

This side of subdivision: Individualization and collectivization dynamics in a pastoralist group ranch held under collective title



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ABSTRACT

Many scholars of rangeland institutions have found fertile theoretical and empirical ground in early efforts by the Kenyan government and international development agencies to socially engineer a shift from open range to discrete territories held under collective freehold title. A rich literature on the dynamics of subsequent subdivision of these “Group Ranches” elucidates a complex interplay of exogenous and endogenous drivers. This paper, on the contrary, explores the dynamic tensions between individualization and collectivization of land and related benefit flows in a group ranch that has thus far not undergone formal subdivision. Research was conducted in Koiya Group Ranch, one of 13 group ranches located in Mukogodo Division, on the Laikipia plateau. Drawing on key informant interviews and focus group discussions with those differentially positioned relative to the benefits of *de facto* processes of rangeland enclosure, and household surveys to document trends in participation and perception, we explore how these processes are perceived and governed. Cross-case comparison highlights the suite of factors shaping which forms of enclosure are contested; the diversity of legitimizing tactics that ensue from such contestation; and the balancing act these tactics represent between retention of privilege and restoration of peaceful relations among group ranch members.

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1. Introduction

Customary forms of tenure worldwide are being transformed by formal systems of tenure, market dynamics and increasingly ‘intimate’ associations with outside actors (the state, civil society, corporations) (Agrawal, 2005; Fairhead et al., 2012). Initiating in the colonial era and continuing at present, these shifts have often been devised to appropriate rural territories and to stimulate changes in and intensification of rural modes of production (Campbell, 1993; Galaty, 1994; Hughes, 2006). Kenyan rangelands are no exception. Pastoralists were first forceably moved to “native reserves” representing a mere fraction of their former range (Hughes, 2006; Rutten, 1992). Grazing and marketing schemes were subsequently designed to re-make pastoralists in the image of European and colonial farmers. These actions, together with the designation of communal ownership as the root cause of degradation, have had profound effects on pastoralist mobility and customary forms of land use and governance (Galaty, 1994; Veit, 2011). It wasn’t until

1965 that group rather than individual ownership began receiving recognition as an alternative, and potentially more suitable, form of tenure for rangelands. Yet even this strategy represented a compromise between customary and private forms of tenure by designating a discrete group of people as the legitimate owners of specific territories (Galaty, 1994), a distinct shift from customary notions of belonging and territory.

While the dynamics of Group Ranch subdivision have received significant attention by rangeland scholars (Galaty, 1992, 1994; Grandin, 1986; Kimani and Pickard, 1998; Mwangi, 2007; Ntati, 2002; Thornton et al., 2006), the dynamic tension between individualization and collectivization in group ranches that remain intact are less well studied. Yet lessons from cases of formal subdivision on what ultimately led to a decision to sub-divide are useful in framing observations of the internal dynamics of the remaining group ranches. Perceptions of Group Ranch members of the integrity of the domain (the absence of threats to the shared territory) and the value of individual “shares” of that domain, for example, seem to have been influential in shaping decisions to subdivide (Galaty, 1994). To understand the internal dynamics of a Group Ranch that has thus far not undergone formal subdivision, it

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is therefore important to understand how group ranch members perceive the distribution of costs and benefits associated with the existing suite of institutions through which land access is mediated, and through which related benefit flows are governed. This paper explores these dynamics through an in-depth look at the dynamic tensions between individualized and collectivized rangeland access in Koiya Group Ranch in Laikipia District, Kenya. To do this, the views of those differentially positioned relative to the benefits of four ‘cases’ of *de facto* rangeland privatization or enclosure are explored. While such an analysis has limited predictive power, it can help to elucidate the ongoing tensions and dynamics within an apparently stable communal regime.

2. Institutions, property and legitimacy

This paper draws on scholarship from fields of legal anthropology, new institutionalism in the social sciences, and environmental governance. Institutions, defined by Douglas North as “rules of the game” (North, 1990), are understood not as static filters on human behavior but as the product of dynamic negotiations among social actors, and dynamic accommodations among multiple social and legal fields. Or, as stated by Falk Moore (1978: 39), “established rules, customs, and symbolic frameworks exist, but they operate in the presence of areas of indeterminacy, or ambiguity, or uncertainty and manipulability”. This is due to both local bargaining and adjustment (Cleaver, 2012; Knight, 1992), and interactions between local social fields and the “larger social matrix which can, and does, affect and invade it, sometimes at the invitation of persons inside it, sometimes at its own instance” (Falk Moore, 1973: 720; see also Falk Moore, 1978; von Benda-Beckmann, 1981). These complex negotiations imply a fundamental tension between efforts to fix social relationships and rules (processes of “regularization”), and processes of “situational adjustment” – where people exploit areas of indeterminacy, ambiguity, uncertainty and manipulability as it suits their immediate purposes (Falk Moore, 1978; see also Sikor and Lund, 2009). The regularities in social organizing and behavior that we observe is therefore as much a product of “the forces at play in the field” as it is a manifestation of common norms (Nuijten, 2003: 12).

Similar dynamics are at play in the case of access and property (Ribot and Peluso, 2003; Sikor and Lund, 2009). While property is often thought of as a thing, the institutional scholarship tends to define it in relational terms – rights only as secure as the corresponding duties of other actors (North, 1990), or socially legitimized claims (Sikor and Lund, 2009). Its social character in turn imbues property with a complex multi-dimensionality: differentially defined in overlapping social and legal fields (Falk Moore, 2001; Schmidt, 1990; von Benda-Beckmann and von Benda-Beckmann, 2006); rights of different degrees (Schlager and Ostrom, 1992); and with variable degrees of stabilization, formalization and legitimation (Falk Moore, 1978; Sikor and Lund, 2009). The recognition of all that lies outside of stabilized and legitimated rights has led to a renewed theoretical interest in the notion of access (Ribot and Peluso, 2003; Robbins et al., 2009), which in turn highlights the role of power relations in the constitution of property and institutional authority (Sikor and Lund, 2009). Access is defined by Ribot and Peluso as “the ability to benefit from things.” Access may be achieved through socially acknowledged and supported claims or rights, or through illicit means – and may be reinforced by structural or relational mechanisms. Structural mechanisms help to position individuals favorably with respect to access by empowering them with knowledge, technology, labor or other crucial resources. Relational mechanisms, on the other hand, emphasize more negotiated forms of access that occur through social relationships “of friendship, trust, reciprocity, patronage,

dependence, and obligation” (Ribot and Peluso, 2003: 172; see also Berry, 1989).

With the difference between access and property lying in the legitimation of an actor’s claims (Sikor and Lund, 2009), it is important to center the notion of legitimacy in this discussion. Legitimacy is often thought of as a fixed entity against which actual conduct can be measured. Suchman thus defines it as “a generalised perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions” (Suchman, 1995: 574). Yet there is growing recognition that legitimacy is in fact processual – something that is established through conflict and negotiation, or processes of “legitimation” (Fortmann, 1995; Lentz, 1998; Moore, 1988). Thus, actors wishing to have their access legitimated will employ legitimation tactics – discursive strategies aiming to establish a practice’s social acceptability. While multiple forms of legitimacy and bases of legitimation are recognized in the literature, three are identified here: (1) *substantive* legitimacy (also known as pragmatic or consequential legitimacy) rests on the actual consequences of an institution or behavior; (2) *procedural* legitimacy, in which legitimacy is garnered through the use of socially accepted techniques and procedures; and (3) *moral-normative* legitimacy, in which institutions or behaviors are evaluated based on established norms (is it “the right thing to do?”) or their inevitability based on taken-for-granted cultural assumptions (Suchman, 1995; see also Berger et al., 1973; Meyer and Rowan, 1991; Scott, 1976). These same distinctions may be used to evaluate the basis upon which other actors recognize or contest the legitimacy of these actions. Scholarship on legitimacy highlights how certain forms of legitimacy can justify the absence of other forms (Suchman, 1995), and show that the forms that discourses gravitate towards is often strategic (von Benda-Beckmann, 1981).

Drawing theoretical linkages between these literatures and the scholarship of pastoralism provides fertile ground for advancing our understanding of the dynamics of property. By acknowledging the multi-dimensionality, relationality and dynamic constitution of access and property, we are able not only to recognize reversals in previous subdivisions with the “new pastoral commons” (Bollig and Lesorogol, 2016; Galaty, 2016), but to explore the everyday processes through which property is simultaneously collectivized and privatized. It also enables us to study the tactics through which uneven access to pastoral commons understood by law to be governed by norms of collective and proportional ownership is informally legitimated and contested.

3. History and privatization dynamics of pastoralist group ranches

Kenya’s Group Ranches came into being in 1968 through two successive Acts of Parliament (German et al., 2016; Mwangi, 2007). The Group Ranch was conceived as a response to the failure of colonial era interventions aiming to limit stocking densities, reverse environmental degradation and enhance livestock productivity in Kenyan rangeland (Rutten, 1992). Whereas communal ownership of rangeland was viewed by the colonial regime as the root cause of degradation, a government-commissioned inquiry into land tenure in 1965 (the so-called “Lawrence Report”) recommended group registration of land as the more relevant land tenure regime for Kenya’s rangelands (Galaty, 1999). This became the official basis for group ranch establishment under the Land Adjudication Act of 1968, effectively converting previously open range into smaller units with clear membership under collective freehold title (Mwangi, 2007). The Land (Group Representative) Act of 1968 then established the statutory requirements for group representation under the law. These include a meeting to adopt a

constitution and elect group representatives (the so-called “Group Ranch Management Committee” or GRMC); the application by the designated representatives for a certificate of incorporation; and rules and procedures governing the powers and duties of group representatives (Republic of Kenya, 1968). Provisions for collective choice are also detailed, including procedures for conducting business, adopting rules regulating matters not governed by the constitution, and approving any changes in membership.

A total of 159 group ranches were established in Kenya by the 1980s (Ng’ethe, 1992), 129 in the Rift Valley (Kajiado, Narok, Samburu, Laikipia, Baringo and West Pokot), six in South Nyanza, seven in the Eastern Province (Embu and Kitui) and 17 in Coast Province (Taita, Kwale and Kilifi). While a total of 57 of these had been established in Kajiado District (southern Kenya) by the end of the program in 1979, within less than 10 years of their establishment there were demands for their dissolution and subdivision into individual, titled units for distribution among members (Mwangi, 2007). While the dynamics within Kajiado are better studied and perhaps more widespread, similar privatization dynamics have been observed elsewhere. While many endogenous and exogenous factors are at play, a host of scholars has shed light on the dynamics within pastoralist communities themselves that have given rise these demands (Ensminger and Rutten, 1991; 1992; Galaty, 1994; Lesogorol, 2008).

For the pastoral commons, ‘de-collectivization’ – defined here as the *de facto* shift from communal to individual tenure, whether or not formally recognized by the state – has taken a variety of forms. Some authors document informal rangeland enclosures by sedentary segments of pastoralist societies (Ensminger and Rutten, 1991) or by single residential units within otherwise communal range (Verdoodt et al., 2009). Enclosures are defined as “areas from which unwanted animals, etc., are excluded” (Aerts et al., 2009); their main purpose is to keep things out of an area. These shifts towards greater exclusivity may be formal (sanctioned by the state) or informal, and may or may not involve a simultaneous process of de-collectivization. In the Orma case (Ensminger and Rutten, 1991), increased exclusivity of rights favoring more sedentary segments of pastoralist societies involved a process of privatization and semi-formalization, in that more exclusive rights came to be enforced by the state without a formal group titling process. Privatization here refers to rights and access shifting from a whole to a part, where the part may be an individual, or a collective entity with more restrictive membership than the whole it derived from (Starr, 1988). The subdivision of Group Ranches is somewhat different from these cases, in that the Group Ranch is already formalized and privatized in the name of a group with specified (if evolving) membership. It instead involves a statutory shift in private land ownership from a well-defined ‘group’ to individual members (Galaty, 1992, 1994; Mwangi, 2007; Ntiati, 2002). Seasonal range enclosures (“fodder reserves”) practiced by pastoralist communities in a portion of communally held range are not considered a form of de-collectivization, but rather internal regulation of use among a community of users – provided decisions governing access shape the rights and duties of all members.

The causal factors and dynamics behind these privatization/de-collectivization dynamics in the Kenyan rangelands have been studied by a number of scholars. Ensminger and Rutten’s (1991) analysis of the dynamics of privatization of communal range for the Orma of northeastern Kenya argues that the roots of privatization are economic differentiation and diversification. They argue that economic growth has increased diversity and undermined consensus on the forms of property rights that are appropriate. Sedentarization in particular, enabled through diversification to commercial forms of production, trade, farming and wage labor, has increased the value of land, the costs of maintaining common

grazing areas, and the gains to be had from dismantling the commons. Sedentary households have used national policies in favor of sedentarization to enforce more exclusive rights against the interests of nomadic, subsistence-oriented sectors of the population.

Lesogorol (2008) has documented de-collectivization dynamics among Samburu pastoralists in Samburu District, Kenya. Her analysis illustrates a community divided on the issue of subdivision along the lines of age and outside influence. Two exogenous influences had a significant influence on the dynamic tensions between individualization and collectivization in her field site: land markets, and a “pro-private bias” of land adjudication officers (observed to be granting individual title over the heads of committee members supposedly representing the group ranch). Yet these dynamics played out not as isolated factors in their own right, but in the ways in which they interfaced with two factions within the Samburu communities themselves. Those pushing for individualized landholdings were found to be those spending considerable time outside their communities due to education, military service or employment as civil servants. These experiences had inculcated in them ideologies of modernization, while giving them greater access to the state as well as to economic resources that could be used to increase returns from land. Those in favor of private holdings within other Kenyan Group Ranches were driven by fear of being left out of land adjudication, a theme echoed also in the wider literature (Galaty, 1994; Mwangi, 2007). In Lesogorol’s (2008) study, opposition to individualized titling centered on the traditional elders of the area, who had the largest herds and therefore the most to gain from maintaining open range, and who had more at stake in decisions of group ranch members to lease land to wheat farmers.

A number of other authors have studied the dynamics of group ranch subdivision (formal de-collectivization) in Kajiado District (Galaty, 1994; Mwangi, 2007; Ntiati, 2002). Here, subdivision was reportedly driven by a defensive strategy against internal and external threats linked to land claims. As described by Galaty (1994), processes through which members saw their numbers grow and their domain shrink undermined their confidence in the integrity of the domain and the value of individual “shares” of that domain, encouraging them to “claim something now or have nothing later”. The principle of progressive recruitment meant that family shares would progressively shrink with the registration of new members as age sets came of age, thereby incentivizing early subdivision. Bribes were also taken to place non-Maasai and politically influential individuals (many of these from the Ministry of Lands) on the register at the time of sub-division. As for the shrinking domain, both endogenous and exogenous factors were at play. Individual group ranch members with influence or education began to stake parcels as individual holdings, a process that was either supported by the GRMC or by district administrators and land officers, while squatter settlements emerged in group ranches located near agricultural communities. Individual titling in both cases became a basis for securing claims against total dispossession.

More recently, many of the same scholars have begun to revisit and question the established notions of pastoralist commons as facing an inexorable, continued pressure toward subdivision. The concept of the “new pastoral commons” has placed these understandings of subdivision dynamics into a broader context alongside more recent, counter-trends in which pastoralists are re-asserting or re-organizing the commons in areas that were formerly under individual or state ownership, often through novel institutional and social mechanisms for natural resource governance (Agrawal, 2003; Bollig and Lesogorol, 2016; Galaty, 2016). These shifts, however, can also pose threats to individual shares of the domain, because the costs and benefits of shifts in collectivization may not be distributed evenly. This study seeks to evaluate

such nuanced dynamics of equity and legitimacy as they play out through individualization and collectivization processes in different resource access systems within a group ranch that has never undergone formal subdivision.

4. Materials and methods

4.1. Research site

Research took place at Koiya Group Ranch (KGR), one of the thirteen group ranches located within Mukogodo Division in Laikipia County, Kenya. Prior to British colonial rule, Laikipia was populated by a mixture of hunter-gatherers and pastoralists (Cronk, 2004). In the early 1900s many Maasai and other pastoralists were forcibly relocated to reserves in southern Kenya, while subsequent legislation forced the remaining indigenous inhabitants onto the driest area of Laikipia – currently known as the Mukogodo Division (Herren, 1988). With the increased intermarriage between the remaining pastoralists and various hunter-gatherer groups, most of the hunter-gatherers from the area are thought to have shifted to a primarily pastoralist lifestyle by the 1930s (Cronk, 2004). While many of Koiya's residents continue to keep bees, a practice common among the hunter-gatherer ancestors of many group ranch members, the primary means of sustenance for a majority of group ranch members remains livestock, with employment on neighboring commercial ranches and by conservation agencies providing cash income to a small subset of households.

Koiya Group Ranch covers an area of 7605 ha and is home to approximately 2267 Maa-speaking pastoralists based on 2009 estimates (Kaye-Zwiebel, 2011), most of whom self-identify as LeUaso (“of the river”) – a group of hunter-gatherers that intermarried with Laikipiak Maasai and Samburu pastoralists. The area is bounded on the western edge by the Ewaso Nyiro River and two large private ranches; on the north by “trust land” occupied by various pastoralist groups (primarily Samburu); and on other sides by neighboring group ranches (Fig. 1). According to the Land

Adjudication Act of 1968 (Chapter 268, Section 69), trust land is land where no demarcation of individual or group tenures has taken place and is governed by custom. Koiya group ranch was reportedly demarcated in 1977 under the legal framework established for collectively held land title, yet was only awarded a title deed in 2000. Interestingly, it was not until the activities surrounding the issuance of the title deed with the support of conservation NGOs that any *de facto* changes in land governance occurred (see German et al., 2016). At that time, the residents also adopted a zonation plan that concentrated their approximately 227 *nkangitie* (plural of *nkang*: extended family compounds surrounding by brush fences where livestock are kept) into four residential clusters within the group ranch, and designated zones in between and near the river as grazing areas and conservation areas. As we will show below, it is with this latter juncture of group ranch formalization, recent trends in enclosures of reserve forage, and the expansion of community conservancies, that western notions of land ownership have begun to gain some traction and residents have begun adopting discourses of shared ownership to frame rights and duties to the commons.

With approximately 450 mm mean annual precipitation, the area is semi-arid; with a high coefficient of variation of annual precipitation, rainfall is also substantially more variable than the rest of Laikipia County (Franz et al., 2010). Residents rely primarily on the Ewaso Nyiro River for water, with two boreholes, one permanent earth dam, small ephemeral stone catchments, and small pools in ephemeral streams (*lagas*) providing additional sources. While the historical response to low and variable rainfall was spatial mobility over extensive areas of rangeland, colonial era land takings and recent enclosures of range have led to new strategies for securing dry season grazing access (Letai and Lind, 2013), and dramatic restructuring of herd composition (Herren, 1989). Recently, conservation trusts have been formed with neighboring private ranches that have diversified from commercial ranching to high-end ecotourism, and with global and national conservation organizations working to conserve globally-significant wildlife on

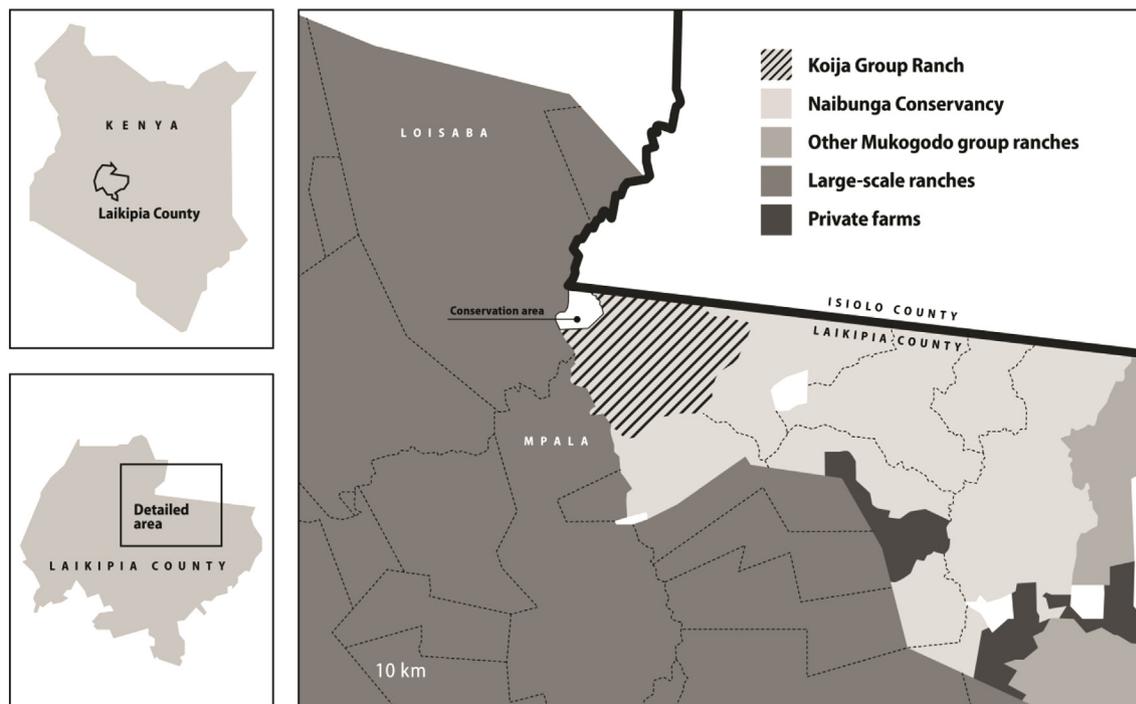


Fig. 1. Map of study area.

private land and trust land (NRT, 2013). The majority of landholdings (40.3%) in Laikipia County consist of 48 large-scale private ranches (Letai, 2011), many of which trace to colonial era commercial ranches. Following efforts to conserve the 65% of Kenya's wildlife that lies outside of protected areas (Western et al., 2009), an increasing number of these large-scale ranches have become "pro-wildlife", meaning they have adopted conservation measures or significantly invested in wildlife alongside continued cattle ranching (Georgiadis et al., 2007). Of the remaining land in Laikipia, 27.21% is accounted for by smallholder farms, and 7.45% are pastoralist Group Ranches (Letai, 2011).

4.2. Case studies

Four cases were chosen to explore the dynamics of individualization and collectivization at Koija, based on observed tensions between individual and collective access, authority and benefits. Two cases explore the dynamic interplay between collectivized and individualized access to rangeland *within* Koija, while the other two explore these dynamics in access to dry season range *outside* Koija (Table 1). The first case concerns the dynamics of diversification into agriculture between 2007 and 2012, and the process involved in allocating private plots from communal range. This allocation occurred along the Ewaso Nyiro River, an area otherwise set aside as dry season range and usually devoid of permanent residential areas. With agriculture requiring close supervision of crops so as to avoid damage by elephants, hippos and monkeys, several households constructed houses near their plots and kept goats nearby despite commonly understood prohibitions on the same (King et al. *in prep*). The second case involves individual livestock enclosures (*lokere*, plural *lokeren*) ranging in size from a fraction of a hectare to several hectares. These have multiple purposes: preservation of pasture for private use during the dry season, beekeeping (the protection of hives and flowering plants from disturbance), care for animals that are very young, sick, or in labor, and balancing herding and domestic chores by having a place to keep livestock during certain hours of the day. The third case involves the allocation of an annual quota for paid grazing access on a neighboring private ranch (Loisaba) among Koija households. The quota is variable between years, but is always far less than actual demand, meaning decisions must be made on how to allocate it among cattle-owning households. The quota emerged from the collaborative relationships established between KGR and Loisaba since group ranch titling, and between individuals on the grazing committee and the ranch manager. The final case relates to efforts by several KGR members to formalize ownership of a plot in an area of forage access outside Koija boundaries that is of high importance to Koija residents. The land is owned by a group of absentee landowners but is used as an important grazing area by Laikipiak Maasai (predominantly Leuaso), Samburu and Turkana pastoralists.

Each case is first explored through an analysis of empirical data on patterns of participation and benefit flows. This allows us to evaluate how existing institutions shape the distribution of costs

and benefits across the group ranch. We then explore each case through the discourses of the actors involved, in an effort to match actor perceptions to their positioning relative to the benefits accrued from the institutional arrangement. Actor perceptions are also analyzed against wider theories of legitimacy, so as to gauge the basis upon which actors legitimate their own behaviors and question the legitimacy of the actions of others or the wider institutions that support them.

4.3. Data collection

To explore a diversity of perceptions and experiences, focus group discussions with purposive sampling of participants were carried out. For each case study, we sought to organize one focus group involving those leading, favoring, or deriving greater benefit from privatization, and a second focus group including those not participating in or less likely to be deriving benefits from rangeland access. Where this was not possible or few individuals showed up, these were supplemented by key informant interviews scheduled in response to logistical constraints associated with organizing group discussions or to capture the views of key individuals not present in focus group discussions. For agricultural plot allocation, semi-structured interviews were therefore carried out with the first farmer, with a focus group involving participants in a second wave of farming (who acquired prime plots along the river), and with a focus group and key informant representing latecomers. For enclosures, interviews included a focus group discussion with those having large *lokeren* and a focus group with those without *lokeren*. For the grazing quota it included the Chairman of the grazing committee (who is also the first farmer) and a focus group discussion with cattle-owning households that had no cows in the grazing quota. For the final case study, interviews included a key informant interview with the Chairman of the community-based organization (CBO) involved in securing title to the area, a focus group discussion with CBO members and a focus group discussion with individuals from *nkangitie* where no CBO members reside. These were instrumental in understanding the history of each case, understanding people's perceptions about the legitimacy of the process and outcomes, and documenting discourses accompanying different stances.

A second component, household surveys, was employed to quantify patterns of involvement in these different initiatives, as well as actor perceptions of them. This enabled us to triangulate findings from focus group discussions with findings from a representative sample of the population. We drew from two separate surveys for this purpose. For most questions, we draw on a 2014 survey with male and female residents of 80 *nkangitie* divided evenly among the group ranch's four residential clusters. Within each cluster, interviewees were selected purposively: 10 men and 10 women, with 5 of each grouping being elders and the other 5 middle-aged. Within those parameters, interviewees were captured opportunistically, based on who was present during cluster visits. During this survey, participants were asked if they

Table 1
Case studies included in the analysis.

Case Studies	Rangeland Concerned	Institutional Implications
Agricultural plot allocation	Koija (prime dry season grazing area)	Individualization of access and <i>de facto</i> authority over land held under collective title
Individualized livestock enclosures (<i>lokeren</i>)	Koija (residential areas)	Individualization of access, and to a lesser extent authority, over land held under collective title
Grazing quota	Neighboring private ranch	Restricted, and partially individualized, access to private rangeland secured via relational mechanisms (individual and collective)
Formalization of collective title to rangeland outside of Koija	Private parcels held by absentee landlords	Collective privatization of property and authority to <i>de facto</i> shared range, with uncertain consequences for access

had any concerns about the focal cases, and if they expressed concern to provide a statement describing that concern. These concerns were subsequently coded to produce descriptive statistics across the sample. It is important to note that only those concerns volunteered by respondents were documented. Survey results are therefore likely to reflect the most salient concerns, rather than all relevant concerns of interviewees. For grazing quotas, we drew on a 2014 survey involving male and female elders who make herding decisions (preferring, but not limited to, household heads, with an average age estimated at ~48.2 yrs) in 218 of Kojia's *nkangitie*. We independently recorded, with the help of knowledgeable group ranch members, whether any household member served currently or in the past on any of three group ranch committees: the Group Ranch Management Committee (GRMC), grazing committee (GC), the Kojia Community Trust or Bursary Committee (KCT), which we refer to collectively as leadership roles. We also recorded whether the household had an enclosure larger than those intended only to protecting beehives. In 2016, we also completed a livestock count of all 218 households to determine the numbers and composition of their livestock herds.

Interviews were conducted in Maa, with the use of an interpreter fluent in Maa and English. Simultaneous translation with recording and subsequent transcription was used during focus group discussions and for pre-testing household surveys, and subsequent survey work was conducted in Maa. The interpreter worked consistently with the project for three years, and was provided prior training for both interpretation and transcription. Statistical analyses included logistic regression to determine whether household cattle herd size predicted large lokere presence or quota participation, and linear regression to determine if herd size of quota participants was correlated with the number of animals included in the quota. Chi-square contingency tests were used to test whether leadership roles influenced the likelihood of large lokere presence and participation in the quota, and Wilcoxon nonparametric analysis of variance was used to test whether the proportion of participants' herds in the quota varied between those with and without leadership roles. All analyses were performed with JMP Statistical Software (JMP, 2013).

5. Results

This section summarizes our findings regarding privatization-collectivization dynamics for each of the four case studies.

5.1. Agriculture

Experimentation with agricultural production at Kojia began when one individual cultivated a plot of land along the river in the late 2000s. After seeing that individual's first few harvests and following subsequent agricultural interventions by the international aid charity World Vision, many others took an interest. KGR residents had never before engaged in agriculture. A June, 2012 survey found that in less than two years, 95 farm plots had been established along the river, with 133 active farmers representing about half of the households within KGR (King et al. in prep). Most farms were 0.25–1 ha in size, reliant on powered or manual irrigation from the river, and predominantly planted with maize for household consumption, though some farmers aspired to sell crops as well. Plots were either unfenced or weakly fenced with thorn branches or single strands of smooth wire. Details on the charity's intervention and plot allocation process that occurred during this time proved difficult to come by. Whether due to a culture of politeness at Kojia, lack of familiarity with the process or simply an absence of explicit decision criteria, concrete answers to questions about the process

or criteria employed for plot allocation were elusive. Focus groups did reveal that during this phase, some people began voicing concerns about the limited availability of land to farm, and the equitability of the plot allocation process. A conflict resolution process was initiated, whereby some of the initially claimed plots were divided to make space for others who expressed an interest in farming. While some indicated plots were divided perpendicular to the river so as to provide access to the river for all to water their crops, others claim that plots were divided parallel to the river – giving newcomers inferior plots. The number of actively farmed plots dropped precipitously over the next few years due to a host of challenges faced, from the cost of inputs and labor, to damage from wildlife and a drought in early 2015 in which the river providing their only source of irrigation water dried up. However, there is renewed interest in farming among some given the sizeable gains observed during good years.

This experience may be explored through an individualization lens due to the appropriation of land held under collective title by individuals. Despite the decline in active farming and the widely expressed sentiment that “the group ranch is all of ours,” the plots that were acquired in the first few years of farming are widely considered to have come under the authority of their individual occupants who hold the exclusive rights to use, manage, exclude and apportion rights to others (so-called “derived rights” acquired through relational means of access, Delville, Toulmin, Colin and Chaveau, 2001). Farmers built houses next to their plots and there was a common understanding that people would return to the same plots they had occupied in prior years.

Focus group discussions and a broader survey of 80 households (50 of which had at least one household member involved in farming at one point or another) revealed a diversity of concerns regarding the perceived legitimacy of the individualization experience. Concerns were expressed by farmers (34, or 68%) and non-farmers (14, or 47%) alike. If we are to explore the substantive dimensions of legitimacy, it is clear that the outcomes of plot allocation are uneven. Plot quality varies considerably by a host of parameters identified through focus group discussions: proximity to river, plot size, soil quality, slope & rockiness. The most salient distinction is proximity to the river, given the effect of distance on the cost or effort of irrigating. While a few foot pumps were allocated by World Vision, most farmers were found to be renting or borrowing petrol-powered pumps from one of the five group ranch members owning them. In fact, all of the initial farmers occupied plots close to the river, opting for steep or rocky plots along the riverbank rather than flatter plots elsewhere (decisions which were ultimately regretted by some). The pioneer farmer indicated that those with plots closer to the river tended to be more successful with farming due to the reduced costs of irrigating. Another important factor shaping plot preference as a function of distance from the river was the relative exposure to raiding by elephants (by far the biggest threat), hippos and monkeys. Farmers away from the river, particularly those isolated from other plots, served as a buffer from elephant raiding for plots along the river; on the other hand, plots closest to the river were said to be most affected by monkeys and hippos. As for other plot quality criteria, soil quality – cognized through distinctions in color, texture and water holding capacity – was said to play a significant role in shaping the success of farming largely from differences in soil moisture and temperature. Sandy soil was said to dry very quickly following irrigation and to be more likely to ‘burn’ the crops. Color distinctions were correlated in people's minds with texture, with sandy soil likely to be of red color and less favorable for farming, and grey soil perceived to be more favorable overall for farming. Another significant distinction was

slope and rockiness, the first affecting water retention capacity (resulting in lower yields or higher irrigation costs) and safety of one's investment (whether seeds and crops are washed away in the rain), and the latter the labor costs of tilling. The survey of 80 farmers showed that substantive concerns were salient for 29% of respondents. Of the concerns raised, plot quality was the concern mentioned most frequently, followed by negative consequences for livestock or herding (Table 2). Based on concerns volunteered during household surveys, the most salient plot qualities related to plot size and distance to the river (10 and 9 respondents, respectively). Those concerned about consequences for herding, by far in the minority, emphasized the effect of agricultural plots on the narrowing of livestock watering points and the loss of dry season grazing areas along the riverbank. This is one of the more interesting findings, and might be productively explored in future work through a look at individual and collective rationalities and the extent to which they converge or diverge given uneven livestock holdings and plot allocations.

From a procedural perspective, equitability is a subject of debate: all agreed that plot allocation occurred on a 'first come first served' basis (at least initially), with the early farmers getting "first mover's advantage", but they argued over the acceptability of this arrangement. Narratives of the early farmers emphasized their industriousness relative to others, the participatory or inclusive nature of the ultimate plot allocation process, the fact that everyone interested in farming ultimately got a plot through this process, or the fact that those having larger plots ultimately subdivided them. Yet among survey respondents, 23 individuals (29% of the total, and 56% of all the respondents who expressed some concern) voiced procedural concerns relating to the allocation process (Table 2). Eleven percent of respondents voiced concerns about biases in plot allocation along the lines of wealth, residential cluster, gender or political influence. Those related to wealth emphasized that wealthier individuals who can afford to buy pipes and generators were the ones ending up with plots nearest to the river, while those who can least afford to irrigate occupied the more distant plots. A few respondents suggested unequal plot allocation was the result of different levels of political influence, or the role of the management committee in favoring some people over others. Others emphasized biases by residential cluster, with certain clusters seen as benefiting disproportionately from plots along the river or certain clusters being left uninformed. It is important to note that the 'first movers' also had their share of complaints, arguing that their plots had been subdivided for people who had never farmed (who, according to one respondent, were being 'forced to do things they don't have an interest in' by being given a plot) or ended up with plots that were not commercially viable despite their intention to start an agribusiness.

The effectiveness of the resolution process aiming to address concerns about inequitable plot acquisitions was also debated.

Some of those required to allocate a portion of their plots to latecomers put this forward as evidence for procedural legitimacy. Yet others debated the legitimacy of this process, claiming plots were divided so as to give latecomers inferior plots ("when people came to ask, they would always give the plot that was away from the river"). This plot division was also reportedly governed by informal understandings that in many cases served to retain authority of the initial occupants over allocated areas. It was often made clear that it was a temporary situation (given for use, not to own), and entirely up to the original occupant whether to continue the arrangement. One key informant was quoted as saying the land was being given "for food, it is not yours completely." In one case, the person giving a portion of his land made this conditional on the continued lax enforcement of the statutory requirement of a 30 m riparian buffer, saying if ever enforced he would have to take 30 m out of the plot allocated to the newcomer. Such cases suggest that the rights to plots acquired by first movers were at the time of research being treated as permanent freehold rights, while many of those acquiring plots following subdivision benefited only from temporary usufruct rights subject to conditionalities.

One respondent also suggested that not everyone was required to subdivide, with those acquiring the first plots (several of whom were on the management committee leading the intervention) never dividing their plots for others. When subdividing, many also gave the subdivided plots to their relatives and friends rather than those deemed to be in need. There are some cases, however, in which plot subdivision occurred among families with no prior social ties, actions which were framed or interpreted as acts of generosity: in one case, a plot was subdivided and given outright, and friendship was the result of the plot allocation rather than the basis for it. Yet the weight of the evidence suggests that criteria for plot subdivision were neither deliberated upon nor formalized, with gestures towards equitability striking a balance between retention of privilege and restoration of harmonious relations among group ranch members.

Views of procedural legitimacy may also be seen through the recommendations provided by interviewees. The predominant recommendation for improving on plot allocation was to hold a group ranch-wide *baraza* (community meeting) to reach an agreement on how it should be done before any plot allocation is carried out. As framed by one individual, "everybody needs to be involved, because we believe we all own the land as a community, so for there to be justice and fairness everybody needs to be involved in that process." Others suggested everyone should be given equal size plots, however small they might be as a result. A final set of suggestions stressed the potential for collective action to reduce the challenges faced by all under existing plot allocations, for example in fencing the entire agricultural area against elephants, pooling labor for labor-intensive tasks (e.g. tilling, planting), and for coordinating and sharing the costs of irrigation.

Table 2
Concerns raised in 'household' surveys about agricultural plot allocations (n = 80 respondents).

Nature of the Concern	Number of respondents
Substantive concerns	23^a
Differences in plot size, location, or quality	19
Negative consequences for livestock/herding	3
Loss of good plot near river following the intervention of a private lodge	1
Procedural concerns	18
Perceived social and political biases in plot allocation	9
Failure to inform or consider all residents in the initial plot allocation	7
Plot subdivision disadvantaged more 'serious' or experienced farmers	2
No expressed concerns	32

^a While a total of 48 people said "yes" to the question of whether they had any concerns about this process, we only enumerate here those who specified the nature of their concerns.

5.2. Enclosures

The practice of fencing areas adjacent to or near homesteads for private use has been in practice for as long as those interviewed could remember. The practice has multiple purposes, as specified above. Factors motivating the establishment of *lokeren* today include: (1) reserve grazing, in which an area is protected from grazing by livestock (including one's own) during the rainy season, so as to safeguard it for one's personal use or for hire during the dry season; (2) reducing the burden of long-distance grazing for some animals (e.g. livestock that are young, sick, injured or in labor) during any season; (3) catering for limitations in household herding labor during certain times of the day; and (4) protection of beehives and "honey trees" from disturbance. The relative importance of different motivations has evolved over time as a function of a complex set of factors, among these: changes in beekeeping practices; rising population density (e.g., inducing conflict when *lokeren* are too large); environmental conditions (incentivizing rehabilitation and fodder functions of *lokeren*, reduced availability of taller trees, and reducing the threat of hives to humans and livestock); and changes in livelihood portfolios (e.g., relative importance of beekeeping, herd size and composition changes).

Changes in beekeeping practices include changes in hive type and location. The prime location for hives is along waterways, where hives are hung high up in certain trees. While these locations continue to be the most productive, access is controlled by customary rules of inheritance and they are not available to everyone. Thus, many families have hives near their homesteads, which are commonly protected by *lokeren*. Regarding hive type, reduced availability of mature *mpopongi* trees (*Euphorbia magni-capsula*), once the main tree used to construct beehives, has incentivized the use of modern beehives. These newer hives have unique properties that require distinctive management strategies, as described by a male focus group participant:

"You know this *lbiliin* [newer hive] needs a lot of bees and the way they make their honey is different from the way that of *mpopongi* does, as it can have too many bees and by the time it is trying to make more it is attacked by the honey badger and they all get away. And that [hive] of *lbiliin*, ...you need to make them have so many bees, so you need to fence in such a way that the honey badger cannot attack it because it will disturb the bees, as the bees that fill that place with the honey need to be many as opposed to that of the *mpopongi*. ...And why again we fence the *lokeren* is because the bees of *lbiliin* can be so aggressive they can even come all the way to here if they attack from my home. And *lbiliin* also if you give them water for two days, then the next day they will come to the house to look for the water, they will be together with the children, and if you try to chase them, that [bee] in the house will go and call all of them."

These hives have therefore increased the need for well-maintained *lokeren*, for regular care of hives, and for vigilance to avoid loss of bees and to keep people safe. Increased human populations have also played a role, by shaping tolerance thresholds for *lokeren* of different size and the incidence of conflict related to the blockage of herding routes and illicit use of another person's *lokeren*. Changing environmental conditions also appear to play a role, as *lokeren* reportedly help to reverse growth in bare patches and gully formation. They may also be motivated by reduced access to dry season range, which is known to increase vulnerability to drought. As populations have grown, people are also forced to place hives in shorter trees – increasing risks to humans and livestock. Finally, changes in livelihood portfolios appear to play a role for some families, whether through shifting the relative importance of

beekeeping or due to outside employment (which reduces herding labor). Wider shifts in herd composition from cattle to smallstock has also changed the nature of herding practices (Herren, 1989), likely shifting some of the labor burden to women, as women and children tend to herd smallstock more frequently than men. To balance domestic chores with herding, *lokeren* have an important function as a temporary place to keep goats, calves and pregnant or sick livestock during certain hours of the day when women are occupied by other chores. As expressed by June, 2015 focus group participants:

"You may be having a *lokere* and you have gone to work and only the wife is at home, so she can lock in the animals and ask the kid to look after when she goes to fetch the water or cooking food for the kids before she can come and drive them away to herd."

"Those with few livestock can close them in and go to do other things."

It is difficult to tease these factors apart or identify their overall effects on *lokere* management, given complex interactions among factors and inter-household variability in livelihood portfolios and strategies. The only unambiguous trend, as identified by multiple individuals in each focus group discussion, has been a general trend towards a reduction in size. This is reportedly due to two factors: increased population density and its implications for social conflict induced by enclosures that restrict movement of livestock on the landscape, and the reduced social acceptability of large *lokeren* due to group ranch titling. The latter was expressed as follows:

"Why they are becoming less is that people are complaining, saying this area is not yours alone, it belongs to all of us. That's why people are doing away with *lokeren* and they are making many small ones compared to the past. People ... are now complaining that we all own this land so everybody should have equal use of that land... Unlike in the past, our fathers never bothered about the land issue."

"We have educated people within the community, and they may take advantage in the name of the *lokere*, and in one way or another they are looking for a title of this place. So to avoid any doubt, that's why the *lokeren* are abolished."

Participants in a June, 2015 focus group suggested that the primary function of *lokeren* had diversified over time, from beekeeping as the primary motivation in the past, to a situation in which even households without bees construct them:

"Since I can remember, I noticed that people with beehives always are the people with the *lokeren*. Because they fence that place to protect their beehives, so by protecting this place you keep away animals grazing there to come knock your beehives. That place would then have good grass, and you take advantage of that good grass for your livestock... When you move from this place to another place, you again need to build up a *lokere* because you have beehives and you will need to move your beehives to the new *boma* [Swahili word for *nkang*]."

"Since I grew up I have always seen those people with beehives having *lokere* and then due to that you find yourself having a place for your goat to graze."

Nowadays, "it [their purpose] depends because I may have the beehives but I do not keep the beehives inside, I keep them in the forest as we have many that are there, so you see then my *lokere* will purposely be for the livestock, so when the drought

comes I will have somewhere to keep my weak animals or the baby goats; and we can have also those people who fence their *lokere* so they can keep the beehives only.”

While this was emphasized less frequently than changes in size, a shift to single-purpose enclosures for livestock would make sense in the context of growing population and shrinking range, something supported by evolutionary views of property (e.g., Platteau, 2000). It is also consistent with the discourse of those with larger *lokeren*, who justify these practices as helping to rehabilitate land (in their words, to “kill the bare spots” and bring back grass).

This case may also be looked at through an individualization lens due to the appropriation of land held under collective title by individuals. Yet the case is somewhat different from the others, in that individualization can be interpreted as favoring poorer households over the wealthier households – a view that was supported by one of our focus groups (see also Lesorogol and Boone, 2016). This is because those with larger herds benefit disproportionately from the commons (see, for example, Platteau, 2000), and those with small herds or no livestock can recuperate some of the “inefficiencies” associated with their participation in the commons by having a *lokere* to reduce their herding burden or rent the area out to others. By this metric, individualization could be viewed as enhancing equity. On the other hand, larger *lokeren* near seasonal streams (*lagas*) considered to be prime grazing areas are viewed unfavorably by others. It’s also important to note that households with large herds also derive benefits from *lokeren* because they will often have a certain number of livestock that are ill, giving birth, or too young to accompany the herds who travel further afield to graze.

Current opinion on the acceptability of *lokeren* is divided. In focus group discussions, the proponents argued that those who wish to abolish them completely are lazy – not ‘taking responsibility’ for repairing them, not ‘bothering about their livestock’, or not ‘serious.’ This may simply be a discourse generated to justify their actions rather than a representation of reality. Those in favor of forbidding them altogether, on the other hand, argued that those in favor want to protect high value grazing areas for themselves. Household survey responses were somewhat more nuanced, highlighting a host of sentiments both in favor and against *lokeren* (Table 3).

Lokeren were said to generate conflict when they block grazing routes or paths to watering points, exclude others from prime grazing areas, or when the ‘owner’ responds very harshly to those found harvesting thatch or other resources from the area or whose livestock get inside to graze. Some believed that this conflict increased in recent years. Those believing they are an expression of

selfishness justified this on the grounds of *lokeren* denying others access, their role in providing uneven access to land that is jointly owned, or their size or placement within prime grazing areas. Those emphasizing joint land ownership as a reason for the illegitimacy of *lokeren* emphasized the need for equal usage, their objections to pasture rental in the dry season, or their concerns that it would lead to subdivision (“which is not good for pastoralists”). Those against *lokeren* tended to emphasize moral-normative dimensions related to shared values that are infringed upon through their establishment.

Those in favor, on the other hand, tended to emphasize the conditions under which *lokeren* may be viewed as socially acceptable and substantive dimensions linked to their crucial livelihood functions. The primary conditions that needed to be met were small size and absence of conflict, which were mentioned by 14% and 11% of respondents, respectively. Other conditions included proximity to *nkangitie*, no blockage of herding routes, ‘non-violation of other peoples’ rights’ (mentioned by 2–3 individuals each) and the attitudes that accompany enclosures. The substantive benefits stated included crucial livelihood functions, as well as the environmental improvements induced through enclosures: slowing down run-off, and encouraging pasture growth (which reportedly starts on the upslope side and migrates downward).

Thus, while it is true that people expressed different views on their legitimacy, the following are commonly shared norms that appeared to govern judgement of the social acceptability of any given *lokere*:

1. They should be small in size;
2. They should be close to one’s *nkang*;
3. They should not block grazing routes;
4. They should not occupy places important for dry season grazing (e.g. near seasonal riverbeds)
5. If you want to utilize someone’s *lokere*, you must ask;
6. When reacting to someone’s animals who have gotten into your *lokere*, you should respond in calm/polite manner rather than with anger (“goats don’t understand boundaries”);
7. The importance of accommodating those in need (“as neighbors, if he has a weak cow or goat, he can ask me for it”).

There seems to be relatively widespread agreement that small *lokeren* located near one’s *nkang* are fine, but large *lokeren*, those that hinder livestock movement across the landscape, or those enclosing prime grazing areas far from one’s homestead are not acceptable. This seems to represent a departure from the past, when it was said that larger *lokeren* near *nkangitie* were allowed, provided one’s *nkang* was far enough from others’. With privatization (and the sense of land ownership, and *shared* ownership,

Table 3
Sentiments expressed in household surveys about enclosures (n = 80 respondents).

Sentiments about <i>Lokeren</i> (S = substantive; P = procedural; N = moral-normative)	Number of respondents
Those Against	
They should be abolished because they cause conflict (S, N)	19
They are a sign of selfishness (N)	10
They should be abolished because the land is owned communally (N)	9
They reduce grazing area and deny others access (S, N)	5
Those in Favor	
They are fine, as long as they meet certain criteria shaping their acceptability (S, P, N)	26
They are important for baby goats (to keep them safe from jackals), and livestock that is sick or giving birth (S)	12
It helps conserve the environment (S)	6
It helps those with few livestock to extend the period of forage availability (S)	3
They are good for beekeeping (S)	1
They are fine, provided people understand the land is for us all (N)	1

that it inculcated) and population growth, the official discourse surrounding larger *lokeren* was that they should be forbidden outright. The discourse about size focused on the ability of livestock to pass through rather than to graze in that area per se, although both were mentioned. Proximity to *nkangitie* was rationalized by the limited use of these areas for grazing by other households (because of the tendency for baby goats to run into other people's herd and go astray) and enhanced ability to monitor use (which presumably plays a role in minimizing social conflict). However, this norm is also likely to help reduce opportunistic fencing of prime grazing areas. These last three express social norms seemingly designed to minimize conflict related to individualized behaviors related to *lokeren*.

In practice, many people had large *lokeren* (36, according to 2013 survey data). This designation was based on visual inspection by co-author P. Naiputari, a Kojia resident, who took note of *lokeren* larger than those built to protect beehives alone. By visual estimation on satellite imagery, these commonly ranged from 1 to 2 ha in size. Those that exceed that amount do so by a lot, but are very few in number (quickbird images from 2011 show two *lokeren* of approximately 25 ha, and co-author P. Naiputari estimates the maximum size at present to be no more than 15 ha). An exploration of the relationship between leadership roles and large *lokeren* found no relationship. Members of 58 households held leadership roles on group ranch committees, yet their households were not more likely to have a larger enclosure (chi-square test: $\chi^2 = 0.058$, $p = 0.81$). Neither was the size of a household's cattle herd found to be a predictor of the likelihood of having a larger enclosure (logistic regression: $\chi^2 = 0.197$, $p = 0.67$). In practice, larger *lokeren* and those located in important grazing areas seem to be allowed provided they do not lead to social conflict. In a bid to avoid enforcement, those having *lokeren* were said to try and manage them in ways that avoid conflict and the resulting intervention by the elders. It also seems that people continue to allow (encourage?) their livestock to access the *lokeren* of others when in need. Some respondents indicated that the tendency to put your livestock in another household's *lokere* has increased with group ranch formalization because they know their actions will be backed up in case of a conflict, given the decline in social acceptability of these enclosures.

Views on procedural legitimacy may be best deduced through the single recommendation repeatedly voiced in interviewees: to host a group ranch-wide *baraza*, during which decisions on whether to have *lokeren* and the size of *lokeren* are agreed upon and apply to all. As with the agricultural case, the emphasis was on formalized (intentional and inclusive) decision-making on whether, to what extent, and how to individualize the commons.

5.3. Grazing quota

Trends in land privatization and enclosures in Kenya's northern rangelands, initiated during the colonial period but intensifying recently in the context of the global 'land rush' (Letai, 2011), have led to the enclosure and intensification of these lands. While goats have greater drought tolerance and do not require grass, the very survival of cattle – and to a lesser extent, sheep – depends on mobility. Kojia residents' efforts to secure mobility include at least the following mechanisms: (i) the cultivation of relationships with neighboring private ranches to secure community quotas for paid grazing access in dry seasons; (ii) efforts to safeguard access by privatizing additional land in the name of Kojia residents; (iii) negotiating access with other neighboring pastoralist communities; (iv) access to grazing on neighboring ranches as a result of employment on those ranches; and (v) illicit grazing on neighboring ranches outside of formalized agreements (see Unks, in

prep, for a detailed analysis of these strategies). The first three mechanisms are coordinated at a collective level, while the last two are household-level strategies. This section addresses the first mechanism, the paid grazing quota system; the subsequent section addresses the second mechanism, efforts to secure privatized titles to land outside the group ranch.

The larger part of the western border of KGR is shared with Loisaba ranch, a partner in multiple spheres: ecotourism (the management of the community lodge); controlling illicit grazing by Kojia residents and other pastoralist communities; and social development activities on KGR. Grazing access for Kojia residents includes an annual community grazing quota. The quota varies from season to season, but typically consists of an estimated 120 adult cows per residential cluster, who are allowed to graze on Loisaba during each dry season in exchange for a monthly fee.

This case differs from the others in that it involves the allocation of short-term grazing access on private land held and actively used by a third party. The justification for exploring it under a privatization-individualization lens rests on the collective ties of Kojia Group Ranch residents to Loisaba in both historical and contemporary times. From an historical perspective, the land was once heavily used by Kojia residents, some of whom claim customary rights to the area. This ranch was also part of areas formerly occupied by the Laikipiak Maasai, and later the Purko Maasai (Hughes, 2006). Place names used until today and sites recognized as former LeUaso and Laikipiak Maasai *nkangitie* support these claims. From a contemporary perspective, the access rights enjoyed today are secured through relational mechanisms (Ribot and Peluso, 2003) that are both individual and collective in nature: the relationships that individuals on the grazing committee enjoy with Loisaba managers, and the relations that KGR members as a whole enjoy with Loisaba through their partnerships in other spheres. The grazing quota allocated to Kojia can thus be interpreted as collective rather than individual rights leveraged at least in part through simple residence at Kojia. Yet as it amounts to just 15.3% of all cattle on Kojia, and grazing beyond Kojia boundaries is a matter of necessity for cattle herds, it is of high importance how equitably that quota is allocated among group ranch members.

Employing once again a substantive look at legitimacy, the equitability of grazing quota allocation depends on the scale of analysis and the criteria employed. The only formal criterion for allocating the quota within the group ranch is numerical equity across residential clusters. While a seemingly simple standard against which to evaluate outcomes, what this means in practice is uncertain. Table 4 evaluates "cluster equity" for the 2014 grazing quota using four variables that correspond to levels of access. The first is the absolute number of cattle from each cluster, which is the formal criterion. The other three measures bring in some dimension of relative or proportional equity, accounting for the fact that clusters have different total cattle holdings and different numbers of cattle-owning households. Despite the substantive criterion for equity among clusters, the realized patterns of quota allocation showed substantial inequity in access to paid grazing. Kojia and Nosirai clusters tend to have greater access across all indicator variables, while Mtaro and Munishoi have lower levels of access throughout.

Allocation equity between clusters was highest for absolute number of cattle from each cluster in the quota (Table 4, Column A), which is the formal criterion of equality used in the quota system. But even for this indicator, cluster access varied by up to 63% (124 cattle from Nosirai and 76 from Munishoi). It is also worth considering which of the variables are best matched to local norms and expectations about what constitutes cluster equity. This was brought up by one focus group, in which participants otherwise disadvantaged by the current allocation (having few cows and no

Table 4

Indicator variables of cluster equity, representing how many of each cluster's cattle were included in the paid grazing quota on Loisaba, 2014^a. Each cluster's rank, in terms of highest to lowest access (1–4), for each indicator variable is indicated in parentheses.

Cluster	A. Total number of cattle in quota	B. Percentage of cluster's cattle in quota	C. Number of cattle-owning manyattas	D. Average number of cattle per cattle-owning manyatta in quota (A:C)
Kojja	91 (2)	19.2 (1)	24 (1)	4.0 (1)
Nosirai	124 (1)	17.8 (2)	32 (2)	3.9 (2)
Mtaro	89 (3)	8.7 (4)	37 (3)	2.4 (3)
Munishoi	76 (4)	15.5 (3)	39 (4)	1.9 (4)

^a Excluded from the analysis are manyattas with residents employed at Loisaba (so as to avoid confounding the data by including the other, relational means of access that they enjoy).

access) suggested that a household's herd size should nevertheless be considered in the quota allocation (“a quota of 5 for a household with many cattle would be meaningless”). The measure that best reflects such a principle of proportionality is the criterion “percentage of cluster's cattle in quota” (Table 4, Column B). Yet this variable had the greatest inequity among clusters, with a 121% difference between Kojja and Mtaro (19.2% and 8.7% of their cattle in the quota, respectively).

It is important to also explore contextual variables that may be playing a role in the quota allocation, such as the role of geography in shaping differential access to alternative grazing sites. For example, Munishoi had consistently low access to paid grazing (Table 4), but is situated adjacent to another ranch, where Munishoi residents have greater access to paid grazing than other clusters. While ethnographic data did not reveal whether such circumstances played a role in the Loisaba quota allocation, this contextualization points to the challenges of evaluating the significance of cluster-level inequity in a complex access system.

Below the scale of cluster-level allocation, equity in access to grazing quotas can be analyzed at the household level, as a function of household cattle wealth. This was analyzed using household specific data for the 2014 quota by plotting the number of cattle that each *nkang* had in the quota against the number of cattle owned by that *nkang* (using the number of cattle owned according to a survey conducted in 2016 to verify animal numbers), for all cattle-owning *nkangitie*. Households with Loisaba employees had different forms of relational access to grazing, so those households were excluded from this analysis. The resulting graph (Fig. 2) shows three main patterns. First, there are a large number of households that did not have any animals included in the quota at all (90 of the 154 cattle-owning *nkangitie*). Second, for the 64 quota-accessing *nkangitie*, the number of included animals was only weakly predicted by the number of cattle owned by that *nkang*. Third, there were two striking outliers among the 154 cattle-owning households. To gain a more nuanced understanding of equity issues associated with the quota system, quantitative and qualitative methods were employed to consider each of these trends in turn.

Different dimensions of equity are revealed by examining the dynamics of non-participation in the quota. Less than half of the cattle owning families participated in the quota system, raising the issue that households may experience unequal access or desire to participate in the quota. Based on ethnographic data, non-participation was found to have at least 4 causes: exclusion from the quota; non-desirability of paid grazing due to unsatisfactory husbandry (poor forage, animals walking too far, lack of attention to disease); loss of access to milk for household consumption when cattle are in the quota; and sale or trade of quotas among households. Logistic regression revealed that households with less livestock wealth were less likely to participate ($\chi^2 = 13.4$, $p = 0.0002$), suggesting that these reasons for non-participation were more salient for households with fewer cattle.

For those households who did participate in quotas, we observed large variation in the proportion of herds included in the quota. Linear regression (excluding one extreme outlier) showed that the number of cattle owned by a household was a weak predictor of the number of cattle that household would have included the quota, explaining only 26% of the variation in quota allocation ($r^2 = 0.26$, $p = 0.0001$). This suggests that at the household level, any norms of proportionality (see Platteau, 2000: 97) were overshadowed by other factors that influenced allocation. This was supported by ethnographic accounts that emphasized the way that households may be prioritized or marginalized by those responsible for organizing the quota, based on reputation or social connections – a topic that we will return to below.

It is also worth considering implications of the two outlier households, who were excluded from previous analyses because such outliers distort statistical trends. While both households had the largest overall cattle herds at Kojja, they had distinctly different quota access patterns: one participated in the quota and the other did not. Characteristics of these households were examined to identify any suggestive contributing factors to their different strategies. The non-participant household was from Mtaro neighborhood, which had the lowest proportion of its cattle (8.7%, Table 4)

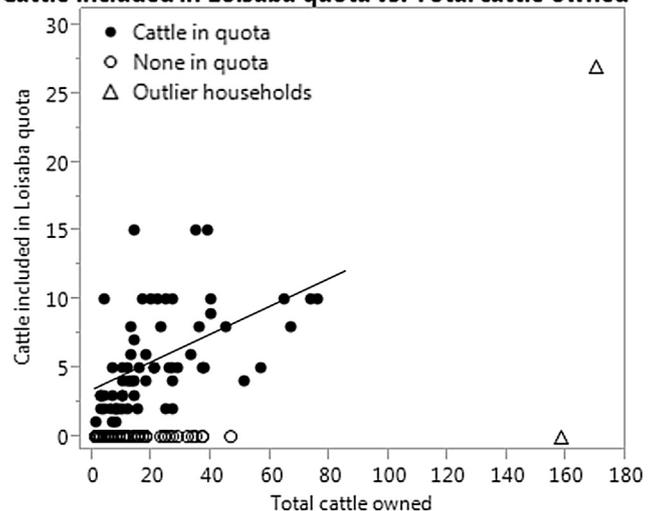
Cattle included in Loisaba quota vs. Total cattle owned

Fig. 2. Scatterplot of number of cows included in quota at Loisaba versus the number of cows owned by a *nkangitie*. Each point represents a *nkang*. The trend line shows the linear regression for households that participated in quota (filled circles). The slope was significantly different from zero ($p = 0.001$), but the relationship explained only 26% of the variation in cattle numbers included ($r^2 = 0.26$). Open circles are households that owned cattle but did not participate in the quota at all. Open triangles are two outlier households excluded from analyses because of their exaggerated effect on statistical relationships.

included in the quota, and had no members who had served leadership roles. On the other hand, the other outlier household, which had 27 cattle in the quota, had a household member in a leadership role on the grazing committee.

To explore the extent to which relational means of access may affect quota allocation, the possible influence of leadership roles was examined in greater detail. Household surveys recorded whether a household member served – currently or in the past – on the Kojia Group Ranch Management Committee, the Kojia Community Trust and Bursary Committee, and/or the Grazing Committee. Overall, 51 of the 154 households considered had a person who previously or at the time of research served on at least one committee. For each of the committees, participation in the quota system was significantly more common for households that had committee members (Fig. 3a). However, for only those households with cattle in the quota, committee membership did not affect the proportion of a household's herd included in the quota (Fig. 3b). As in the case of household livestock wealth, access inequity was more evidently manifest in terms of participation vs. non-participation, than the proportion of cattle included for those who were participating.

So how is the quota allocation governed, and to what extent is it viewed as procedurally legitimate? According to the grazing committee Chairman and a representative of Loisaba, the only requirement set by them on committee membership was that the committee must have two representatives on the grazing committee for each cluster. While Kojia residents indicated the appointment of the Chairman is heavily influenced by Loisaba, the rest of the governance decisions seem to be left to the group ranch. The Chairman indicated the members of the committee from each cluster are chosen by the elders residing in that cluster, but some respondents without cattle in the quota thought that the entire committee had been appointed by Loisaba. Unlike the annual general meetings during which KGR residents decide whether to elect a new Group Ranch Committee, the term of service on the grazing committee is indefinite. As for the quota allocation process, according to Loisaba, the only allocation criterion set by them is cluster equity, defined as each cluster having the same number of head of cattle. However, Loisaba reportedly stays out of the process,

charging the committee with finding the cows to fill the quota, though they do keep records of who the cows are said to belong to. The only controls are at the time the cattle enter Loisaba, when the cattle from each cluster enter at the same time and employees who know everyone at Kojia are appointed to verify the number of cattle that enter. The Chairman of the grazing committee also claimed to leave the cluster-level allocation up to cluster representatives, without imposing any criteria.

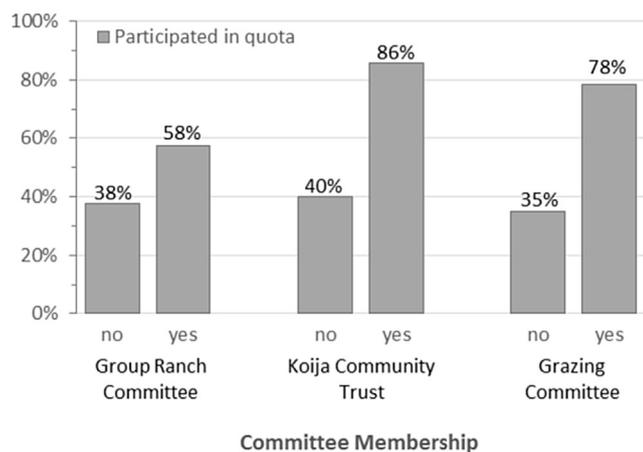
This process had very little procedural legitimacy in the eyes of those we spoke to who felt disadvantaged by it. According to some respondents, the quota was allocated according to who you know, and by the time others come to know about it, the quota is filled up:

“These people who have been appointed talk to the other elders, they don't talk to everybody to discuss who takes their cows there. I might have 4 cows, the other might have 3, and we may not get any quota. The group just sits down and decides without a *baraza*, and if you have a friend, the more you will be favored.”

“These people who were involved in allocating people's cows, they do it as in, ‘Who do you know? Is he your friend, is he your relative?’ So these people distribute cows to those people they know, basing on how they know one another.”

Even Loisaba acknowledged the possibility of irregularities in the process. One year, cluster disparities were identified (which contrary to our data favored Munishoi) but were left unaddressed. Some blamed Loisaba for the perceived disparities due to their preference for people who “leak information” (presumably about illegal grazing) and tendency to defer to those appointed rather than “looking into the issue.” Yet others disagreed, saying Loisaba is “not to be blamed so much, because [they do] not know each person here.” These individuals felt that it was the grazing committee that is responsible for “neglecting some people.” These comments seem to suggest that non-participation is not about lack of interest, but the result of biases in the quota allocation process. Once again, a group ranch-wide *baraza*, along with “equal allocation,” was suggested as the way to redress inequities:

Committee Membership and Household Participation in Quota



Committee Membership and Proportion of Cattle in Quota for Households that Participated in Quota

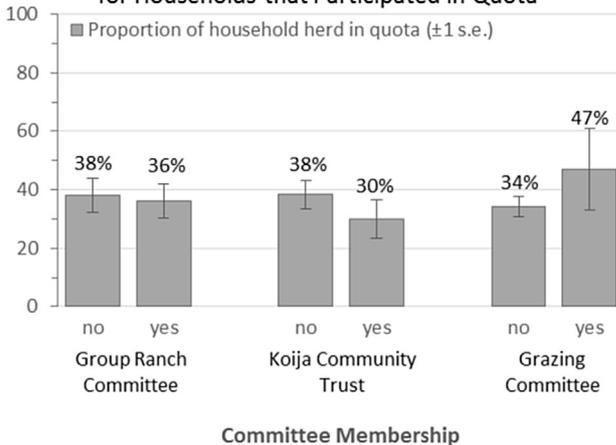


Fig. 3. Quota access for households that did, or did not, have members who served on three different committees in the community. Fig. 3a shows the percentage of all cattle-owning households that participated in the quota system, broken down according to whether that household contained a current or past committee member. Rates of participation were significantly different between members and non-members for each committee (chi-square test: $\chi^2 = 4.38, 15.18, 6.14$; $p = 0.036, 0.001, \text{ and } 0.013$, for KGR, KCT, and GC, respectively). Fig. 3b includes only households that did participate in the quota. It shows the mean percentage of each household's total cattle herd that was included in the 2016 quota. Differences between members and non-members were not significantly different for any of the committees (Wilcoxon rank test: $\chi^2 = 0.082, 0.041, 0.048$; $p = 0.774, 0.840, \text{ and } 0.827$, for GRMC, KCT, and GC, respectively).

“The only solution to this problem is when they want to allocate these cows to the quota, [the Loisaba representative] himself must come and they should call for a big *baraza* [for] everyone to sit down there and they share this number of cows that he wants, even if it's everyone to have 1 cow.”

And this, of course, is the main barrier to equity: the high stakes of the quota for herd survival, and the economic consequences of a fully inclusive and transparent process. While this is a process that could be imposed by Loisaba managers, it may not be in their interests to directly confront grazing committee members. The chairman of the grazing committee, for example, is reported to inform on illicit grazing on Loisaba, and claims to have been instrumental in negotiating formalized grazing access through the quota system. It is also important to acknowledge the benefits that flow to the wider community through the Chairman's relationship with Loisaba: whereas cattle caught “illegally” grazing in the past would be apprehended until the owners came to pay their fines, they are now returned to Koiya (thereby avoiding confinement in Loisaba's cattle crush) with the understanding that the Chairman will help ensure that fines are paid. It is unclear whether cows caught grazing outside the quota are caught more often under this arrangement, but the greater leniency in the response is clear.

5.4. Formalization of collective title to dry season range

The final arena for considering collectivization-individualization dynamics relates to the formalization of collective title to rangeland outside of Koiya. The area in question was a colonial era ranch or subset of one, that the Kenyatta administration gained possession of following independence (Letai, 2011). Focus group participants claimed that in the past, Koiya residents were not allowed to graze there, and were unable to access it because it was surrounded by private ranches. After independence the land was subdivided into 900 parcels, which were sold (Williams, 2013) or given to Kikuyu families by the Jomo Kenyatta regime as payment for their support. Few of these families occupied the area, instead largely using them for collateral on loans (Letai, 2011), and the land has been used for at least several decades for dry season grazing by Maasai, Pokot, Samburu and Turkana households (including Koiya residents). One focus group participant related this post-independence history as follows: “During that time, there was no membership in [the area], there was nobody saying this is my place; it was just an open place that anybody could go and graze. There are people who now call [it] theirs.”

The process of securing title by Koiya residents began in the 1970s. One respondent was able to name four families that bought a parcel within the area at this time. They were given some papers by a Kikuyu man but never a title deed. Around 1990, other families from Koiya went to settle in the area to stake land claims, but left again in 2005 during the Pokot-Samburu wars when they lost all their cattle to the Pokot. During the mid-2000s, after securing title to the group ranch, the KGR Chairman made a bid to use group ranch money to buy a plot in the area and make it part of Koiya, but people rejected the idea. About two years later, after a severe drought, sentiments changed and an initiative started to have individuals contribute Ksh 10,000 each to purchase the parcel. The families that fled the area in 2005 reportedly returned in 2007 as part of this effort. They formed and registered a community-based organization (CBO) with this money, and managed to secure a title in the name of the CBO. While the name of the entire area is often given when discussing efforts to secure a title, based on documents provided by the Chairman the title deed only covers a 11.6 ha parcel. CBO members reportedly aspire to purchase more land

through membership fees from new members and by raising a herd of steers owned collectively. The Chairman indicated that each year the members collectively contribute Ksh 1 million (approximately US\$ 10,000) to an association of Kikuyu landowners, for this purpose. Changes in the 2010 constitution are reportedly enabling CBO's to make claims to these lands (Galaty, 2016), and addressing land tenure security for the CBO was one of the aims of a project carried out by the Zeitz Foundation with funding from the Global Environment Facility, presumably as part of the Laikipia Unity and Land Initiative (GEF n.d.). However, imperfect “legal literacy” of CBO members and our inability to track down records of CBO registration or land transactions in district offices make the legal status of these claims uncertain. It is therefore unclear what effects these efforts or the project supporting them will have on (prospects for) Koiya CBO efforts to secure title to land in the area.

Based on focus group discussions and a key informant interview with the former KGR Chairman, those using the area for grazing prior to recent efforts to acquire titles include permanent residents as well as those relying on the area for dry season grazing. Those currently grazing there were said to include many Koiya residents not involved in the titling effort, other Maasai (of the neighboring Ldigiri group), as well as Samburu, Turkana and Pokot pastoralists. One respondent indicated that the majority of non-Koiya users were Samburu, and that seasonal users far exceed the CBO members: “So many people go there, even more than the members. Even if your goats get lost, you cannot even know [where they are], because there are so many people there.” Thus, while the parcel is small relative to the area used by these pastoralist groups, it does help secure at least one portion of that collectively used range.

Efforts by the Koiya CBO to secure titles to more parcels in the area make it difficult to explore the substantive dimensions of legitimacy for this case, as the outcomes are indeterminate. It will depend in large part on rules governing new CBO membership, and the extent to which those accessing the area prior to recent efforts to acquire titles would have ongoing access. It appears that the vast majority of households living on the titled parcel year-round were involved in the effort to acquire title. While these were predominantly families from Koiya (who together account for more than 30 *nkangitie*), they also include a few Turkana and Samburu families (one and two *nkangitie*, respectively). We were unable to verify whether all of these households had settled there explicitly to stake claims to the area, or for other reasons. There are a few families with *nkangitie* at Sukutan that are not members, but it was not possible to verify the reasons. Some maintain a house and boma there but only use it when needed for grazing. Conversely, there are a few members that do not have any household members living in the area. There are also many residents of Koiya that access the area seasonally who have not yet chosen to pay the required fees and thus to participate in the titling effort.

For most Koiya residents, ongoing access to the few remaining areas of dry season range outside Koiya (of which the case study is but one) is of great consequence given the great difficulty of relying exclusively on Koiya for cattle in the dry season. Sixty percent of Koiya's 191 *nkangitie* claimed to have cattle and/or sheep herds (the livestock most dependent on dry season grazing ranges) grazing in the case study area at some point in 2013. Yet Koiya residents are not the only people grazing cattle in the area. Opinion was divided on how titling in the name of the CBO was likely to affect future access for these groups. One member who pioneered this effort as KGR Chairman indicated that while people are given access freely, this will come to change as a result of their ownership of the land:

“At that time, I said anyone willing to come and settle [there], you have to come and do that contribution. But we don't want people to come and graze and disappear ... We are thinking of

restricting it, so that nobody can come unless they pay. ... Otherwise, what will be the benefiting of buying the land if people just come and go? And if we need to hire scouts, what money shall we use to pay? It is this money (from paid grazing) we shall use to pay.”

This individual indicated they were planning on encouraging all group ranch members to register as CBO members, so that any resident of Koiya could also be allowed to graze there. He said that if they still choose not to participate after given the opportunity, they too will have to pay for grazing access. Non-members also speculated on how formal ownership by other KGR members would shape grazing access in the area:

“When these people will get the title, even if they are our people, we shall have to go and ask permission to be there, because now that will be their property ... Since these people are ours, I don't think there will come a time when they refuse [us] to access grazing there. ... But for people like Samburu, I don't think they will be allowed to graze there. ... These Samburus who are living there, they are just living there because they requested to live there. So they will obey the rules of the majority. If they want people to come, they will have to ask the entire community if they will be allowed to bring some there.”

As for membership criteria, the CBO Chairman indicated they would like to cap membership at 300, and new membership would be limited to Koiya residents. While this interpretation is in line with the “Koiya 2” label for the area, used by one of the former Group Ranch Chairmen, it is also speculation and only time will tell how access is governed.

In surveys, participants and non-participants alike (all from Koiya) were found to be strongly in favor of the effort to seek a title deed. When envisioning future access to the area through CBO ownership of a parcel therein, respondents from participant and non-participant *nkangitie* alike emphasized the benefits resulting from reduced grazing pressure on Koiya and their ability to benefit through their ties to members (Table 5). Reduced congestion was expressed by one individual as the ability to graze longer than usual before having to seek pasture elsewhere, while those emphasizing benefits through social ties emphasized members being “our people”, their ability to move there “with ease” and the ability to acquire more grazing area “for Koiya.” These expectations reflect lack of awareness of the unresolved questions of whether all Koiya residents or only CBO members would have access, and whether they would be expected to pay the CBO for that access. It is interesting to note that the only respondent to express concern about ongoing access was from a participant *nkangitie*; whether this concern arose out of greater familiarity with member plans for the area or other reasons is uncertain. The envisioned expansion of Koiya into non-adjacent lands poses a suite of challenges to equitable access in the future. Given the slow, contentious process of titling in Kenya and challenges faced in securing even a small parcel, the amount of land that is likely to be formally acquired in the area is unlikely to

meet residents' expectations as they were reflected in statements regarding reducing crowding. The leaders at Koiya offered contrasting potential scenarios for regulating access, ranging from allowing all Koiya residents and some non-Koiya families access, to restricting access to Koiya households only, to a capped number of CBO members. Thus, securing titles in the area could bring about either increased collectivization or increased privatization of access and use of that area, depending on the formal and informal governance processes to be adopted.

While it is as yet unclear how expanded titling would affect equity in collective access among Koiya residents, it is expected to result in decreased collective use or outright exclusion of members of other pastoralist groups that currently use the area. This raises additional challenges for *inter-ethnic* parity, which can lead to conflict and subsequent livelihood vulnerability for Koiya residents on a broader social-political scale, if their pursuit of titling is seen as a threat to the other pastoralist groups using the area. This potential outcome was not raised in interviews. However, one of the authors on this paper (a resident of Koiya) speculates that this would lead to a lot of conflict in the years to come, referencing recent Samburu-Koiya conflicts as stemming from KGR efforts to deny the Samburu grazing access on the group ranch. The Pokot-Samburu conflict that led to the evacuation of the area in 2005 was itself triggered by a tenure formalization process that denied Pokots access to former seasonal grazing (Greiner, 2012). The Pokot retaliation and subsequent Samburu counter-retaliations resulted in years of armed conflict and human displacement in western Laikipia. So-called “abandoned lands” such as these can also serve as areas for pastoralists to gain a point of entry to graze without permission on private ranches (Wade, 2015), and it is commonly known that Samburu herders stay at Koiya primarily to access grazing on neighboring Loisaba. This plays into the idea of community conservancies as motivated in part by the “security” interests of private ranches.

A third reason for the strong support for the titling effort derived from emerging notions of property in land, which was expressed as the ability to control or have authority over the area (4 individuals) or the ability to better protect land through controls on its use (1). One respondent from a non-participant *nkangitie* expressed concern that it might bring intercommunity conflicts among members, given shared title among people from Koiya (Leuaso) and Samburus – who “don't know how to live together.” Despite this sentiment, the two groups have a closely shared, overlapping history, and intermarriage between Leuaso and Samburus is not uncommon (see Hodder, 1982; Cronk, 2002). This suggests these inter-ethnic tensions are situated within recent history and the new set of political dynamics taking shape in the region (Greiner, 2013).

As for procedural dimensions of this case, those spearheading the process claim everyone was given the opportunity to buy into the scheme. However, some non-participants who depend heavily on the area for reserve grazing claim they never received clear communication about the opportunity to be a member if you pay the membership fee. On the other hand, even those who felt insufficiently informed felt they *could* participate if they wished to

Table 5
Reasons mentioned for favoring CBO ownership of a parcel in the focal area (n = 80).

Reasons for Favoring CBO Ownership	Number of respondents
It will reduce congestion on Koiya	21 (19 non-members)
It will provide a secure place to migrate to during drought	9 (8 non-members)
Enhanced authority to control use	4 (1 non-member)
Job opportunities associated with ecolodges	2 (non-members)
Benefits of securing land given the uncertainty of land issues in Kenya	1 (non-member)
Benefits of parents securing land for their children	1 (non-member)

do so – provided they were able to pay the membership fee. The main concern would therefore lie with other ethnic groups whose historical claims may not be respected under formalization in the name of KGR.

6. Discussion and conclusions

This paper tells the story of a pastoral commons in Laikipia County that, while sharing a number of features with processes of collectivization and de-collectivization observed in other areas, is also unique in a number of important respects. At Koiija, there are strong contrasts to the well documented mutually reinforcing external and endogenous pressures to subdivide, as in the case of southern Maasai Group Ranches. We see shared range in which *de facto* patterns of access are the net result of the dynamic pursuit of private interests in conjunction with discursive and procedural tactics to advance equity in ways that are in part real and in part symbolic. This study therefore departs from much of the pastoralist commons literature exploring how a community resists or succumbs to outside pressures, while also being situated in a wider context where landscape connectivity is prioritized. We focus in on four cases of de-collectivization for which threats to “the integrity of the domain” or to “individual shares of the domain” are perceived by Koiija residents, and reflect on the procedural and substantive dimensions of legitimacy and their respective roles in keeping the peace. This analysis thus speaks squarely to the role of human agency in navigating the tensions between retention of privilege and maintenance or restoration of peaceful relations among group ranch members. The case shows that there is a lot to learn from efforts to bridge environmental governance scholarship with institutional lenses on pastoralism in transition by looking at the many nuanced components of commons governance (and legitimacy thereof) that are not easily understood with a “to subdivide or not to subdivide” framing.

A comparison of the dynamics at Koiija with the wider literature on group ranch subdivision highlights both similarities and differences. Similarities include a community increasingly divided by age and outside influence (see German et al., 2016; Lesogorol, 2008); and informal rangeland enclosures accompanying sedentarization (as observed by Ensminger and Rutten, 1991) representing forms of privatization that arguably threaten “the integrity of the domain.” On the other hand, growing land markets and sedentarization were not observed to be incentivizing sub-division at Koiija, as was observed among Orma and Samburu pastoralists (Ensminger and Rutten, 1991; Lesogorol, 2008). While there is a very active land market in Laikipia contributing to land consolidation and threatening pastoralist displacement (Letai, 2011), group ranches in Mukogodo Division have experienced relatively stable land ownership and use. While increased sedentarization has been observed elsewhere to increase the value of land, the costs of maintaining common grazing areas, and the gains to be had from dismantling the commons (Ensminger and Rutten, 1991), the same cannot be said for Koiija. While recent forays into agriculture do represent similar processes of economic diversification, farming is riskier at Koiija, as the climate does not readily support farming and its investments are bolstered and risks mitigated through pastoralism (King et al. in prep). The degree of dependence on rangeland within Koiija is also extremely high, with cattle herds requiring all of Koiija and more for survival. So while 5.9% of households had no registered livestock holdings in 2013, there is a strong incentive among most Koiija residents to safeguard communal range. While small in comparison to incomes from livestock sales, other forms of cash income generation are closely tied to the tourism industry, whether through employment in lodges, sales of beadwork and cultural dances, or the benefits derived from participation in the

Koiija governance structures (see German et al., 2016 for a detailed discussion of the relationship between the Group Ranch governance structure, conservation and tourism). These can be seen as benefiting from communal over individual forms of tenure by ensuring landscape connectivity for wildlife, the primary draw for tourists.

This brings us to another major difference between Koiija and other documented cases of subdivision: the role of outsiders. The “pro-private bias” observed among government officials and observed collusion of government actors with private interests (e.g., farmland acquisition) incentivizing sub-division elsewhere (Ensminger and Rutten, 1991; Galaty, 1992, 1994; Lesogorol, 2008; Ntiati, 2002; Rutten, 1992) was not observed at Koiija. Two mutually reinforcing factors appear to be behind this trend: climate, and the political and economic dominance of conservation and conservation-based tourism in Laikipia. With the group ranches occupying the drier parts of Laikipia, the environment is an extremely marginal one for farming. This has minimized outside pressure on community land, which through the threat it posed to the integrity of the domain in other group ranches, created strong incentives among members to subdivide. Rather than agricultural production, outside interests in the drier areas of Laikipia are strongly focused on wildlife conservation. The confluence of global conservation concerns and income streams through high-end ecotourism in this elephant migration route seem to have made landscape connectivity a stronger motive than agricultural productivity in Laikipia, uniting government, private ranches and non-governmental organizations alike (Silvester and Lalampaa, pers. comm.). The paucity of protected areas for achieving this goal has meant that conservation must occur in partnership with local landowners and users, including pastoralist communities (NRT, 2013; Sachedina et al., 2009; Sachedina and Nelson, 2010). Rather than enforcing *de facto* and *de jure* privatization in rangelands, as observed elsewhere (Ensminger and Rutten, 1991; Rutten, 1992), the state has adopted a stance that favors landscape connectivity for wildlife (including draconian policies for anti-poaching and engaging in forms of patronage linked to wildlife revenues) (Gibson, 1999). This, together with the growing political and financial muscle of regional and global conservation actors (NRT, 2013; Sachedina et al., 2009), has contributed to a set of dynamics strongly in favor of landscape connectivity and collective tenures in the northern rangelands. This dynamic has also contributed to opportunities for economic and political advancement for the select few (mostly the formally educated) in tourism, research and the group ranch governance structure in an otherwise challenging economic landscape.

So how do we begin to make sense of observed “threats to the integrity of the domain” within this wider political landscape favoring landscape connectivity? Are there inherent tensions between incentives to subdivide and wider interests in connectivity? Are those Koiija residents most interested in shared ownership aligning with outside actors at the expense of other residents, or are the interests of residents with different interests balanced in some way? Here, a discussion of procedural and substantive dimensions of legitimacy can shed light on the dynamics at Koiija. Results from the analysis of case studies exhibiting the dynamics of individualization and collectivization at Koiija suggests that threats to the integrity of the domain exist for Koiija residents in at least three out of the four cases. Efforts to privatize *de jure* land title in an area outside Koiija boundaries, in contrast, may pose more of a threat to other pastoralist communities than to Koiija residents not formally involved in the effort per se. The “Koiija 2” label employed by a former group ranch leader and CBO member could be interpreted in this light. Thus, at least in a *de facto* sense and at present, the interests of KGR members with respect to this last case appear to be

aligned. Yet with some interviewees expressing concerns over their future access, threats to Koiya residents with respect to the integrity of the domain and individual shares of the domain remain to be seen. This case mirrors what Galaty (2016) and others refer to as a “new commons”—where an area that is previously under private or state tenure shifts to common tenure. Yet with the *de facto* patterns of access anticipated to leave unchanged or to *reduce* the number of pastoralists able to access the area, the titling effort may have effects contrary to those explored by Galaty.

If “the domain” is defined as Koiya Group Ranch, the cases that pose the biggest threats are plot allocation for agriculture and the establishment of enclosures. Here, concerns were raised by residents over both the integrity of the domain (in the case of *lokeren*) and the value of individual shares of that domain (in the case of agricultural plot allocation). For each case, discursive practices on both sides of the divide over the acceptability of *de facto* subdivisions draw on arguments of procedural legitimacy to both justify and contest substantive outcomes. Yet two key tactics seem to have helped in striking a balance between the retention of privilege and the maintenance or restoration of harmonious relations among group ranch members. In the case of agriculture, gestures to improve procedural equity (e.g., new rules of subdivision) and substantive outcomes (actual subdivision of prime plots) following contestations over unequal allocations seem to have restored the peace, while also seeming to safeguard positions of privilege (e.g., retention of the most favorable locations and subdivided portions by “first movers,” and informal understandings regarding the conditionality of subdivisions). In the case of *lokeren*, a “safety valve” function seems to exist, in which rules prohibiting their establishment are flexibly enforced, thereby safeguarding positions of privilege, yet quickly enforced in cases of conflict. Procedural equity seems to be paramount in this case. While it could be argued that equitable access is not achieved in either case (and that it is impossible to achieve in plot allocation given the limited availability of prime farmland), peace nevertheless seems to have been maintained through largely procedural means as norms regarding *lokeren* have evolved. These cases demonstrate the potential for human agency to contest actions threatening the integrity of the domain and the quality of individual shares of the domain, and to restore social order by balancing the privileges resulting from these actions with the interests of contesting parties. They also demonstrate internal processes through which social inequities may be propagated over time, despite – or perhaps aided by – active contestation and proactive responses to keep social conflict at bay.

It is interesting to note that in the case of the grazing quota on Loisaba, where the greatest inequities were observed, we did not observe any open contestation. Here, procedural dimensions of legitimacy likely intersect with a host of other factors to keep the peace, despite the high stakes involved. These are likely to include the limited sense of entitlement to the domain stemming from the *de jure* legal order (minimizing the perceived legitimacy of claims); informal access outside of the quota system (minimizing the stakes); and the relational mechanisms through which initial and ongoing access is granted, which centers on few gatekeepers at Koiya (raising the stakes of contestation).

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