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Can formalisation of pastoral land tenure overcome its paradoxes? Reflections from East Africa

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Abstract

Legal frameworks for communal land rights in Ethiopia, Kenya, and Tanzania are now gaining momentum. Questions can be raised as to whether, how, and to what extent these frameworks take into account the disadvantages of formalising tenure and the complexities of pastoral resources. In this paper, we consider the impact of these challenges on the formalisation of communal ownership, beginning with an overview of how commons theory has influenced land governance policies and how it is applied to pastoral systems. We identify the main challenges that land policy interventions in East Africa face and ways in which the conceptual models of shared property rights embodied in current land tenure regimes are not well adapted to the socio-ecological characteristics of some rangeland landscapes. We argue that policy interventions capable of overcoming the paradox of pastoral tenure and strengthening tenure security while addressing herders' needs for mobility and flexibility will often involve the progressive recognition of layers of sometimes overlapping rights, rather than attempts to subdivide landscapes into simple mosaics of discrete communal territories. This paper is based on an analysis of the legal frameworks for land tenure in the three countries and a review of the literature on pastoralism and land governance in the region.

Keywords: Commons, East Africa, Land tenure, Pastoralism, Property rights, Tenure formalisation

Introduction

Scholarship on the management and governance of land and natural resources in pastoral systems has long decried the insecurity of land tenure and the problems that arise from the privatisation of rangelands resulting in their shrinkage, fragmentation, and blockage of migration routes (e.g. Cousins 2000; Flintan 2012; various contributions to Galvin et al. 2008). In Africa, improved infrastructure, including roads and communication networks, has made these areas more accessible. Pressure and competition for pastoral lands and natural resources have increased greatly as governments and investors have looked to what had previously been considered marginal lands (Lind et al. 2020a; Flintan et al. 2021). Governments often treat common land such as rangelands as 'unoccupied' and not requiring compensation for expropriation (Alden Wily 2006; Deininger 2003). Where states have developed requirements for such compensation, these systems have been criticised for undervaluing communal land and providing only weak protection to landholders (Otto et al. 2019; Alden Wily 2019). Other trends, such as land speculation and migration into pastoral areas by farmers, together with natural population growth, sedentarisation, and pastoralists' increasing desire to possess their own plot of land, also drive individualisation and privatisation of communal lands (Greiner 2017; Lind

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et al. 2020b; Tamou et al. 2018; Bollig 2016)[1]. Pastures are converted to croplands even in areas with rainfall so low and erratic and with soils so poor that harvests regularly fail (Tamou et al. 2018; Tache and Oba 2010).

The competition for and fragmentation of land contributes to social differentiation, contentious politics, and forms of territorialisation that extend well beyond the actual parcels of land privatised (Lind et al. 2020a). As the competition for land use increases, so do the chances of competition becoming violent, both among pastoral communities (Unruh 2010; Young and Sing'Oei 2011) and between pastoral communities and other land users (Galaty 2016; Mbih 2020). Blocked migration routes, for instance, are both a cause and effect of conflict between land users (Lind et al. 2020b; Sulieman 2013). Conflict over land is more common where individualisation of land is widespread (Byakagaba et al. 2018). Although the causes of these trends are highly complex, tenure insecurity in pastoral lands has been identified as a key factor (Davies et al. 2016; Flintan 2012).

Pastoralists' need for secure land tenure is a priority and requires some form of legal recognition from states. Legal recognition is a key component of the *robustness* of property rights, which refers to the extent to which those rights are enforceable when under threat (Doss and Meinzen-Dick 2020). Where the government land administration apparatus lacks the capacity for efficient administration and effective enforcement of property rights, formal law can nevertheless be a critical source of legitimacy for tenure rights. People often attribute superior status to state law and therefore feel the need for formal legal recognition of tenure rights (Timmer 2010). Even where some groups do not accept the legitimacy of state institutions, without formal recognition by the state, property rights will be less than completely secure and susceptible to being challenged.

Globally, there is a general trend of states providing such recognition of communal tenure. Forests and forest communities have received greater attention but consciousness and recognition of tenure needs has increasinged in rangelands as well (Almeida 2015; Alden Wily 2018). In East Africa, several states now have legal frameworks to enable the recognition of communal land rights. In Ethiopia, Kenya, and Tanzania in particular, efforts are accelerating to formally recognise land rights for pastoral communities. Under their new frameworks, Ethiopia and Kenya have begun to formalise communal land rights through issuing communal landholding certificates and community land title deeds. In Tanzania, the issuance of certificates of customary rights of occupancy (CCROs) for grazing lands is picking up pace following the development and piloting of procedures for joint village land use planning (Sulle 2021; Kalenzi 2016).

However, formal recognition does not necessarily equate with tenure security. Effective formalisation requires sufficient state capacity for implementation and enforcement, which in developing countries is sometimes lacking (Deininger and Feder 2009).

Exclusive forms of formal land tenure may be particularly ill-suited to pastoral rangeland systems, undermining the flexibility so crucial to pastoral systems (Fernández-Giménez 2002). Pastoralism is a complex land use system that converts often poor-quality natural resources erratically distributed across a landscape into food and other livestock products. Customary pastoral tenure and governance systems reflect the mobile livelihood system and the uncertainty, variability, and low density of resources, often comprising loose sets of collective institutions characterised by principles of flexibility, adaptability, multiple use by multiple users, and sophisticated layering of rights over the same resource (Robinson 2019; Niamir-Fuller 1999). For many pastoralists, securing rights of access is of greater importance and concern than owning the resources, and the boundary around communal rangeland units can be fuzzy and porous. The implementation of legal land tenure frameworks often undermines these systems, challenging them with alternative sources of authority and imposing more rigid patterns of resource access, which in turn undermines pastoralist practices for coping with variability (Fernández-Giménez 2002; Basupi et al. 2017). This is the 'paradox of pastoral land tenure'—the apparent incompatibility of pastoralists' needs for secure tenure and for socially and spatially flexible patterns of resource use (Fernández-Giménez 2002).

With legal frameworks for communal land rights in Ethiopia, Kenya, and Tanzania now gaining momentum, questions can be raised around whether, how, and to what extent those frameworks are taking into account the pitfalls and drawbacks of tenure formalisation and the complexity of pastoral resource use. In this paper, we consider the implications of these challenges for communal tenure formalisation in these three countries, starting with a review of how theory on commons has influenced land governance policy and how it applies to pastoral systems. We identify the key challenges that land policy interventions need to address in East Africa and ways in which the conceptual models of common property rights implicit in the current land tenure frameworks are not well-adapted to the social-ecological characteristics of

[1] We use *individualisation* to refer to a situation in which exclusive rights over common pool land are being claimed by individuals, whereas *privatisation* refers to formal rights being assigned through titles or certificates to individuals or corporations. The two often take place together, although individualisation can take place without formal state recognition.

some pastoral landscapes. We argue that policy interventions capable of overcoming the paradox of pastoral tenure—strengthening security of tenure while accommodating the needs of pastoralists for mobility and flexibility—often entail incrementally recognising layers of rights rather than attempting to comprehensively divide landscapes into simple mosaics of discrete communal territories. This paper is based on our analysis of legal land tenure frameworks in the three countries and a review of the literature on pastoralism and land governance in the region (explored more broadly in Flintan et al. 2021). It also draws on accumulated findings and insights from numerous research and policy engagement projects the two authors have carried out in East Africa since 2006.

Conceptual models of tenure and their applicability in pastoral systems

Thinking on communal land tenure formalisation has been influenced by research on commons. Perhaps, the most important assertion of commons scholarship over the past few decades has been its rejection of the equation of *commons* with *open access* (Ciriacy-Wantrup and Bishop 1975; Berkes and Farvar 1989; Bromley and Cernea 1989). This distinction is most succinctly and influentially expressed in the framework that divides tenure into four categories of property rights: state property, private property, communal property (or commons), and open access (non-property) (Berkes and Farvar 1989). This typology, sometimes called 'the big four' (B. Turner 2017; von Benda-Beckmann 2001), has helped justify communal tenure and legitimise it by presenting it as a form of tenure equally valid as private or state property. Influenced by this framework, organisations such as the World Bank and the Food and Agriculture Organization of the United Nations (FAO) have supported the development of legal frameworks that include formal recognition of communal land tenure (e.g. Deininger et al. 2011; Food and Agriculture Organization 2012). The view that there is a natural evolution from other categories toward private tenure and that formalisation of private property rights in land is key to unlocking the potential for economic development is still very influential (Musembi 2007 drawing from de Soto 2001). Nevertheless, the recognition of the validity of communal tenure and the dangers of formalisation as individual property rights has gained much ground over recent decades building on critique of de Soto's theories (Benjaminsen et al. 2009).

The formalisation of property rights is a critical component in a larger process of territorialisation, in which spaces that are seen as 'ungoverned', 'natural', or 'vacant' frontiers are subjected to new classifications and a reordering of social relations (Rasmussen and Lund 2018). 'Frontiers', in this sense, are any spaces seen as lacking effective property rights, i.e. any space where open access resources have not yet been converted to one of the three types of property. Efforts aimed at strengthening land tenure therefore often involve identifying boundaries and ensuring that all land is divided into clearly demarcated parcels. Some parcels—in some situations conceivably *all* of the parcels–may be large, communally owned territories rather than small, privately owned plots, but the vision is one in which the landscape is a 'simple tenure mosaic' in which all boundaries are clearly defined and no land is left without a clear communal, private or state owner (Robinson 2019).

Yet, it has long been recognised that the big four typology is an oversimplification and that most governance regimes for common pool resources 'are mixtures of these idealised types' (Berkes and Farvar 1989: 9). An alternative conceptualisation of property rights describes tenure in terms of diverse bundles of rights (Schlager and Ostrom 1992). Use rights such as rights to access a resource or to withdraw products from the resource are determined by second-order control rights (Schlager and Ostrom 1992; Sikor et al. 2017). Different authors have proposed various formulations but typically mention management (the right to regulate use and to transform the resource), exclusion (the right to determine who has use rights), and alienation (the right to sell, lease, or otherwise dispose of other rights) among these second-order rights. Different individuals, communities, or institutions may each hold different bundles of rights over the same space (Sikor et al. 2017; Deininger et al. 2010). Conceiving property rights in terms of overlapping layers of diverse bundles can help avoid the misleading oversimplification of the big four typology and enables a more nuanced analysis of the complexities and variations in how property regimes can be arranged (von Benda-Beckmann et al. 2006).

Ownership of land can be understood as describing a bundle that includes management, exclusion, and alienation rights (Schlager and Ostrom 1992). However, what does not fit easily into a big four conceptualisation is any notion that these different rights might be situated in different bundles or that different kinds and scales of 'communities' may each have some rights over the same land or resources (Scoones 2021). If such situations do exist, they are seen as aberrations violating the first Ostrom (1990) design principle for effective governance of commons that resource boundaries and social group boundaries should be clearly defined. The big four typology implies that land should either be under private tenure, state tenure, or communal tenure and that for communal tenure, each community parcel or territory should have a clear, community holder of those rights—an owner. In many customary systems, however, because rights are

layered in different bundles, no single rights-holder can legitimately claim to be the full owner of a land parcel (Deininger et al. 2010).

A steady stream of research on pastoralism has highlighted ways in which the conventional conceptualisation of commons and property rights often do not apply to pastoral realities. For instance, the first of the well-known design principles for effective governance of commons is the need for clear territorial boundaries and social group boundaries (Ostrom 1990; Dietz et al. 2003). Yet, the resource governance systems that emerge in pastoral systems often lack both (Robinson et al. 2017; Cousins 2000; Niamir-Fuller 1999). In traditional pastoralist systems, norms and institutions tend to emphasise flexibility and access to resources rather than secure ownership and clearly defined social and territorial boundaries (Robinson and Berkes 2010; Cousins 2000; Fernández-Giménez and Le Febre 2006).

Recent research has called into question the applicability of the big four typology to pastoral systems. Moritz (2016), for example, argues that in many pastoral systems open access to resources does not represent a failure to create rules, management systems, and property rights; rather, open access is an adaptation to conditions in which resources are sparsely distributed and in which exchange of information and freedom of mobility allow herders to distribute themselves across the landscape in ways that prevent a tragedy of overuse (Moritz 2016). In these open property regimes, open access does not represent the absence of rules, as implied by the big four typology. Rather, 'open access is the rule' (Moritz 2016, 704) and cultural norms and rules specifically uphold the right of herders to access forage for their livestock when and where needed. In other pastoral settings, there can be a gradation in the strength and clarity of property rights over different resources (Robinson 2019). These customary pastoral systems have mosaics of property rights, but not the simple mosaics made up of neat, discrete parcels, but rather complex systems with overlapping layers of rights (Robinson 2019; Flintan et al. 2021).

However, care is needed when invoking the importance of flexible and fuzzy governance arrangements for pastoralists. Concepts such as variability, uncertainty, and flexibility have become cornerstones of the dominant paradigm in research on pastoralism. While we subscribe to that paradigm, it has been noted (Gillin 2021) that the concepts are sometimes used uncritically with no distinction made between variability and uncertainty or between flexibility and mobility. Much of the variability seen in pastoral rangelands occurs within predictable parameters, and some types of mobility are quite regular and predictable and do not necessarily require flexibility of access arrangements and institutions (Gillin 2021). Formal protection of migration corridors, for instance, will not necessarily result in constraints on flexible mobility if sufficiently elaborate networks of corridors are maintained (Turner et al. 2016). Flexibility in tenure can also imply flexibility for land grabbing and fragmentation. Land governance in pastoral areas where variability and uncertainty are great, necessitating adaptive and opportunistic mobility, should be as flexible and complex as necessary but no more so.

The ongoing evolution of pastoral resource governance in East Africa

Pastoralism in East Africa

Pastoralism in East Africa is adapted to the bimodal rainfall pattern that prevails across much of the region. As a result, seasonal mobility is generally shorter than the transhumance of regions such as the West African Sahel where pastoralists track the north-south movement of the unimodal rains over long distances. Nevertheless, it is not uncommon for pastoralists to migrate dozens, sometimes hundreds of kilometres, although the longest migrations seldom take the form of regular seasonal transhumance. The heterogeneity of some pastoral landscapes leads to patterns of mobility in which herders sometimes converge on scarce resources, particularly during droughts (Robinson 2019). Borana migration patterns in southern Ethiopia, for example, often follow this pattern. During rainy seasons, weak, young, and lactating animals are kept around the homestead, but the foora herds[2] are dispersed to distant pastures. Even today, there are few to no restrictions on where herders choose to move within rainy season pastures. In the dry seasons, however, pastoralists and livestock converge on pastures close to reliable water sources where customary institutions exert greater control over access and use of pastures.

The dispersal-convergence mobility pattern also involves sites where herders from more than one community converge. The Kom spring in northern Kenya is a case in point. It is located in Samburu County close to the borders of Isiolo and Marsabit counties and close to the territorial extent of where Samburu, Rendille, and Borana pastoralists meet. The area usually has good quality forage in dry years when other areas have been exhausted as well as water pans. All three ethnic groups have traditionally used the vicinity of Kom as a drought fallback area. We are unaware of any reliable information on whether and to what extent the sharing of this area was peaceful in the past, but in recent years, it has been the site of recurring violent conflict among pastoralist groups (Pas 2018; Mkutu 2020).

[2] Foora herds consist of male animals and non-reproductive females.

Customary pastoral systems often apply different governance arrangements to different parts of their lands. Some lands have been governed as commons, but governance in other locations more closely resembles the open property model. In yet other areas, it involves rights and institutions that overlap in complex ways (Robinson 2019). In the past, territorial boundaries between clans or ethnic groups were often understood completely differently from the boundaries used by modern states to demarcate administrative territories or property parcels (P. Robinson 1985; Schlee 1990 cited in Haro et al. 2005). Schlee, for example, quotes a Rendille elder as describing Rendilleland and Samburuland being 'inside each other… they are mixed up' (Schlee 1990 p. 24, cited in Haro et al. 2005). Multi-level resource governance arrangements are common in East African pastoralist ethnic groups, but these vary greatly. The Borana, for instance, have an elaborate multi-level structure for decision-making on land and grazing (Senda et al. 2020). For others, such as the Gabra, customary decision-making is more ad hoc, with key decisions about mobility and management of pastures made by councils or traditional meetings convened at a scale corresponding to the decision at hand (Robinson et al. 2010).

Territorialisation

Against this backdrop, one of the most important social processes over the past several decades has been territorialisation. Territorialisation is a multifaceted spatial, political, economic, and social process resulting in the regulation of people and resources through the creation of boundaries (Rasmussen and Lund 2018). The demarcation of territories and the identification of which ethnic groups corresponded to which territories was an important component in European colonial strategy in this region (Schlee 2010). The process continued into the independence era, with the politicisation of religion and ethnicity (Schrepfer and Caterina 2014; Schlee 2010; Watson 2010). In Ethiopia, territorialisation has been promoted by the post-Derg state through its policy of ethnic federalism (Schlee 2010; Nori 2021). In Kenya, despite an emphasis on national discourse for many years of universal Kenyan citizenship and the evils of tribalism, territorialisation of ethnicity has steadily advanced, with new administrative boundaries being mobilised for political support and the solidification of ethnic identities (Robinson 2009; Schlee 2010). In post-independence Tanzania, territorialisation was less influenced by ethnicity than it was in Ethiopia or Kenya but has advanced nevertheless, in part through the extension of a wildlife conservation frontier expanding outward from protected areas through programmes labelled 'community-based conservation' (Bluwstein and Lund 2018). Private capital is also driving territorialisation, with indigenous entrepreneurs claiming private rights over land and collaborating with state efforts to extend its control over space (Korf et al. 2015; Lind et al. 2020a).

Not surprisingly, government policies on land and resource governance have furthered territorialisation. Of these three countries, it is in Kenya where Western conceptions of private property have most directly influenced the land tenure system and the linkages of territorialisation to property rights are most evident. Kenya's group ranch system was created in part to establish clear group rights to land and thereby incentivise pastoralists to act more like economically rational private ranchers in the belief that this would halt rangeland degradation and improve productivity (Veit 2011; Galaty 1980). More recently, as community-based conservation programmes helped many group ranches convert to community conservancies, the processes of territorialisation and hardening of borders continued, as the enforcement of wildlife conservation has become entwined with local communities exerting more exclusive control over clearly demarcated territories (Pas 2018; Robinson et al. 2021). However, the process has also fueled the dissemination of environmental crisis narratives that stigmatise pastoralist communities and thus drive down land rents, and second, the recapitalisation of conservation territories and reconfiguration of prevailing land uses in ways that enable forms of gentrification via the capture of heightened and differential ground rents (Cavanagh et al. 2020).

Recreating complexity

Despite the trend toward territorialisation with more clearly defined and less porous borders, pastoralists in East Africa often use a range of strategies to resist and even reverse fragmentation and claim rights and secure access to water and pastures beyond their home territories. One strategy is to simply refuse to respect legal property rights in times of need, illegally taking herds into protected areas or onto privately owned land. Herds are often moved into the territories of other communities without permission. Isolated occurrences could simply be considered as incidents of trespassing. However, it is not uncommon for such incursions to be organised efforts involving large groups of armed herders. In Laikipia County in Kenya, such 'invasions', as they have been referred to by local Maasai group ranch members, have overwhelmed the capacity of local communities to enforce their group ranch boundaries and legally recognised land ownership (Robinson et al. 2021).

Sometimes, parcelisation and fragmentation of land and the erosion of collective management systems are resisted through negotiation and collaboration among pastoralists and between pastoralists and other

landowners. In rangelands that have been individualised and fragmented, pastoralists can sometimes activate social networks to enable 'free' (non-financial payment) access to resources, including grazing and water, recreating a de facto commons under a system of de jure private holdings (Archambault 2016). Negotiated agreements are sometimes established between landowners and groups of pastoralists to access grazing, which also helps the landowner protect his property from the wider group of pastoralists by using the selected group acting as a buffer (Wade 2015). Pastoralists are also collaborating to take down fences that have subdivided the land, sometimes by mutual agreement with landowners and incentives from conservation financing (Reid et al. 2016), and sometimes by force (Galaty 2016).

Fragmentation, parcelisation, and privatisation are also resisted through legal action. In Kenya and Tanzania, pastoralists have contested private ownership in the courts (Galaty 2016 and IWGIA (International Work Group for Indigenous Affairs) 2022). In southern Ethiopia, after some years in which it was becoming increasingly common for individuals to fence sections of communal pastures under the pretext of cultivating it, customary pastoralist institutions have pressured the government to clamp down on the practice, with a modest degree of success. In Kenya, in places where land allocated to European settlers following independence has not been used because it was too small to be economically viable, the government has taken steps to legalise occupation by pastoralists and to convert it to communal tenure (Wade 2015).

Another strategy is to use private property to maintain access to land in the broader landscape. In places in Laikipia County in Kenya, where the subdivision of large ranches resulted in small and often unviable agricultural plots, some pastoralists have chosen not to occupy these plots but have instead purchased plots in other parts of Laikipia. The strategic purchase of even very small plots of land can allow pastoralists to access contested areas, abandoned lands, underutilised government land, and large private ranches (Wade 2015). In doing so, 'They use titles as their shield so they can 'eat' [graze livestock] everywhere' (a government administrator, quoted in Wade 2015, 56). As such, they are not so much replacing common property with private property but combining the two. The result is a hybrid of private property and flexible customary access arrangements (Wade 2015; Homewood 2008).

These strategies are sometimes called 'recreating' or 'reasserting' commons (Archambault 2016; Galaty 2016). However, in light of the research discussed above that has identified ways many pastoral systems do not conform to conventional conceptualisations of commons, it should be noted that in some situations, pastoralists' actions to reverse fragmentation and parcelisation are not recreating the neat communal tenure land parcels implied by the big four conceptualisation. For example, where there have been large scale, organised incursions into the communal land of other pastoral communities, as happened in Laikipia County in 2015 and 2017, there was no effort by the incoming herders to replace one set of common property borders and institutions with another; rather, the norms of access they implicitly upheld more closely resembled those of an open property system than any classical commons. In other cases, pastoralists are pushing access arrangements toward multi-layered, overlapping mosaics. What these strategies do is to insert—in most cases reinsert—nuance and complexity into a situation of relatively simple de jure tenure rules. In many of these cases, it is more accurate to say that pastoralists are recreating a complex layering of claims and rights than that they are recreating commons, at least in the narrow interpretation of *commons*.

Formalisation of communal land rights in Kenya, Ethiopia, and Tanzania

Kenya

Kenya's new land framework conforms to the big four conceptualisation, with the 2010 constitution explicitly establishing three categories of tenure: public, private, and community. In so doing, the status and security of communal rights are placed on the same level as private rights. The Community Land Act makes it clear that customary communal rights 'have equal force and effect in law with freehold or leasehold rights' (CLA 2016, Sec. 5(3)). Moreover, registration of community land vests 'in that community the absolute ownership of that land together with all rights and privileges belonging or appurtenant thereto' (CLA 2016 Sec. 16a).

The constitution does allow for land to be converted from one category to another (sec. 68c), but there is no implicit assumption that such conversion is a one-way affair away from community tenure toward private and state tenure. Instead, the Act affirms the 'security of [the community] land right' (Sec. 50(1)b). What the legal provisions for community land in Kenya make little room for is the fuzziness, flexibility, and overlap which are common among many pastoral communities. Any registered community can zone, plan for, and regulate different parts of its communal land parcel in different ways, and the Act allows for 'communities' to be organised in a variety of ways (according to common ancestry, culture, geographical proximity, or other criteria). However, the Act also envisions that each community is distinct in space from every other community, and has 'absolute and indefeasible ownership' of its parcel (CLA 2016, Sec. 2 and

Sec. 4:1). Moreover, provisions of the Act envision communities that are quite small: for example, the requirement for two-thirds of all adult members to be present at general meetings.

Ethiopia

While the Government of Ethiopia has decentralised land administration to regional governments, the formulation of broad land policy rests with the federal government. The Ethiopian Constitution asserts state ownership of land held in trust as the 'common property of the people' (Article 40 (3) of FDRE Constitution, 1995). However, three broad categories of landholding rights are recognised: private, communal, and state holding. Unsurprisingly, the land certification process in the pastoral lowlands has lagged behind that of individual landholdings in the farming-dominated highlands (Senda et al. 2022). Nevertheless, since 2013, the USAID-funded Land Administration to Nurture Development project has been helping the federal government and the regional government of Oromia to develop and pilot a certification process for pastoral lands. There was extensive debate on what kind of boundaries and spatial land units to use, over what geographic extent and scale. It was eventually decided to use customary Borana land management units rather than administrative jurisdictions (Senda et al. 2020). The Borana have a sophisticated customary system of nested land units, and while each level of the Borana system had pros and cons as a unit for collective land certification, the largest, landscape-level grazing land unit (called *dheeda* in Afaan Oromo) was eventually chosen, with the first three communal land certificates issued to three *dheeda* in 2018. Attempts to replicate the registration process in other areas in Oromia and other regions have so far failed.

Although the choice of the *dheeda* as the unit for this collective land registration and certification does not imply a comprehensive recognition of the Borana customary governance system, it does enable land management to follow traditional spatial units and management practices. In Borana areas, the customary system includes different rights at lower levels within the *dheeda*, such as over a group grazing exclosure or an individual well or tree. These rights are not formalised in the certification process, although this may happen later through bylaws.

Under the current arrangement, pastoral communities have the right to be compensated if the government appropriates their landholdings for public purposes. Communities are given collective landholding rights which includes the right to indefinitely use the land according to the customary laws and agreement of the community and the right to jointly develop their land with an investor, provided 75% or more of the community members agree (Bekure et al. 2018). In some areas, local governments have already issued some landholding certificates to individuals for cropping land. It is not yet clear how these different layers will be managed under the pastoral land holding registrations that have taken place. The communal certifications have not undone the authority of the government administration in land affairs, and the *dheeda*-level councils have no direct authority over decision-making at the level of *kebeles*, the lowest level in the government administration. On the whole, the protections afforded by the registration of collective pastoral lands, while a step in the right direction, are still relatively weak and subject to the whims of state agencies (Wabelo 2020). Implementing the framework is still in the early stages with many details yet to be worked out regarding how far-reaching and how robust collective rights will be. Thus far, it seems that the arrangements involve modest improvements in collective tenure security while maintaining a great deal of flexibility—flexibility both for adaptive pastoralist management approaches and for pasture lands to continue being converted to other uses, although perhaps now with modestly improved recognition of pastoralists' collective rights.

Tanzania

In Tanzania, as in Ethiopia, all land is considered state land, held in trust for the people, but both private and communal land rights are recognised. Recognition of rights in grazing land primarily takes place through the framework for village land based on the National Land Policy 1995, the 1999 Village Land Act, and the 2007 Land Use Planning Act. These provide the legislative framework for certifying village land, undertaking village land use planning, and providing certificates of customary rights of occupancy (CCROs) to landholders. This can provide layers of formal protection, commencing with issuing a village land certificate that defines the boundaries of the village land and the authority of the village council and other village bodies to administer the land. Once village land has been certified, village land use planning can be undertaken and zoning land for different uses, including for crop farming and grazing, which is a necessary first step for obtaining a CCRO. As of 2021, only 2454 of Tanzania's 12,319 villages had land use plans, and the number of villages with allocated grazing land is even smaller at 30 (Cosmos, personal communication 2021).

Large programmes supporting village land use planning and tenure formalisation processes alongside development of growth corridors such as SAGCOT (Southern Agricultural Growth Corridor of Tanzania) have been criticised for occurring alongside large-scale evictions of pastoralists (Askew et al. 2017; Walwa 2017; Walwa

2019). In an attempt to support a process more favourable for pastoralists and the protection of shared grazing lands, *joint* village land use planning (JVLUP) has been advocated as an approach. The Village Land Act empowers village councils to enter into joint village land use agreements with other villages. Villages that share resources are encouraged to undertake village land use planning together to ensure the shared resource is kept intact in each plan. For a shared grazing land that often straddles village boundaries, a livestock keepers' association is then set up in each village to which a group CCRO is issued for the grazing land falling within the village's jurisdiction (Kalenzi 2016; Nindi et al. 2019). An additional layer of protection for the shared grazing land is its listing on the Ministry of Livestock and Fisheries register of grazing lands, as per the Grazing Land and Animal Feed Resources Act (2010). As a result of JVLUP, thirteen group CCROs have been issued to livestock keepers associations, while three have been issued to hunter-gatherers (Cosmos, personal communication Cosmos 2021).

Unlike in Kenya, where communal property rights for each community are vested in a single community title, the Tanzanian framework formally recognises rights incrementally through a series of layers obtained through different means. The village council (the lowest level of government) is at the forefront of this process, supported by district technical staff. Visibly improving the land and managing it in a way that is legible to government add to tenure security through such means as participatory rangeland management activities that involve government officers. This can further reduce the likelihood of the land being converted to another use, either at the village level or by the national government. Clear benefits have been seen in terms of reduced conflicts, improved local rangeland investments and productivity, and good governance including a greater number of women in governing bodies and decision-making processes (Waweru et al. 2021)

All these layers of protection relate to relatively large areas of land (typically several thousand hectares) that can encompass different rules and regulations for use, which may or may not be formalised as village bylaws. However, a drawback of the Tanzanian framework is that it demands a relatively large investment of time and resources for the required planning process and negotiations to reach an agreement between multiple groups of local land users across villages. Any delays or gaps in the funding can interrupt the process and be highly disruptive (Kalenzi 2016). While the framework does leave some room for flexibility, the vision is still based on distinct territories (villages) with clear boundaries and leaves no obvious scope for recognising overlapping rights that might be held by other scales of 'communities' or rights over resources that might be legitimately claimed by more than one community.

Implications for resolving the paradox of pastoral land tenure

The influence of the big four conceptualisations of land tenure, while clearest in Kenya, can be detected in all three countries. All three frameworks allow for neighbouring pastoral communities to negotiate resource sharing and flexible access to each other's territories, but this would happen within landscapes that legal frameworks imagine as having clearly defined territorial boundaries, with each distinct community having exclusive rights over its own territory. Ethiopia's framework allows for more flexible management arrangements within large rangeland territories than in the other two countries but at the expense of weaker tenure security. None of the three frameworks provides any obvious way to account for situations in which different types and levels of communities can each possess legitimate, overlapping rights over the same land or resources. Thus, the formal recognition of communal tenure in East Africa seems destined to continue the process of parcelisation, despite concerns that simple parcelisation of entire landscapes is ill-suited to many pastoral rangelands (e.g. Robinson 2019).

However, the discussion above also pointed out ways in which many pastoralists are resisting parcelisation and through their actions are reinserting complexity into the way land is accessed. This should not be taken as an argument that formal recognition of communal tenure is unnecessary or unhelpful in any form. Despite the drawbacks and dangers of formalisation of community and indigenous systems, it seems that formal recognition of communal tenure is better than no recognition at all (Almeida 2015). This all suggests that 20 years after Fernández-Giménez articulated it, the paradox of pastoral land tenure (Fernández-Giménez 2002) still needs resolution. Fernández-Giménez (2002) described the paradox of pastoral tenure as a tension between two competing needs or objectives: security of tenure and flexibility of access and management arrangements. We suggest, however, that there are three objectives that need to be disentangled. The rationale for formally recognising communal tenure typically involves a desire to protect against illegitimate alienation of land and to incentivise collective management. The latter is important because in the context of modern nation states, if a community land institution lacks formal recognition, it will be significantly handicapped in its ability to prevent free-riding and implement management actions such as enforcing seasonal grazing plans. Therefore, the three objectives that need to be simultaneously accommodated in pastoral systems are:

1. Providing security against illegitimate alienation and fragmentation of rangelands
2. Legitimising collective management
3. Allowing for flexibility of access and management

The first two objectives are similar but not the same. Seen through a *bundles of rights* perspective, the first objective relates to alienation rights, whereas the second relates to management and exclusion rights. Strategies aimed at strengthening tenure for communal land based on a big four conceptualisation address the first two objectives together with a single solution: clearly delineating community land parcels for which management, exclusion, and alienation rights are allocated to a singular community institution for each parcel. The problem is that a simplistic approach of issuing titles or landholding certificates to each community, in addressing the first two objectives but failing to distinguish between them, thereby fails to achieve the third objective.

One approach to improving tenure security without undermining mobility and flexibility and without overly territorialising management could be to identify critical portions of rangelands most in need of protection and make fencing and conversion of these areas to other uses and other tenures subject to approval by two or more institutions or processes, each operating at different spatial levels: community land management committees, clan or tribal institutions, and landscape-level land use plans, etc. In particular, the use of zoning categories within land use plans is an attractive option for Ethiopia, Kenya, and Tanzania, as all three countries have official land use planning frameworks in place and ready to be applied: *woreda* participatory land use planning, county spatial planning, and joint village land use planning, respectively. For example, in Kenya, the Guidelines on County Spatial Planning in pastoral areas, while leaving room for county governments to each adopt their own approach, refer to the possibility of using zoning to prohibit the development of new settlements in certain zones such as areas identified as drought reserve pastures (Kenya National Land Commission 2019). If governments would be willing to give land use plans more 'teeth' than they typically do in East Africa, it could help protect against alienation and fragmentation, regardless of what approach they take to formalisation of community territories and the issuance of communal titles or landholding certificates.

Situations in which more than one community has had legitimate claims over the same resource, in particular, need creative solutions. Not all communal rangeland resources are communal in the same way. For example, there are areas widely acknowledged as the home territory of locally resident communities, places where the border between communities is fuzzy or is contested, and places that occasionally attract herders from long distances from multiple directions (e.g. places such as Kom that are seen as drought fallback areas). Simple communal titling may be an appropriate strategy for securing tenure for the first category, and sometimes for the second if done carefully so as to resolve conflicts. For land in the third category, however, other strategies may be needed. These are often those pieces of land most likely to be converted to other uses, such as irrigated farming. This is problematic not because of the quantity of land lost but because, as key grazing areas close to reliable water sources, these are linchpin resources whose loss has a disproportionate impact on the viability of the pastoral system as a whole (Davies 2008; Galaty and Fratkin 1994). Providing tenure security for these linchpin resources is urgent, yet these areas are also susceptible to the formalisation of communal tenure thereby exacerbating conflict. This is not to say that communal titling of linchpin resources should be off the table. It does suggest that the formalisation of tenure over such resources might be done differently than for communal territories generally and in situations where the resource is shared and legitimately claimed by multiple communities. In such cases, the title or landholding certificate should reflect this by being issued to a rights-holding body that represents all those communities. Unfortunately, it is difficult to see how the current land tenure frameworks in these countries could make room for such an approach as they implicitly assume that each community has a distinct territory.

Conclusion

The increasing willingness of states to formally recognise the communal land rights of pastoralists is a welcome development. The frameworks for communal land tenure now being implemented in Ethiopia, Kenya, and Tanzania may work well where there is a straightforward relationship between communities, their territories, and claims over resources. However, pastoral systems in East Africa, like pastoral systems elsewhere, frequently have features that are poorly served by conventional land tenure arrangements. And even though various forces have been steadily driving territorialisation, pastoralists themselves are often taking actions that resist territorialisation and ensure that the actual patterns of access to grazing land remain complex and messy, yet effective.

Pastoralists' customary governance systems provide clues to the features needed in state land governance frameworks if these are to support pastoral systems instead of undermining them. However, the flexibility and complex layering of overlapping rights found in many customary pastoral systems is not easily replicated

in state land tenure legislation, and in most cases, it is inappropriate to attempt to do so. Recognising that the different types of rights in land can conceivably be bundled in various different ways, our argument is that approaches to securing land rights in layers—sometimes involving complex, overlapping layers of such rights—are better suited to the complexities of pastoral realities. Through strategic and incremental use of policy, legislation, and regulations not only for land but also for natural resource management and water management, as well as land use or ecosystem planning frameworks, various kinds of rights could be recognised in stages and layered over other rights. This would allow for more flexibility and adaptation over time than is typically possible from a system based on issuing titles.

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The authors jointly contributed to the article. The authors read and approved the final manuscript.

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