to community-based conservation (CBC) has been extensively documented, and remains a core

⁶ Ecologically, these fortresses fragmented landscapes, cutting off ecosystem connectivity and migration routes with detrimental effects on wildlife species and other biotic life (Fynn et al. 2015; Ogutu et al. 2009). ⁷ These solutions have many names, such as integrated conservation and development projects (ICDPs), community-based natural resource management (CBNRM), community-based conservation (CBC), and conservation with development (CWD) schemes (Homewood et al. 2009a; Hulme & Murphree 2001; UNEP 2012; UN 2014).

feature of conservation debates today as a supposed panacea for addressing the twin goals of biodiversity conservation and rural poverty alleviation (Adams et al. 2004; Berkes 2004, 2007; Brooks et al. 2012, 2013; Calfucura 2018; Kieti et al. 2013; Lamers et al. 2014a,b, 2015; Little 2013; Ruiz-Mallén et al. 2015; Rutten 2002; Tyrrell et al. 2017; Western et al. 1994, 2015). In Kenya, ecotourism, or what I like to call conservation-as-tourism, in particular has become a widespread CBC practice in pastoral areas. Ecotourism has been encouraged by governments and conservation NGOs alike as 10 to 15 per cent of Kenya's gross domestic product comes from tourism (Okello 2014; RoK 2010), much of which wildlife-based tourism accounts for (Cheung 2012). Importantly, the biases against pastoralism that were borne out of colonial prejudice and later, false environmental narratives, have continued to inform Kenyan policy, mainstream conservation NGOs, and international public opinion, most of which consider wildlife-based tourism a more sustainable and productive land use strategy than pastoralist livestock husbandry (Homewood et al. 2009c: 400). Under CBC, conservation-as-tourism in Kenya typically involves the establishment of private-community or public-private partnerships (PCP/PPPs), which connect the investment capital and business acumen of private (usually foreign or non-local) entrepreneurs to local land owning communities, ideally in a mutually beneficial arrangement (Lamers et al. 2014a,b; Osano et al. 2013; Van Wijk et al. 2015). Often NGOs act as facilitators of these partnerships and mediate between multiple stakeholders with diverse interests. In order to succeed, conservation-as-tourism operations that are not located adjacent to internationally known PAs or NPs (e.g., Amboseli National Park), have often required that a wildlife conservancy be established from either joint private land or communal land. Currently, 60-70 per cent of Kenyan wildlife live outside PAs in largely Maasai-inhabited and owned community lands, meaning that conservancies are vital for the long term survival of wildlife (Dolrenry et al. 2014; Ihwagi et al. 2015; Tyrrell et

al. 2017; Western et al. 2015). Between the early 1990s and 2016, the number of private and community-based conservancies has grown rapidly, from less than 5 to over 160, covering an area of 30,000 km² (KWCA 2016). Recent legislative developments have attempted to further incentivize CBC in Maasailand and other areas, with the passing of the 2010 Kenyan Constitution (RoK 2010) that led to nation-wide decentralization of wildlife and environmental management in non-PAs to landowners. This in turn paved the way for the promulgation of the Wildlife Conservation and Management Act in 2013 which established the Kenya Wildlife Conservancies Association (KWCA) as the national body charged with conservancy formalization, created a compensation scheme⁸ for human- or livestock-wildlife conflict, and entrenched wildlife conservation as a state-recognized land use option (RoK 2013). Coupled with the fact that wildlife-based tourism revenues can be massive, today accounting for a large portion of Kenya's gross domestic product (Cheung 2012; Okello 2014; RoK 2010), there is a clear economic incentive to maintain wildlife populations in the country.

A main objective of CBC has been to reframe perceptions of wildlife not as liabilities, but rather as assets, the management and benefits of which communities can participate in (Western et al. 1994, 2015). This idea underlies the 'global story' of mainstream conservation, and has implications for how communities engaged in CBC practices, such as the Maasai pastoralists of Olkiramatian and Shompole, view wildlife and express expectations that conservation provide them with tangible benefits. Injecting financial logics into the natural realm is not a novel approach

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⁸ This was mandated under Section 18 of the Act, with the County Wildlife Conservation and Compensation Committee (CWCCC) in charge of managerial processes (Part IV), but also the enactment and disbursement of compensation (Part V) in Section 24 and 25. The Wildlife Compensation Scheme was supposed to be organized by the government where the monies were to be used "for financing compensation claims for human death or injury or crop and property damage caused by wildlife" (RoK 2013: 24.2). While claims were meant to be directed to the CWCCC, but usually are reported and filed with the KWS in Olkiramatian and Shompole.

to conservation, but Maasai pastoralists considering wildlife in terms of tourist dollars⁹ has a relatively recent history. In this way, mainstream conservationists, NGOs, and their supporters are constantly "selling success" as they communicate the impact conservation can have on rural pastoralist livelihoods, often overselling the potential benefits and raising community expectations of returns to unrealistic heights (Adams et al. 2004; Büscher 2014; Homewood et al. 2009c). Even with numerous attempts in Kenya to devolve decision-making power to local Maasai communities in CBC enterprises or projects, to date the majority of "community-based' initiatives are not working as either incentives to conservation or as green development contributing to poverty alleviation" (Homewood et al. 2009c: 395; see also Godfrey 2016).

It is within this history and development of mainstream conservation that I foreground the Olkiramatian and Shompole communities, their definitions of conservation, their pastoral management institutions and ecological governance system, their relationships with wildlife, and local organizations like SORALO. I consider mainstream conservation to be an imposed concept that prescribes certain technical practices in pastoral communities, one which has historically pitted the traditional pastoral lifeways of Maasai against biodiversity conservationist efforts. While some scholars have challenged mainstream conservation assumptions (Homewood & Rodgers 1984; Homewood et al. 2012; Reid 2012), there is a dearth of literature exploring Maasai experiences of, and alternatives to, conservation. The aim of this thesis is to explore a complex social-ecological system that functions through adaptive pastoral management, the integration of mainstream conservation into this system, but most importantly, how a non-Western ethic of environmental care and management can help us rethink the 'conservation story' as it applies to

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⁹ For excellent work on neoliberal conservation, future nature, or what some have dubbed Nature™ Inc. see Büscher 2014; Buscher et al. 2012, 2014; Büscher & Fletcher 2015; Dressler et al. 2018; Heynen & Robbins 2005; Igoe & Brockington 2007; Sullivan 2013, 2014.

Kenya's Maasailand. I am writing within and beyond mainstream conservation discourse to include a more culturally-attuned representation of environmental care, using *erematare* as a lens and framework (Berkes 2004). Through *erematare* I explore what conditions—institutional, ecological, organizational—have allowed social-ecological health in Olkiramatian and Shompole to be maintained. In light of rapid social and ecological transformations, including human population growth and global climate change, what can be gained from thinking beyond dominant Western formulations of conservation toward a holistic pastoralist ethic of environmental management and care? What might we learn about communicating and doing conservation better through a detailed case study of two Maasai communities and their adaptive pastoral management? This work contributes to literature that defines "biocultural approaches to conservation" (Gavin et al. 2015) and supports the development of better rangeland and pastoral policies which "respect local knowledge, land use, and livestock management practices" and "balance the objectives of natural conservation agendas with the cultural autonomy and self-determined development requirements of pastoral communities" (Lankester & Davis 2016: 477). These issues will be addressed through the following questions, which roughly organize the chapters of this thesis.

i. Research questions

What do the words 'conservation' and *erematare* mean to Maasai pastoralists in Olkiramatian and Shompole?

How is land used and governed in Olkiramatian and Shompole, and what ecological effects does this governance have?

How do Maasai pastoralists relate to wildlife, and feel about the costs and benefits associated with living in close proximity to wildlife (i.e., 'doing conservation')?

What role has SORALO played in supporting both conservation and pastoralism in Olkiramatian and Shompole?

ii. Theoretical orientations

I draw from the fields of political ecology and traditional ecological knowledge (TEK) or indigenous knowledge (IK) in my social science perspective on the study of conservation, integrating natural science perspectives where relevant to promote interdisciplinary dialogue (see Berkes 2004; Moller et al. 2004; Peterson et al. 2010). Political ecology, first defined by Blaikie and Brookfield (1987), and later elaborated in Bryant and Bailey's (1997) seminal work, *Third* World Political Ecology, studies the interactions of ecology and political economy on local, national, and global scales. In the early years, political ecology was used to infuse politics into human-environment relations, understanding "the environment as an arena where different social actors with asymmetrical political power are competing for access to and control of natural resources" (Vacarro et al. 2013: 254). Through political ecology, the study of natural resource management, degradation, environmental governance and change, and biodiversity conservation became the purview of anthropologists, geographers, and other social scientists (Neumann 2014; Vaccaro et al. 2013). As Mori (2016) explains, this theoretical framework "emphasizes that while material outcomes of nature are political, the ways we 'see' and view nature are shaped and applied in ways that are inherently political" (ibid.: 8). Thus, studying power and the way it is distributed amongst individuals or groups has been core to the framework, which has often aligned political ecologists with underrepresented or marginalized groups (Bryant 1992; Forsyth 2004; Neumann 2014). The work of political ecologists has been crucial in challenging popular environmental narratives that simplify complex human-environment systems and underpin dominant environmental discourses (Adger et al. 2001; Benjaminsen & Svarstad 2010; Reid 2012; see also Stump 2010). Influenced by Michel Foucault's (e.g., 1977) contributions, many contemporary political ecologists stress how narratives, discourses, and representations shape people's perceptions, and thus have material implications. A notable example of discourse and narrative analysis is the work of James Fairhead and Melissa Leach (1995, 1996), who used local knowledge and histories to contest the dominant narrative of environmental degradation in Guinea, West Africa, and to critique how policy was informed by Western ideas of change and ecological understandings of African forest cover. By listening to local perspectives on environmental change, and politicizing a formerly 'natural phenomenon' (e.g., forest islands), their work provided a counter-narrative that was then used to inform future policy and environmental management approaches.

Political ecology, with its emphasis on power and knowledge, is a useful theoretical tool to study human-environment relations¹⁰, because "investigating how knowledge about the environment is produced is inevitably central to understanding how environmental problems, processes, and solutions are framed, normalized, and contested" (Fabinyi et al. 2014: 6). In the last few decades, growing scholarly engagement with TEK and IK systems has furthered our understanding of power, knowledge, and the application of both across scales and cultures. TEK is expressed through cultural frameworks, and can be represented by local terms, ontologies, or practices (Nadasdy 1999; Peterson et al. 2010). Conservation as an ideological and technical field has traditionally been dominated by the natural sciences, their metrics, language, and indicators of success. Taking a TEK/IK approach and highlighting the knowledge and experiences of local or indigenous stewards is not only an act of allyship toward those whose voices are less often heard, but more importantly a way to support the livelihood practices and cultural views of these communities. In many cases, TEK/IK represents a 'local' definition or explanation of a

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¹⁰ Important works contributing to our understanding of human-environment interactions and how power, knowledge, and representation have real-world effects, include Agrawal 2005a,b; Brosius 1997, 1999, 2006; and Li 2007.

phenomenon, which is often pitted against the 'global' discourse or dominant (Western) view. In her analysis of the development of Wildlife Management Areas (WMAs) in the Maasai-inhabited rangelands of Tanzania, Katherine Homewood (2017) uses a 'global' versus 'local' framework to explain how visions of sustainability are defined by conservation NGOs without input from, or authentic engagement with, pastoral communities and their values related to land security. Through the study of TEK/IK, the tensions, synergies, or complementarities that exist between global/Western science views and local/TEK/IK views of environmental management, 'sustainability', and conservation can be properly attended to, with a critical eye to the dominant knowledge(s), practices, and policies that have developed over an inequitable history.

Accordingly, I will apply the lenses of political ecology and TEK/IK in my presentation of conservation as both an ideological and a technical practice in the Maasai pastoralist communities of Olkiramatian and Shompole. Conservation in its mainstream form is ideological because it has specific values built into it, which have informed environmental management policy and practice for centuries (Hoben 1995; Homewood et al. 2009a,b,c; Reid 2012). The words we use hold power, and this power matters for how we interact with and in the world; these words didn't grow up in 'pristine' wilderness, but have been managed by people. Fabinyi et al. (2014) claim that "practical struggles are always simultaneously struggles for 'truth' and meaning—struggles that happen in imagination and representation at the same time as they are conducted in the material world (ibid.: 6). Fittingly, conservation as a technical or material practice takes form in a multitude of ways, through complex configurations of diverse stakeholders who wield differential power (e.g., PCP/PPPs) and sanctions on the land and the natural resources therein.

iii. Context of the research

Olkiramatian and Shompole are located in Kajiado County, approximately 130 km southwest of Nairobi along the Magadi Road. They lie on the floor of the Great Rift Valley, with their westernmost wall crawling up the lush escarpment. The area is extremely remote and relatively inaccessible due to poor roadway conditions once past Magadi town and the newly tarmacked road; only one *matatu* (bus [Kiswahili]) travels each day between Kiserian (a Kajiado town at the outskirts of Nairobi) and Nguruman town (located in Olkiramatian). Forty kilometers away, Magadi is the nearest commercial hub, home to Tata Chemicals Magadi, the largest soda ash manufacturer in Africa, and Lake Magadi, a 100 km² salt lake that boasts large numbers of flamingoes and other wading bird species. This region is known as the South Rift portion of 'Maasailand', a 150,000 km² expanse of arid rangeland which straddles the national border between Kenya and Tanzania (Homewood et al. 2009a). The South Rift is nested between the famed Maasai Mara National Reserve to the northwest and Amboseli National Park to the southeast, and is an area of high conservation activity (Fig. 2). The area is 600-700 m above sea level, one of the lowest-lying places in Kenya, which experiences high temperatures that range between 18°C in the night and 45°C in the day (Tyrrell et al. 2017). The area is semi-arid, with variable and bimodal rainfall that averages 400-600 mm yr⁻¹ (Agnew et al. 2000).

The Maasai is a community that speaks an Eastern Nilotic language, which has occupied the rangelands of Kenya and Tanzania for centuries (Homewood et al. 2009; Lamprey & Reid 2004; Reid 2012). Maasai are iconic of the African continent and famously known as being "people of cattle" (Galaty 1982). They traditionally practice transhumant or semi-nomadic pastoralism across extensive landscapes, rearing cows, goats, and sheep (shoats), but have increasingly become sedentarized due to a combination of governmental and ecological pressures (Homewood et al.

2009a,b; Reid 2012). In the 1960s and 1970s, the introduction of the Group Ranch program transformed the rangelands of Kenya, with a Group Ranch being defined as "a livestock production system or enterprise where a group of people jointly own freehold title to land, maintain agreed stocking levels and herd their livestock collectively which they own individually" (RoK 1968; see also Grandin 1991). This system "conferred private land ownership rights on pastoral communities rather than individuals (Galaty 1980, 1994; Rutten 1992)" (Moiko 2013: 82) and subdivided customary pastoral lands into smaller, discrete units with membership registers¹¹. The Olkiramatian and Shompole communities represented a single Maasai pastoral unit until after the formation of Group Ranches, being closely tied together with one age-set¹² leadership in the mid-1970s (personal communication, January 2018). In Kenya, there are 11 Maasai sections (oloshon [Maa]), which historically occupied different areas (Lamprey & Reid 2004). The territory adjudicated as Olkiramatian and Shompole in 1968 and 1969 (formally registered in the late-1970s) was primarily inhabited by members of the Loodokilani Maasai section, which represents the majority of the Group Ranch populations being discussed, there being also members of other sections such as the Purko and Loita Maasai, and the Bantu-speaking Sonjo from Tanzania, and other tribes like the Kikuyu, Kamba, and Luo living within the Group Ranch borders today (Moiko 2013; Pollini 2015).

Olkiramatian and Shompole together are inhabited by over 30,000 Maasai pastoralists, their cattle (*Bos indicus*) and shoats (*Ovis aries* and *Capra aegagrus hircus*), and a huge

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¹¹ Created when Group Ranches were adjudicated in 1968, a register is a list of Group Ranch members which stays 'open' unless Group Ranches are approaching subdivision or it is voted upon by the community to 'close' the register. When created, registers only accounted for heads of household, so men make up most of the registered Group Ranch members.

¹² The age-set system is at the core of Maasai social organization, where boys of a similar age pass together through a series of age-related statuses, with each stage lasting approximately 15 years; age-sets are important for governance and decision-making in Maasai society (Grandin 1991; Galaty 1992, 1994).

community of wildlife species that include secretary birds, hornbills, zebra, elephants, lions, cheetahs, wildebeest, and giraffe (Tyrrell et al. 2017). The Group Ranches share a boundary, with Shompole's land extending south of Olkiramatian to the Tanzanian border (Fig. 3). Olkiramatian is comprised of between 21,000 and 26,000 ha depending on border delineations (or map used) and has 1,350 registered members¹³, representing approximately 15,000 people (Moiko 2013: 85). Shompole is the second largest Group Ranch in Kajiado County at approximately 69,000 ha and is home to 3,400 registered members¹⁴, with estimates of total population above 18,000 (personal communication, summer 2017). The human population on both group ranches is growing rapidly given the relatively low population density of around 10 people per square kilometer, which is a correlate of aridity (Schuette et al. 2013).

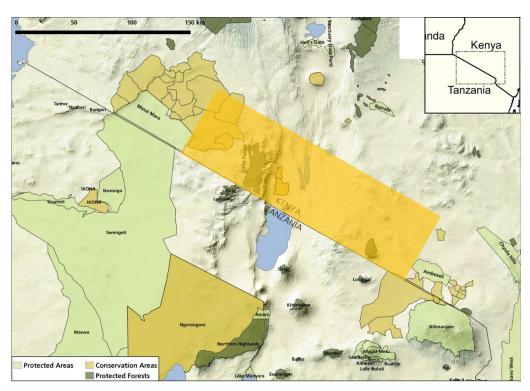


Figure 2. Map of the South Rift (orange) and the surrounding area, with protected area, conservation areas, and protected forests indicated. Map made by Peter Tyrrell (2017), adapted by author to show the South Rift.

¹³ Registered member figures are not representative of the actual population. The 2009 census reports 7,947 people living Olkiramatian.

14 The 2009 census reports a Shompole population of 8,226 people.

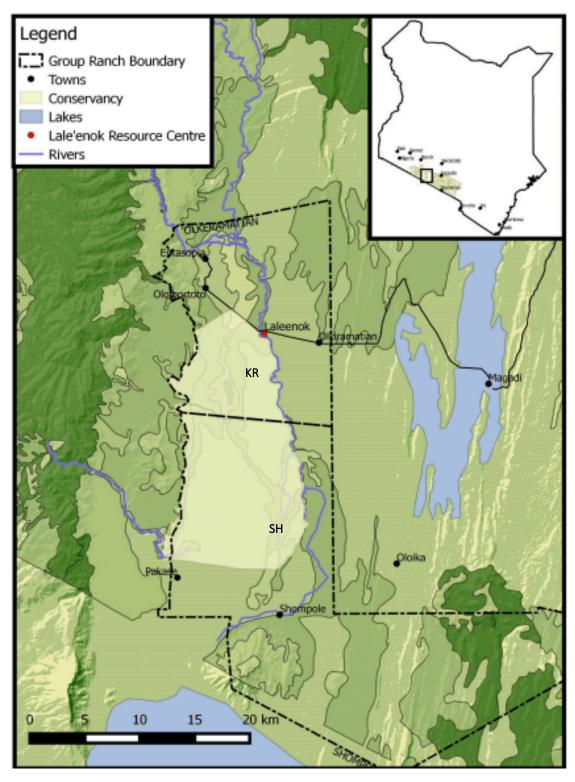


Figure 3. Map situating Olkiramatian (KR) and Shompole (SH), and showing major topographic features and conservancy boundaries. Map made by Peter Tyrrell (2016).

In pastoral areas such as these, effective management of natural resources is crucial for livelihood security. The land in both Group Ranches has been roughly divided into three sections: the livestock-rearing zone, the irrigation area, and the dry season grass bank, which also functions as a wildlife conservancy (Fig. 4, Fig. 5). There is also a 'buffer' zone that lies between the regular season grazing zone and the grass bank. Land in both Group Ranches is managed by executive and grazing committees that oversee the movement of livestock into different areas between seasons. While the majority of Olkiramatian and Shompole inhabitants practice semi-nomadic pastoralism, access to a reliable water source—the Ewaso Ngiro river—and an abundance of wildlife, among other things, has made possible certain forms of livelihood diversification. The Ewaso Ngiro acts as the "lifeline" for both Olkiramatian and Shompole, dissecting Olkiramatian more clearly into ecological zones, whereas Shompole has a more complicated ecological configuration (Moiko 2013: 85). In arid lands, farming mainly occurs on riverbanks, escarpments, or swamplands, thus cultivation here relies on the permanent Ewaso Ngiro river and streams that flow off the Nguruman Escarpment (Moiko 2011: 2). In the irrigation sections of Olkiramatian and Shompole, many people tend small plots of land, cultivating 15 crops of maize, beans, potatoes, with diversification into 'Asian' crops like tomatoes and watermelons for export (Pollini 2015). The ability to cultivate crops explains relatively high agricultural household incomes in Olkiramatian and Shompole (personal communication, summer 2017). The grass bank-cumconservancy, which supports wildlife populations in the area, has encouraged employment through the research and tourism sectors.

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¹⁵ Agriculture in this area has been practiced since pre-colonial times, introduced by Bantu-speaking migrants planting mostly subsistence crops like maize and potatoes. Between the late 1970s and early 1980s agriculture expanded to cash crops ('Asian' crops) and the current irrigation system developed here through the early 1990s (Pollini 2015; personal communication, March 2018).

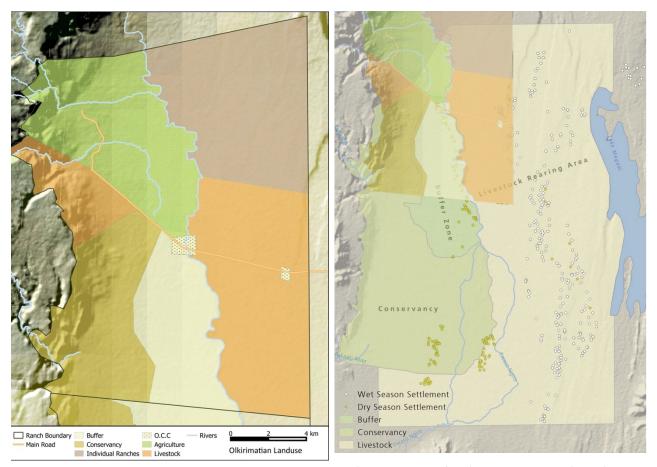


Figure 4. Map of Olkiramatian land use and sections. Map by Peter Tyrrell (2018).

Figure 5. Map of entire ecosystem and grazing management zones. Map made by Peter Tyrrell (2018). Olkiramatian overlaid by author.

Since the late 1990s, there has been an active tourism and NGO presence in Olkiramatian and Shompole. The African Conservation Centre (ACC) was one of the first conservation-oriented NGOs to work in the area, assisting in setting up a conservancy and the famed Shompole Lodge in Shompole. Olkiramatian has had camp sites and small-scale lodges at the Sampu/Lentorre site up the Escarpment since the early 2000s, which spurred the creation of the Olkiramatian conservancy. SORALO became a formal NGO body in 2004, but had been working to consolidate tourism camp sites and develop livelihood strategies years before. SORALO's vision is "a pastoralist community that is empowered to ensure security of tenure over their resources in a just and sustainable manner in order to improve their livelihoods" (SORALO Website, 2018).

SORALO's information gathering and sharing hub, Lale'enok Resource Centre (LRC), has been a crucial community resource and source of employment since it started in 2006. SORALO employs local Maasai youth from Olkiramatian and Shompole to work on its ecological monitoring program, the carnivore research team (Rebuilding the Pride), educational outreach, and the baboon project, all of which are based at LRC. Lale'enok has been an important development for the Olkiramatian community, specifically, as the Centre benefits the Olkiramatian Reto Women's Group through bed night fees that visiting researchers and students pay. The Women's Group was granted ownership of the land that Lale'enok was built on by the Group Ranch Committee when conservation activities were being introduced and women felt excluded from benefits and management. The Women's Group, with SORALO's support, now boast a membership of over 200 women and uses LRC accommodation fees to pay the school fees of orphaned or 'needy' young girls. The LRC has also served as a central meeting place for Olkiramatian and Shompole leadership and general meetings. The Kenya Wildlife Service (KWS), a state corporation that manages and conserves Kenya's wildlife, PAs, and NPs, has its Nguruman Field Station in the town of Daraja, not far from SORALO's LRC, where a Warden and field officers stay and respond to wildlife-related calls from community members. Numerous academic and NGO research projects have been carried out in these communities, which provides occasional employment for residents who are fluent English speakers. Today in Shompole, the only active ecotourism operation is a high-end tented camp called Shompole Wilderness (established 2016, formerly Loisijo) but there are plans to rebuild the Shompole Lodge site in Pakaase. In Olkiramatian, Lentorre Lodge (formerly Sampu) offers luxury safari packages, and has been in operation for 4-5 years. A study designed and conducted by SORALO in 2014 surveyed 211 people in Olkiramatian and Shompole (129 from Shompole, 77 from Olkiramatian, 2 from both Group Ranches, 3 N/A). It reported that 82 per cent of respondents were employed in pastoralism, 9 per cent worked in (general) business, 4 per cent were employed as civil servants, 3 per cent worked in pastoral-related business, and 2 per cent were employed by the tourism industry (SORALO Report, *unpublished*).

iv. Methodology

As a social scientist of conservation, my project is based on qualitative and ethnographic research (see Bernard & Gravlee 2014; Northey et al. 2012: 78-90). I employed three main methodologies to collect data: participant observation (DeWalt 2014), semi-structured interviews, and literature review. I spent three months from May to July 2016 and three months from May to July 2017 living in Olkiramatian and Shompole, based primarily at the LRC near Olkiramatian shopping center. In 2016, I worked as an intern for SORALO, through an affiliation with the Institutional Canopy of Conservation (I-CAN), a research partnership between McGill University and the ACC. In my capacity as intern, I worked daily with resource assessors, local youth from Olkiramatian and Shompole who play an integral role in SORALO's environmental monitoring and data collection programs. This experience served as preliminary fieldwork for my Masters project, as I built personal and professional networks within the Olkiramatian and Shompole communities, SORALO, and officials at the KWS Field Station down the road from LRC.

In 2017, for my graduate fieldwork, I lived primarily at the LRC, spending 10 days at a guest house in Oloika town, Shompole, making day trips to other areas in Shompole for interviews. Participant observation and informal conversations that occurred while astride a *pikipiki* (motorbike [Kiswahili]), 'hanging out' with colleagues, or at the dinner table were central to my understanding of land use, conservation, and the role of organizations in the area. As such, "paraethnography" (Holmes & Marcus 2005) helped me stitch together diverse perspectives, attitudes,

and facts, filling knowledge gaps and enhancing the quality of my data interpretation (DeWalt 2014). Flexibility and adaptability were central to my study as new avenues of interest would arise daily, or translation errors would guide my research in a new direction (Bryman 2008: 389). As described in Northey et al. (2012), when done well, ethnographic research "respect[s] the complexity and ambiguity of social life while giving voice to the experiences of people who might not otherwise be heard" (82). Further, participant observation "encourages the formulation of new research questions [...] grounded in in-the-scene observation" (DeWalt 2014: 258). My introductory "ethnographic vignette" (Hoffman 2014: 126) demonstrates renegotiation of original research avenues through a participatory and collaborative approach, which is something I value in my work. Being a white foreign researcher, I was always an 'outsider' in the eyes of my informants, and in one or two instances certain information was off limits to me for this reason. I was aware that past interactions with foreigners and participation in research projects colored people's perceptions of me, for better or worse. On this particular point it is crucial to address my own positionality as a conservation researcher within community. Due to the fact that conservation is a relatively white endeavor in Kenya (e.g., many white Kenyan citizens finds employment in this sector), and research in these areas is largely carried out by foreigners who often come and extract knowledge without long-term engagement, throughout my fieldwork I remained cognizant of how past research engagement with community and dynamics of identity were at play in all of my interactions. At every opportunity, I endeavored to speak honestly and simply about my goals for the project: to learn about people, livestock, land, and wildlife in both communities.

I conducted 49 semi-structured interviews (25 in Olkiramatian, 24 in Shompole) through a combination of snowball and opportunistic sampling (Bryman 2008; Northey et al. 2014; Vaccaro et al. 2010). Key collaborators were identified based on knowledge of the Group Ranch structures

from preliminary fieldwork and employment with SORALO. With the assistance of my research assistant and translator (RA), Dan Sepis of Olkiramatian, individuals in leadership positions, women, youth, and elders, were targeted for interviews, but most leadership positions in the Group Ranches were held by older men. Members of the Conservation Committee (in Olkiramatian) and Shompole Community Trust (in Shompole) were sought out specifically for their knowledge of Group Ranch organization and conservation activities. This, coupled with the realities of pastoral living, poor cell reception, and great distances between towns, homesteads, and places of meeting meant that most participants were men who primarily lived closer to town or accessible centers.

When interviews were scheduled in advance by my RA, they were usually conducted in the *inkangitie* (homesteads [Maa], *bomas* [Kiswahili]) of participants because this was easier for them. In more public settings, where sampling was more opportunistic, we would find a quiet, shaded location in which to conduct interviews. It was important for me to build a rapport with community members before proceeding with interviews, and to make sure that expectations were explained at the outset of each interview. As a SORALO-affiliated researcher, I had asked my colleagues if there was a precedent for paying a small compensation to participants (e.g., bag of sugar, phone credit), which there was not. Thus, when proceeding with interviews I ensured participants knew that they could stop or leave at any time, and expressed my deepest thanks for sharing their time and knowledge with me. This was a priority also because of "research fatigue" (Clark 2008) and my not wanting to infringe on people's time. With verbal consent given, interviews were recorded on my mobile phone, the file then downloaded to my computer, and all interviews transcribed in Canada from August to October 2017. Only 4 out of 49 participants asked to remain anonymous.

At the end of my fieldwork, I held feedback meetings in both Olkiramatian and Shompole for participants and the public to communicate preliminary findings from my research. These meetings generated positive discussion and allowed participants to comment on my approach to research, ask questions, and inquire about the purpose of the information gathered and goals of the study again. I explained my limitations as a researcher, what could be expected from the work, as well as my intention to disseminate all the findings once the project was complete. I will return to Olkiramatian and Shompole in September 2018 with copies of my MA thesis and community reports, and aim to hold dissemination meetings then.

• • • SECTION TWO • • •



Figure 6. The Shompole swamp, with Mount Shompole rising up in the background. This wetland area is an important site for wildlife and livestock alike. Photo by author (2016).

Chapter II

Making meaning of 'conservation' and erematare: Etymologies and hegemonies

This is where we start: definitions and meaning. What does the English word 'conservation' mean to Maasai pastoralists in Olkiramatian and Shompole? How is it interpreted, and how has the 'global story' of mainstream conservation informed perceptions of conservation as a practice? What is lost in translation? This chapter addresses the question of how traditional ecological or indigenous knowledge (TEK/IK), embodied in the Maa concept *erematare*, can help us think about and 'do' conservation better in pastoral landscapes (Berkes 2012; Berkes et al. 2000; Gadgil et al. 1993; Nadasdy 1999). Taking Samantha's suggestion to heart, in interviews with

Olkiramatian and Shompole members I would ask first about the meaning of the Maa word *erematare* and then for their definition of 'conservation'. Sometimes I would inquire whether there was a place for wildlife within *erematare* which many described as a wide and encompassing term. By comparing the definitions of 'conservation' and *erematare*, the aim of this chapter is to comment on the power of mainstream conservation in Maasailand, and how communicating conservation is often done in ways that reduce complex human-environment relationships into flat lines on a map, shaded in green. This, in turn, paints conservation as something *other* than good environmental care through pastoral management, conflating it with ecotourism or a wildlife-only space. *Erematare*, on the other hand, offers a culturally-relevant lens that is more attuned to the complexities of pastoral rangeland management and relationships between people, livestock, land, and wildlife.

"So, can you tell me what 'conservation' means to you? Where did this word come from? Where did you learn about it?", I would ask my collaborators 16:

"Conservation is *olale oramatieki ng'uesin*, which means conserved land for managing wildlife and where rangers are security. It is a western name that we sometimes also call *olopololi*" (Nkunjai ole Sipano [KR¹⁷], translated from Maa, 07-07-17).

"Educated people from here brought this name [of conservation] here and said we would be famous and sustain us with income; it means the same as management of wildlife" (Ntuala ole Soipano [SH], translated from Maa, 10-07-17).

"It means a section recognized and marked that it is for a conservancy area. It is a place for conserving the wildlife where the environment will not be destructed, no clearing because you must have enough security for the wildlife. It is a place where the clients will

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¹⁶ For full definitions of 'conservation' and *erematare* from the 25 interviews conducted with members of Olkiramatian, see Appendix A. For the 24 interviews conducted with members of Shompole, see Appendix B.

¹⁷ In direct quotations, the short forms 'KR' and 'SH' will be used to denote Olkiramatian and Shompole respondents, respectfully.

come and from one point to another one they can go on game drives" (Peter Munterei Moriro [KR], translated from Maa, 01-06-17).

"[It] came through projects and establishment of lodges, western clients, [with] rules set for this area like no homesteads" (Nkili ole Partaloi [ole Ntuluo] [SH], translated from Maa, 12-07-17).

Much is revealed in these words about the way that conservation has been communicated to, and understood by, the members of Olkiramatian and Shompole. As only a small sample of the interviews I conducted (Appendix A and B), these responses reflect a common trend, and what I would call a common misunderstanding: the idea that 'conservation' is a *place* or defined area. As a place, 'conservation' is equated with the unfenced conservancies that each community established within the last twenty years, which function as dry season grass banks. Many Maa words, all indicators of place, were offered to describe the conservancies in Olkiramatian and Shompole, such as kikurro (a site with plenty of dust), olokeri, olare, sampu (a striped area, referring to brush and cover), ol-chamba loo ng'uesin (farms for wildlife), olale loo ng'uesin (a place for/fencing up wildlife), and olopololi. Olopololi essentially function as household-level grass banks, established by sectioning off a portion of land with acacia branches to maintain pasture for young calves, kids, lambs, or sick animals. The idea that a conservation area can be considered an *olopololi* for wildlife was distinct from other Maa terms because it denoted a futureoriented place of care, which aligns more with an *erematare* approach, discussed in the following sections. Overall in Olkiramatian and Shompole, conservation was a word and practice credited to Western or educated people, distilled to what I call conservation-as-place and conservation-astourism.

Why does it matter that conservation is defined by many pastoralists in Olkiramatian and Shompole as a place set aside for wildlife where clients can go enjoy themselves? Conservation-

as-place and conservation-as-tourism reveal that Maasai people in Olkiramatian and Shompole understand conservation in terms of separation (place/conservancy) and a practice carried out for other people (ecotourism). Where are the pastoralists? Where are the livestock? These interpretations are simplifications of complex forms of environmental management and say very little of the relationships between pastoralism as a livelihood practice and ecosystem health as supporting biodiversity. It is true that the Group Ranches set aside the conservation area for dry season cattle grazing, with most wildlife living in these areas during the wet season, thus creating a degree of human-wildlife separation through strategies of pastoral management taking place. However, this move is a practical one that reduces human- and livestock-wildlife conflict, rather than an ideological division of human and natural spheres. This conceptual separation of cultural and natural domains expresses Western values, not Maasai values.

Pastoralist experiences and definitions of 'conservation' were focused on place, wildlife, and ecotourism, rather than an unfenced area that enables multispecies coexistence through good pastoral management of pasture. In this way conservation, as communicated to me by Olkiramatian and Shompole members, downplays the good environmental stewardship of Maasai pastoralists. For example, on a few occasions people mentioned that their community did "not know the way of conserving the wildlife" before 'conservation' came (Agnes Molo [KR], translated from Maa, 29-05-17), or denounced their traditional practice of *moranism*¹⁸ as 'backward'. Whether or not *moranism*, rather than the combined forces of PA enclosure, poaching, land degradation, climate change, and urbanization, can be blamed for global decline in the lion population, is beside the point. Repeatedly Maasai people here have been told that 'conservation' is good because it serves

¹⁸ Moranism refers to a stage of life that young Maasai men pass through. It is a time when they live as a group (age set) of morani in the bush, learn traditional customs, and develop their strength and abilities as young warriors, often culminating in the killing of a male lion for its tail—a cultural symbol of bravery. The practice of lion killing has been phased out in recent decades.

the interests of foreign tourists and wildlife in the area. These definitional details, how they speak to imposed historical and global trends in mainstream conservation discourse and practice, and how little room conservation as a concept provides for Maasai pastoralists to include themselves, their livestock, and their environmental management strategies within it, should push us to think *otherwise*. To broaden our conception of what conservation in Maasailand can look like, to paint people and livestock back into the picture, shall be the goal of the next section. Where conservation is understood as a relatively narrow term, what does the Maa word *erematare* add to the story?

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"We were trying to look for a word for 'conservation', said Chairman of Olkiramatian group ranch and Director of SORALO, John Kamanga¹⁹, " [but] we don't have that as Maasai [people]. We have husbandry, where you husband your land, family, livestock. *Erematare* is a collective word for general husbandry. Conservation in the Maasai context is not a separate thing. The grass bank is the conservancy but for us it is part of the livestock *erematare*. [Conservation] means you are keeping [land] in a certain form [...] As Maasai we are not 'conserving', we are managing! That is where *erematare* comes in. You are putting it aside for wildlife ... but what are you conserving it from? This is a misleading [narrative]."

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Communicating rangeland management, and the place of wildlife in this system, *can* be done in a way that addresses the wider meaning of conservation as environmental ethic, and supports Maasai livelihoods by re-centering the mainstream conservation story on local Maasai values. I argue that this can be accomplished by thinking, communicating, and 'doing' conservation through the lens of *erematare*. To many who have worked in Maasailand, this Maa

¹⁹ From this point forward, I will refer to John Kamanga as 'Kamanga'.

word might simply mean livestock husbandry²⁰, as Kamanga noted above. With guidance from colleagues at SORALO, and in conversation with my collaborators, however, a broader definition emerged (Appendix A and B). The majority of people explained *erematare* to me as management of one's family, one's livestock, and one's land. Faith Kijape, a primary school teacher, extended this notion of management to include "taking care of land, people, domestic animals, and wild animals [too]" ([SH], translated from Maa, 05-07-17). Management and care featured in a number of other *erematare* definitions:

"Have to give tender care to children, wife, family, manage livestock, environment and trees must be conserved, and wildlife [is] included, grass pasture needs to be managed; also people and meetings" (John Parkolei ole Ntitik [SH], translated from Maa, 10-07-17).

"It is taking care of something. You can say it's taking care of wildlife, the livestock that you have, the vegetation. It is a bit wide" (Phllip O. Kolei [KR], translated from Maa, 14-06-17).

"Management of persons and livestock; for wildlife to be there, we are taking care of them; pasture management and other natural resources; for everything to succeed and be well, is erematare" (Anne Koin Maseto [SH], translated from Maa, 06-07-17).

"Traditionally, erematare means [management of] land, pasture, many species of trees, livestock, and people [...] without having the land you cannot complete this name. By having land but with no livestock, you don't have management. And by having land but no people, who will you be able to instruct? All must be complete. There is another parcel of land where management is different than the homestead because we are sustaining wildlife and the environment" (Kenyatta ole Lemorora Mpesi [KR], interview in English, 07-06-17).

In 47 conversations where a definition of *erematare* was given, 23 participants included 'wildlife' or 'conservancy', and in four instances where the question 'Can wildlife be included in *erematare*?' was asked, all respondents agreed that yes, of course, wildlife is included in

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²⁰ The Maa (Maasai) dictionary spells *erematare* phonetically as ε-rámátàrè, and defines it as a noun meaning "livestock rearing, animal-husbandry" (Payne & Kotikash 2005).

management. Philip O. Kolei's framing of *erematare* as a 'wide' term, and the repeated reference by many to 'care'—whether or not wildlife was explicitly included—are important features of this Maa concept. There is something at once intuitive and embodied in expressions of *erematare* and what that word encompasses, which can be related to how local knowledge and practices are cultivated. Indigenous knowledge is defined by Gadgil et al. (1993) as "a cumulative body of knowledge and beliefs handed down through generations by cultural transmission about the relationship of living beings, (including humans) with one another and with their environment" (ibid.: 151). IK or TEK, while cumulative, experiential, and (often) orally transmitted, can have flexibility built into it as communities whose livelihoods rely on natural resources must contend with changing conditions; indeed, knowledge is a process (Berkes 2012). The breadth of *erematare* as a concept, the fact that it can include wildlife, is a testament to this flexibility. *Erematare* is not simply a descriptor for management, but also a term within which specific knowledges and practices of husbandry and care are represented (Appendix C); it is not simply something you do, it is something you embody, live out, and have a hand in shaping. In Olkiramatian and Shompole, family, livestock, and land define the contours of daily life. These are the most important elements, the good management and care of which is central to living well. As a more culturally- and linguistically-relevant representation of environmental care, erematare offers a rich lens to understand the relationships between people, livestock, land, and wildlife in Olkiramatian and Shompole. Because *erematare* represents a pastoralist vision of a 'complete' life through good management, it is also very much a process that individuals or communities are constantly working toward.

Many scholars have written about the integration of TEK or IK with scientific definitions and ontologies, which comes with its own challenges related to power and exploitation. The

histories of who gathers, reproduces, and represents knowledge about human-environment interactions have shown how difficult a task integration can be (see Goldman 2007; Jandreau & Berkes 2016; Nadasdy 1999; Scott 2013). I do not believe that literally replacing the word 'conservation' with erematare will assist CBC schemes or the livelihoods of Olkiramatian and Shompole members. Participating in the 'global story' and attracting tourists is one of the only ways that Maasai communities can participate in the business of conservation. Conservation and erematare are not synonyms, since they come from different worlds and express different intentions, but *erematare* does represent an environmental ethic that conserves land and pasture for livestock, which benefits the wildlife that call Olkiramatian and Shompole home. Instead, I consider the contribution of *erematare* to conservation thinking as the cultivation of a "resilient knowledge system" that is adaptive and holistic (Jandreau & Berkes 2016). As a field and practice heading more towards landscape- and multi-scale management and complex-systems thinking (Berkes 2007; Milder et al. 2014; Robinson et al. 2017; Tyrrell et al. 2017; Zimmerer 2000), mainstream conservation is only just arriving at the conclusion that Maasai pastoralists and other natural resource-dependent people have lived out for centuries: everything is connected. In the context of the pastoral rangelands of Olkiramatian and Shompole, the wellbeing of people relies on that of livestock, which in turn depends on the health of the land. Wildlife, too, are a part of this.

As Berkes (2007) explains, "[t]here are legitimate community perspectives on what conservation is or could be, and it is an important task for conservation-development practitioners to understand these perspectives" (ibid.: 15193). To engage in more effective dialogue with local Maasai communities, and to improve conservation-with-development approaches, the aim of this chapter has been to attend to these perspectives (see also Homewood 2017). The dissonance we

can see between what mainstream conservation is understood to mean, and Maasai approaches to environmental care based on availability and health of pasture thus provides an opportunity rather than a challenge. Conservation discourse—and those who participate in, perpetuate, and construct it—must advocate a "pluralistic, cross-cultural conservation ethic" (Berkes 2004: 628) that both "broadens and redefines the meaning of conservation to fit an African context" (Reid 2012: 252). This works towards what Peterson et al. (2010), Berkes (2004), Brosius & Russell (2003), and others have promoted as the development of a 'social definition' of conservation, or a "biocultural approach to conservation" (Gavin et al. 2015), which I believe *erematare* could be for Maasai pastoralists.

The richness of *erematare* as a Maa concept that broadens the mainstream understanding of conservation, to center the 'story' on people, livestock, land, management, and care, is useful for a number of reasons. First, "using knowledge and perspectives from the community level can help build a more complete information base than [would] be available from scientific studies alone (Berkes et al. 2000)" (Berkes 2004: 623). Second, since its conception, mainstream conservation has been informed largely by biological and ecological sciences, the knowledges of which have not "been particularly successful when confronted with complex ecological systems" (Gadgil et al. 1993). As part of the Maasai traditional knowledge system, *erematare* represents a way of being, the 'completion' of which implies living well, founded on pastoral values rather than wildlife-centric mainstream conservation values. As will be discussed in the following chapter, being wonderfully 'wide', *erematare* can also be considered as representing relationships within the complex social-ecological system of Olkiramatian and Shompole. Uniting the social and ecological realms, *erematare* can frame our understanding of social and environmental

management in Olkiramatian and Shompole, which includes mainstream conservation initiatives through the conservancies, eco-camps, and lodge.

Chapter III

Erematare as a social-ecological system: How local environmental conceptualizations align with evolving environmental science

To speak about how conservation operates in Olkiramatian and Shompole, we must first understand how land and natural resources in Olkiramatian and Shompole are governed. Because erematare can be understood as management or care of people and land, it epitomizes the systems approach that emerged in the natural sciences in the late 1990s to counter utilitarian, static views of nature²¹. Following Berkes and Folke (1998), systems thinking increasingly replaced the "view that resources can be treated as discrete entities in isolation from the rest of the ecosystem and the social system" (ibid.: 2). Many social scientists have applied ideas of non-equilibrium models, social ecological systems, and complexity to human-environment interactions since then (e.g., Abel & Stepp 2003, Scoones 1993, 1999), the limitations of which have been discussed elsewhere (Fabinyi et al. 2014). In this thesis, I use 'social-ecological system' to otherwise represent erematare as a concept that links human and natural realms in the pastoralist context. I first discuss the Group Ranch management in Olkiramatian and Shompole, which includes institutional decision-making, and the emergence of conservation-related activities. Then I explore what effects adaptive pastoral governance has on the ecology of the ecosystem. Just as the care of wildlife is not prioritized over care of livestock, land, and people in most definitions of erematare, this chapter will explain how strategic governance of a pastoral landscape creates the conditions for conservation in the mainstream sense to occur. The 'conservation story' that emerges is one where

²¹ At this time social scientists had already been critiquing the separation of nature and culture (e.g., Cronon 1996), but these ideas were new to mainstream ecology.

wildlife and charismatic megafauna do not play leading roles (as is so often the case), but rather are the beneficiaries of adaptive pastoral management.

The Olkiramatian and Shompole communities have held onto something exceedingly precious and quite rare in Maasailand. Under private title, both Group Ranches continue to hold communal tenure²² over their land despite growing pressures²³ to subdivide and trends toward individualization occurring across Kenya (Galaty 2013a). As Moiko (2013) explains, "[b]y 1990, barely two decades after inception, almost 80 per cent of the Maasai group ranches had decided to [...] convert into individual land holdings" (ibid.: 83-84), which signaled not only a physical change on the land, but a simultaneous shift in the minds of Maasai pastoralists. The process of physical subdivision and transfer of land title from collective to individual occurred for a number of reasons (Galaty 1994; Ng'ethe 1992; Riamit 2014), some of which are related to an emerging cash economy and the need for money to pay for health services and school fees, for example, in Maasai-inhabited areas. An oft-cited explanation is the "paradox of pastoral land tenure" (Fernandez-Giménez 2002), which pertains to the subdivision of communal land for fear of 'grabbing' by others. While land grabbing is a legitimate concern in these communities (Galaty 2013a; Reid 2012; Puzzolo 2017), the two Group Ranches have remained intact, open, and

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²² Common property and pastoralism go hand in hand, being sometimes criticized (if not vilified) by ecologists, conservationists, and national policies. The biases inherent in anti-pastoralism policy and sentiment were informed by economic growth models and conceptions of pastoral common property systems as unproductive, idle, or environmentally degrading (see Lamprey 1983). Hardin's influential work (1968) on the 'tragedy of the commons', which confused common property with open access, has contributed to the valuation of privatized tenure over commonly held land globally (Mwangi 2007: 9; see also Riamit 2014: 3-4). Scholars have shown the ecological interactions of pastoralism, the systems of common property that support it, and biodiversity to be much more complex (Turner 1993).

²³ A number of comprehensive studies have documented socioeconomic and land use change occurring at various temporal and spatial scales related to colonial expansion, agricultural production, ecotourism development, 'land grabbing', and other processes in East Africa (Behnke 2008; Galaty 1992, 1994, 2013a,c, 2016; Galvin et al. 2008; Hobbs et al. 2008; Homewood et al. 2009a,b,c; Mwangi 2007; Norton-Griffiths 1995). For a detailed account of land tenure in Olkiramatian, see Moiko (2013).

communally managed in a landscape that is increasingly fragmented and fenced (Hobbs et al. 2008; Kristjanson et al. 2002; Reid 2012; Fig. 7).

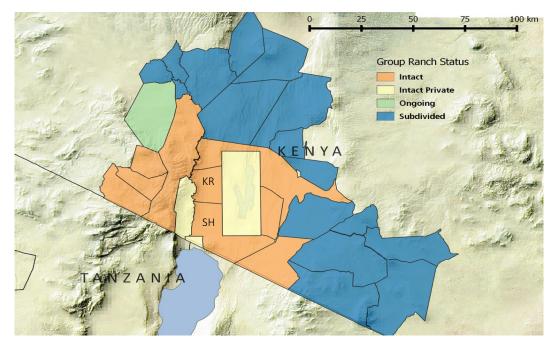


Figure 7. Map showing the status of group ranch land ownership and subdivision in the South Rift. Map made by Peter Tyrrell (2017), Olkiramatian and Shompole noted by author.

Following Gadgil et al. (1993), "[a] characteristic of any well functioning communal property regime is the ability of users to limit access to the resource to members of the group, and the ability to make and enforce rules among themselves" (155). We can simplify this: a well functioning communal property regime needs institutions that are trusted and rules that are agreed upon which everyone participates in the enforcement of. In Olkiramatian and Shompole, this is done "through an innovative local institutional system composed of semi-autonomous decision-making organs, locally referred to as committees" (Moiko 2013: 86). In each community, the organizing 'umbrella' body is the executive Group Ranch Committee, which is comprised of ten elected positions, voted upon at community-wide general meetings: Chairman, Vice-Chairman, Secretary, Treasurer, and six other general members. Under the Group Ranch Committee, the two most active sub-committees manage grazing movements and

conservation activities. In both Group Ranches, the grazing committees monitor pasture, and develop management strategies or 'grazing patterns' (also called 'Phases') that seasonally control movement of livestock into different Group Ranch sections. In Olkiramatian, the body that manages conservation-related activities, and liaises with SORALO and the KWS is called the Conservation Committee and in Shompole it is called the Shompole Community Trust. The Conservation Committee and Shompole Community Trust have the same executive positions, the main difference being that representatives of the Shompole Community Trust are appointed by the Group Ranch Committee rather than elected by the whole community, as is the case in Olkiramatian. Current Shompole Chairman, Joel Karori ole Sapiyaya, explained that between 2008 and 2010, the Shompole community wrote a constitution to formalize their management structures, term lengths, and define that only executive Group Ranch Committee members would be elected. In his view, because the Shompole Community Trust is appointed by the umbrella committee "they are more together as one" (interview in English, 14-07-17). As the topic of Chapter IV, it is relevant to add that the only money that the Group Ranches have in their community bank account comes from conservation activities, which include camping fees (KES 1,000 per night), gate fees to enter the conservancies, research fees from LRC, bed night fees through agreements with Shompole Wilderness (in Shompole) and Lentorre Lodge (in Olkiramatian), and the annual lease fees that each ecotourism operation pays. Additional to the grazing and conservation committees, there is the administration made up of area and sublocation chiefs (paid County-mandated positions), nyumba kumi (ten houses [Kiswahili]) members who are involved in security, and other smaller, less active sub-committees (e.g., water, education, or market committees, women's groups).

I consider the Group Ranch Committees and their sub-committees as organizations underpinned by institutions, described by Ostrom (1990), as the "the rules of the game" (3). These institutions dictate how the Olkiramatian and Shompole communities organize themselves socially and ecologically. Helmke and Levinsky (2004) add that these "rules and procedures" can be both formal and informal, which can be interpreted as state and customary (cultural) rules, respectively. Stephen Moiko (2013) refers to this constellation of committees as a 'hybrid' or 'dynamic framework' because it incorporates the Group Ranch Committee and sub-committees, area and sub-location chiefs, as well as customary age-set leaders and elders into overall Group Ranch governance (see also Moiko 2011). As such, there is a somewhat devolved approach to management, with decision-making power distributed across subcommittees. Olkiramatian Chairman Kamanga thinks the decentralized structure ensures that "resources are shared and the many groups [and individuals] are empowered" (interview in English, 15-07-17). This feeling of empowerment, as well as trust in the Group Ranch Committee, was more present in Olkiramatian than Shompole, where many people mentioned that 'high politics' from the past were only now beginning to cool down. Contrasting Shompole Chairman ole Sapiyaya's sense of unity above, elder Manina ole Lankoyie explained that "[t]here ha[d] been weak leadership with Shompole and the Trust, where elections were done in a way that was [unsatisfactory]" (translated from Maa, 05-07-17). Others voiced similar opinions, suggesting that the Shompole community is less trusting of their elected and appointed Group Ranch leadership. The appointed, rather than democratically elected, nature of Shompole Community Trust positions may be one cause of mistrust, viewed by some as nepotistic rather than unifying.

Being physically contiguous, the two communities experience many of the same benefits tied to continuous landscapes (Curtain 2015), and challenges related to resource access in a pastoral rangeland ecosystem. Further, these communities coexist with a huge population of wildlife species that include lions, giraffes, zebra, elephants, and buffalo, to name a few. These shared experiences, traditional Maasai values of cooperation and reciprocity, and the management framework described above have enabled innovative cross-boundary land governance and organization. Since the late 1970s, Olkiramatian and Shompole have managed their land by dividing it into three distinctive land use zones²⁴: a livestock-rearing zone, an irrigation (farming) area, and a dry season grass bank, which also functions as a wildlife conservancy (Fig. 4, Fig. 5). The Olkiramatian community members agreed to set aside approximately 4,000 hectares of their land as grass bank-cum-conservancy, while Shompole set aside around 8,000 hectares. Both areas are unfenced, which, coupled with the low human population density of both Group Ranches, makes them what Robin Reid calls "soft boundary savannas" (2012: 69-72). This important ecological detail—the absence of a hard boundary—allows for synergistic movement and resource use by livestock and wildlife. For most of the year, cattle and shoats are grazed in the livestockrearing zones, where some grazing wildlife also resides. At specific times of year when the dry season advances, herders direct cattle toward 'buffer zones' and eventually into the conservancies to access forage. The exact dates of movement are decided by the executive Group Ranch Committee and grazing committee, and communicated through chief networks, at general meetings and by word of mouth. Important to note is that only cattle are permitted to graze in the conservancy; shoats are excluded because due to their indiscriminate herbivory, they tend to clear the land completely. The grazing system and schedule is adaptive (i.e. times of movement change

²⁴ For a comprehensive description of the three zones in Olkiramatian, see Moiko 2013: 87-89.

depending on the progression of dry season conditions), but the rules of access are strict. Social checks are in place, whereby a person seen grazing in a buffer zone or conservancy before the 'release period' will be reported to the grazing committee or Group Ranch Committee; a general meeting will be called, and a fine will have to be paid. Without grazing rules and community-wide support of the management system, Shompole grazing committee Chairman Nkili ole Partaloi (ole Ntuluo) believes that "people would be greedy" (translated from Maa, 12-07-17). This strategy, where the grass bank is rested during the wet seasons (lasting up to 6 months), has continued to be an ecological support system for the livestock and people of Olkiramatian and Shompole, potentially decreasing human-wildlife interactions by limiting the amount of time resources are shared within the conservancy (Tyrrell et al. 2017). Further, the threat of tsétsé fly and exposure to other livestock diseases are mitigated through this management, whereby cattle are only brought into the conservancies during the later dry season when flies have retreated, gone dormant, or their hosts have withdrawn to the Nguruman Escarpment. The difference between the 'preconservation' era, when the areas were only accessed for dry season grazing, and now, where they serve a double function as conservancies, is that no semi-permanent or permanent settlements are allowed to be erected inside the borders of the conservation areas.

In Olkiramatian and Shompole, movement of livestock for grazing depends on management decisions by the Group Ranch Committee and grazing committee, on the locations of temporary settlements, and on the status and locations of nutrient-rich pasture. Over the last 10 years, ecological data have been collected by SORALO and affiliated researchers monitoring grass species abundance, wildlife density and movement, and the effects of livestock and human settlement on the range. In this complex mixed-use landscape, it is important to understand how pastoral management through grazing and managerial committees, and the existence of land use

zones, has impacted ecosystem health. Wildlife is viewed across many savannah rangelands as directly competing for forage resources with livestock, and often livestock is blamed for the large declines in wildlife seen in many community areas (Ogutu et al. 2011, 2016). Management and policy decisions in Kenya have commonly been made based on this assumption, with livestock excluded from some protected areas to the benefit of wildlife (Homewood et al. 2009a). This reflects the ecological argument underpinning mainstream conservation and the 'global story' that paints pastoralism as a land use strategy that leads to land degradation (Lamprey 1983), which is, therefore, incompatible with biodiversity conservation. The ecological complexity of pastoral grazing systems is well characterized by non-equilibrium dynamics, reported on by many authors despite policy not reflecting this reality (Abel & Stepp 2003; Behnke 2000, 2008; Behnke et al. 1993; Briske et al. 2017; Scoones 1993, 1999; Sullivan & Rohde 2002). Non-equilibrium grazing systems experience "low and erratic rainfall that produces unpredictable fluctuations in forage" (Behnke 2000: 141), which is why rangeland ecologists in this school highlight livestock mobility, resiliency of grass species after sporadic rain, and livestock density independence as interacting dynamics, all of which challenge degradation assumptions related to overstocking the range (see Sandford 1983). Pastoralism can cause degradation, and we should not understate the problem of overgrazing, but the interactions between wild and domestic species are quite complex, and in some circumstances the presence of livestock can increase wildlife's access to forage resources (Butt & Turner 2012; Odadi et al. 2011; D. Western 1984). Indeed, if well-managed, savannas can thrive for people, livestock, and wildlife (Reid 2012: 152-55).

Today, the Olkiramatian and Shompole ecosystem "represents one of the few areas in East Africa where wildlife and livestock co-exist and move unimpeded through the seasonal migrations" (Russell et al. 2018: 7). Tyrrell et al. (2017) explain in great detail how the

spatiotemporal separation of resource use between livestock and wildlife species in Olkiramatian and Shompole has resulted in resource heterogeneity²⁵ and optimal grass quality for the different domestic and wild grazers. Put simply, the unique and adaptive pastoral management system in Olkiramatian and Shompole, which is made possible by communal tenure and collective decision-making, positively impacts the pasture, livestock, and wildlife in the area; pastoralism and biodiversity conservation *can* be compatible from an ecological standpoint (Homewood & Rodgers 1984; Reid 2012: 123-143; Russell et al. 2018). This is coexistence in action, grounded in pastoral management of livestock, people, and land: *erematare*.

The pastoral management and care of this complex social-ecological system is the reason that the communities can participate in conservation as a livelihood diversification strategy because without wildlife, conservation is not a viable option. As touched upon above, all conservation-as-place (conservancy) and conservation-as-tourism (ecotourism) activities are managed by Olkiramatian and Shompole's conservation committees. The Conservation Committee and Shompole Community Trust have only been part of Group Ranch management for approximately 15-20 years, since conservation activities became more formalized in the communities. In both Olkiramatian and Shompole, small camp sites and walking tours had been marketed to international and national visitors previously, but efforts in each Group Ranch were consolidated and reinvigorated in the early 2000s. Conservation in Olkiramatian and Shompole developed side-by-side, but important differences set their experiences apart. Joel, a Shompole member, explained how the idea of a conservancy was introduced in his Group Ranch:

²⁵ This refers to functional (resource) heterogeneity, which Fynn et al. (2015) define as "spatial and temporal variation in the grass height (structure), productivity, phenology, composition and chemical attributes of grassland and savannas plant communities, which determine the abundance, stability, diversity and spatial distribution of large mammalian herbivores" (ibid.: 2-3; see also Fynn et al. 2017; Owen-Smith 2002, 2004).

[T]he conservation area was established in 2001 when a field survey was done with the ACC. [We] asked the community questions about the idea of a conservancy – Shompole [L]odge started after the survey. People were told that the grass would not be affected, and they would get money from tourists. People [here] are still supporting the conservation area. The first question in response to the survey by community members was 'will the conservation area only be for wildlife?' (interview in English, 08-07-17).

With the help of the ACC, Shompole was the first to create a high-end lodge²⁶ and conservation area in partnership with an investor named Anthony (representing a PCP/PPP), and then elected members to the Shompole Community Trust to liaise with investors, help organize the conservancy and local scouts, and manage revenues and their distribution. Shompole Lodge was extremely successful at bringing in business, so it became known internationally as a luxury safari destination, and it experienced a few profitable years for both the investor and the Shompole community before tensions led to its burning and closure²⁷. Much of the mistrust that Shompole members conveyed about past and present Group Ranch leadership seems to have stemmed from the rise and fall of Shompole Lodge. The 15-year contract between the tourism investor, Anthony

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²⁶ Other Shompole and Olkiramatian members said that the Shompole Lodge was established in 2000, thus the ACC survey might have been carried out earlier.

²⁷ Current SCT Chairman, Jackson Kaayia Sisi, summarized the Shompole Lodge story: "We had an investors called Antony and we were impressed with what he was doing. He made many friends when he came, and studied people. After some time, he made an argument about the placement of the land and the agreement that was for 30 years. The community sat down, and saw some parts where we have been pressed, and thought 'what can we do with this investor?'. Once they felt they were oppressed and Anthony was doing plans on his own...the investor came to negotiate a plan with his friends but excluding the Group Ranch chairman and leadership. The Group Ranch chairman learned of this and moved in, requesting that the lease agreement be terminated immediately so Antony could vacate right then. The conflicts began and were high. The investor was told to vacate, but he was trying to find support among his friends. The investor then moved, and the friends of the investor didn't want any other person [to take the lodge]. Because of the conflicts and negativity of the friends towards the leaders, it was decided that nobody was allowed to come and invest. The leaders brought an Indian guy that was interested in the lodge. The conflicts came back, and people went to the gate entry...where a man was killed [in the scuffle]. The family of this dead man went to the lodge and burned it down" in 2012 (interview in English with some Maa translation, 04-07-17). See also Little 2013: 74, and "Shompole Closure" (Russell 2011).

Russell, and the Group Ranch Committee of Shompole had been set up in a complex way such that the community owned 30 per cent of the company shares and would eventually be able to buy back more of the company over the 15-year period so that it would become 70 per cent community-owned (personal communication, summer 2017). A few years into operation, unmet community expectations of financial returns, lack of transparency in the relationship between the Shompole leadership and Anthony, and a failed attempt to renegotiate terms of the agreement resulted in volatile relations within the community and with Lodge management, and the eventual destruction of much of the Lodge infrastructure between 2011 and 2012.

Around the same time that the conservancy and Lodge were established in Shompole, Kamanga had just been elected as Olkiramatian Chairman with no instruction on how to strengthen community livelihoods, "[s]o my plan was their plan" he explained:

At that time because of my experiences working with other conservation groups, I had always liked conservation as [a] development model, and I asked the community to work with me and this model to allow them to make money. Conservation would be the driver of development; because it yields money, creates jobs (interview in English, 15-07-17).

Today, the Shompole Lodge site sits vacant and full of potential²⁸, and the PCP/PPP agreement with the Shompole Wilderness camp (maximum capacity of 8 persons) which was facilitated by SORALO is providing employment, paying an annual lease fee and bed night fees to the Shompole Community Trust, and thus far is proving to be a positive partner. The official lease agreement²⁹

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²⁸ The Shompole Conservation Trust is currently in communication with a potential investor, and SORALO is providing support to Shompole by helping to facilitate the creation of a lease and benefit-sharing agreement that is transparent and satisfactory to the community. All parties involved in creating PCP/PPPs have learned from past mistakes and are hopeful that a more positive relationship can be established between community and investor.

²⁹ The agreement is valid for 20 years, with the annual lease fee starting at KES 100,000 for the first two years, to be increased by KES 100,000 per subsequent year.

with Shompole Wilderness was signed on January 21st 2017 and the camp, managed by Johann du Toit (husband of SORALO's Research Coordinator at LRC, Samantha Russell), is yielding 'small milk' for the community. In Olkiramatian, LRC was the first conservation-related development that Kamanga and his executive were able to build with funding provided by SORALO. LRC benefits the Olkiramatian Reto Women's Group, which owns the Centre and is paid bed night fees (between KES 1,000 and 1,500 per night depending on length of stay), and the Conservation Committee receives the conservation fees and gate fees that visiting researchers or student groups pay to enter the conservancy. Further, SORALO employs over 20 local Olkiramatian and Shompole youth as resource assessors and researchers at LRC, and supports game scouts for both community conservancies. Lentorre Lodge (which many refer to as 'Sampu', after the small mountain in the area; maximum capacity of 16 persons) has been operating for 4-5 years, with the annual lease³⁰ fee paid to the Group Ranch Committee account, and the bed night and conservation fees paid to the Conservation Committee. As with Shompole Wilderness, the PCP/PPP between Lentorre's managers and the Olkiramatian community has been positive to date. With oversight from the executive Group Ranch Committee, the Conservation Committee and Shompole Community Trust control the Group Ranch finances and are the final authority, ideally after community consultation³¹, on how money from conservation—being their only source of income—is spent (explored in Chapter IV).

The unique 'constellation of committees', land use management, and ecological outcomes of *erematare* as an environmental ethic of care has allowed for Olkiramatian and Shompole to

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³⁰ In their first year, Lentorre Lodge paid KES 650,000, with a guaranteed 15 per cent increase per year since.

³¹ People in leadership positions assured me that Group Ranch-wide meetings were frequent and well-attended, although many of the women, elders and youth (not in leadership positions) said that they had never heard of a meeting to discuss finances.

address multiple objectives simultaneously: sustaining a productive environment for pastoralism and generating additional income through conservation. This is not common in environmental management approaches (Berkes 2007), as many CBC programs, being informed by mainstream discourses, may have prioritized the goals of biodiversity conservation over strengthening of local livelihoods in meaningful ways (Godfrey 2016). The case of Olkiramatian and Shompole paints a hopeful picture for the future of pastoralism and wildlife coexistence in Maasailand. That being said, change and uncertainty are part and parcel of pastoral living.

In Olkiramatian and Shompole, there exists a collective sensibility that seems to have been lost by many other Maasai communities in Kenya. When speaking about relationships between the two Group Ranches, Leshashi ole Ikayo (Sampin-Irmong'i) from Shompole explained, "Shompole and Olkiramatian, we are like one thing" (translated from Maa, 19-07-17). This unity, according to some, has enabled both communities to have a "good environment" because "[y]ou cannot say that 'this land is mine', it is ours" (Samwell Munyere Rimpaine [KR], interview in English, 14-02-17). While people spoke with great pride and recognition that the way Olkiramatian and Shompole manage their land (i.e. in three zones via sub-committees) is unique compared to other Maasai-inhabited areas in Kenya, such as the Maasai Mara region or Maji Moto, concern about communal tenure lasting too much longer in Olkiramatian or Shompole was shared by many, including Olkiramatian resident Titiyio ene Meiponyi,

The only best way we will be able to sustain the good management of this community is if it remains the way it is right now. Otherwise, in case the subdivision will be agreed upon there will be a lot of challenges to this community. There are some men whereby a portion of land was subdivided and he can sustain his family, but the people who want subdivision, their target is just to sell the land [for money that] they can spend on his own without remembering his family. By doing that it will be a problem because how can his children survive? That person who has

livestock but no pasture, they will not be allowed to graze outside their property. Where will they graze after subdivision? (translated from Maa, 07-06-17).

Certain individuals had been on tours to other parts of Maasailand and had seen what subdivision of intact, communal land had brought with it: land sales and hard times for many. However, colonial histories (Hughes 2007) and contemporary realities of Maasai land dispossession (Galaty 2013a,b,c; Puzzolo 2017) have influenced how secure Maasai people feel in their rights to the land and pasture that they rely on. In the South Rift context, this fear of dispossession, and the desire to own land individually, has created a divide in both communities between those that want to subdivide the land, and those that do not. Proponents of subdivision have explained that they would be happy if individual land titles were given out in the cultivation zones³²; no one thought it wise to subdivide the livestock-rearing zones or conservancy. Those on the other side of the debate feel that a shift from collective to individual or private ownership epitomizes a cultural transition from 'we' to 'me', thinking that is contrary to traditional Maasai perspectives, but exhibited by many youths in Olkiramatian and Shompole (personal communication, 15-07-17). Pressures to subdivide are related to the greatest challenges that Olkiramatian and Shompole face today: a rapidly increasing human population (demanding rights to own and cultivate their own land), and climate change-related droughts that are limiting pasture and killing livestock.

Climate change and human population pressures, which most importantly for Olkiramatian and Shompole members threaten the future of pastoralism (Homewood et al. 2009a,b,c; Osano et al. 2013), have implications for the health and wellbeing of wildlife populations and thus conservation as well. In the last forty years, the combined effects of rising human population, rural

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³² In the last few decades the trading centers were partially demarcated, but plots were quickly sold by community members to non-Maasai, which deferred further further titling or extended demarcation (personal communication, March 2018).

development, and subdivision of land has led to a 40-70 per cent loss of wildlife in Kenya (Ogutu et al. 2009, 2016; see also Groom & Western 2013, Western et al. 2009). To view these changes through the lens of *erematare* as a social-ecological system, we can see how land tenure is related to ecosystem health and availability of pasture for wild and domestic species, which is culturally and economically important for the livelihoods of over 30,000 Maasai pastoralists living in Olkiramatian and Shompole. If, as Olkiramatian member Agnes Molo put it, "[pastoralism] is recognising a sense of danger" (translated from Maa, 29-05-17), then coming up with innovative solutions to address the current and future challenges pastoralism is facing should be a priority for mainstream conservationists and like-minded organizations. Securing the future of pastoralism and biodiversity in Olkiramatian and Shompole will require continued adaptive management of livestock, people, and land. SORALO, with Kamanga³³ at the helm, has played a vital role in maintaining a collective mentality, keeping the Group Ranches physically whole, communally owned, and developing conservation enterprises so that wildlife can 'pay its way'. For the time being, the safety net that the grass bank-cum-conservancy offers for dry season grazing and additional income to some families reduces the immediate pressure to subdivide. Further, the establishment of a conservancy strengthens recognition of the Olkiramatian and Shompole communities' collective land rights, which is a useful political tool in the context of land grabbing, natural resource exploration or extraction, and other forces that threaten the practice of pastoralism today.

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³³ The majority of Olkiramatian members expressed confidence in the Group Ranch leadership, but some were troubled by the 'dual role' that Kamanga has played as Olkiramatian Chairman and Director of SORALO over the last 15 years, feeling that he and his friends have benefitted more than the community. In Shompole, less was known about SORALO and Kamanga generally.

Chapter IV

Changing relationships and the 'little milk': The promise and the failures of the tourism model

Wildlife has always been present in the Olkiramatian and Shompole landscape, a part of everyday life, and of pastoral management. They—the diverse biotic assemblage—are embedded in the complex social-ecological system that *erematare* represents, but their position within it has become increasingly complex as the 'global story' now demands that wildlife pay their way. In this chapter, I show how relationships with wildlife have changed for Maasai pastoralists in Olkiramatian and Shompole since the idea of conservation was both introduced and enforced at the national and local levels, respectively. If, through the concept and business of CBC, wildlife that used to simply be 'out there' should be considered second cattle with monetary value, how do people feel about the benefits and costs associated with conservation, which in a practical sense means living with wildlife despite challenges like livestock predation, crop raiding, human injury or death? How are these benefits perceived or expressed beyond monetary terms (Berkes 2013)? In the Foreword of Homewood et al.'s (2009c) book, Staying Maasai? Livelihoods, Conservation and Development in East African Rangelands, ecologist Dr. David Western explains that the underlying assumption of CBC approaches in Kenya's Maasailand "is that wildlife will generate sufficient income to justify its presence on private and communal lands," prompting the question "[b]ut does it?" (D. Western 2009: vi). In the previous chapter, I explained how adaptive pastoral management and seasonal movement of livestock has created the ecological conditions for wildlife to thrive in the conservancies of Olkiramatian and Shompole. It seems appropriate, then, to ask whether pastoralists feel they are benefitting in meaningful ways from their participation in conservation

In Kenya, all wildlife is state-owned and governed through the Kenya Wildlife Service (KWS). Hunting of wildlife has been illegal in Kenva since 1977³⁴ (Homewood et al. 2009b: 9). even for communities like the Maasai who hunted wildlife for food in times of need and killed male lions as cultural shows of bravery or in defense of livestock and people. With customary consumptive practices now illegal, landowners can only benefit through non-consumptive practices like game viewing (safaris) and photography, the returns of which are usually less than consumptive uses (Norton-Griffiths 2007; see also Norton-Griffiths & Southey 1995). This has led to the proliferation of conservancies and ecotourism operations around NPs and PAs, with between 300-400 privately-owned eco-lodges now crowding the perimeter of the Maasai Mara National Reserve (personal communication, summer 2017). Wildlife in conservancies *can* create substantial local revenue through ecotourism or regulated hunting (Groom & Harris 2008; Naidoo et al. 2016), but living with wildlife can have significant costs such as predation of livestock, human injury or life loss, complex disease interactions, and competition for grazing resources (Odadi et al. 2011; Tyrrell et al. 2017). The Wildlife Conservation and Management Act (Wildlife Act), passed in December 2013, intended to improve management of Kenya's precious wildlife by separating wildlife regulation, administration, and research divisions, and outlined a compensation program to address costs associated with human- and livestock-wildlife conflict. Under the Act, each County is supposed to have a Wildlife Conservation and Compensation Committee that works with the KWS to file reports of human- or livestock-wildlife conflict for monetary compensation. This was part of a national agenda to incentivize pro-wildlife behaviors in pastoral communities, fueled not only by global conservation discourse but the contribution that ecotourism and NP visitation makes to the national economy (Cheung 2012). Indeed, logics related to the

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³⁴ This does not include game bird species, the hunting of which is differently regulated.

financialization of nature feature prominently in Kenya's environmental planning and economic strategies regarding the potential of "natural capital" (RoK 2015).

How have pro-wildlife policies and "discourses of success" (Dressler et al. 2018) that incentivize communities to engage in CBC changed Maasai relationships with, and expectations of, wildlife as potential contributors to livelihoods? Maasai have been coexisting with wildlife and their livestock in the East African rangelands for millennia (Reid 2012). In Olkiramatian and Shompole, people described pre-conservation relationships with wildlife as respectful but wary, explaining that Maasai people have always 'been together' with wildlife but,

Nowadays it is totally different because it is they who are coming close to the people. There was a time where we had *morans* and the lions would escape because they were afraid of the warriors. Now the lions can walk around the *manyatta* and kill the livestock. People see elephants nowadays [everywhere], where poachers used to kill them. We are now thinking how are we going to reduce this? (Anonymous [KR], translated from Maa, 02-06-17).

Efforts to reduce conflict between people, livestock, and wildlife have largely been directed at incentivizing pro-wildlife sentiment, which does not have any practical bearing on the everyday experience of livestock predation, human injury, and death by wildlife. Research and monitoring teams from SORALO and the affiliated carnivore initiative, Rebuilding the Pride, do their best by communicating to Maasai herders the locations of certain collared lions and collaborating with the KWS on livestock 'rescue missions', but conflicts continue. At the same time that conflicts occur without the possibility of retaliation by the Maasai, these communities have been told by leadership, NGOs, and other interested parties that wildlife is valuable and can benefit them greatly through tourism. An elderly *mama*, Dorcas Montoi ene Marite, having witnessed many changes since the beginning of conservation in Shompole, asked "is wildlife really benefitting us?" As the

group that is supposed to help the community claim compensation, "the KWS is more concerned about the killers of wildlife than justice for people" (translated from Maa, 12-07-17).

Mainstream conservation, which the Kenyan government, KWS, tourism operators, and even Maasai elites benefit from and perpetuate, has embodied an "ecocentrist" approach, placing more value on the preservation of natural resources and wildlife species than on the human inhabitants (Reid 2012: 161). Coupled with this sentiment is the fact that fewer than ten people I spoke to mentioned ever being compensated by the KWS for loss of human life or injury; even when this occurred, it took months to be paid what was seen as a small amount of money. Feelings of neglect are felt at the local level in Olkiramatian and Shompole:

Last Sunday a cow of mine was taken by a lion, and then 20 people with spears went out and found 5 lions – they waited for [my] authority and I thought about the future and not to kill the lions. I called the KWS people who came and witnessed the lions eating his cow; took pictures; asked him to visit the station and fill forms, which has resulted in no action taken; I fill the document for nothing. One day we will be fed up and kill wildlife (Nkunjai ole Sipano [SH], translated from Maa, 07-07-17).

It took a long time while we are just asking them to compensate the livestock. If the wild animal is killed, helicopters will come. If a person is killed they say 'pole' [sorry, Kiswahili]. Sometime we may say, 'I will kill it', even if I will be taken to jail because I must. The main problem we have is no compensation for our livestock or crops (Anonymous [KR], 02-06-17).

Despite growing frustrations (see also Homewood 2017: 100-102), with the help of SORALO and the KWS, community members continue to fill out compensation request forms to document the conflicts, and have remained hopeful. That being said, I have no expectation that the compensation promised by the Kenyan state in the Wildlife Act will ever be disbursed fully. Kamanga, who was

involved through SORALO in community consultations regarding the Wildlife Bill before it was passed in 2013, has been privy to amendments being made to the Act currently. In this process, the section providing for compensation will be removed and thus "compensation will never happen" (Kamanga [KR], interview in English, 15-07-17). We can only speculate about the effect this will have on community feelings toward wildlife. Compensation through the KWS is less a benefit tied to conservation than it is promised recompense by the government to mitigate the costs of pro-wildlife behaviour. In this way, compensation is technically separate from revenue made by the Group Ranches through tourism, research fees, and other benefits that communities feel wildlife provide; but it is part of the story, too.

To borrow from Naidoo et al. (2016), "communities living with wildlife are not monolithic entities; rather, they are composed of different groups of people who will experience different costs and benefits from wildlife conservation (Agrawal & Gibson 1999; Roe et al. 2009)" (ibid.: 629-630). The importance of differential perceived or real costs and benefits from conservation that stem from leadership or decision-making power is paramount. All the monetary benefits that accrue from conservation activities in Olkiramatian and Shompole are funnelled through the Conservation Committee and Shompole Community Trust bank accounts, and are the only source of income the Group Ranches collectively have. As mentioned in Chapter III, today these community benefits come from annual lease fees paid by Shompole Wilderness and Lentorre Lodge, bed night fees dependent on occupancy at the camps, conservation fees for visitors or researchers to the conservancies (KES 1,500), and camping fees (KES 1,000). When I asked people how the benefits of living with wildlife compared to the costs—leaving room for interpretation—every single respondent said that the costs were greater. When I narrowed the question to "conservation benefits", people mentioned money from conservation being used by the

Conservation Committee or Shompole Community Trust in the past to pay school fees for disadvantaged female children, medical bills for a community member who could not afford them, lawyers' fees for court cases, the salaries of teachers, or to construct and service the conservancy gates and wildlife dam. Employment at Shompole Wilderness, Lentorre Lodge, and LRC, or serving as community game scouts, were all considered conservation benefits by community members. Others expressed that conservation had never benefitted them or their community, speaking to inequitable distribution of revenues presumably tied to poor leadership or transparency:

We are not benefitting how we want. We expect managers of the income source to distribute equally to the community, but the [Group Ranch people] are not doing this. The Group Ranch people know about the number of clients and money paid, no meetings have been held. Broken record of 'the Group Ranch will do this' over and over (Anne Koin Maseto [SH], translated from Maa, 06-07-17).

Apart from what some perceive as "elite capture" of conservation revenues by the Conservation Committee and Shompole Community Trust, a commonly reported consequence of CBC (Brooks et al. 2012: 104; Jandreau & Berkes 2016: 3; Lamprey & Reid 2004: 1024), Anne Koin Maseto draws attention to two key elements: expectations and transparency. Depending on how the potential benefits of conservation were explained to communities, they may have unrealistic expectations of returns at an individual or household level. Further, if procedural transparency regarding incoming ecotourism clients, bed night fees, and other monies paid does not exist, then suspicion and discontent naturally follow. While figures for total collective³⁵ and individual³⁶ conservation revenues are not available presently, I posit that the contribution of conservation

³⁵ Collective benefits include the lease, camping, conservancy, and research fees paid to the CC or SCT, with SORALO usually acting at intermediary.

³⁶ Individual benefits translate to employment by SORALO at the LRC, as community game scouts, or at one of the ecotourism ventures.

earnings to the average community members' income is negligible given that Olkiramatian and Shompole are home to over 30,000 inhabitants. Because collective revenues held by the Conservation Committee and Shompole Community Trust on behalf of the communities are spent on projects that supposedly benefit everyone (mentioned above), the few individuals that are directly benefiting from conservation activities are those with salaried work, which can be as a resource assessor with SORALO, as a community scout, or at one of the ecotourism operations. If the communities do not feel that the monetary benefits they receive either collectively or individually outweigh the costs of living with a growing wildlife population, and participating in conservation, then why bother? Simple: when it comes to wildlife and 'doing' conservation, "a little milk is better", says Shompole resident Ntuala ole Soipano (translated from Maa, 10-07-17). With conservation came the wisdom of "milking the wildlife" (Ntudulu ole Kipanoi [KR], translated from Maa, 07-06-17), and with it expectation that the "cattle in the forest" would provide new financial futures (Nkili ole Partaloi ole Ntuluo, translated from Maa, 12-07-17). The hope that people conveyed about 'little milk' coming from conservation might be a reason that these communities have expressed a strong desire for lion populations to be either maintained or increase, which is not a common opinion in other lion-populated regions of Africa (G. Western 2017).

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In early August, I ask Kamanga about the 'little milk' and how he felt conservation had benefitted Olkiramatian and Shompole.

"[I]n terms of how many people have benefitted from conservation, it's a small amount. The big thing about conservation, the money is coming in, yes, but there are jobs and livelihoods coming out of it. [LRC] camp employs 20-30 people which is a lot of money, that's conservation [...] Greater than that is the question of pasture. The biggest benefit for communities here is when we manage the conservancy appropriately for our livestock because that affects every household."

Livestock is, and will likely continue to be for some time, the most productive economic unit in Olkiramatian and Shompole. This reality, however, is often eclipsed by the charismatic mega fauna and tourism dollars that drive the conservation activities in the area, from which only a few individuals directly benefit monetarily. I ask about the relationship between pastoralism and conservation, which practice he believes to be more important for the future of Olkiramatian and Shompole. Kamanga explains that, "at the Shompole market on a good day you are talking about nothing less that USD\$30,000 in [livestock] sales. That is every week. We are talking about USD\$30,000 coming from tourism, which is every six months! There is no comparison!"

"But Kamanga!" I interrupt, "How people perceive conservation 'benefits' and set their expectations is tied to a different financial reality. The common narrative of 'you will be rich from wildlife' has been so often spun here."

Kamanga nods, and continues: "[Conservation] is good, and it's additional, but it's the pastoralist system that we have to continue to work on and improve *through* the conservation movement. So when we see a cow killed by a lion, that is our problem, because that is the resource for people here. Conservation should pay for us to keep [our livestock systems] in place, but it is not about the money. It is not a replacement for pastoralism. We shouldn't look at [conservation] as an economic game-changer, it is a nice driver and model, but it is only an enabler of a greater system."

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Proponents of conservation-as-tourism and the 'global story' have for decades preached the transformative power of conservation in improving the lives of rural communities in countries like Kenya³⁷. Often the groups spinning pro-wildlife narratives are ecocentrists (e.g., transnational or local NGOs), governments with economic incentives, or investors who see a lucrative business opportunity. The theoretical success of community-based PCP/PPPs and payment for ecosystem services (PES) programs is premised on an ideal 'win-win' scenario for local communities, wildlife, and the economy. The triple win scenario where rural populations are lifted out of poverty through foreign or state investment in conservation-based enterprises has been part of this narrative since the creation of CBC as a tool to merge conservation and development goals (Homewood 2017: 94; Igoe & Brockington 2007; Thompson & Homewood 2002). The mainstream conservation discourse of CBC, which has accumulated so much power over its lifetime, was always motivated first by the goals of biodiversity conservation, second by those of human development. How stakeholders communicate conservation to local communities relates to the "perceived financial value of 'future nature' – a growing trend in global conservation, where selling perceived benefits and success go hand-in-hand with capitalising on the anticipated value of nature and any associated financing that is stoked by crisis (Büscher 2014; Büscher and Fletcher 2015; Igoe et al. 2010; West 2006)" (Dressler et al. 2018). Communicating the potential or futureoriented successes of CBC (or any conservation initiative), which is tied to global networks of supply and demand, embodies a kind of "speculative conservation" (Sullivan 2014). As I spoke with those who had benefitted from employment in camps or lodges, such as Shompole Lodge, I

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³⁷ I do not dispute that conservation schemes, when participatory and well-managed, *can* impact local livelihoods positively (e.g., Clements & Milner-Gulland 2015; Ondicho 2018) but the degree of impact is often overstated.

got the sense that the expected community benefits of conservation were overstated; many Shompole residents spoke about how they were told they would be very rich after the Lodge was constructed. When there was a discrepancy between expectation and reality, frictions arose.

How individual and community conservation benefits, resulting from integration of ecotourism into the *erematare* system, are communicated in economic, social, infrastructural, or ecological terms needs to be honest and realistic. Conservationists, policymakers, and investors need to be wary of false promises that lead to high expectations on returns, which can often be tied to "discourses of success" and speculative promises (Dressler et al. 2018). The framing of conservation-oriented enterprises should not be 'game-changing'. Rather, wildlife-based income should be presented as one livelihood diversification strategy among others, the revenues of which cannot replace those from pastoralism, as Kamanga mentioned above. The KWS and Kenyan government are important actors in this as well. With compensation promised but not delivered, what do they expect the inhabitants of Olkiramatian and Shompole to do? Empty promises and community frustration will not help the wildlife of Kenya.

In the past, there has been a mismatch between what conservationists define as benefits and what matters to communities, whereby "the conception of local incentives purely in terms of community economic benefit is too narrow, too simplistic, and potentially counterproductive" (Berkes 2004: 627; see also Berkes 2013). The story that *erematare* tells us is that tender care of livestock, people, and land are the most important aspects of pastoral life in Olkiramatian and Shompole. New terminologies of 'compensation', 'benefit', and 'conservation' have brought with them new ways that pastoralists express their needs, expectations, and value wildlife. At the same time, fairness, equity, transparency, and communication are of great concern to people in Olkiramatian and Shompole. As the most active conservation organization in the area, SORALO

has always been, and will continue to be, at the center of these conversations. In the next chapter, I will explain the role of SORALO in Olkiramatian and Shompole—how the organization and land trust came about, how they define their roles, what the communities know of (and expect from) them, and finally, what improvements can be made to communicate and 'do' conservation better.

Chapter V

The role of SORALO: Local leadership and the pastoralist agenda

The emergence of the community-based approach to conservation in the 1980s marked the blending of community, NGO, corporate, and state powers in troubleshooting the twin challenges of environmental protection and human development. Combined with the rise of neoliberalism and a rolling back of the state, a shift in the locus of power was observed where NGOs effectively filled a new niche of global environmental decision-making and governance (Pellis et al. 2014, 2015). This enabled all types of conservation NGOs (see Brockington 2011) to tap into the international development streams of funding and broaden their support base and donor networks. The literature on transnational, local, civil society, or grassroots conservation NGOs is abundant as NGOs are immensely powerful actors that participate in and benefit from the lucrative mainstream conservation business (Brockington et al. 2018; Brockington & Scholfield 2010a,b,c; Chapin 2004; Dougherty 2002; Finger & Princen 2013; Ghimire & Pimbert 2013; Holmes 2013; Igoe 2004). In Kenya, the Wildlife Act (RoK 2013) mandating the devolution of wildlife management and conservation initiatives to local or County levels meant the propagation of community-based or civil society organizations which added to growth of an arguably saturated conservation NGO network³⁸. In Kenya, conservation NGOs are active in the creation of knowledge that supports particular human-environment interactions, contributing to academic and public discourses and directing a collective consciousness. They act as mediators not only ideologically—translating between the 'global story' and the local contexts—but also financially as funnels for donor or tourist dollars, or facilitators of PCP/PPPs (Lamers et al. 2014a,b, 2015).

³⁸ There is no exhaustive list of environmental or conservation NGOs working in Kenya, but here are a few: http://earthdirectory.net/kenya;https://softkenya.com/directory/environmental-organizations-in-kenya/; http://www.conservationalliance.or.ke/our-members/

To completely understand how conservation operates in Olkiramatian and Shompole, it serves to examine the roles that organizations such as the ACC, the KWS, and SORALO have played. Additionally, it is crucial to understand how these organizations do their work, and what they communicate to the communities they are working with. While I support a sectoral approach to the study of conservation NGOs (see Brockington et al. 2018), my contribution will be an individual examination of SORALO because of the unique role it has played in the development of conservation in Olkiramatian and Shompole as a locally-developed, Maasai-run NGO that believes in erematare. Mention of SORALO can be found on select pages of books, articles, and reports³⁹ without an attempt to describe in detail the organizational mechanisms or the diverse academic, philanthropic, and governmental networks SORALO relies on to do its work. In this chapter I will explain what SORALO's approach to pastoral development is, how it functions as an organization⁴⁰, and what work it does in Olkiramatian and Shompole. This will be compared to community views and opinions of SORALO, and its mandate and leadership roles played within Olkiramatian and Shompole. Supporting *erematare* and its holistic vision is core to SORALO's mission and underpins their involvement in the conservation sector. I argue that SORALO as an organization has been instrumental in supporting adaptive rangeland management, and sustaining communal tenure in Olkiramatian and Shompole by providing employment to local youth and developing conservation initiatives.

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³⁹ All of the published literature that mentions SORALO, which does not include grey literature: see Curtin 2015: 21,92,94,134; KWCA 2016: 5,10,15,36,37,46,62-63,81; Pellis et al. 2014: 27-29; Sambalino et al. 2015: 15,30; Sundstrom et al. 2012: 493; Russell et al. 2018; Western et al. 2015: 55,57,59; D. Western 2008: 10-13; Worden et al. 2009: 6; and the acknowledgements section of Tyrrell et al. 2017.

⁴⁰ SORALO has been described across the published literature as a regional association, land trust, grassroots organization, civil society organization, and local institution; for my purposes I will use the terms 'organization' and 'institution' interchangeably.

As newly elected Chairman of Olkiramatian, Kamanga brought conservation in its placebased and tourism-based forms to Olkiramatian, and has remained a key player in the growth of conservation in both Group Ranches over the last fifteen years through SORALO. The original motivation behind SORALO was to establish a representative body that could help Maasai landowners start ecotourism operations in the South Rift. After the success of a conservancy in Shompole and the Shompole Lodge providing employment to community members and bringing in tourists, Kamanga decided that if the little camps operating in Olkiramatian were collapsed into one or two bigger camps and owned collectively, a conservancy could also be established. Kamanga explained to me that previous Group Ranch Committees had not been trusted to "do conservation", but "when I came with this idea, the community said 'we trust you' [and] gave me one condition which was that I not bring in the government" (interview in English, 15-07-17). Instead of seeking government support, Kamanga turned to Dr. David Western and the ACC for assistance in raising funds and contacting tourism partners. The first few years were difficult, with a slew of investors coming in and out for various lengths of time, and with varying degrees of business acumen. Once formally established in 2004 as a land trust and 501(c)(3) NGO, SORALO started work to develop the Sampu camp site (now Lentorre Lodge) and supported Shompole by setting up Loisijo (now Shompole Wilderness) as an overflow "fly camp" for Shompole Lodge. LRC was built in 2006 to "draw communities into research, rather than [deliver] research [outputs] to them from scientists" (Lale'enok Website, 2018). Lale'enok is a Maa word meaning 'place where information is brought and shared'. LRC—as a site for researchers, student groups, and small tourist groups to visit or stay—has been one of the most visible outcomes of SORALO's work in Olkiramatian, also benefitting Shompole members through employment as resource assessors and community game scouts in the conservancies.

Currently, SORALO's membership is comprised of representatives from fifteen Maasai communities, with representation devolved to five cluster committees spread across the South Rift landscape (Fig. 8). The locations of the clusters are defined loosely by traditional divides. Cluster committees are composed of up to eight individuals selected by the community leadership to represent traditional leaderships, modern institutions, youth and women. From each of the eight individuals sitting on cluster committees, two people are elected to the SORALO board to represent their communities for four-year terms. In addition, the cluster committees work to provide ownership and guidance to SORALO projects within their areas. An annual meeting of all cluster committee members is used to guide the strategy and scope of SORALO for the following year. Today, SORALO employs 52 people from across the South Rift, 33 of which are community game scouts (SORALO General Report 2017: 4, 38). In Olkiramatian and Shompole, SORALO pays the salaries of 7 community game scouts per community conservancy.

SORALO's vision is to empower and support Maasai communities in securing and keeping their land healthy, productive and connected for the mutual benefit of livestock, people, and wildlife. As per their most recent General Report, SORALO "believes in *Erematare*, a traditional [Maasai] ethos of holistic management of all things, and in *Enkop'ang*, securing the feeling of 'home' for the people of the South Rift' (2017: 1). Under this ethos and with this vision, SORALO coordinates a variety of programmes across the South Rift, which are organized into four pillars: Conservation for Coexistence, Conservation Planning and Governance, Conservation for Livelihoods & Enterprise, and Information for Action. Under each pillar numerous projects are housed (Fig. 9), with interconnections between most of the pillars and projects. To draw on Reid et al.'s (2016) work, I would classify SORALO's approach and core leadership team as "knowledge-to-action" oriented and "boundary-spanning" (ibid.: 4581). For reasons related to the

early onset of research activities, promotion of tourism, establishment of the LRC, and SORALO leadership, it is fair to say that compared to the other thirteen Maasai communities that make up SORALO's membership, the Olkiramatian and Shompole communities have benefitted in the most diverse ways from SORALO's activities through employment, income-generating projects, research partnerships, and recurring student group trips. Acknowledging this disparity between organizational presence across the South Rift, over the last two years SORALO has been reviewing its programmes and overall structure to better serve the thirteen other communities it represents with assistance from Maliasili Initiatives. Maliasili Initiatives "champion[s] leading local [conservation] organizations and help them build the organizations and networks they need to deliver on their mission and achieve their goals" (Maliasili Website, 2018). In this capacity, they have been aiding SORALO with leadership development, organizational functioning, legibility of programming, and tailoring their methodologies to fit SORALO's specific needs and challenges, some of which are elaborated on below.

SORALO is able to pursue its mission due to good relations with—and support from—the Maasai communities it works with. Almost as important for a grassroots organization, though, is the large network of international donor support that SORALO has cultivated since inception. SORALO has been explicit about the centrality of 'conservation' to its operations, which helps it access many international funding opportunities. Kamanga elaborated on how SORALO navigates the difficulties of staying focused on a pastoralist vision while adapting to the realities of conservation's 'global story':

The problem we have is that we are trying to run some activities and bring about change, but where are we getting the funding? We are getting it from conservation agencies. [To] to drive whatever we are doing [forward] we need to drive it with that [conservation] 'hat'. There is the global story, so we must conform to a global

story to be able to bring about the change that we want. Therefore, if we didn't say 'conservation', and only drove it from a livestock perspective, who is going to fund us? There is no funding that is going to livestock, but everybody is funding conservation. As SORALO we are calling it 'conservation' but we are then saying that livestock is part of the story (interview in English, 15-07-17).

Driving their programs forward with the conservation 'hat' has led to active partnerships and research collaborations ongoing with: the ACC; the Pathways to Resilience in Semi-arid Economies (PRISE) project; the International Livestock Research Institute (ILRI); the International Union for Conservation of Nature-Eastern and Southern Africa Region (IUCN ESARO); and Maliasili Initiatives (SORALO General Report 2017: 37). Further, SORALO is part of the African Conservation Leadership Network (ACLN) and the Horn of Africa Regional Environmental Network (HOAREN). These networks add institutional support and legitimacy to SORALO, who are then able to apply for funding through grants or contact charitable organizations and individuals. In 2017 alone, SORALO received a total of USD \$504,256 from donors and supporters (Table 1), and "of this, 36% went to support the salaries of all 52 staff members. A small percentage (1%) went to running the Nairobi office and the rest [63%] to supporting field programmes" (SORALO General Report 2017: 38). That SORALO has very little overhead means that the impact of each donor dollar is much greater than would be the case for a larger NGO like the African Wildlife Foundation, for example.

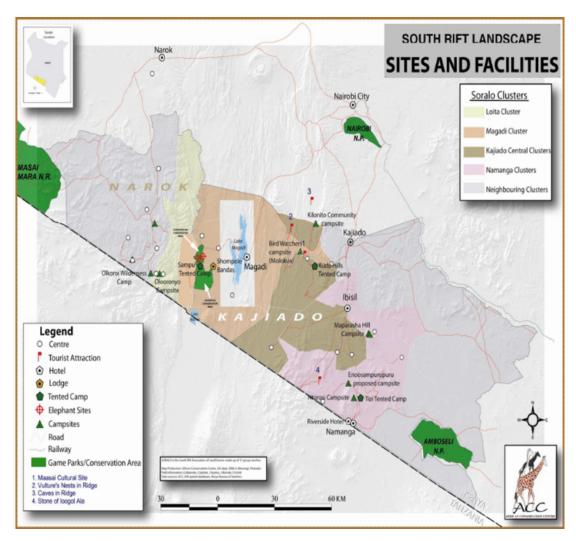


Figure 8. Map of SORALO's clusters, sites, and facilities. Map made by Peter Tyrrell (2017).

Table 1. List of donor organizations and amounts given to SORALO for 2017 fiscal year. Adapted from SORALO General Report (2017: 38).

| DONOR | AMOUNT (KES) | AMOUNT (USD) |
|-----------------------------|--------------|--------------|
| Horn of Africa Climate | 22,778,965 | 227,790 |
| Change Program | | |
| IUCN-Netherlands | 13,368,175 | 133,682 |
| Cincinnati Zoo & Botanical | 6,689,500 | 66,895 |
| Gardens | | |
| Liz Claiborne Art Ortenberg | 1,981,300 | 19,813 |
| Foundation | | |
| Angel Fund | 1,500,000 | 15,000 |
| The Living Desert | 1,000,000 | 10,000 |
| Zoo/Gardens | | |
| Donations | 3,107,689 | 31,077 |
| TOTAL | 50,425,629 | 504,256 |

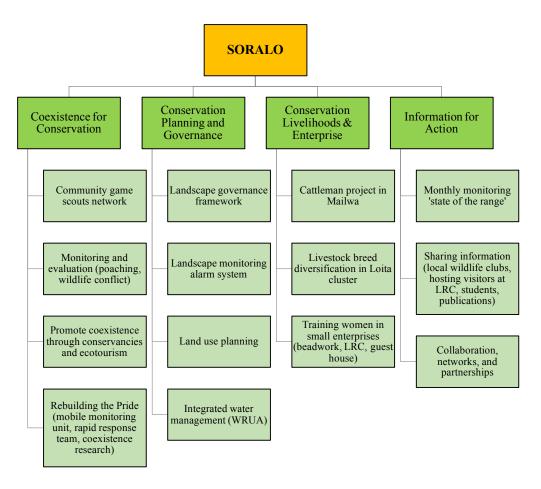


Figure 9. Schematic of SORALO's four pillars and programming, adapted by author from SORALO General Report (2017).

As a grassroots NGO and land trust having now operated for fourteen years in Olkiramatian and Shompole, how much of what has been described above about SORALO's purpose, activities, and structure is known by the wider communities? What is understood about the role SORALO plays in supporting pastoralism through conservation initiatives and coexistence research? The answer is not so clear, but there is room for improvement. Only 8 (3 from Olkiramatian, 5 from Shompole) people that I spoke with had not heard of SORALO, knew nothing about their activities, or were unclear about what SORALO did. However, what people *did* know about SORALO was relatively cursory, and they did not present SORALO's goals in terms similar to *erematare*. What came out of conversations with 49 Group Ranch members was that no one had a clear, comprehensive understanding of SORALO's mandate, nor the activities they pursue in

Olkiramatian and Shompole. More participants considered SORALO to be more of a wildlifeoriented conservation and research NGO than one pursuing programs to support pastoralism. Within Olkiramatian and Shompole, responses on what SORALO does in the community, or what their role was, varied greatly.

In Olkiramatian, most people emphasized the role SORALO plays as an advisory body and educator, sharing information related to pasture and the whereabouts of wildlife with the Olkiramatian community. As Olkiramatian mzee Maseto ole Siere explained, "[t]he elected committees and SORALO work together and bring up ideas to the community, propose them, then can agree upon them. The elected committees hold meetings with SORALO and bring over information and activities, thinking about which is the right way to go" (translated from Maa, 29-05-17). After this, the most frequent activities identified were providing security to wildlife through scouts and helping bring clients and other well-wishers to LRC and Lentorre Lodge. In Shompole, the emphasis was on the community scouts program and the mediation role SORALO played in bringing Shompole Wilderness to the community. Additionally, SORALO was identified as benefitting the communities through employment of both Olkiramatian and Shompole members at LRC, and clearly favoring the pro-communal tenure stance. When I asked for recommendations on how SORALO could improve their work in Olkiramatian and Shompole, everyone wanted more well-wishers to populate the ecotourism sites. Shompole members were hopeful about the future restoration of the Shompole Lodge site, benefitting from SORALO's help in brokering a fair contract with a new investor. Many participants asked for more outreach and education for the communities, both in terms of SORALO's activities and in a capacity building sense. Joel, a Shompole member explained that SORALO is not doing enough, that providing information to communities "is their role, [to] take people for tours, choose and train people of every cluster to manage resources. Capacity building about resources [is] needed" (interview in English, 08-07-17). Everyone was eager to learn if there were 'better ways forward' for their small enterprises, their families, their livestock, and their land.

Many individuals spoke to the disconnect between Group Ranch leaders, SORALO, and the wider communities, particularly regarding equitable sharing of benefits. This was more acute in Olkiramatian because Kamanga is a 'son of Olkiramatian' and thus wields a lot of power in his two roles, seemingly also reaping many personal benefits:

It is no problem if he is the Chairman of our Group Ranch and Director of SORALO, it should be our benefit because we have him there and he knows our problems. It is him who went [away], he left the community so it depends what he is earning from SORALO. When he comes here, he comes with Land Cruisers and allowances. He is the [only one] who is benefiting through SORALO [...] The problem is that SORALO knows where the funds come from, not us (Anonymous [KR], translated from Maa, 02-06-17).

While this view does not represent the majority by any means, others spoke of how confusing it is that Kamanga is both the Director of SORALO and the Chairman of Olkiramatian⁴¹. Further, transparency about how and from whom SORALO gets its funding was a notable and popular request that people I spoke with made.

This relates to the most controversial role that SORALO plays in Olkiramatian and Shompole as an intermediary body between Group Ranch Committees via the Conservation Committee and Shompole Community Trust in each community. A large part of the suspicion that people voiced about never receiving any conservation 'benefits' is tied to an overarching mistrust

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⁴¹ Kamanga has told Olkiramatian that he wishes to leave his elected post at Chairman, but the community has demanded that he craft a constitution before he leaves. This process is taking time, but he believes that this distance will help SORALO expand its programs in other areas and create a healthier relationship between SORALO and Olkiramatian.

of Group Ranch leadership when it comes to benefit-sharing, which was an opinion more often voiced in Shompole. Suspicion breeds tension in these scenarios, where there is general uncertainty about the magnitude of conservation fees coming in, and how those revenues are then handled by the Conservation Committee, Shompole Community Trust, and SORALO. As Chapter IV elaborated on, the conservation era in Olkiramatian and Shompole heralded a new way of valuing wildlife, in which monetary benefits from ecotourism were handled by the Conservation Committee and Shompole Community Trust. These bodies are in control of *all* the collective revenues that accrue from the various conservation-related initiatives, which represents *all* the money that the Group Ranches generate. Because there are often visitors at LRC, and guests of Shompole Wilderness or Lentorre Lodge flying in on private planes, community members have a sense that 'money is coming in', but over and over express a frustration that their leaders—which includes SORALO as advisors—are not being transparent with them; they would like SORALO and conservation representatives to announce the earnings from conservation at general community-wide meetings which are held at least once per year.

In conversations with leaders and employees of SORALO, I believe the organization values transparency, accountability, and honest communication. Perhaps above these, though, they value pastoralism as part of Maasai culture, and work toward securing a sustainable future for Maasai people in the South Rift. From what members of Olkiramatian and Shompole spoke to me about, it appears that in the last fourteen years, the larger mission of SORALO has been pursued at the cost of the aforementioned values. There is something about the organic nature of SORALO's development that has made its work exceedingly illegible to the communities it works with, but currently SORALO is attempting to restructure and make its programs easier to understand. Not only this, but the restructuring may help distance SORALO from the Conservation Committee and

Shompole Community Trust in its role as monetary 'benefit funnel' if the right protocols are established. It is hard when internal politics and suspicions tied to benefits blend with SORALO's work and community opinions because of the intermediary role it plays between donor, tourist, and researcher well-wishers and the communities. Kamanga explained that such a mechanism would be implemented soon, whereby twice a year SORALO would present "conservation cheques" that represent all the revenues from ecotourism and conservation activities under their purview to the entire communities. That way, "[SORALO] is allowing the rest of the community [beyond the Group Ranch Committees] to see the funds and understand the benefits for the sake of [accountability]" (interview in English, 05-08-17). It is promising that the next step SORALO is taking is to render themselves and their programs more legible, thus aligning with what many in the Olkiramatian and Shompole communities have asked for.

Since the beginning of conservation work in Olkiramatian and Shompole, SORALO has acted as a representative to a wider national and global audience and body of support, while also facilitating engagement between the communities and foreign student groups, researchers, and well-wishers. Because the state was explicitly excluded at the outset, SORALO has had a "leading and mediating role in the meta-governance of [...] [the Group Ranches] by integrating conservation interests with the interests of international donors, private enterprises and local communities (Lamers, van der Duim, Nthiga, van Wijk, & Waterreus, 2015; van Wijk et al., 2014)" (Pellis et al. 2015: 132). At the same time, SORALO's mandate puts it firmly on the side of anti-subdivision and anti-individualization of land. The organization believes in maintaining an open landscape for pastoralists and their livestock, which, as was discussed at the end of Chapter III, has become an increasingly difficult task due to multiple pressures on land. The trend in some other areas of Maasailand (Riamit 2014) has been that the dismantling of communal tenure systems

leads to hard boundary savannas and loss of ecological connectivity, reducing the viability of pastoral livelihoods. In these communities the threat of land dispossession looms large (Galaty 2013a; Puzzolo 2017), and so it is interesting to think about how SORALO's work establishing and maintaining wildlife conservancies strengthens customary rights to land through the conservation movement. These dynamics, along with communicating more clearly their mission through the lens of *erematare* by fostering *enkop'ang* should be explicitly addressed in future conversations between SORALO, Olkiramatian, and Shompole. Conservation is only one element of contemporary pastoral rangeland management (*erematare*), not separate from it.

• • • SECTION THREE • • •



Figure 10. A member of the Olkiramatian Reto Women's Group beading a necklace as other women sell beadwork to visiting students. Photo by author (2016).

Chapter VI

Conclusion: Thinking toward erematare

The ideology and practice of mainstream biodiversity conservation in Kenya is ubiquitous. Since the imposition of Western notions of separating people and wildlife on the Kenyan landscape, through the parks and protected areas movement, to the more recent CBC approaches, mainstream conservation in its many iterations has found fertile ground in which to embed its predominantly ecocentrist pursuits within Kenyan global identity and politics. Both the discourse and business of conservation have tended to serve the interests of dominant groups (e.g., Kenyan

politicians, foreign investors, transnational and local NGOs) rather than already underrepresented groups such as the Maasai⁴². In this process, alternative approaches to, or stories of, environmental care that are more attuned to unique local and pastoral contexts have been obscured. Protection of the abundant and diverse wildlife and plant species that have populated Kenya's rangelands for millennia has been the focus of mainstream conservation, and, while I do not deny the crisis of biodiversity loss, taking a wildlife-first approach alone has demonstrated a limited ability to sustain ecological health and attend to complex social-ecological systems. The acknowledgement and valuation of how Maasai pastoralists in savanna ecosystems—through mobility and management of pasture—have coexisted with wildlife centuries before colonial, and thus conservationist, contact has been lacking to date (but see Homewood & Rodgers 1984; Homewood et al. 2012; Lankester & Davis 2016). Instead of valuing the ecological contributions of pastoral systems, like Curtain (2015) and others have noted (Gavin et al. 2015; Reid 2012), I find that mainstream conservation discourse has predominantly valued empirical metrics of biodiversity conservation "success" such as total lions collared, community scouts employed, species richness, population density of ungulates, total protected area, or revenue from wildlife-based tourism (Gruber et al. 2018). The "discourses of success" that sustain the conservation industry (Dressler et al. 2018) have made use of the aforementioned indicators, which simplify complex social and ecological relationships, deny local histories of coexistence, and often overstate the benefits communities can expect or receive from conservation-related activities. This is not to say that these indicators are not important to measure and incorporate into conservation approaches, but they should be balanced against sociocultural indicators of CBC "success" like degree of community ownership in ecotourism operations, or broad distribution of benefits. Further, mainstream

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⁴² Noting that even within Maasai communities, it has often been the case that elites or those in leadership benefit from conservation business through 'capture' or personal connections.

conservation has defined the terms of engagement between conservation-as-tourism (PCP/PPPs, ecotourism), conservation-as-place (conservancies), and perceptions that Maasai pastoralists in the South Rift have of what conservation as an ethic of environmental care can mean. As a dominant discourse which is historically tied to expressions of Western values, biases against pastoral communal tenure systems, and toward wildlife-based tourism, mainstream conservation in Kenya has been exogenously imposed in many Maasai communities. Wonderfully, over the last decade academic allies of indigenous and pastoralist communities have been building a body of literature that both broadens and adds sociocultural nuance to mainstream conservation discourses (Berkes 2004, 2007, 2012, 2013; Gavin et al. 2015; Peterson et al. 2010), while also highlighting continued imbalances of power within the conservation industry (Brockington & Scholfield 2010a,b,c; Fox 2017; Holmes 2011; Mbaria & Ogada 2016). In so doing, alternative visions of environmental care, that integrate people-first *and* wildlife-first approaches into a complementary system, have been gathering support, thus having the potential to guide future rangeland management or conservation policy.

In this thesis, I have presented Maasai definitions of 'conservation' and the Maasai concept *erematare*, explored social and ecological governance of a complex pastoral system, described how the integration of conservation into an *erematare*-based system has changed relationships with wildlife, and finally, elaborated on the distinctive role of SORALO in Olkiramatian and Shompole. Reflecting on everything presented and analyzed in the preceding ethnographic chapters, and echoing questions posed in Chapter I, what have we gained from thinking beyond mainstream formulations of conservation, and what have we learned about communicating conservation and managing pastoral rangelands better through a detailed case study of Olkiramatian and Shompole?

In Chapter II we saw how conservation as a concept and practice has been reduced to conservation-as-place and conservation-as-tourism in the minds of Olkiramatian and Shompole members. The definitions and interpretations that were shared with me privileged the desires of foreign tourists in visiting wildlife-abundant spaces over the realities of well-managed pasture and seasonal livestock movement that benefits both livestock and wild grazers. As such, local perceptions of conservation highlight its imposed history, rooted in narratives that exclude people and livestock from the picture. With guidance from my SORALO colleagues, and through the voices of my collaborators, I offered up *erematare* as an alternative, a holistic vision of environmental stewardship rooted in Maasai pastoralism. As stated in Chapter II, erematare does not just mean 'conservation', but is a concept that brings together management and care of humans, land, livestock, and also wildlife. This means conservation-related activities can be understood as a newly integrated component of erematare as a social-ecological system. Erematare offers both a lens through which to view and rethink the relationship between pastoralism and conservation, and an approach to pastoral development through adaptive management. In so many ways, erematare might serve as a "pluralistic, cross-cultural conservation ethic" (Berkes 2004: 628) that both "broadens and redefines the meaning of conservation to fit [a Maasai] context" (Reid 2012: 252). Using the Maa term *erematare* to otherwise represent an ethic of social and environmental care, rooted in Maasai values of human-environment connectedness, conveys a different message than global conservation discourse traditionally has.

This message ties together complex social-ecological systems, adaptive pastoral management, constellations of committees as decentralized decision-making bodies, the importance of communal tenure, and the support of people, land, livestock, and wildlife species. With conservation ecology literature having oriented itself toward non-equilibrium and systems

thinking in the late 1990s, the relevance of *erematare* as a social-ecological system—the topic of Chapter III—is clear. The flexibility that pastoral systems have exhibited throughout history and currently do in response to ecological challenges of rangeland areas, such as unpredictable rainfall (e.g., Homewood 2008; Lankester & Davis 2016), is crucial in the context of changing climate patterns and growth in human populations; the persistence of pastoral systems into the twenty first century is a testament to their adaptability. Through the hybrid governance institutions in Olkiramatian and Shompole, and the division of Group Ranch land into three distinct ecological zones, we have seen how sustainable management of pasture through seasonal livestock grazing and the maintenance of institutions that sustain community cohesion can mutually benefit wild and domestic grazers. A consequence of the adaptive management present in Olkiramatian and Shompole is that both biodiversity conservation and pastoralism are supported in this coexistence system.

The management and care of wildlife, which is understood as 'doing conservation', reflects an emergent strategy within the *erematare* system of Olkiramatian and Shompole, which was the topic of Chapter IV. Engagement with mainstream conservation practices such as ecotourism through the establishment of lodges and conservancies that encourage and support tourist inflow is relatively new to these communities, while pastoralist coexistence with wildlife has a long history. At the same time, this engagement has necessitated the creation of the Conservation Committee and Shompole Community Trust as governing bodies, combined with CBC ideas and national policies that feature the language of compensation and benefits, means that wildlife has been seen as second cattle which both communities can receive 'little milk' from. From an *erematare* perspective, conservation activities bring wildlife-based management into the traditional definition of husbandry. However, with these activities comes the expectation of

conservation income and other benefits that may be misaligned with the reality, cause intracommunity suspicion about fiscal transparency, or mistrust of Group Ranch leadership. Despite
the absence of government compensation for livestock loss or human injury through the Wildlife
Act, and the overall feeling of community members that the costs of living with wildlife far
outweigh the benefits they receive from conservation at the household and community levels, 'a
little milk is better'. To have an in-depth understanding of peoples' perceptions of conservation
activities is useful in identifying areas of improvement, which might look like more honest,
transparent communication about the returns of ecotourism in Olkiramatian and Shompole from
the Group Ranch leadership as well as from SORALO as a mediating body between the
communities and tourism-related funds.

In Chapter V, we explored the role of SORALO as an NGO and land trust that functions in the meta-governance of Olkiramatian and Shompole. Through SORALO's integrated approach to pastoral research and development, combining local traditional knowledge and scientific methods where necessary, the social-ecological management that the Olkiramatian and Shompole communities carry out has a strong grassroots body behind it. As a Maasai-run and Maasai-focused NGO, SORALO has supported a holistic *erematare* ethos in its programs and work, while also furthering pastoralist agendas regarding land security and livestock production across the South Rift. However, as was explained in Chapter V, the role and purpose of SORALO is not adequately understood by most of the people I spoke with. SORALO's conservation 'story'—which takes as its point of departure pastoral management and culture rather than wildlife population numbers—has not been shared with the very people they represent. This is important for a number of reasons, first of which relates to the kind of ownership and pride that Maasai pastoralists feel in knowing that an organization is working *for and with* them, rather than for external agendas or wildlife only.

It is paramount that SORALO make clear the relationship between their larger goals of achieving security of pastoral tenure, sustainable land use planning, and how integration of ecotourism and the 'global story' links Olkiramatian and Shompole to development opportunities and donor support. That being said, the constraints of international funding priorities on an organization like SORALO working at the intersection of pastoralism, conservation, and development play a part in which programs or initiatives garner more resources, which in turn impacts community attitudes and understandings of SORALO's purpose. Shifting funding priorities from wildlife-first or single-species conservation projects, for example, toward landscape-level projects that support livestock production systems and good environmental governance through pastoralism will take time, but is a necessary next step.

In telling the story of Olkiramatian and Shompole, mainstream conservation ideas and practices have been critiqued for their inability to attend to the complexity of rangeland ecology and management, and their obfuscation of pastoralism's role in conserving Kenya's biodiversity. To think about environmental management in terms other than 'conservation', to come up with a culturally-relevant 'social definition' of holistic environmental care that the mainstream conservation story eclipses, has been the goal of this thesis. This social definition is found in the Maasai concept *erematare*, which can be a new lens through which we think about and practice rangeland and biodiversity management in Maasailand. The position I take is not against mainstream conservation discourse, because the 'global story' can be leveraged to serve pastoralist needs (i.e. wearing the conservation 'hat', as Kamanga put it), and I recognize that the underlying logic of CBC *does* provide room for real community decision-making and ownership. My position, which has filled the pages of this thesis, is *beyond* Western-born mainstream conservation as it has been applied to Kenya's Maasailand. Perhaps the best way to carry *erematare* into the future of

rangeland and pastoral policy is to view it as aligning with what Gavin et al. (2015) call "biocultural approaches to conservation", defined as "conservation actions made in the service of sustaining the biophysical and sociocultural components of dynamic, interacting and interdependent social-ecological systems" (ibid.: 141). With the majority of Kenya's wildlife residing in pastoralist community lands, to combine both people-first and wildlife-first objectives in this kind of approach is imperative. Where still possible⁴³, it is time for conservation projects, programs, and organizations in pastoral areas of Kenya to consider that integrating the needs of pastoralists, their livestock, and wildlife can be done. In Maasailand we can rethink the 'conservation story' through the lens of *erematare*, with CBC as one element of a larger pastoral system striving for livelihood security and development, in part through sustaining and benefitting from wildlife.

This story—how Olkiramatian and Shompole have adapted their land management, established conservancies, camps and lodges, and benefitted from the support of SORALO—is distinctive, but needs not be unique. Olkiramatian and Shompole's systems of Group Ranch governance through adaptive land management and dedicated decision-making structures, the moderate success of ecotourism and research-based activities, the connectivity of people and their landscape through communal tenure, and the active presence of an organization like SORALO together represent what I call conditions of possibility. These conditions of possibility have allowed CBC objectives to be integrated into the social-ecological framework of *erematare* while not sacrificing the needs of Maasai pastoralists, their livestock, and their visions of development. A number of lessons can be learned from the way that Olkiramatian and Shompole have managed

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⁴³ By this I am referring to the pastoral areas that still have the chance to implement land use planning to best configure grazing land for the mutual benefit of livestock and wildlife species. A continuous, connected, and communally held landscape would be the ideal for this, thus we might refer to Fig. 7 where group ranch ownership and subdivision status was reported.

a complex landscape and adapted to changing conditions and new opportunities such as engagement in conservation. I recognize Olkiramatian and Shompole as cases where local institutions are in line with conservation goals, but in which the primary motivation is to secure and develop pastoral livelihoods, rather than conserve wildlife species; in this system, a complementarity has been struck between pastoralist and conservationist aims. Being a locally-developed organization headed by a Olkiramatian leader that is also directly supported by—and enmeshed within—a network of transnational NGOs and donors, SORALO has played an integral role in maintaining an open, communal landscape for pastoralists and wildlife alike, but also in using conservation-oriented business and research activities as one strategy among many aimed at community development.

In my last conversation with Kamanga, he explained that "[w]e have to work so that everything we do is supporting [the] core, which is land security. We can do research and conservation, but towards securing the landscape. This is not what I want, this is what we *must* do" (interview in English, 05-08-17). For pastoralism to continue and thrive as the primary subsistence strategy in Olkiramatian and Shompole, and in other Maasai communities in southern Kenya, adaptability to changing social and environmental conditions will be as important as securing the landscape. Trends of hotter and dryer temperatures are already impacting pastoralists in the South Rift as healthy pasture becomes more variable with sporadic rainfall and prolonged drought periods (personal communication, summer 2017). Soft-boundaries, like the conservation areas of Olkiramatian and Shompole that double as a dry season grass bank, rather than hard-boundaries suggestive of land individualization or subdivision, are crucial for wildlife species and pastoral movement. To develop livestock-based strategies, and reduce the very real costs of 'doing conservation' in Maasai communities such as loss of livestock, crop raiding, or human injury,

interventions must be recognized and made at the policy level. In the conclusion of her book, *Savannas of Our Birth*, ecologist Robin Reid (2012) offers conservationists, pastoralists, policymakers, governments, investors, and academics five principles to achieve a "middle ground" between the diverse goals of the aforementioned stakeholders: empowerment, benefits, equity, adaptive stewardship and management, and collaboration (ibid.: 251-258). The dispelling of antipastoralism assumptions built into Kenyan legislation is long overdue, and might be reconstructed through the lens of *erematare* to reach this productive "middle ground". I propose that the Maasai communities in Olkiramatian and Shompole, for all the reasons described above, are approaching this "middle ground", a vision described by Reid (2012) as comprising real community decision-making power, a locally appointed or elected advisory committee that has real power to determine who bears the costs and receives the benefits of wildlife, and having revenues from conservation-as-tourism be allocated in a completely transparent manner (ibid.: 251-253).

This is where we end: *erematare* as a new story; a cross-cultural conservation ethic; a biocultural approach; and a culturally-relevant lens through which environmental care in Maasailand can be understood, and done, better. To re-conceptualize the links between the human and natural world through *erematare* requires policymakers and publics to "acknowledge the validity of other knowledge systems" (Gavin et al. 2015: 143), support Maasai voices and values, which in a sense means reclaiming the story of pastoral coexistence to fit the twenty-first century context. Recognizing the compatibility of raising livestock and protecting wildlife within a single governance system means caring for livestock, advocating for ecosystem connectivity through communal or cooperative tenure, and supporting adaptive pastoral management of land to secure sustainable and productive futures. In the pastoral rangelands of Kenya, these productive futures may very well be achieved by thinking toward *erematare* and beyond conservation.

References

- Abel, T. and Stepp, J. R. (2003). A new systems ecology for anthropology. *Conservation Ecology*, 7 (3): 12.
- Adams, J. S., & McShane, T. O. (1992). *The myth of wild Africa: conservation without illusion*. University of California Press.
- Adams, W. M., Aveling, R., Brockington, D., Dickson, B., Elliott, J., Hutton, J., Roe, D., Vira, B., & Wolmer, W. (2004). Biodiversity conservation and the eradication of poverty. *Science*, 306 (5699): 1146-1149.
- Adams, W. M. & Hutton, J. (2007). Parks, people and poverty: political ecology and biodiversity conservation. *Conservation and Society*, 5: 147-183.
- Adger, W. N., Benjaminsen, T. A., Brown, K., & Svarstad, H. (2001). Advancing a political ecology of global environmental discourses. *Development and change*, 32 (4): 681-715.
- Agnew, A.D.Q., Mwendia, C.M., Oloo, G.O., Roderick, S., Stevenson, P. (2000). Landscape monitoring of semi-arid rangelands in the Kenyan Rift Valley. *African Journal of Ecology*, 38: 277-285.
- Agrawal, A. (2005a). Environmentality: Community, intimate government, and the making of environmental subjects in Kumaon, India. *Current Anthropology*, 46(2), 161-190.
- Agrawal, A. (2005b). *Environmentality: Technologies of government and the making of subjects*. Durham, NC: Duke University Press.
- Behnke, R. H. (2000). Equilibrium and non-equilibrium models of livestock population dynamics in pastoral Africa: their relevance to Arctic grazing systems. *Rangifer*, 20 (2-3): 141-152.
- Behnke, R. H. (2008). The drivers of fragmentation in arid and semi-arid landscapes. In *Fragmentation in Semi-Arid and Arid Landscapes*, Springer, Dordrecht. pp. 305-340.
- Behnke, R. H., Scoones, I., & Kerven, C. (1993). *Range ecology at disequilibrium*. London, UK: Overseas Development Institute.
- Benjaminsen, T. A., & Svarstad, H. (2010). The death of an elephant: Conservation discourses versus practices in Africa. *Forum for development studies*, 37 (3): 385-408.
- Berkes, F. (2004). Rethinking community-based conservation. *Conservation biology*, 18 (3): 621-630.
- Berkes, F. (2007). Community-based conservation in a globalized world. *Proceedings of the National academy of sciences*, 104 (39): 15188-15193.

- Berkes, F. (2012) Sacred Ecology: Traditional Ecological Knowledge and Resource Management. (3rd edn), Taylor & Francis.
- Berkes, F. (2013). "Poverty reduction isn't just about money: community perceptions of conservation benefits", in Roe, D., Elliot, J., Sandbrook, C., & Walpole, M. (eds.). *Biodiversity conservation and poverty alleviation: Exploring the evidence for a link*. Wiley-Blackwell, pp. 270-285.
- Berkes, F., Colding, J., & Folke, C. (2000). Rediscovery of traditional ecological knowledge as adaptive management. *Ecological applications*, 10 (5): 1251-1262.
- Berkes, F., & Folke, C. (1998). "Linking social and ecological systems for resilience and sustainability" in *Linking social and ecological systems: management practices and social mechanisms for building resilience*, Beijer Discussion Paper Series No. 52: 1-16.
- Bernard, H. R., & Gravlee, C. C. (eds.). (2014). *Handbook of methods in cultural anthropology*. London: Rowman & Littlefield.
- Blaikie, P. M. & Brookfield, H. C. (eds.). 1987. *Land degradation and society*. London/New York: Methuen.
- Briske, D. D., Illius, A. W., & Anderies, J. M. (2017). "Non-equilibrium ecology and resilience theory", in Briske, D. (eds.). *Rangeland Systems. Springer Series on Environmental Management.* Springer, pp. 197-223.
- Brockington, D. (2002). Fortress Conservation: The Preservation of the Mkomazi Game Reserve, Tanzania. Bloomington: Indiana University Press.
- Brockington, D. (2011). A Brief Guide to (Conservation) NGOs. *Current Conservation*, 5 (1): 30-31.
- Brockington, D. (2015). El poder perdurable de la Conservación Fortaleza en África [The enduring power of fortress conservation in Africa]. *Nova Africa* 32 (Enero 2015).
- Brockington, D., Duffy, R., & Igoe, J. (2008). *Nature Unbound: Conservation, Capitalism and the Future of Protected Areas.* London: Earthscan, pp. 249.
- Brockington, D., & Igoe, J. (2006). Eviction for conservation: a global overview. *Conservation and Society*, 4 (3): 424-470.
- Brockington, D., & Scholfield, K. (2010a). The conservationist mode of production and conservation NGOs in sub-Saharan Africa. *Antipode*, 42 (3): 551-575.
- Brockington, D., & Scholfield, K. (2010b). Expenditure by conservation nongovernmental organizations in sub-Saharan Africa. *Conservation Letters*, 3 (2): 106-113.

- Brockington, D., & Scholfield, K. (2010c). The work of conservation organisations in sub-Saharan Africa. *The Journal of Modern African Studies*, 48 (1): 1-33.
- Brockington, D., Scholfield, K., & Ladle, R. (2018). Anthropology of Conservation NGOs: Learning from a Sectoral Approach to the Study of NGOs. In *The Anthropology of Conservation NGOs* (pp. 47-70). Palgrave Macmillan, Cham.
- Brooks, J. S., Waylen, K. A., & Mulder, M. B. (2012). How national context, project design, and local community characteristics influence success in community-based conservation projects. *Proceedings of the National Academy of Sciences*, 109 (52): 21265-21270.
- Brooks, J., Waylen, K. A., & Mulder, M. B. (2013). Assessing community-based conservation projects: A systematic review and multilevel analysis of attitudinal, behavioral, ecological, and economic outcomes. *Environmental Evidence*, 2 (2): 1-34.
- Brosius, J. P. (1997). Endangered forest, endangered people: environmentalist representations of indigenous knowledge. *Human Ecology*, 25 (1): 47-69.
- Brosius, J. P. (1999). Analyses and interventions: Anthropological engagements with environmentalism. *Current Anthropology*, 40 (3): 277-310.
- Brosius, J. P. (2006). Common ground between anthropology and conservation biology. *Conservation biology*, 20 (3): 683-685.
- Brosius, J. P., & Russell, D. (2003). Conservation from above: an anthropological perspective on transboundary protected areas and ecoregional planning. *Journal of sustainable forestry*, 17 (1): 39-66.
- Bryant, R. L. (1992). Political ecology: an emerging research agenda in Third-World studies. *Political geography*, 11 (1): 12-36.
- Bryant, R. L., & Bailey, S. (1997). *Third world political ecology*. Psychology Press, pp. 231.
- Bryman, A. (2008). *Social Research Methods*. (3rd edn), Oxford/New York: Oxford University Press.
- Büscher, B. (2014). Selling success: Constructing value in conservation and development. *World Development*, 57: 79-90.
- Büscher, B., Dressler, W., & Fletcher, R. (eds.). (2014). *Nature Inc.: environmental conservation in the neoliberal age*. University of Arizona Press.
- Büscher, B., & Fletcher, R. (2015). Accumulation by conservation. *New political economy*, 20 (2): 273-298.

- Büscher, B., Sullivan, S., Neves, K., Igoe, J., & Brockington, D. (2012). Towards a Synthesized Critique of Neoliberal Biodiversity Conservation. *Capitalism Nature Socialism*, 23 (2): 4-30.
- Butt, B., & Turner, M. D. (2012). Clarifying competition: the case of wildlife and pastoral livestock in East Africa. *Pastoralism: Research, Policy and Practice*, 2 (1): 9.
- Calfucura, E. (2018). Governance, Land and Distribution: A Discussion on the Political Economy of Community-Based Conservation. *Ecological Economics*, 145: 18-26.
- Ceballos, G., Ehrlich, P. R., & Dirzo, R. (2017). Biological annihilation via the ongoing sixth mass extinction signaled by vertebrate population losses and declines. *Proceedings of the National Academy of Sciences*, 114 (30): E6089-E6096.
- Chapin, M. (2004). A Challenge to Conservationists. World Watch Magazine, November/December, 17-31.
- Cheung, H. (2012). Tourism in Kenya's national parks: A cost-benefit analysis. *SURG Journal*, 6 (1): 31-40.
- Clark, T. (2008). 'We're Over-Researched Here!' Exploring Accounts of Research Fatigue within Qualitative Research Engagements. *Sociology*, 42 (5): 953-970.
- Clements, T., & Milner-Gulland, E. J. (2015). Impact of payments for environmental services and protected areas on local livelihoods and forest conservation in northern Cambodia. *Conservation Biology*, 29 (1): 78-87.
- Cronon, W. (1996). *Uncommon ground: rethinking the human place in nature*. New York: W. W. Norton & Company.
- Curtain, C. G. (2015). The science of open spaces: Theory and Practice for conserving large complex systems, Washington: Island Press, pp. 255.
- Conservation International. (2018). *Hotspots: targeted investment in nature's most important places*. Retrieved from https://www.conservation.org/How/Pages/Hotspots.aspx.
- DeWalt, K. M. (2014). "Participant observation", in Bernard, H. R. & Gravlee, C. C. (eds.). *Handbook of methods in cultural anthropology* (2nd ed.), London: Rowman & Littlefield, pp. 251-292.
- Dolrenry, S., Stenglein, J., Hazzah, L., Lutz, R. S., & Frank, L. (2014). A metapopulation approach to African lion (Panthera leo) conservation. *PloS one*, 9 (2): e88081.
- Dougherty, M. E. (2002). The politics of environmental conservation: A study in civil society, scales of influence, and corruption in Panama. *PhD Dissertation*, University of Pennsylvania, pp. 264.

- Dressler, W. H., Fletcher, R., & Fabinyi, M. (2018). Value from Ruin? Governing Speculative Conservation in Ruptured Landscapes. *TRaNS: Trans-Regional and-National Studies of Southeast Asia*, 6 (1): 73-99.
- Ellis, J. E., & Swift, D. M. (1988). Stability of African pastoral ecosystems: alternate paradigms and implications for development. *Rangeland Ecology & Management/Journal of Range Management Archives*, 41 (6): 450-459.
- Fabinyi, M., L. Evans, & S. J. Foale. (2014). Social-ecological systems, social diversity, and power: insights from anthropology and political ecology. *Ecology and Society*, 19 (4, 28): 1-12.
- Fairhead, J. and Leach, M. (1995). False forest history, complicit social analysis: rethinking some West African environmental narratives. *World Development*, 23 (6): 1023-1035.
- Fairhead, J., & Leach, M. (1996). *Misreading the African landscape: society and ecology in a forest- savanna mosaic*. Cambridge University Press, pp. 354.
- Fernandez-Giménez, M. E. (2002). Spatial and social boundaries and the paradox of pastoral land tenure: A case study from postsocialist Mongolia. *Human Ecology*, 30: 49-78.
- Finger, M., & Princen, T. (2013). *Environmental NGOs in world politics: Linking the local and the global*. Routledge.
- Forsyth, T. (2004). *Critical political ecology: the politics of environmental science*. Routledge, pp. 323.
- Foucault, M. (1977). *Power/knowledge: Selected interviews and other writings, 1972-1977.* C. Gordon (ed.). New York: Pantheon.
- Fox, G. R. (2017, August 29). The dark and white side of conservation in Kenya. Retrieved from https://africasacountry.com/2017/08/the-dark-and-white-side-of-conservation-in-kenya/
- Fynn, R. W., Augustine, D. J., Peel, M. J., & Garine-Wichatitsky, M. (2015). Strategic management of livestock to improve biodiversity conservation in African savannahs: A conceptual basis for wildlife–livestock coexistence. *Journal of Applied Ecology*, 53 (2): 388-397.
- Fynn, R. W., Kirkman, K. P., & Dames, R. (2017). Optimal grazing management strategies: evaluating key concepts. *African Journal of Range & Forage Science*, 34 (2): 87-98.
- Gadgil, M., Berkes, F., & Folke, C. (1993). Indigenous knowledge for biodiversity conservation. *Ambio*, 22 (2/3): 151-156.

- Galaty, J. G. (1980). "The Maasai group ranch politics and development in an African pastoral society", in Salzman, P. C. (ed.). When Nomads Settle: Processes of Sedentarization as Adaptation and Response, pp. 157-172
- Galaty, J. G. (1982). Being "Maasai"; being "people-of-cattle": Ethnic shifters in East Africa. *American ethnologist*, 9 (1): 1-20.
- Galaty, J. G. (1992). "This Land is Yours" social and economic factors in the privatization, subdivision and sale of Maasai ranches. *Nomadic Peoples*, 30: 26-40.
- Galaty, J. G. (1994). Ha(l)ving land in common: the subdivision of Maasai group ranches in Kenya. *Nomadic Peoples*, 34/35: 109-122.
- Galaty, J. G. (2013a). "Land Grabbing in the Eastern African Rangelands", in Catley, A., Lind, J., & Scoones, I. (eds.). *Development at the margins: Pathways of Change in the Horn of Africa*, London: Routledge, pp. 143-154.
- Galaty, J.G. (2013b). "The Indigenization of Pastoral Modernity: Territoriality, Mobility, and Poverty in Dryland Africa", in Bollig, M., Schnegg, M., & Wotzka, H.P. (eds.). *African Pastoralism: Past, Present, Future. The Emergence, History and Contemporary Political Ecology of African Pastoralism.* Oxford: Berghahn Books, pp. 473-510.
- Galaty, J. G. (2013c). The collapsing platform for pastoralism: land sales and land loss in Kajiado County, Kenya. *Nomadic Peoples*, 17 (2): 20-39.
- Galaty, J. G. (2016). Reasserting the commons: Pastoral contestations of private and state lands in East Africa. *International Anthropologist* 107 (3): 1-20.
- Galvin, K. A., Reid, R. S., Behnke, R. H., & Hobbs, N. T. (eds.) (2008). *Fragmentation in semi-arid and arid landscapes: Consequences for Human and Natural Systems*. Dordrecht, The Netherlands: Springer, pp. 402.
- Gavin, M. C., McCarter, J., Mead, A., Berkes, F., Stepp, J. R., Peterson, D., & Tang, R. (2015). Defining biocultural approaches to conservation. *Trends in ecology & evolution*, 30 (3): 140-145.
- Ghimire, K. B., & Pimbert, M. P. (eds.). (2013). *Social change and conservation* (Vol. 16). Routledge.
- Godfrey, K. B. H. (2016). "Approaches to community-based conservation in Kenya: Case studies from Amboseli, Maasai Mara, and Laikipia." *Unpublished undergraduate research paper*. Submitted to J. G. Galaty, McGill University.
- Goldman, M. (2007). Tracking wildebeest, locating knowledge: Maasai and conservation biology understandings of wildebeest behavior in Northern Tanzania. *Environment and Planning D: Society and space*, 25 (2): 307-331.

- Grandin, B. E. (1991). "The Maasai: socio-historical context and group ranches", in Bekure, S., de Leeuw, P. N., Grandin, B. E., and P. J. H. Neate (eds.). *Maasai herding: an analysis of the livestock production system of Maasai pastoralists in eastern Kajiado District, Kenya*. ILCA, Addis Ababa, Ethiopia
- Groom, R., & Harris, S. (2008). Conservation on community lands: the importance of equitable revenue sharing. *Environmental Conservation*, 35 (242).
- Groom, R., & Western, D. (2013). Impact of land subdivision and sedentarization on wildlife in Kenya's southern rangelands. *Rangeland Ecology and Management*, 67.
- Gruber, J., Mbatu, R., Johns, R. and Dixon, B. (2018), Measuring conservation success beyond the traditional biological criteria: the case of conservation projects in Costa Rica, Mekong Valley, and Cameroon. *Natural Resource Forum*, 42: 19-31.
- Hardin, G. (1968). The tragedy of the commons. Science, 13 (162): 1243-1248.
- Helmke, G. & Levitsky, D. Institutions and comparative politics: a research agenda. *Perspectives on Politics*, 2 (4): 725-740.
- Heynen, N., & Robbins, P. (2005). The neoliberalization of nature: Governance, privatization, enclosure and valuation. *Capitalism Nature Socialism*, 16 (1): 5-8.
- Hobbs, N. T., Galvin, K. A., Stokes, C. J., Lackett, J. M., Ash, A. J., Boone, R. B., Reid, R. S., & Thornton, P. K. (2008). Fragmentation of rangelands: implications for humans, animals, and landscapes. *Global Environmental Change*, 18 (4): 776-785.
- Hoben, A. (1995). Paradigm and politics: The cultural construction of environmental policy in Ethiopia. *World Development*, 23: 1007-1021.
- Hoffman, D. M. (2014). Conch, cooperatives, and conflict: Conservation and resistance in the Banco Chinchorro Biosphere Reserve. *Conservation and Society*, 12 (2): 120-132.
- Holmes, D. R., & Marcus, G. E. (2005). "Cultures of expertise and the management of globalization: toward the re-functioning of ethnography", in Ong, A. & Collier, S. J. (eds.). *Global assemblages: technology, politics, and ethics as anthropological problems.* Blackwell Publishing Ltd, pp. 235-252.
- Holmes, G. (2011). Conservation's friends in high places: Neoliberalism, networks, and the transnational conservation elite. *Global Environmental Politics*, 11 (4): 1-21.
- Holmes, G. (2013). Exploring the relationship between local support and the success of protected areas. *Conservation and Society*, 11 (1): 72-82.
- Homewood, K. M. (2008). Ecology of African pastoralist societies. James Currey.

- Homewood, K. M. (2009). "Policy and practice in Kenya rangelands: impacts on livelihoods and wildlife", in Homewood, K., Kristjanson, P & Chenevix Trench, P. (eds.). *Staying Maasai?: Livelihoods, Conservation and Development in East African Rangelands*. New York: Springer, pp. 335-367.
- Homewood, K. M. (2017). "They Call It Shangri-La": Sustainable Conservation, or African Enclosures?", in *The Anthropology of Sustainability*. New York: Palgrave Macmillan, pp. 91-109.
- Homewood, K. M., & Rodgers, W. A. (1984). Pastoralism and conservation. *Human Ecology*, 12 (4): 431-441.
- Homewood, K., Kristjanson, P & Chenevix Trench, P. (eds.). (2009a). *Staying Maasai?:* Livelihoods, Conservation and Development in East African Rangelands. New York: Springer.
- Homewood, K., Kristjanson, P. & Chenevix Trench, P. (2009b). "Changing land use, livelihoods and wildlife conservation in Maasailand", in Homewood, K., Kristjanson, P & Chenevix Trench, P. (eds.). Staying Maasai?: Livelihoods, Conservation and Development in East African Rangelands. New York: Springer, pp. 1-42.
- Homewood, K., Chenevix Trench, P. & Kristjanson, P. (2009c). "Staying Maasai? Pastoral livelihoods, diversification and the role of wildlife in development", in Homewood, K., Kristjanson, P & Chenevix Trench, P. (eds.). Staying Maasai?: Livelihoods, Conservation and Development in East African Rangelands. New York: Springer, pp. 369-408.
- Homewood, K., Chenevix Trench, P. & Brockington, D. (2012). "Pastoralism and Conservation –Who Benefits?", in Cooper, W., Roe, D., Elliott, J., Sandbrook, C., & Walpole, M. (eds.). *Biodiversity Conservation and Poverty Alleviation: Exploring the Evidence for a Link*, pp. 239-252.
- Hughes, L. (2006). Moving the Maasai: a colonial misadventure. Springer, pp. 238.
- Hughes, L. (2007). Rough time in paradise: Claims, blames and memory making around some protected areas in Kenya. *Conservation and Society*, 5 (3): 307-330.
- Hughes, R., & Flintan, F. (2001). *Integrating conservation and development experience: A review and bibliography of the ICDP literature*. London: International Institute for Environment and Development.
- Hulme, D. & Murphree, M. (eds.). (2001). *African Wildlife and Livelihoods: The Promise and Performance of Community Conservation*. Oxford: James Currey Ltd.
- Igoe, J. (2004). Conservation and Globalization: A study of the National Parks and Indigenous

- Igoe, J. & Brockington, D. (2007). Neoliberal conservation: A brief introduction. *Conservation and Society*, 5 (4): 432-449.
- Ihwagi, F. W., Wang, T., Wittemyer, G., Skidmore, A. K., Toxopeus, A. G., Ngene, S., King, J., Worden, J., Omondi, P., & Douglas-Hamilton, I. (2015). Using poaching levels and elephant distribution to assess the conservation efficacy of private, communal and government land in Northern Kenya. *PloS One*, 10 (9): e0139079.
- Jandreau, C., & Berkes, F. (2016). Continuity and change within the social-ecological and political landscape of the Maasai Mara, Kenya. *Pastoralism*, 6 (1): 1-15.
- Kenya Wildlife Conservancies Association. (2016). State of wildlife conservancies in Kenya. 2016 Report.
- Kieti, D., Manono, G., & Momanyi, S. (2013). Community conservation paradigm: The case studies of Mwaluganje elephant sanctuary and Il Ngwesi community conservancy in Kenya. *Research on Humanities and Social Sciences*, 3 (1): 206-217.
- Klopp, J. M. and Lumumba, O. (2014). "Kenya and the 'global land grab': a view from below", in Kaag, M. & Zoomers, A. (eds.). *The global land grab: beyond the hype*. Zed Books, pp. 54-68.
- Kristjanson, P., Radeny, M., Nkedianye, D., Kruska, R., Reid, R., Gichohi, H., Atieno, F., & Sanford, R. (eds.). (2002). *Valuing alternative land-use options in the Kitengela wildlife dispersal area of Kenya*. ILRI Impact Assessment Series 10. A joint ILRI/ACC Report. Nairobi: ILRI, pp. 61.
- Lale'enok Resource Centre Website. (2018). "About Lale'enok: History". Retrieved from https://laleenok.wordpress.com/history/
- Lamers, M., Nthiga, R., van der Duim, R., & van Wijk, J. (2014a). Tourism-conservation enterprises as a land-use strategy in Kenya. *Tourism Geographies* 16 (3): 474-489.
- Lamers, M., van der Duim, R., van Wijk, J., Nthiga, R., & Visseren-Hamakers, I. J. (2014b). Governing conservation tourism partnerships in Kenya. *Annals of Tourism Research*, 48: 250-265.
- Lamers, M., van der Duim, R., Nthiga, R., van Wijk, J., & Waterreus, S. (2015). Implementing tourism-conservation enterprises: A comparison of three lodges in Kenya, in *Institutional Arrangements for Conservation, Development and Tourism in Eastern and Southern Africa* Netherlands: Springer. pp. 219-238.

- Lamprey, H. F. (1983). Pastoralism yesterday and today: the over-grazing problem. *Ecosystems of the World*.
- Lamprey, R. H., & Reid, R. S. (2004). Expansion of human settlement in Kenya's Maasai Mara: what future for pastoralism and wildlife? *Journal of Biogeography*, 31 (6): 997-1032.
- Lankester, F., & Davis, A. (2016). Pastoralism and wildlife: historical and current perspectives in the East African rangelands of Kenya and Tanzania. *Revue scientifique et technique* (*International Office of Epizootics*), 35 (2): 473-484.
- Li, T. M. (2007). *The will to improve: governmentality, development, and the practice of politics*. Durham, North Carolina, USA: Duke University Press.
- Little, P. D. (2013). "We Now Milk Elephants: The community conservation business in rural Kenya", in Little, P. D. (ed). *Economic and political reform in Africa: anthropological perspectives*. Indiana University Press, pp. 64-90.
- MacKenzie, J. M. (1988). *The empire of nature: Hunting, conservation and British imperialism*. Manchester: Manchester University Press, pp. 340.
- Maliasili Website. (2018). "Team: Fred Nelson". Retrieved from: https://www.maliasili.org/team
- Marchese, C. (2015). Biodiversity hotspots: A shortcut for a more complicated concept. *Global Ecology and Conservation*, 3: 297-309.
- Matheka, R. M. (2008) Decolonisation and Wildlife Conservation in Kenya, 1958–68. *The Journal of Imperial and Commonwealth History*, 36 (4): 615-639.
- Mbaria, J., & Ogada, M. (2016). *The big conservation lie: the untold story of wildlife conservation in Kenya*. Auburn, WA: Lens & Lens Publishing, pp. 200.
- McAfee, K. (1999). Selling nature to save it? Biodiversity and green developmentalism. *Environment and planning D: society and space*, 17 (2): 133-54.
- Meguro, T. (2014). Becoming conservationists, concealing victims: conflict and positionings of Maasai, regarding wildlife conservation in Kenya. *African Study Monographs*, 50: 155-72.
- Milder, J. C., Hart, A. K., Dobie, P., Minai, J., & Zaleski, C. (2014). Integrated landscape initiatives for African agriculture, development, and conservation: a region-wide assessment. *World Development*, 54: 68-80.
- Moller, H., F. Berkes, P. O. Lyver, and M. Kislalioglu. (2004). Combining science and traditional ecological knowledge: monitoring populations for co-management. *Ecology and Society*, 9 (3): 2

- Moiko, S. S. (2011). "Diversification, Experimentation, and Adaptation: Pastoralists in Communal Governance of Resources and livelihoods Strategies", in *The Future of Pastoralism in Africa Conference, Addis Ababa*.
- Moiko, S. S. (2013). "Pastoralists at crossroads: Community resource governance in the context of a transitioning rangelands tenure system", in Sternberg, T., & Chatty, D. (eds.). *Modern pastoralism and conservation: Old problems, new challenges*, Cambridge: Whitehorse Press, pp. 76-94.
- Mori, A. (2016). 'The Wildlife will be like our Cattle': Devolution and the Maasai community in the Lake Natron Wildlife Management Area. MA M, McGill University.
- Mwangi, E. (2007). Socioeconomic change and land use in Africa: the transformation of property rights in Maasailand (1st ed). New York: Palgrave Macmillan, pp. 219.
- Myers, N., Mittermeier, R. A., Mittermeier, C. G., Da Fonseca, G. A., & Kent, J. (2000). Biodiversity hotspots for conservation priorities. *Nature*, 403 (6772): 853-858.
- Nadasdy, P. (1999). The politics of TEK: Power and the" integration" of knowledge. *Arctic Anthropology*, 36 (1/2): 1-18.
- Naidoo, R., Weaver, L.C., Diggle, R.W., Matongo, G., Stuart-Hill, G., & Thouless, C. (2016). Complementary benefits of tourism and hunting to communal conservancies in Namibia. *Conservation Biology*, 30: 628-638.
- Neumann, R. P. (1997). Primitive ideas: Protected area buffer zones and the politics of land in Africa. *Development and Change*, 28 (3): 559-82.
- Neumann, R. P. (1998). *Imposing wilderness: struggles over livelihood and nature preservation in Africa*. Berkeley: University of California Press.
- Neumann, R. P. (2014). Making political ecology. Routledge. pp. 224.
- Ng'ethe, J. C. (1992). "Group ranch concept and practice in Kenya with special emphasis on Kajiado District", in Kategile J. A. & Mubi S. (eds.). Future of livestock industries in East and southern Africa. Proceedings of a workshop help at Kadoma Ranch Hotel, Zimbabwe, ILCA, Addis Ababa, Ethiopia. pp. 227.
- Northey, M., Tepperman, L., & Albanese, P. (2012). *Making sense in the social sciences*. Oxford University Press.
- Norton-Griffiths, M. (1995). "Economic incentives to develop the rangelands of the Serengeti", in Sinclair, A. and Rees, P. (eds.). *Serengeti*. University of Chicago Press, pp. 588-604.

- Norton-Griffiths, M. (2007). How many wildebeest do you need?. *World Economics*, 8 (2): 41-64.
- Norton-Griffiths, M., & Southey, C. (1995). The opportunity costs of biodiversity conservation in Kenya. *Ecological Economics*, 12 (2): 125-139.
- Odadi, W. O., Karachi, M. K., Abdulrazak, S. A., & Young, T. P. (2011). African wild ungulates compete with or facilitate cattle depending on season. *Science*, 333 (6050): 1753-1755.
- Ogutu, J. O., Owen-Smith, N., Piepho, H.P., Said, M.Y. (2011). Continuing wildlife population declines and range contraction in the Mara region of Kenya during 1977-2009. *Journal of Zoology*, 285: 99-109.
- Ogutu, J. O., Piepho, H.P., Dublin, H.T., Bhola, N. & Reid, R.S. (2009). Dynamics of Mara-Serengeti ungulates in relation to land use changes. *Journal of Zoology*, 278: 1-14.
- Ogutu, J. O., Piepho, H.-P., Said, M.Y., Ojwang, G.O., Njino, L.W., Kifugo, S.C., & Wargute, P.W. (2016). Extreme wildlife declines and concurrent increase in livestock numbers in Kenya: what are the causes? *PLoS One*, 11 (9): e0163249.
- Okello, M. M. (2014). Economic contribution, challenges and way forward for wildlife-based tourism industry in Eastern African countries. *Journal of Tourism and Hospitality*, 3 (1).
- Ondicho, T. G. (2018). Indigenous Ecotourism as a Poverty Eradication Strategy: A Case Study of the Maasai People in the Amboseli Region of Kenya. *African study monographs*. *Supplementary issue*, 56: 87-109.
- Osano, P. M., Said, M. Y., de Leeuw, J., Moiko, S. S., Ole Kaelo, D., Schomers, S., Birner, R., & Ogutu, J. O. (2013). Pastoralism and ecosystem-based adaptation in Kenyan Masailand. *International Journal of Climate Change Strategies and Management*, 5 (2): 198-214.
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective actions.* Cambridge: Cambridge University Press.
- Owen-Smith, R. N. (2002). Adaptive herbivore ecology: from resources to populations in variable environments. Cambridge University Press, pp. 374.
- Owen-Smith, N. (2004). Functional heterogeneity in resources within landscapes and herbivore population dynamics. *Landscape Ecology*, 19 (7): 761-771.
- Payne, D. L., & Kotikash, L. (2005). Maa (Maasai) Dictionary, "Categories: animal husbandry". Retrieved from: http://pages.uoregon.edu/dlpayne/Maa%20Lexicon/categories/main.htm

- Pellis, A., Anyango-van Zwieten, N., Waterreus, S., Lamers, M., & van der Duim, R. (2014). Tourism captured by the poor evaluation of aid investments in the tourism sector of Kenya's ASALs. Wageningen: Wageningen University.
- Pellis, A., Lamers, M., & Van der Duim, R. (2015). Conservation tourism and landscape governance in Kenya: the interdependency of three conservation NGOs. *Journal of Ecotourism*, 14 (2-3): 130-144.
- Peterson, R. B., Russell, D., West, P., & Brosius, J. P. (2010). Seeing (and doing) conservation through cultural lenses. *Environmental management*, 45 (1): 5-18.
- Pollini, J. (2015). "Fieldwork report: Olkiramatian, Kenya". The Institutional Canopy of Conservation (I-CAN) Report. *Unpublished*.
- Puzzolo, C. N. (2017). The emergence of post-wilderness conservation: examining the case of Kenya's Maasailand. MA Thesis, The New School.
- Rands, M. R., Adams, W. M., Bennun, L., Butchart, S. H., Clements, A., Coomes, D., Entwistle, A., Hodge, I., Kapos, V., Scharlemann, J.P., & Sutherland, W. J. (2010). Biodiversity conservation: challenges beyond 2010. *Science*, 329 (5997): 1298-1303.
- Reid, R. S. (2012). Savannas of our birth: people, wildlife, and change in East Africa. University of California Press, pp. 416.
- Reid, R. S., Nkedianye, D., Said, M. Y., Kaelo, D., Neselle, M., Makui, O., Onetu, L., Kiruswa, S., Kamuaro, N.O., Kristjanson, P., & Ogutu, J. (2016). Evolution of models to support community and policy action with science: Balancing pastoral livelihoods and wildlife conservation in savannas of East Africa. *Proceedings of the National Academy of Sciences*, 113 (17): 4579-4584.
- Republic of Kenya. (1938). Trust Land Act (No. 28 of 1938). Nairobi: Government Press.
- Republic of Kenya. (1966). Lawrence Report Recommendations (Sessional Paper No. 1 of 1962/1963). Nairobi: Government Press.
- Republic of Kenya. (1968). *Land (Group Representatives) Act (Cap. 287)*. Nairobi: Government Press.
- Republic of Kenya. (2010). The Constitution of Kenya. Nairobi: Government Press.
- Republic of Kenya. (2013). *Wildlife Conservation and Management Act (No. 47 of 2013)*. Nairobi: Government Press.
- Republic of Kenya. (2015). *Kenya's Natural Capital: A Biodiversity Atlas*. Nairobi: Government Press.
- Republic of Kenya. (2016). Community Land Act (No. 27 of 2016). Nairobi: Government Press.

- Riamit, S. K. (2014). Dissolving the Pastoral Commons, Enhancing Enclosures: Commercialization, Corruption and Colonial Continuities amongst the Maasai Pastoralists of Southern Kenya. MA Thesis, McGill University.
- Robinson, L. W., Ontiri, E., Alemu, T., & Moiko, S. S. (2017). Transcending landscapes: Working across scales and level in pastoral rangeland governance. *Environmental Management*, 60 (2): 185-199.
- Ruiz-Mallén, I., Schunko, C., Corbera, E., Rös, M., & Reyes-García, V. (2015). Meanings, drivers, and motivations for community-based conservation in Latin America. *Ecology and Society*, 20 (3): 33.
- Russell, A. (2011). "Shompole Closure", The Safari and Conservation Co. Retrieved from: https://us2.campaignarchive.com/?u=880cdf0559552a47e4929f0ba&id=0c41fa86a8
- Russell, S., Tyrrell, P., & Western, D. (2018, *in press*). Seasonal interactions of pastoralists and wildlife in relation to pasture in an African savanna ecosystem, *Journal of Arid Environments*, 1-12. Available online April 3 2018, doi: https://doi.org/10.1016/j.jaridenv.2018.03.007
- Rutten, M. (1992). Selling wealth to buy poverty. The Process of the Individualisation of Land Ownership among the Maasai pastoralists of Kajiado District, Kenya, 1890–1990.
- Rutten, M. (2002). Parks beyond Parks: genuine community-based wildlife eco-tourism or just another loss of land for Maasai pastoralists in Kenya? IIED Drylands Programme Issues Paper No. 111. London: Institute for International Environment and Development.
- Sambalino, F., Hulshof, M., Borgia, C., Tolk, L., & Kleinendorst, T. (2015). South Rift Landscape. *Kenya: A baseline study part for the Horn of Africa Climate Change Programme, The Netherlands and Kenya.*
- Sandford, S. (1983). *Management of pastoral development in the Third World*. London: John Wiley & Sons.
- Schuette, P., Creel, S., & Christianson, D. (2013). Coexistence of African lions, livestock, and people in a landscape with variable human land use and seasonal movements. *Biological Conservation*, 157: 148-154.
- Scoones, I. (1993). "Why are there so many animals? Cattle population dynamics in the communal areas of Zimbabwe", in Behnke, R., Scoones, I., & Kerven, C. (eds.). *Range ecology at disequilibrium*. London, UK: Overseas Development Institute, pp. 62-76.
- Scoones, I. (1999). New ecology and the social sciences: what prospects for a fruitful engagement? *Annual Review of Anthropology*, 28: 479-507.

- Scott, C. H. (2013). "Ontology and Ethics in Cree Hunting: animism, totemism and practical knowledge", in Graham Harvey (ed.). *The Handbook of Contemporary Animism*, Durham (UK): Acumen, pp. 159-166.
- Sternberg, T. & Chatty, D. (2013). *Modern pastoralism and conservation: Old problems, new challenges*, Cambridge: Whitehorse Press, pp. 210.
- SORALO General Report. (2017). "South Rift Association of Land Owners: SORALO General Report 2017". Internal document, pp. 1-39.
- SORALO Website. (2018). "Our Vision", in Internal SORALO website planning draft document. *Internal circulation only*.
- SORALO Report. (*Unpublished*). 'A Review of the Lale'enok Resource Centre's Data Collection', study conducted April 2014.
- Stump, D. (2010). "Ancient and backward or long-lived and sustainable?" The role of the past in debates concerning rural livelihoods and resource conservation in Eastern Africa. *World Development*, 38 (9): 1251-1262.
- Sullivan, S. (2013). Banking nature? The spectacular financialisation of environmental conservation. *Antipode*, 45 (1): 198-217.
- Sullivan, S. (2014). The natural capital myth; or will accounting save the world. *The Leverhulme Centre for the Study of Value School of Environment, Education and Development, The University of Manchester: Oxford, UK*.
- Sullivan, S., & Rohde, R. (2002). On non-equilibrium in arid and semi-arid grazing systems. *Journal of Biogeography*, 29 (12): 1595-1618.
- Sunderlin, W. D., Angelsen, A., Belcher, B., Burgers, P., Nasi, R., Santoso, L., & Wunder, S. (2005). Livelihoods, forests, and conservation in developing countries: an overview. *World Development*, 33 (9): 1383-1402.
- Sundstrom, S., Tynon, J. F., & Western, D. (2012). Rangeland privatization and the Maasai experience: Social capital and the implications for traditional resource management in Southern Kenya. *Society & Natural Resources*, 25 (5): 483-498.
- Thompson, M., & Homewood, K. (2002). Entrepreneurs, elites, and exclusion in Maasailand: Trends in wildlife conservation and pastoralist development. *Human Ecology*, 20 (1): 107-138.
- Turner, M. (1993). Overstocking the range: a critical analysis of the environmental science of Sahelian pastoralism. *Economic Geography* 69 (4): 402-421.

- Tyrrell, P., Russell, S., & Western, D. (2017). Seasonal movements of wildlife and livestock in a heterogeneous pastoral landscape: Implications for coexistence and community based conservation. *Global Ecology and Conservation*, 12: 59-72.
- United Nations (UN). (2014). *The Millennium Development Goals Report 2014*. New York, NY: United Nations.
- United Nations Environment Programme (UNEP). (2012). The Future We Want: Biodiversity and Ecosystems—Driving Sustainable Development. United Nations Development Programme Biodiversity and Ecosystems Global Framework 2012-2020. New York: UNEP.
- Vaccaro, I., Smith, E. A., & Aswani, S. (eds.). (2010). *Environmental social sciences: methods and research design*. Cambridge University Press, pp. 382.
- Van Wijk, J., Van der Duim, R., Lamers, M. and Sumba, D. (2015). The emergence of institutional innovations in tourism: the evolution of the African Wildlife Foundation's tourism conservation enterprises. *Journal of Sustainable Tourism*, 23 (1): 104-125.
- West, P., Igoe, J., & Brockington, D. (2006). Parks and peoples: the social impact of protected areas. *Annual Review Anthropology*, 35: 251-277.
- Western, D. (1984). Amboseli National Park: Enlisting landowners to conserve migratory wildlife. *Ambio*, 11 (5): 302-308.
- Western, D. (2008). Ecotourism, conservation and development in East Africa: How the philanthropic traveler can make a difference. *Washington: Center for Responsible Travel*.
- Western, D. (2009). "Foreword", in Homewood, K., Kristjanson, P., & Chenevix Trench, P. (eds.). Staying Maasai? Livelihoods, Conservation and Development in East African Rangelands. New York: Springer, pp. v-viii.
- Western, D., Groom, R. & Worden, J. (2009). The impact of subdivision and sedentarization of pastoral lands on wildlife in an African savanna ecosystem. *Biological Conservation*, 142: 2538–2546.
- Western, D., Waithaka, J., and Kamanga, J. (2015). Finding space for wildlife beyond national parks and reducing conflict through community based conservation: The Kenya experience. *Parks*, 21 (1): 51-62.
- Western, D., Wright, M. R., & Strum, S. C. (eds.). (1994). *Natural connections: perspectives in community-based conservation*. Washington, D.C: Island Press, pp. 581.
- Western, G. (2017). *Conflict or coexistence: Human-lion relationships in Kenya's southern Maasailand and beyond.* Submitted PhD Dissertation. Pembroke College, Oxford University, Oxford, UK.

- Williams, R. (1980). "Ideas of Nature", in *Problems in Materialism and Culture: Selected Essays*. London: Verso, pp. 67-85.
- Worden, J., Western, D., & Waruingi, L. (2009). Exploring potential economic and livelihood impacts of climate change and possible adaptation mechanisms in the Kenyan rangelands. Nairobi: African Conservation Centre, pp. 7.
- Zimmerer, K. (2000). The reworking of conservation geographies: nonequilibrium landscapes and nature-society hybrids. *Annals of the Association of American Geographers* 90 (2): 356-369.

Appendices

Appendices A and B present raw transcribed interview data (translated from Maa) in table form, specifically responses to the questions (1) what does *erematare* mean, (2) what is the definition of 'conservation', and (3) where did this idea or word come from?

Appendix C is the definition of *erematare* written by hand by my research assistant, Dan Sepis ole Lemanyi, then typed out by myself January 2018.

Appendix A

Definitions of *erematare* and 'conservation' by Olkiramatian respondents, with origins or reasoning behind 'conservation' elaborated on in some cases (transcribed directly from interviews carried out May to August 2017).

| Name of respondent | Definition of erematare | Definition of 'conservation' | Origins/reasoning of 'conservation' idea |
|---------------------|---|--|--|
| Siparo Kitesho | N/A | It means management whereby there is some portion of land in the wet or rainy season where people cannot graze their livestock. When it continues to rain, all the people have to be given information to move livestock from this point to the grazing point to conserve pasture. Nowadays we are wise, some years back the <i>morani</i> went and killed wild animals and celebrated this. | N/A |
| Agnes Molo | It has two meanings: (1) keeping of goats and sheep, and (2) management of the land that you own. It is also recognized in the management of the [conservancy] land part. | It is a portion, or section, which is recognized for the conservation of the wildlife. | N/A |
| Maseto ole Siere | It means management or managing the properties you have – the land, the livestock. Managing it very well. | Conservation means an identified section of land where you can preserve. For example, Sampu is a conservancy point, and Lale'enok [is] a conservancy point. It is a place of action. | N/A |
| Lemanyi ole Lemunke | The first thing is to have peace between the people. To have livestock – goats, cows –, to have your wife and children. It means managing, that you will be able to manage your stuff. | It is a place that is identified as a portion of land for keeping of wildlife and also an area to get information for training within the community and homesteads on how to manage the resources. | N/A |
| Charles Mpesi | It is a way of life. There are so many ways that Massai are trying to do with erematare. You are doing something, a livestock keeper or doing cultivation and maybe doing business. [Prompt] With wildlife, we have to accept the reality that we have the wildlife. We go together and we will benefit from our wildlife because they are sharing our resources and that is the only way that we will all be together. The wildlife will get room to live and the community will get benefits — we are in the right line. It's just like cows, we go together and can benefit. | The management of the wildlife. It means that wildlife will still have their room for some years to come. | N/A |

| Name of respondent | Definition of erematare | Definition of 'conservation' | Origins/reasoning of 'conservation' idea |
|----------------------------|--|--|---|
| Kamango ole Tolu | It means having two things: a family and livestock. Once you have one, you try to complete erematare by having the other. It is about management and completion of both family and livestock. Most people want food, clothing, tender care. On the side of Maasai, to manage the people you should have the livestock to be able to provide. The cattle want some things: pasture so that they will be healthy, water points, treatment when they are sick, and someone to monitor them. At the moment there are two important things in livestock; drugs for cattle and breeding where you have enough good breeds. By having the three things: (1) drugs for livestock, (2) good pasture, (3) lots of water, you can say that you have completed the side of caring for livestock. At the grazing points, security is required which is tender care of both humans and livestock. When it comes to your family, children require clothing, food, shelter, education, and for you to know the techniques on how to speak to your family nicely. | In the past, when the formation of the conservancy area occurred, we agreed as a community to get income from there and benefit the whole community by education, medication, for everyone. | N/A |
| Evans Kipaseyia Orrumoi | It is keeping of livestock. | Protection. When you protect something from damage, from misuse. | When I was young, people started thinking of tourism and started forming small groups. They teamed up into groups of 10-15 and made little camp sites. Then, through education, our people came with an idea that we can have a conservancy and put aside such a land |
| Ikayo ole Kiletai | It is by keeping goats, sheep, and cattle. This name is compiling the whole Group Ranch of Olkiramatian because the Maasai say it is the management of human beings, taking care of people. It goes up to taking care of the families. A person has to be cared for. Wife, children, goats, brother, cattle, mother, grandfather – these people all must be managed. | It is conserving the wildlife, taking care of wildlife. That portion of land is bisected and we can request that parcel to graze upon in severe drought, so it is a reserve point for conserving the wildlife. | N/A |
| Nairrugo ole Kasale | You have the man with a family, wife, children, and livestock, and you will be able to manage them all together. | It is conserving or keeping high security for the wildlife. Also a parcel of land that is sectioned where our clients come and can move around to view the wildlife. | People started bringing clients for camping which gave a runway and then we formed up the conservancy area, the LRC, which are now the key organizations managing conservation. |

| Name of respondent | Definition of erematare | Definition of 'conservation' | Origins/reasoning of 'conservation' idea |
|---------------------------------|--|--|---|
| Peter Munterei Moriro | It is a comparison of a lot of things: health, family, land, livestock. You need something to sustain and manage to have erematare. You must manage every item. | It means a section recognized and marked that it is for a conservancy area. It is a place for conserving the wildlife where the environment will not be destructed, no clearing because you must have enough security for the wildlife. It is a place where the clients will come and from one point to another one they can go on game drives. | In the beginning, security was emphasized from the KWS. Those are the people who really informed that if you attempt to catch wildlife we will get you, and you must stop hunting the wild animals. The other organization is SORALO and Dr. Western in 2005 where they came and after a visit in Maasai Mara where they same some changes there, they said there are some people practicing this so 'will you try also to conserve this wildlife as a community?' We took it as an action and kept aside a piece of land that is recognized as a conservancy and we have seen a big benefit. |
| Anonymous | The way that the Maasai use is to make sure that whatever you are doing in your <i>manyatta</i> , you put it all together. Manage the cows, the <i>manyatta</i> , kids – whatever is your aim. The management. | It is a place aside for wild animals to be protected and have people benefit through that place, from tourists. | N/A |
| Sompeta ole Nanyamanyit | It means managing or management. I have cattle, goats, wives, children, boys, girls. There are differences between the children – playful, quarrelsome. That study is in the heart and mind so that you can control and manage them all together. The other definition means controlling. Once you don't have the family, land, livestock to manage, you will be recognized as a valueless Maasai. You will just wake up and look to where you can get food, tea, you will just move around. | The name itself was Western people who have named it and given it to us and told us to say this name. During our birth in 1970s we did not know what was meant by 'conservation', we were not aware about it. Once we came to have knowledge and people identified it and brought western clients to us, we started projects and doing conservation. The name means something to the visitors who are coming and giving us assistance. | The western people proposed the name to us and we accepted. We agreed upon the establishment of the conservancy, it was not a name that was here. It was an idea that was brought from Western continent. |
| Nairraba (David) ole Kitesho | Having a family, you need to have livestock (cow and goats) so that you will be able to manage your livestock and your people. | Conservation means the management of wildlife together with managing the clients who are coming purposely because of wildlife. | After the visit and tour [to other areas in Kenya], we saw that people were making camps. We saw a benefit to the community by conservation, so we brought this feedback and community members asked how we can start our own. |

| Name of respondent | Definition of erematare | Definition of 'conservation' | Origins/reasoning of 'conservation' idea |
|------------------------|---|--|---|
| Sirote ene Tipatet | It is management – you need to have people, have land, and livestock. Without having these you cannot complete the full name. Even today, with planning management a church fundraiser, can be erematare. You need to plan and manage. [Prompt] The wildlife is included in the name erematare because there was that portion of land kept aside. | It is a conservancy area that is only to secure and conserve wildlife on their own; it is a site for wildlife only. | N/A |
| Penina ene Shung'eya | It means taking care of livestock – you need to have organized land use. Each section has its own [management]. | Conservation is somewhere whereby the wildlife section is conserved and catered for. A parcel of land where wildlife has freedom without disruption. | N/A |
| Ntetiyian ole Pasoi | Managing of a person, you have to manage your own person and many people. Then there is managing one cow. Erematare has a diversity definition because even managing the land [is part of it]. Managing the land is how we manage water and irrigation. [Prompt] [Wildlife] will fit [in], because the conservation area is marked and has its own boundary. There is a high security and that is management. | The name of conservation is recognized as a homestead for caring for wildlife. Sampu, Kikurro, Lentorre (a small spring called 'lentorre' up by the escarpment), are all Maa words that relate to 'conservation'. | We were brought the idea about conservation. Education brought this idea. The educated people in our community came and shared that we might be able to have something for tomorrow, because they can benefit from visitors coming to see the wildlife we have. The name conservation was brought from the Western continent. |
| Titiyio ene Meiponyi | For the name to be complete you need to have livestock like cattle, goats, donkey, and people. We as the Maasai, are asked the question 'did you complete the erematare?', which shows a completion of management. | On the side of conservation there is management of different species of wildlife in different ways. There is conserving the environment like forests where people are not allowed to disturb the trees. Two-way management; we have the domestic animals that we must manage while the wildlife has their own management where you must monitor them for security. | N/A |
| Ntudulu ole Kipanoi | For you to have completion of management you need livestock, people, and land. | 'Conservation' means that there is a portion of land managing the combined three of wildlife, humans, and livestock. | One community brother [Kamanga] and Dr. Western brought the idea of 'conservation' and the wisdom of milking the wildlife. |
| Jacob Maura ole Kipees | It is a diversity of many things. The wildlife, you have to manage. It is defined as managing. On the side of wildlife, livestock (goats and cattle) need specific and general management, people, community. It is a combination of a general management of activities. | Recognized as a parcel of land which is marked and known as having its own management, the people will [manage], the wildlife, and the habitats are important. The pasture also is very much important, there is a control of grazing points. Even the livestock also, because they are included with the wildlife in the conservancy area. | N/A |

| Name of respondent | Definition of erematare | Definition of 'conservation' | Origins/reasoning of 'conservation' idea |
|--------------------------------|--|--|--|
| Kenyatta ole Lemorora Mpesi | Traditionally, erematare means [management of] land, pasture, many species of trees, livestock, and people. Combination of four things to complete erematare; without having the land you cannot complete this name. By having land but with no livestock, you don't have management. And by having land but no people, who will you be able to instruct? All must be complete. There is another parcel of land where management is different than the homestead because we are sustaining wildlife and the environment. | By management of the [area] marked with beacons, there are people there which are staff who manoeuver within and there is wildlife to manage and the forestry department who help with managing the land. You have people, wildlife, and the land. It is a place where management is [occurring], because if it is only that land without management, it will just be <i>enkop</i> . | This a new management, a new way, a new technique, that has come from other knowledge. |
| Anonymous | N/A | It's a place marked to conserve the fertility of the soil so it has a good environment for pasture and shrubs. It is also a place of attraction for the tourists. For the attraction of the clients and buffer zone sites for wildlifeneeds a small flow of water for wildlife. | N/A |
| Samwell Munyere Rimpaine | It simply means livestock keepers. | There's an area that have been protected aside for wild animals and in some situations we might move in if we have some drought. In the rainy season we do not go in because it is for the wild animals, we don't disturb them there. | N/A |
| Phillip L. Kolei | It is taking care of something. You can say it's taking care of wildlife, the livestock that you have, the vegetation. It is a bit wide. | Any activity that goes on in the community that takes care of the wildlife or vegetation. Within a given area. | N/A |
| John Kamanga | We have husbandry, where you husband your land, family, livestock. Erematare is a collective word for general husbandry. Conservation in the Maasai context is not a separate thing. The grass bank is the conservancy but for us it is part of the livestock erematare. | It means you are keeping [land] in a certain form. It is challenged and you are trying to conserve it in a certain state or you are conserving it from the possible futures. As Maasai we are not 'conserving', we are managing! That is where erematare comes in. You are putting it aside for wildlifebut what are you conserving it from? This is a misleading [narrative]. | I don't know where this started, but it probably came from people arriving in Africa and saying 'look at those Maasai killing wildlife, we should conserve them'. It was about people coming and thinking wildlife were in need and then conserving it from the savages in wild Africa. When I think about it, and the concept of how the global world is thinking about Africa, that is where it fits. They were thinking we didn't know what to do with our environment so let's drop the [conservation] concept on them because otherwise they will finish it. |
| Dan Sepis | See Appendix C. Erematare at the Group Ranch scale needs to have livestock, irrigation, conservancy – you must have them all. | 'Conservation' is a name given from outside (West) that means protecting, managing, and is also a demarcated area that is defined but doesn't need to be fenced. | The second of the second secon |

Appendix B

Definitions of *erematare* and 'conservation' by Shompole respondents, with origins or reasoning behind 'conservation' elaborated on in some cases (transcribed directly from interviews carried out May to August 2017).

| Name of respondent | Definition of erematare | Definition of 'conservation' | Origins/reasoning of 'conservation' idea |
|---------------------|--|--|---|
| Stephen ole Kureko | Taking care of people and livestock. [<i>Prompt</i>] Of course wildlife is involved. | Management of wildlife and general habitat. | From ACC and white people like you, and the community. They told us that we could make money from the wildlife. |
| Jackson Kaayia Sisi | How we can manage our own livestock in the rainy and dry season, so that you can sustain them. When it comes to the side of wildlife, which we used to kill because we didn't know the benefit, we now know some ways of management. One way is to train community people about how to love wildlife. In the formation of Shompole lodge, the funds to support orphaned children were very high and came from clients who came for conservation. Compared to some years back, where we did not see [the impact] of wildlife. | Conservation is just like the name of <i>olopololi</i> where you save a portion or land to mark the boundary so you can conserve wildlife. It is the <i>olopololi</i> of wildlife. | N/A |
| Lukeine Morira | It has both managing domestic animals, and family. On the other hand, you have to have the wildlife department or environment (grazing points) that you manage. | It is to conserve the environment and the wildlife. | When I joined the leadership six years ago I learned of that name. |
| Manina ole Lankoyie | You have your children and your livestock. You must take care of your children by feeding them and educating them; caring for an illness. We must take care of our animals by giving them enough water and bringing them to good pasture. | Agreed upon that wildlife would have their own area, and that they would not be hunted. So that is on the side of wildlife in terms of erematare. In elaboration of erematare, it goes to family, livestock, land, community, and extends to wildlife. | First was agreed upon to keep the area for grass, then after for wildlife. We saw that if we conserved wildlife we would be able to make income from wildlife for our children. |
| Faith Kijape | Taking care of land, people, domestic animals, and wild animals. | A place to conserve wildlife; large marker site with clients and future investors to request large space for wildlife. | N/A |
| Janet Sompette | To have peace, good health, looking after cattle, environment, operating good business, wildlife can join in because you conserve it and you can manage it. | A place agreed upon to conserve for wildlife and domestic animals – agreement not to graze until July 1 ^{st.} | N/A |
| Anne Koin Maseto | Management of persons and livestock; for wildlife to be there, we are taking care of them; pasture management and other natural resources; for everything to succeed and be well, is 'erematare'. | Designated place for wildlife section and is the business operation; conservation site is in one account for entire of Shompole. | N/A |

| Name of respondent | Definition of erematare | Definition of 'conservation' | Origins/reasoning of 'conservation' idea |
|--------------------------------|---|---|--|
| Maria Napitit Kipapei | Tender care of children, livestock, wildlife; control and security of both livestock and wildlife. | Somewhere that people agree to set a portion of land as 'conservancy' with rules and regulations to guide it and taking care of wildlife; people not allowed in in the wet season, limit in the dry season. | Word 'cons' was created by the western people; a good name for Maasai is <i>ol-chamba loong'uesin</i> which means land for wildlife. |
| Ezekiel Linti Nkapulele | Goats, sheep, providing for me. | Area where wild animals are kept and secure, resources are there. | English word from books. |
| Nkunjai ole Sipano | Management, planning, organizing; livestock and children are also included; cattle herders; room for wildlife under management with rangers who report and manage animals. | Olale oramatieki ng'uesin, which means conserved land for managing wildlife; rangers are security | A western name where we used olale oramatieki ng'uesin or olopololi |
| James Sarinke | Something you own – livestock, business; wildlife can join as [I] am a ranger. | Portion of land known for management of wildlife; they are like livestock in this forest. | N/A |
| Solol Mpe ole Ntato | Having land, Shompole has this as a shield; "something called ours, we can share together"; we must manage and people must live peacefully and share what they have. | Section of land marked with a boundary discussed upon to conserve for conservancy area where we can give out to an investor. | N/A |
| Joel | Management of livestock but also of wildlife. | Management of natural resources, a wide term. | N/A |
| Ntuala ole Soipano | Management of livestock, children, wildlife; any activity you have to do for future betterment. | It means the same as management of wildlife. | Educated people from here brought this name [of conservation] here and said we would be famous and sustain us with income. |
| Mary Kipuyan Sumare | Security of wildlife; doing business and caring for children; finding water and food; e.g. elephants with the swamp cannot be controlled by herders so you must call the KWS to chase them. | Agreed upon and designated area for wildlife. | Westerners introduced this, like Antony and his camp. |
| John Parkolei ole Ntitik | Have to give tender care to children, wife, family, manage livestock, environment and trees must be conserved, and wildlife [is] included, grass pasture needs to be managed; also people and meetings. | Section of land with a purpose of conserving wildlife; <i>olale loo nguessin</i> . | Western clients brought this. |
| Anonymous | Bank account for the Maasai; many things that mean tender care; pay for expenses; to complete, it is our ATM bank account; good management with livestock, family and wife and kids. | The projects are under that name; wildlife are the key that brought the name of conservation. | N/A |
| Tiparo ene Sintei (Naimadu) | People with health because of managing diseases and livestock and wildlife. | Rules and regulations are important to keeping wildlife; grass for both cattle and grazers; a section. | Foreign clients who shared the idea of starting this. |

| Name of respondent | Definition of erematare | Definition of 'conservation' | Origins/reasoning of 'conservation' idea |
|---|---|--|---|
| Benjamin ole Kirewa | How to take care of your possessions so it cannot be destroyed; e.g. trapping a lion and moving it to a national park, but also managing. | Olale = fence up, like in a boma; bisected land, rules and regulations for wildlife, where there is no living within the area; kikurro as phase II dry season grazing | N/A |
| Nkili ole Partaloi (ole Ntuluo) | Start by having family and livestock, you must manage all of these; domestic management and outside the homestead management. Grazing management controls people; wildlife fit into [erematare] too, decreased poaching and reserve wildlife. | Means 'olopololi for wildlife', reserved as phase IV not just for livestock but also for wildlife; the boundary is known orally; rules set for this area like no homesteads. | Came through projects and establishment of lodges, Western clients. |
| Dorcas Montoi ene Marite | Organize yourself, then secure for livestock and people; managing family, monitor pasture, water, livestock; what is the purpose of a conservation area if not to manage wildlife? | (1) wildlife there to be maintained, and (2) clients come to visit. | Came through the Shompole lodge. |
| Joel Karori ole Sapiyaya | Development and management of sheep, goats, cows. | Area kept aside for the wild animals and tourism management. | N/A |
| Leshashi ole Ikayo (Sampin-Irmong'i) | To have it completed, you need livestock, know where grass and water is, family helps with this. | Section of land in <i>kikurro</i> with people managing and high security of wildlife; people do not step in there; just like we're managing cows, we manage livestock. | N/A |
| John Masikonte ole Ntiiti | Taking care of wealth and property; conserve livestock and wildlife. | Erematare, you conserve; conservancy is <i>olkeri, olopololi, olare</i> in Maa; land use planning was about keeping land for grazing; the conservancy is still valuable for dry season as it was before. | Introduced by ecotourism. |

Appendix C

Definition of *erematare* provided by research assistant and translator, Dan Sepis ole Lemanyi, given to author at the end of fieldwork. He spells the word *eramatare*.

What is meant by *eramatare*? The word *eramatare* can be clearly translated as 'tender caring'. In addition, [it] can be defined in short abbreviation as *Aramat*. The word *eramatare* is so wide and at the same time specified above, for a truly person whom have really accomplished the general categories (6) section of management will be recognized in Maa as "*Olaramatani*" – the manager – organizers (well). *Eramatare* has the following categories definition or sections.

- a. Livestock management
- b. Family care
- c. Land management
- d. Environmental section
- e. People's concern
- f. Wildlife department
- (A) **Livestock management:** The word *eramatare* was recognized first on livestock section. By struggles and challenges one has to go through for the betterment and success[ful] management of livestock in two way either during wet season for the control of many outbreak diseases whereby some require early injections/treatment for prevention i.e. CBPP for shoats and vaccinations for cattle too. Again immediately during the first rains to pour down, all the animals are normally required to be treated (deworming) and antibiotics too. See this info on Livestock Records Management.
- In Maa culture, its true to share that every child in a family has to be given either a cow, heifer, kid, goat, sheep, chicken, and a dog, depending on the level standard of family wealth. The so called child i.e. Kipepete, will have to own that gift which was given by their parents. Because of Maa generosity level, this was also another way to track/monitor the production of livestock for every member of the family.
- The parents for the above named son Kipepete will decide the ear-notching for their son and suppose they donated 2 young kids (new born) to him, they will start marking for him.
- Kipepete will then start practising livestock management for monitoring the given gift, confirmed every evening while gathering kids when due time for shoats arrival from herding points, if then will be an adult goat, has to ensure it's there and even milking it when it's lactating. That given gift will then be track[ed] and in case the production increases, might be exchanged and for him a young steer. The stage has moved to own now a cow. This goes to the time when his grown-up and its for initiation period. Since then this boy have practiced from very early stage, he would have some experience of herding shoats and cattle, knows how to maneuver when in dark forests, pastoralism practices, i.e. migration from point to the other in seasons changes and follow up of pasture and at the same time the wisdom for several diseases identification and their treatment. Suppose like Kipepete was admitted to Education section, he will have a blessing of 2 [two] knowledge: (A) paper work [in] school, and (B) livestock care [at] home. In addition, suppose like Kipepete was donated a chicken. The above mentioned son will then start practicing general ways of feeding, ensure this chicken [gets] treatment on a required time. The sales of

eggs, cock-sales for either exchange of new chicken breeds he will admire within the community. This will give a child freedom in his heart that I will do this project. He will have a wider diversity goals for targeting the number of eggs to sell either every 2 [three] months or cocks after every 6 [six] months in a year. Will also enable him [to] sharpen his mind for having new and future dreams, i.e., sales income report (data), personal needs stuff, school fees and books purchasing and proceed to buy 1 [one] or 3 [three] goats. By owning a dog, Kipepete will make sure he will be tracking feeding program of this dog being in the morning and evening too. The so called Kipepete dog will be resourceful in two ways, (A) security for livestock at the homestead [at] night, and (B) safeguarding the entire family and providing enough security track during the daytime when livestock are grazing at different points. It will be an alarm security to any member of the family herding.

- **Identification of livestock:** In Maa culture, though we do have sub-Maa tribes, proceed to sub-clans, there are several things which are similar while other people sets their little abbreviation for recognition within the community. Hence follow:
 - a. Ear-notching: Ear-notching varies from sub-clan marks and proceed for individual persons to select their own and different ear-notching. In Maa we recognize this as "Orponoto". Now sub-clans mark shoats and cattle while there are special clan which normally they don't interfere with cattle ears for ear-notching marks and they are recognized as "Irmeponi" means they don't mark their cattle. I Dan, belong to this clan. The rest of the clans are (1) "Ilaitayiok" mark ear-notching recognized as "Empenyet"; (2) "Ilaiser" mark ear-notching recognized as "Ntuka"; (3) "Ilukumae" mark their ear-notching as "Ilooigerr"; (4) "Irmelelian" mark ear-notching recognized as "Empunit"; (5) "Irmeponi" who don't at all attempt to cut down a calf ear. They use a sharp pocket knife to do this.
 - **b. Branding:** Branding also varies as sub-clan marks, here these are individual persons proceeded to mark on their names abbreviation letters. Once you set on your herds, will be recognized within the community, when it is lost to the other herds, stolen and sold in the market will be easily tracking system. For branding mark, the Maa say "Ormishire". This has to be used several hot iron called "Irmishiria".
 - c. Neck-tag [bell]: Neck-tagging for livestock is very important. It has several helpful ways, i.e., when livestock are grazing, someone will identify the echo sound and can be easily to track your herds when you want to monitor grazing points or alight them in the evening. Will also determine the distant point of the herder person. In case [they] will doze during herding, the silence of the bells echo will awaken him up and on a silent gaps, will know the direction point where the livestock moved to. For security purpose being daytime herding on a dark forest when sensitivity of danger and at the same time night at home. Once they signal threatening smells, or anything wild, will alert by bells ringing. Both the cow and shoat bells are tied either on a hard machine thread or using a cow skinned made from bells holding stuff known as *emaitai*. The neck tags are categorized for Maa as follows:
 - Cow neck tag (bell) is recognized as "enkorkorr"
 - Shoat neck tag (bell) is recognized as "entuala"
- Breeding selection: 10-20 years ago, the Maa community were NOT advance[d] to new techniques of livestock breeding management. Meanwhile at the moment (current) due to a few advanced people whom made visit to other various parts of the country and also trained (joint training) on breeding system, made a serious change one step to the other by Advancing Livestock Keeping, by purchasing other cross breeds of bulls, he goats, and rams. People began to cope and after encountering the breeding several advantages, they proceed[ed] and buy to make a big change onto their herd. The two advantages encountered were milk production and weight, such that you can sell at good money. Currently, the following are livestock breeds available within our community: (i) sheep are Merino, Dopper, Black-headed, or

Massai brown sheep; (ii) goats are Galla, Local, or Toggern-burg; (iii) cattle are Zebu, Sahiwal, Boran, there is a fourth breed maybe Hermslies. By selection good breed for your herd, [it] will [...] set you future goals like livestock fattening project plan. Buying of 20 castrated goats on January when the market is down and poor at approximate[ly] KES1,200, persevere for the challenges and struggles then set on the market on early December when the market is in peak season. Buying price = 20 [cattle] at KES1,200 = KES24,000 → selling price = 20 [cattle] at KES6,000 = KES120,000. The less the buying price capital to enable you sustain the same project the coming year. Again less labour costs of herder, drugs, then the remaining funds are your Net profit.

- a. An additional and important domestic animal is a donkey. A donkey is an important animal at [the] homestead while can be used is resourceful in different ways such as (i) fetching water from long distant water points, (ii) assistance as loaders during migrations from one point to another; i.e., E-W [East-West] and vice-versa. During setting up a new settlement, a donkey can be used to drag cut down tree branches for fencing program. Meanwhile the Maa has a saying that "Eepare oshiaake osikiria nkishu", [which is translated as] a donkey [is] normal beside the cattle. But I real sense the poor man can be called a famous community leader and share food together on the table during ceremonial invitation.
- Padlocking: In control of sheep to give births in appropriate time where/when we normally expect short rains (fall), padlocking of the ram has to take place. By doing this too, will enable the shoats sustain severe drought and health, strong enough to sustain until rainy season. Padlocking of the ram sheep also is another second way to control of births and avoid spread of your breed to every other surrounding neighbour.

• Livestock management reports:

- a. Gestation period: This will be able to ensure you when the expectation period of a certain number of your shoats will give birth to enable you to control in advance. In case for migration, then you can plan yourself on time.
- b. Birth: Record of livestock births normally is a challenge to many people has high number of herds and this will bring confusion to like 10-20 black-headed lambs in one month. By tracking births of livestock also will give you a clear genealogy track birth of each and every goat, sheep, and cattle. I have done this from 1988 to 2000.
- c. Sales and exchange: Sale data is very important [because market prices vary] in several years. I.e., it is funny that I went through our livestock sales prices with ILRI staff on the year 2006 tracking 1988, 1999, 2000. It was amazing for them going through the prices of livestock sales data, comparison to 2006 livestock market data survey, I was then assistant.
- d. Purchase: Livestock purchase data also is very important to track the mix breeding of shoats and cattle, birth circles, and other management. Prices (buying) is an important [thing] to track after births and approximately how many births and the selling prices.
- e. Donations: Livestock donation data is also an additional management to track whom was given what on when and purpose of donation.
- f. Drug data: Drugs management date also require clear report to shown the following categories of livestock drugs:
 - Acaricides: spraying for eradication of ticks and control of trypanosomiasis caused by tsetse flies. By having this data sheet, will clearly shows track of acaricides used to pray cattle and when on next spraying season/date. Lots of farmers hurt their livestock by overdosing the spraying acaricides to livestock;
 - Deworming: the selection of drugs usage is determined [by] several pastoralists. The livestock need to be dewormed after every 3-month period. Many people are challenged for [getting] the approximate dates either too short period or other people exceed the dates.

- Antibiotics: livestock management on antibiotics treatment normally confuse lots of people and without giving an allowance for the drugs to work well on livestock bodies, they proceed to do additional injections.
- Vaccination data: by having a general livestock treatment spreadsheet which combined with above column sections will be beneficial to the pastoralist and again you will be tracking in advance on when the vaccines are required to be purchased.
- **Livestock security:** The livestock need to be safeguarded at homesteads at night by fencing well the surrounding fence. The management of dry season feeding program for kids, lambs, and calves, needs also to be fenced off very well to protect other animal to access [it], feeding for kid preservation pasture.
- Things are so funny that in our community Olkiramatian, when a dog gives birth to 8-9 puppies, people announce to people surrounding to select and pick the puppies for themselves. While on the other side it happens that I managed to work on private organization in Maseno-Equator, Kenya, and the nearest market is Luanda, Kenya. It was an amazing to [find] this big market whereby people has to sell cattle on the open field, food stuffs also sold on the other corner, while there was also a section for cats, dogs, puppies are being sold at KES800. This occurred on June 2014.

General information of *eramatare*: The great key for *eramatare* means early in the morning the activities has to take place by milking of calves, breakfast preparation for the family, prepare food for the herders, milking time for shoats. Time has to be set on when to depart for grazing while cattle will leave very early depending on long distance point for pasture availability. If then people live far distance from water point, the family member has to delegate duties and donkeys will be required for fetching water for both family member sustainability, kids, and calves too. In the evening time, there's time to gather up kids around, confirm all by ensuring that all are present, time for gathering calves from various points, and as an elder has to leave early 3-4pm to alight livestock on the way home. In other way early (every) morning, monitoring of livestock [to keep track of] (identify) the sick ones for injections and the weak ones to be cared for at home. Same to evening. Countdown of livestock is very important and taken by pastoralist as a daily routine.

- (B) Family care: In reference to our son Kipepete, whom expected now as a grown up and because of his donation livestock have increased in number, one has to organize himself that I want to marry a certain year/month. The ceremonial budget has to be set. Booking of a bride is much more important to select and in Maa traditionally we don't have courtship period [despite] now people are advance[d] and making changes. Our son will set up his mind when to marry, also set up his mind that how many kids he wants to bear. Every individual normally tries his level best to make/planning his wedding/marriage successful one. Livestock to be slaughtered, target expectation people to attend/invite also determines.
- (C) Land Irrigation: Management of land is also very important now for farmers to control crop rotation, advance from mono- [to] intercropping. Pesticides identification is also important on which drugs to be used when. Irrigation project planning also [is important]. Many people only concentrate on short-term crop management while a few set up well their grounds and setting of long-term perennial crops. Spacing of each and every food stuffs crops. Rotational (revival funds) are very important. Incomes and management for developing the land.

- (D) **Environmental habitat:** Management of the environment is recommended for individual people to care for the surrounding environment. Lots of people [don't] consider the environment by burning of bushes, cutting down completely of tree species and others proceed to burn charcoal. Natural habitat is required to sustain and to avoid desertification. By conserving more about the environment by preserving the natural resources is beneficial to our community and a high sensitization needs to take place within for the development of Afforestation department be taking place within the individual's land. This will be another part of eramatare.
- (E) **People's concern:** Management of people is also part of eramatare; being individual and general community. People also require more tender care.
- (F) Wildlife section: For a completion of eramatare, wildlife [is] also included.