

Pastoralists seasonal land rights in land administration

A study of Northern Kenya

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administration
A study of Northern Kenya

Thesis

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Chapter 1

General Introduction

1.1 Land Administration

The UN Land Administration Guidelines (1996) define land administration (LA) as the processes of recording and disseminating information about the ownership, value and use of land and its associated resources. Dale and McLaughlin (1999) expand the LA definition so that it can also be understood as the management of land: ‘the processes of regulating land and property development and the use and conservation of the land, the gathering of revenues from the land through sales, leasing, and taxation, and the resolving of conflicts concerning the ownership and use of land’. These definitions show that LA is a process concerned with mainly three aspects within the overall context of land management. These aspects are the ownership, the value and the use of land. Ownership – in a broad sense – can be seen as equivalent to land tenure as the mode in which rights to land are held; value is about all kinds of values which land might have, depending on the purpose of the valuation, the use of the land and the method of valuation; and the use of land is about all the kinds of use that can be made of the land, depending on the purpose of the use and the type of classification and methodology used (Molen, 2002). As such, processes in LA include the determination (or adjudication) of rights and other attributes of the land, the survey and description of the land, their detailed documentation and the provision of relevant information in support of land markets (UN/ECE/WPLA, 1996).

The goal of an LA process is to support the implementation of land policy using the aspects of land management (Molen, 2002). The implementation of land policy is a joint responsibility of private and public parties, but usually governments set an institutional framework that meets the principles of the ‘rule of law’, including a binding legal framework as a context for implementing the land management aspects of land tenure, land value and land use (Molen, 2002). The purposes of good LA are to improve or guarantee security of tenure, support the implementation of urban and rural land use planning, provide a base for land taxation, provide security for credit, guarantee the result of judicial procedures relating to land rights, reduce land disputes, develop and monitor land markets, protect state lands, facilitate land reform and produce statistical data as a basis for social and economic development (UN, 1998).

Rights to land may be held under statutory law, common law and customary traditions (Molen, 2002). Under statutory and common law (or the ‘formal’ system), rights to land or real property rights to land are

usually defined in the relevant legislation dealing with land. Property rights to land originating from the formal system – for example ownership, freehold, leasehold, easements, superficies and right of profit as recognized and defined in the law – are usually protected by provisions in the national constitutions (Enemark and Molen, 2008). In this formal system, people gain access to real property rights initially through the cadastral processes of adjudication, survey and registration. Cadastral surveys aim to determine the legal situation of land by documenting the land objects and their right holders; registration confirms the legal security of the real property rights to land (FIG, 1998). Because real property rights to land obtain a legal status by legal instruments, holders of formal rights to land can assume that their rights to land are protected or secured (Schlager and Ostrom, 1992; Enemark and Molen, 2008). On the other hand, customary law is a body of unwritten rules that finds its legitimacy in tradition, which may have applied from time immemorial (Cotula and Chauveau, 2007). The content of customary laws are diverse, and can vary from community to community according to cultural, ecological, social, economic and political factors (Migot-Adholla et al., 1991; Cotula and Chauveau, 2007). In many customary tenure systems, people gain access to property rights to land through membership of social communities, which validate and facilitate the acquisition and safeguarding of property rights (Migot-Adholla et al., 1991; FAO, 2002).

In this thesis, I focus on land tenure as it relates to the adjudication of real rights to the land in the formal system of property rights and land administration.

1.2 Pastoralism

Nomadic pastoralism is a major land use in the arid and semi-arid rangelands of the world. Pastoralists typically rely on animal husbandry for their economic activities. Their arid and semi-arid environments are characterized by variations in climatic conditions under which plant growth is seasonal, occurring only when temperature and rainfall allow it (Dyson-Hudson and Dyson-Hudson, 1980). Their strategy for providing year-round food for their herds is to move their livestock to pasture rather than bringing fodder to them (Dyson-Hudson and Dyson-Hudson, 1980). In dry seasons, pastoralists usually move their cattle to highlands or well-watered areas (dry season pastures). When the rains begin in the rangelands, they move back to take advantage of the new and more

abundant wet season pastures. Moving between rangelands and dry season grazing areas allows pastoralists to exploit resources in different agro-ecological conditions at different times to make up for fluctuations in production (Goodhue and McCarthy, 1999).

1.2.1 Pastoralist' land tenure

Pastoralists' land tenure is based on customary traditions. Pastoralists hold their land under communal tenure (Migot-Adholla et al., 1991). This communal property regime is important because it creates pastoral rights of access, providing the best framework for pastoralists to exploit the available resources across various agro-ecological conditions, thereby reducing their levels of vulnerability (Niamir-Fuller, 2005; Nori, 2007). Mobility between seasonal resources is therefore a key element in pastoral production systems (Niamir-Fuller, 1999, 2005; Mwangi and Dohrn, 2008). During their seasonal movements, pastoralists manage access to required resources through their customary systems. Pastoralists' rights of access to dry season resources are based on reciprocal arrangements on the use of property rights between agriculturalists and pastoralists, and these depend on factors like climatic conditions and the social relations between the communities, among others (McCarthy et al., 1999). It is this flexibility that provides a measure of security in times of drought or other disasters by creating reciprocal expectations of resource sharing between groups (Meinzen-Dick et al., 2005). These customary rights to sharing seasonal resources, even between different communities, came into existence because they were recognized by those communities (Bruce and Migot-Adholla, 1994).

The seasonal movements of pastoralists means that pastoral land use can be described as a migratory land use, with property rights to land applying across different spaces in time. This thesis therefore describes pastoralists seasonal land rights as being spatiotemporal.

1.2.2 Spatiotemporal land rights

The Concise Oxford Dictionary (eleventh edition) defines spatiotemporal as 'belonging to both space and time'. The online Merriam-Webster dictionary and thesaurus defines spatiotemporal as 'having both spatial and temporal qualities', while the TheFreeDictionary defines it as 'having both spatial extension and temporal duration'. These definitions capture the elements of space and time. In relation to this study, the 'space' element reflects the distances that pastoralists travel and the areas

covered during their seasonal migrations. The 'time' aspect refers to the timing of their migrations and the duration of their stay at the dry season grazing areas.

1.3 Pastoralism and Land Administration: Problem statement

The 'tragedy of the commons' theory states that land held in common will unavoidably be overgrazed, because it is in each individual herder's interest to increase the number of their animals (Garrett, 1968). Inspired by the tragedy of the commons theory, colonial governments in many African countries, including Kenya and Botswana, hypothesized that economic progress could only be accelerated by encouraging private (individual) land ownership, and introduced economic policies and measures to sedentarize pastoralists (Sandford, 1981; McCarthy et al., 1999). In Kenya, from the late 1950s land reforms were introduced to convert land held under customary tenure into private land tenure under the formal system (Okoth-Ogendo, 2002). This was continued by post-colonial governments. Policies aimed to sedentarize pastoralists (through the registration of private rights to pastoral groups) and incorporate their production system into the market economy were introduced in some pastoralists home areas (Fumagalli, 1978). Meanwhile, the Kenya government's support for conservation and urban and agricultural land uses was accompanied by an expansion of private tenures and government land in the rangelands (Fumagalli, 1978; Anderson and Broch-Due, 1999). This formalization of property rights to land had direct impacts on the extensive seasonal migrations of pastoralists because it endangered the traditional methods of access to required resources. As pastoralists ignored the boundaries of their private land to maintain their seasonal migrations (BurnSilver, 2000), and as the land was continuously being surveyed, demarcated and allocated for private purposes under the formal land tenure system, renegotiating temporary and flexible access rights to resources became problematic and as a consequence seasonally recurrent conflicts intensified (McCarthy et al., 1999; Homewood, 2004; Mwangi, 2007).

These undesirable outcomes arise from deficiencies in the processes involving the conversion of property rights under customary tenure to the formal system. Besides the conversion of customary rights to formal rights, customary land was also taken and allocated to individuals who did not have any previous rights to the land. Formalization of property rights weakened the established traditional norms and rules for regulating

the use of pasture by opening up customary land to non-traditional users, who were not tied by those customary norms and rules (Mwangi and Dohrn, 2008). In the process of formalizing rights to land, the purpose of adjudicating land rights, in its true sense, is to establish the rights to land as they exist in reality; all the rights adjudicated should therefore correspond to the land rights to be registered (Lawrance, 1985). In practice, however, preference was given to private ownership and other customary tenures were ignored (Alden-Wily, 2008). In the formal system, real rights to land establish a direct legal connection between an individual and the land, and the holder of the real rights is entitled to control that land within the limits of his rights, without necessary relation to other persons (Kleyn and Boraine, 1992). In Kenya, conferring full ownership rights to land gave landowners a legal power to exercise their real property rights to land in the formal system. But at the same time, the pastoralists were put in a weaker legal position as their need (based on a customary system) to access land which was now held in private ownership by others was not recognized in the formal system. Moreover, according to the Registered Land Act of Kenya (Kenya, 1963), the holders of real property rights to land are not obliged to respect the previous uses of the land by others not shown in the register. This means that pastoralists entering privately held land without permission from the landowners amounts to violation of real property rights and is therefore liable to legal action. This is a complex problem arising from a situation in which pastoralists' customary jurisdiction and the formal jurisdiction clash. While each jurisdiction is only as strong as its source of legitimacy – customary or formal – the formal/state law is often more powerful and used by government officials, for example, to declare and enforce the rights (Meinzen-Dick et al., 2005).

The Kenya National Land Policy (2007c) states:

Pastoralism has survived as a livelihood and land use system despite changes in lifestyles and technological advancements. This tenacity of pastoralism testifies to its appropriateness as a production system for the dry lands. The problems of pastoral land tenure relations have their roots in the dispossession of some pastoralist communities of their land and land based resources....To secure pastoralists livelihoods and tenure to land, the government shall...institute alternative methods of registration that define individual rights in pastoral communities while allowing them to maintain their unique land use system and livelihoods (section 3.6.3: 181 c).

This study endeavours to assess how pastoralists' rights of access to seasonal resources could be accommodated within the legal framework for real property rights and land administration. My thesis strongly supports the inclusion of pastoralists' rights to land as real property rights to support their migrations and access to seasonal resources would give pastoralists and other holders of real property rights an equally strong legal position in the formal system. Holders of real property rights can expect their rights to land to be respected and can use the formal law to enforce their rights. In this thesis I refer to pastoralists' seasonal rights to land as 'mobility and access rights' or 'spatiotemporal rights' or 'seasonal land rights', and these terms can be used interchangeably. Migration routes and migration corridors are also used interchangeably.

1.4 Contents

1.4.1 Aim and scope

The overall research objective of this thesis is to explore how pastoralists' seasonal land rights could be accommodated within the legal framework for real property rights and land administration. To meet this overall objective, the thesis addresses four separate sub-objectives:

1. Investigate whether pastoralism is still active in Northern Kenya and how formal rights can meet the requirements of the pastoralists' seasonal land use.
2. Understand how non-pastoralist land use actors manage seasonal encounters with migrating pastoralists.
3. Describe how seasonal migrations and access rights could be aligned and secured as rights that overlap with private rights, within the legal framework for real property rights and land administration.
4. Assess what tenure options are potentially suitable for securing seasonal migrations and access rights within the legal framework for land administration.

1.4.2 Study area

As stated earlier, pastoralism is a dominant land use in the rangelands (semi-arid and arid environments). In Kenya, the arid and semi-arid lands make up 84% of the country's total land surface. These areas support about 9.9 million Kenyans (or approximately 34 % of the country's population), account for more than 80% of the country's ecotourism interests and contain up to 75% of its wildlife population (Barrow and

Mogaka, 2007). Figure 1.1 shows the distribution of the seven agro-ecological zones in Kenya. My study was conducted in an 18,926 km² area in Northern Kenya, just above the equator. The study area is indicated by the thick red line in Figure 1.1. It lies inside the Samburu–Laikipia–Isiolo–Meru landscape, located between longitudes 36° 27' 34" and 38° 10' 15" East and latitudes 1° 8' 05" North and 0° 5' 47" South.

This area was chosen for two main reasons. First, the area cuts across all seven agro-ecological zones found in Kenya. The highlands are located in the south-western parts of the study area. Moving northwards and eastwards, the agro-ecological zones drop from the highlands (humid zones) to the rangelands (semi-arid and arid zones). This area is considered an ideal setting for this study because pastoral seasonal land use is characterized by seasonal movements between rangelands and highlands (Oba and Lusigi, 1987; Swallow, 1994; Goodhue and McCarthy, 1999). The second reason for choosing this study area is the diversity of land uses, land use actors and land tenures found there. The main forms of land uses include pastoralism, crop farming, private or commercial ranching, urban land uses and conservation (wildlife parks and forests). Figure 1.2 shows the distribution of these land uses in the study area. The pastoralists are mainly located in the semi-arid and arid environments of Samburu, Isiolo and Laikipia. Their tenures are mainly communal and based on either customary or statutory tenures. The southern parts of Laikipia lie in the transition areas between semi-arid and semi-humid/humid agro-ecological zones. Other than pastoral use, land uses such as crop farming, private/commercial ranching and conservation are also found in Laikipia. Meru is a high-potential area, the dominant land use being crop farming (subsistence and cash crop farming). While pastoralist land use is migratory, the land uses of all the non-pastoralist land use actors are sedentary and their lands are mainly under private tenure, held either by individuals or by the government (Lengoiboni et al., 2010). The diversity in the study area provides an ideal setting for exploring seasonal interactions between pastoralists and non-pastoralist land use actors in relation to land laws and property rights and land administration.

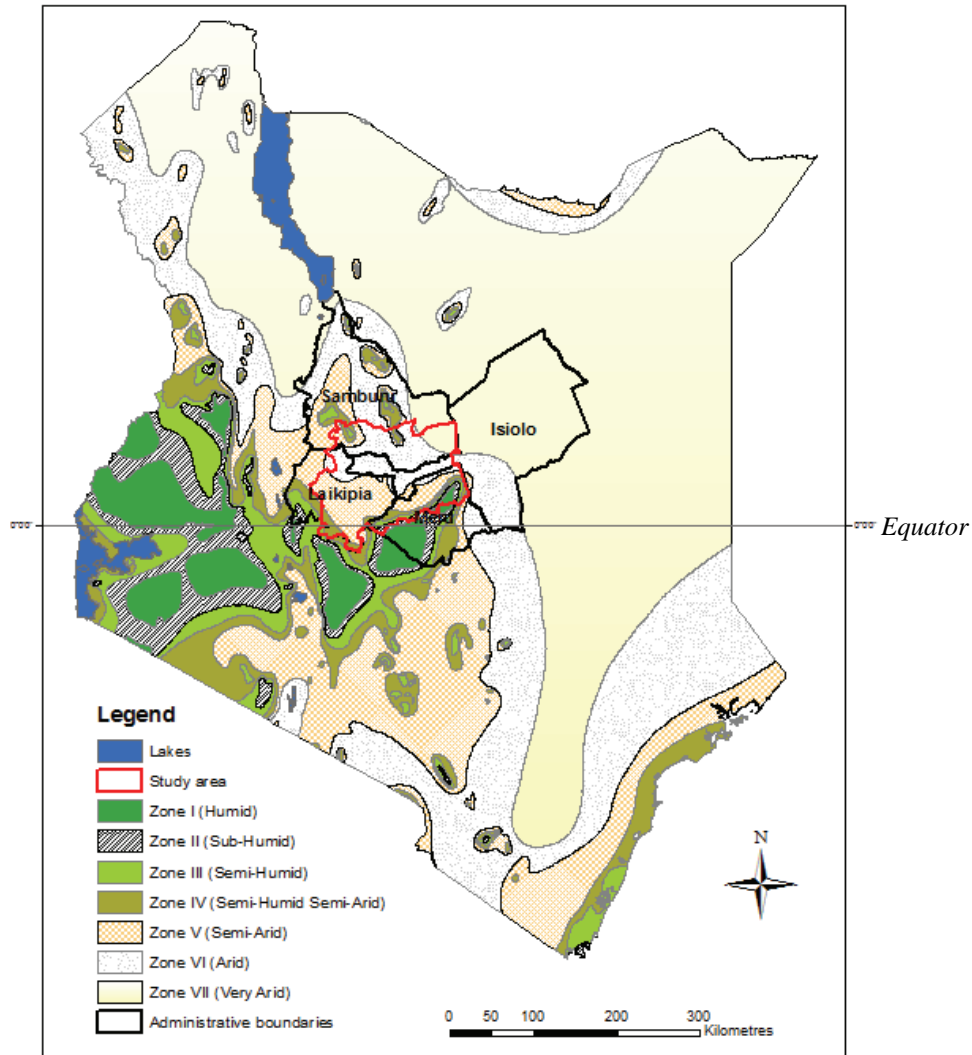


Figure 1.1 Agro-ecological zones in Kenya, and location of the study area. Source (USDA, 2004)

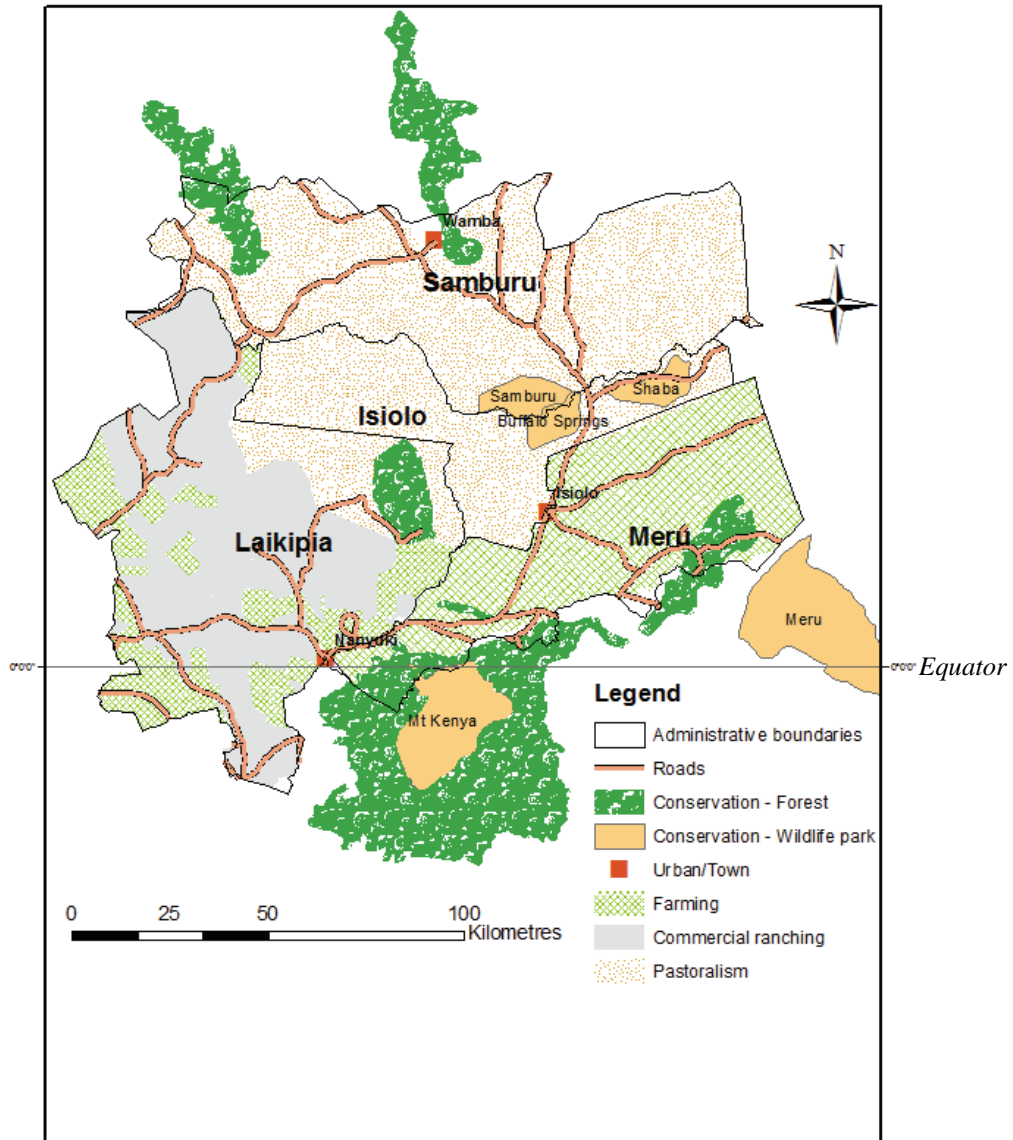


Figure 1.2 Distribution of land uses in the study area. Source: (Lengoiboni et al., 2010)

1.4.3 Outline of the thesis

Each chapter in this thesis is a step towards answering the overall objective. Chapters 2 to 5 form the core of the thesis and each one concentrates on a sub-objective. The chapters are based on a series of

four papers that have been published in, or submitted to, international peer-reviewed journals.

Figure 1.3 illustrates the structure of the thesis and the sub-objectives covered in Chapters 2 to 5. The research was undertaken in two phases: problem analysis and solutions. Chapters 2 and 3 cover the problem analysis phase. Chapter 2 looks at the spatial extents of the migration corridors in the study area (which in turn define where dry season grazing areas exist) and the temporal elements of pastoral land use. These are assessed against the legislation that supports property rights and land administration, and its consequences for both pastoralists and non-pastoralist land use actors in the study area. Chapter 3 looks at the consequences for migrating pastoralists arising from the adjudication of ownership rights to non-pastoralist land use actors. This chapter investigates how non-pastoralist land use actors manage the seasonal encounters with migrating pastoralists, who need to enter their land to follow the traditional pastoralist migration routes.

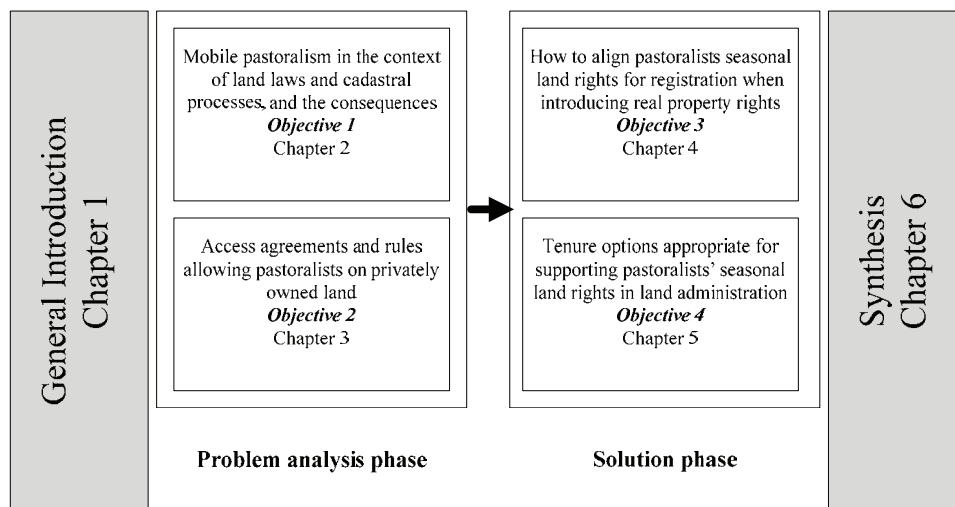


Figure 1.3 Research framework

Chapters 4 and 5 cover the solution phase of the thesis. Chapter 4 assesses how other countries have aligned the exercising of pastoral seasonal land rights in their legislation. This chapter also analyses the views of experts on pastoral land rights on whether the seasonal land rights should be formalized through registration. It discusses the spatiotemporal land rights from the perspective of managing property

rights, restrictions and responsibilities. Chapter 5 explores the tenure options suitable for securing the migration corridors and dry season grazing areas within the land administration system.

Chapter 6 summarizes the main findings of all the previous chapters. It also contains my reflections on the main results, the usefulness of the research and suggestions for future research.

The thesis concludes with the references and summaries in English, Dutch and Swahili.



A participatory mapping session with herders at Namelok community
[Photo Monica Lengoiboni]

Chapter 2

Pastoralism within land administration – the missing link

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Pastoralism within land administration in Kenya, the missing link

Abstract

In land administration (LA), the right to exercising property/ownership rights on land is based on cadastral processes of adjudication, survey and rights registration. Private ownership rights are now being taken up in pastoral areas, where they must contend with pastoralists' land rights. Pastoral land use requires seasonal migrations determined by climatic conditions. This study aimed to find out how well the existing land laws and property rights in LA are able to serve the requirements of pastoralists land use, identify mismatches and put forward possible solutions. A case study was carried out in the Samburu–Laikipia–Isiolo–Meru landscape in Kenya. Data on the degree of livestock dependency among pastoralist communities, the spatial extent and patterns of dry season migrations, the resulting encounters between herders' and non-pastoralist land use actors, and the perceptions of land rights held by actors were collected through a variety of methods and analysed. The results show that pastoralism is still active. The migration corridors reveal that herders maintain extensive dry season mobility, even though some of the corridors currently overlap with areas where land is privately owned by non-pastoralist land use actors. Moreover, the results show that most non-pastoralist land use actors have their land rights registered, but seasonal encounters with migrating pastoralists persist as pastoralists continue to exercise customary rights of communal use. We conclude that existing land laws and property rights in LA are suitable for sedentary land use, but do not address how to serve pastoralists land rights in time and space. The pastoralist's migration routes and patterns obtained indicated that it is possible to predict where pastoralists will be at a given time/dry season. This information could be used by decision makers and land administrators to identify where and when pastoralists' land rights apply. This could provide the foundation for including pastoralists' spatiotemporal land rights in LA. Arguments emphasize that adjudication, surveys and registration of rights should focus not only on ownership and full control of land, but also on defined periods when spatiotemporal mobility and access rights could be granted to pastoralists.

Keywords: property rights; land laws; pastoralists; seasonal migrations; conflicts; spatiotemporal land rights; non-pastoralist land use actors

2.1 Introduction

The primary objective of a land administration (LA) system is to support the operation of the land market and, in turn, support economic development, environmental management and social stability in both developed and developing countries (Williamson, 2001). This is achieved through legal, regulatory, fiscal and information management, the components of LA (Palmer and McLaughlin, 1997). Rights or rules on cadastral parcels and land are exercised through a number of property rights regimes, depending on the form of land tenure (Dale and McLaughlin, 1999). It is upon the processes of land survey and registration that property rights can be exercised based on four qualities: universality, exclusivity, transferability and enforceability. Universality is about ownership rights, exclusivity about the rights to benefit from land, transferability about the rights to transfer property rights to another owner, and enforceability provides a structure of penalties that prevent others from encroaching on or taking over property rights without the agreement of the owner (Tietenberg, 1992; Dale and McLaughlin, 1999). These institutions form the norms and rules of LA (Molen, 2003b), and are supported by laws and mandates that legitimize regulation of activities, such as holding rights to land, economic exploitation of land, and control over land use and development (Enemark and Molen, 2008). These LA notions are well recognized and respected by citizens in developed countries, and are backed by theoretical and legislative frameworks that have evolved over hundreds of years (Bennett et al., 2008). In developing countries such as Kenya, however, these LA notions may fail to achieve their purpose in landscapes where varied land uses such as pastoralism and sedentary land use exist side by side.

Pastoralists, or mobile pastoralists – these terms are used interchangeably in this paper – depend on livestock for their livelihood and live in seasonal environments. Their strategy for providing year-round food for their herds is to move their livestock to pasturage, rather than bringing fodder to their herds (Chang and Koster, 1994; Dyson-Hudson and Dyson-Hudson, 1980; Fratkin, 2001). The time and pattern of movement is determined by climatic conditions (wet and dry seasons) and the availability of pastures, among other physical and biotic factors (Dyson-Hudson and Dyson-Hudson, 1980; Fratkin, 2001). The dry seasons are most demanding for pastoralists (Oba and Lusigi, 1987). They move to areas with higher rainfall where the vegetation persists, moving back again to their home areas at the onset of the rains to take advantage of the

new grass (FAO, 1999). The variability in pasture availability forces pastoralists to be alert and take advantage of fodder when it becomes available, and to plan ahead and safeguard against disasters (Anderson and Broch-Due, 1999). Anthropological studies have observed pastoral systems of pasture utilization to be sustainable and compatible modes of exploitation (Homewood et al., 1987; Fratkin, 1997), although the areas of land involved and the migration routes or corridors are considered to be fuzzy or ill defined (Toulmin, 1993; Scoones, 1994; Goodhue and McCarthy, 1999).

During seasonal migrations, pastoralists' may cross into non-pastoral areas, which can lead to encounters with land users outside the pastoral community. When pastoralists enter non-pastoralist land their interests may temporarily overlap or conflict with those of the land users. Such conflicts may be heightened when non-pastoral land users have their lands surveyed and their property rights registered, confirming their rights to the land. Formalization of property rights excludes overlapping interests because it creates exclusive forms of ownership of resources (Meinzen-Dick and Mwangi, 2009), obstructing pastoral movements essentially by depriving them of access rights (Brink et al., 2005). The pastoralist practice of repeatedly renegotiating temporary and flexible access rights to resources is becoming more problematic in a landscape that is progressively being surveyed, demarcated and allocated (Homewood et al., 2004). Social and economic welfare among pastoralists has declined (Swallow and McCarthy, 1999). According to FAO (1999), pastoralists are exposed to unprecedented pressures and are unable to respond appropriately to meet the requirements of their traditional mode of production.

Conflicts between pastoralists and non-pastoralist land users are usually about property rights issues (Brink et al., 1995). Tietenberg (1992) states that ill-defined property rights are behind the problems that are putting pastoralist livelihoods in danger (Fratkin, 1994; Deininger, 2003; Cotula et al., 2004). However, little is known about why/the degree to which land laws and property rights in LA fail to address the spatiotemporal dimension of land rights in pastoral production systems, the seasonal migrations. To address this gap, current pastoralist practices were investigated by studying the magnitude of livestock dependency and the spatial extent and patterns of seasonal migrations. The interaction between migrating pastoralists and non-pastoralist land use actors was analysed. Perceptions of land rights were assessed by finding out how

aware the land use actors were about land registration systems for their lands in northern Kenya. Drawing on the results, the paper discusses possibilities for using land administration systems to secure pastoralists' spatiotemporal land rights.

2.2 Study area and methods

The case study area, the Samburu–Laikipia–Isiolo–Meru landscape in Kenya, was selected because of the diversity of land tenures and land use actors found there. The land use actors are pastoralists and non-pastoralists with varied forms of land tenure. Land tenure forms for pastoralists are based on two systems: statutory and customary tenure. Statutory tenure is legislated for in Chapter/Cap. 287 of the land law, which contains provisions for group ownership of land known as 'group ranches'. A group ranch is a large tract of land that is delineated and registered, and which is owned privately and used equally by the group members. Group ranch ownership is obtained by representatives of a group of owners of land registering their ownership under the Land Adjudication Act (Cap. 284). Pastoralists communal land use and livestock movement within the group ranch boundary is permitted. The second system, customary tenure, is exercised through traditional communal practices in trust lands occupied by pastoralists. Trust lands may be described as areas where no adjudication and demarcation of individual or group tenures has taken place. Section 69 of Cap. 288 allows the occupiers to enjoy land rights according to their customary law, including any subsequent modifications of the land rights, but only as long as such rights do not conflict with any of the provisions of the Act or rules made under it, or to the provisions of any other law currently in force.

Non-pastoralist lands are held under statutory tenure, in the form of individual holdings or government land. Private tenures are mostly held by individuals outside the pastoral sector, but some pastoralists do own private land. Private tenures can be obtained by surveying boundaries and registering individuals as proprietors of the land, as provided for in Cap. 300 of the land laws. Upon registration, absolute ownership is conferred to the owner, with a title deed or a certificate of lease. This permits land owners to exercise their rights of universality, exclusivity, transferability and enforceability provided by LA. Cap. 300 also provides that, upon registration, land owners are not obliged to respect needs/uses of their land by other parties', as long as their interests and claims are not shown

in the register. Penalties for trespassing on private land are provided for in Cap. 294.

Government land is covered by Cap. 280 of the land laws. Frameworks for conservation of biodiversity and wildlife are also incorporated into legislation on government land in the Forest Cap. (385) and Wildlife (Conservation and Management) Cap. (376). Cap. 280 on government land is rather flexible, including provisions for access to resources such as water within the government lands. However, unauthorized occupation of unalienated government land, in any manner whatsoever, is liable to penalty.

The land use activities in the study area are diverse. For this study, six categories of land use actors were identified and each treated as a unit of analysis: pastoralists, farmers, private ranchers, urban residents, wildlife park wardens and forest officers. Figure 2.1 shows that pastoralists are mainly found in the drylands of Samburu, Isiolo and northern Laikipia. They make seasonal migrations across large areas in search of pastures in response to climatic conditions. Pastoralist tenures range from individual tenure to group ranches and trust lands. Farmers are mostly located in the more productive areas of the Isiolo and Meru regions, practising subsistence and cash crop farming. Private ranchers are found mainly in the Laikipia landscape, where they practice a variety of activities, such as wildlife conservation, forestry, farming and ranching. The urban residents of Isiolo, Wamba and Nanyuki towns were selected for the study. Isiolo and Nanyuki are more populated and developed urban centres; Wamba is an important trading centre in the pastoral areas and contains residential areas. Wildlife parks and forest are private lands owned by the government or local authorities. For this study, farmers, private ranchers, urban residents, wildlife park wardens and forest officers are categorized as non-pastoralist land use actors. Their tenures are commonly private ownership, either individual or government land ownership.

The diversity in the study area provided an ideal context for exploring interactions between pastoralists and non-pastoralist land use actors in relation to land laws and the property rights provided by land administration.

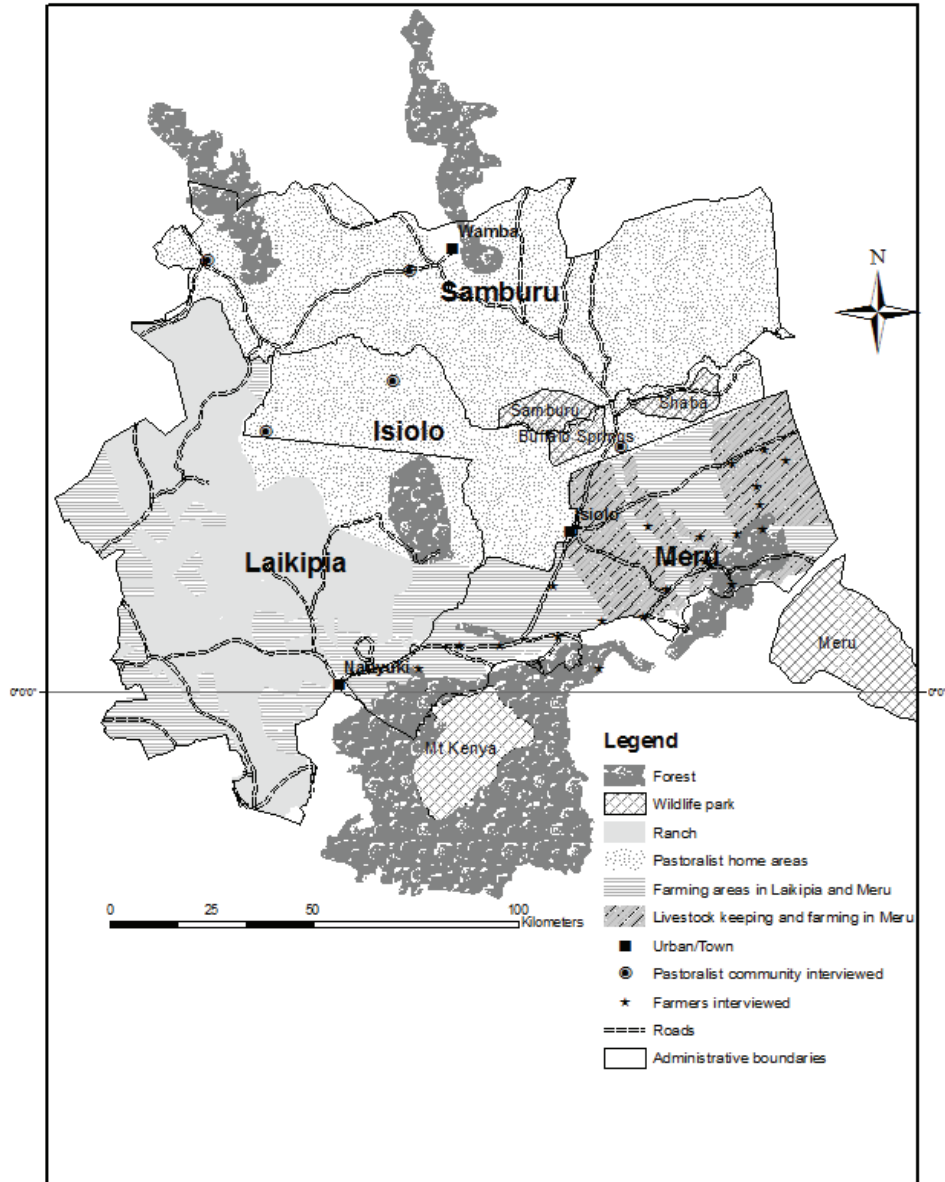


Figure 2.1 Study area, land use and land use actors within the Samburu-Isiolo-Laikipia-Meru landscape

Figure 2.1 was compiled from a map showing livelihood zones and a map showing property (land) ownership, and from additional GIS layers. The livelihood zones map is a national database accessed via the Community Based Livestock Early Warning Systems (CB-LEWS) of the

ASAL (Arid and Semi Arid Lands) Based Livestock and Rural Livelihood Support Project (ALLPRO) in Nairobi. The livelihood zones show pastoralist areas in Isiolo and Samburu districts, as well as farming and livestock areas in the Meru landscape. The 'livestock keeping areas' classification designates occupation by different livestock rearing communities from both the pastoral and non-pastoral sectors. The property map contains cadastral information on individual ranches. The details of each property, such as cadastral boundaries, were not used in this research owing to the sheer size of the study area. The map was obtained from Africa Wildlife Foundation (AWF) in Nanyuki, Kenya. The GIS layers with information on administrative boundaries, forests, wildlife parks and roads were obtained from ILRI (International Livestock Research Institute) in Nairobi.

2.3 Methods

Data were obtained to assess how appropriate the existing land laws and property rights in LA are to the needs of pastoralist land use in northern Kenya. Current pastoralist practices were investigated by studying the magnitude of livestock dependency, the spatial extent and patterns of seasonal migrations, the resulting interaction between pastoralists and non-pastoralist land use actors, and the perception of land rights based on how much the land use actors knew about the registration systems for their land.

A case study approach was used as it is well suited to investigations of interactions between phenomenon in their real-life context (Yin, 1994; Cassell and Symon, 2004). It is also an appropriate method for descriptive studies where the goal is to describe the features, context and processes of phenomena (Yin, 1994), which is the purpose of this study. As the study consists of six units of analysis, the embedded case study approach was used. It is one of the most appropriate research strategies for conducting studies containing more than one sub-unit of analysis, in which detailed information on each unit of analysis is integrated in the final analysis (Yin, 1994; Scholz and Tietje, 2002). A further advantage of case-based research is the range of possible methods for information gathering and analysis (Glesne, 1999). The data for this study were obtained from semi-structured questionnaires containing both open and closed questions, conducted in face-to-face interviews and via email.

The questions varied slightly between actor groups depending on the information required. Pastoralists were asked about: i) current pastoralist

tenures and seasonal migration practices; ii) delineation of pastoralist seasonal migration routes and patterns for the two dry seasons – this is because climatic conditions in this northern Kenya drylands is bimodal (having two rainy seasons and two dry seasons) (McClanahan and Young, 1996); and iii) their awareness of registration systems used for their land. Non-pastoralist land use actors were asked about: i) whether they had conflicts with migrating pastoralists; and ii) their awareness of registration systems used for their land.

Fieldwork was conducted between November 2007 and February 2008. Various sampling methods were used to identify interviewees. Pastoralist communities were chosen using the cluster sampling method (n = 5 from 72 participants) in a non-random manner, based on factors such as location and accessibility. Information was obtained through focus groups composed of from 8 to 20 men of various age groups. Besides answering the questions, the focus groups discussed seasonal migrations for the early-year dry season (usually January through March) and the late-year dry season (usually around July through September/October) and formulated general patterns of movements. The participatory mapping approach was used to record pastoralists indigenous knowledge on the timing and routes of seasonal migrations by translating the information onto a map. Indigenous knowledge is a unique, traditional local knowledge that has developed within the specific conditions of people indigenous to a particular geographical area (Grenier, 1998). To facilitate the mapping exercise for pastoralists, GIS layers with information on administrative boundaries, areas of private ranches, towns, wildlife parks, forests and roads were overlaid on a Landsat TM at 30m resolution. This was printed on A0 size paper, on which pastoralists drew their migratory routes. The migratory route maps were later geo-referenced, digitized and visualized in GIS.

For the non-pastoralist land use actors, farmers were identified using quota sampling (n=21, from 71 farmers), and both individual and group interviews. The quota sampling used a non-random approach based on factors such as location and accessibility. Questionnaires were sent by email to 26 private ranchers whose contact details could be found. Of these, 6 responded (n = 6). Urban residents were identified using quota sampling in the three urban centres (n = 25, from 40 urban residents – approx. 10 interviewees per urban centre). A condition for selecting urban residents was that they practiced some form of farming, such as kitchen gardening. Both individual and group interviews were held.

Individual interviews were held with wildlife park wardens (n = 4) and forest officers (n = 8).

In total, this resulted in 69 completed questionnaires, of which 5 were from pastoralist communities and 64 from non-pastoralists land use actors.

2.3.1 Analysis

Due to the unequal sample sizes, cross tabulations are used to represent the frequencies of distribution of the responses from each category of land use actors. The interactions between the land use actors that were studied are shown in Figure 2.2. Digitized layers of pastoralists' migratory routes obtained from the participatory mapping sessions were overlaid with land use maps. As shown in Figure 2.1, some areas in the Meru landscape are classified as livestock keeping areas. During fieldwork, however, it became apparent that crop farming was also practised in these livestock keeping areas. Given this situation, permission was sought from the Community Based Livestock Early Warning Systems (CB-LEWS) to include farming and reclassify the livestock keeping as farming areas, consisting of a mix of livestock farming and cropping. As the cadastral maps could not be accessed, the land use map was used instead to represent pastoral areas, farming areas, urban centres, wildlife parks and forests. The land use map therefore shows pastoral areas where tenures are mostly communal, and non-pastoral areas where tenures are mostly private. Overlaying the migratory routes on the land use map, an analysis was made of areas where migration routes approach, encroach on or cross areas used by non-pastoralist actors. The results are given in two tables, one for each dry season period. The study looked at pastoralists' relationship to the land, and did not consider pastoralist stocking rates.

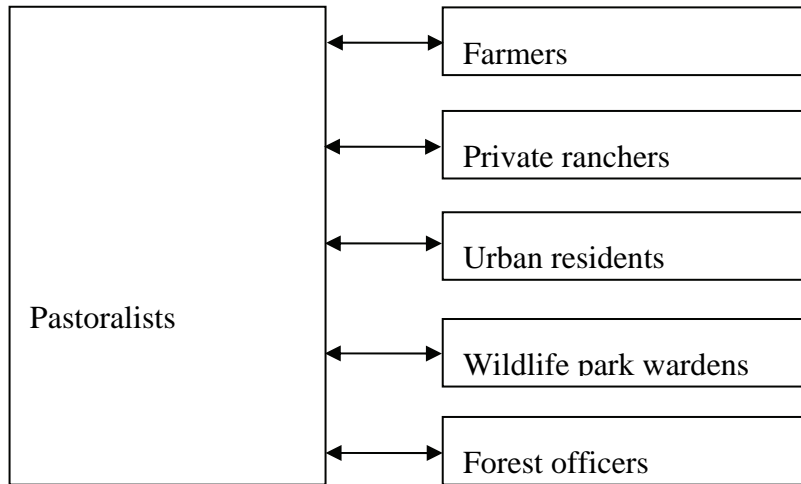


Figure 2.2 Interaction between pastoralists and other land use actors in the study area

2.4 Results

2.4.1 Current mobile pastoralist practices

Table 2.1 lists the tenures and current practices in five pastoralist communities. The Mbaringon community owns land registered as group ranch ownership, while the Lodungokwe, Longopito, Namelok and Ngaremara communities live on trust lands. The proportion of families dependent on livestock for their livelihood is 100% in all communities except Ngaremara (25–50%). Clearly, pastoralism is active in all communities except Ngaremara. The lower dependency on livestock in the Ngaremara community reflects a shift from livestock keeping to crop farming. Livestock raids between pastoralist groups, with a major raid in 2001, encouraged many community members in Ngaremara to settle down and change their livelihood. Those who did not change to crop farming mentioned keeping smaller herd sizes than other pastoralist communities.

All communities confirm relating to land through the customary norms of communal use, and that migrations still occur in dry seasons. This includes the Mbaringon, whose members move out of their registered land, and the Ngaremara, whose members have smaller herd sizes. This suggests that seasonal migrations are still perceived as a viable traditional practice to sustain the pastoralist livelihood through the dry seasons. During migrations all pastoralist communities agree to encroach on non-

pastoralist lands when the resources they require are on those lands. The reason for encroachment was that non-pastoralists do not easily allow access.

Table 2.1 Pastoralist tenures and current practices in five pastoral communities

Pastoralist Community	Tenure Type	Estimated proportion of population dependent on livestock	livestock migrations in both dry seasons	Encroach on other peoples' lands in dry seasons	Relate to land via traditional norms of communal use
Mbaringon	group ranch	100%	yes	Yes	yes
Lodungokwe	trust land	100%	yes	Yes	yes
Longopito	trust land	100%	yes	Yes	yes
Nomekok	trust land	100%	yes	Yes	yes
Ngaremara	trust land	25–50%	yes	Yes	yes

2.4.2 Spatial extent and patterns of seasonal migrations

Figure 2.3 presents the results of the analysis of the spatial extent and patterns of seasonal migrations for the five pastoralist communities. The maps show the normal patterns of movement during the early-year and late-year dry seasons. From their home areas (group ranch or trust land), migrating pastoralists follow the same routes to and from the dry season grazing areas. Although these routes are standard and are followed each year, they may change (shorten, lengthen or sometimes a shift in direction) depending on the intensity of the dry season or even drought. Pastoralists report that on arrival at pastures, the herds spread out to graze. This phenomenon appears as a delta-like feature on some of the migration routes. Pastoralists report that this spreading out could mean that the migration routes extend further into non-pastoral areas than shown on the map.

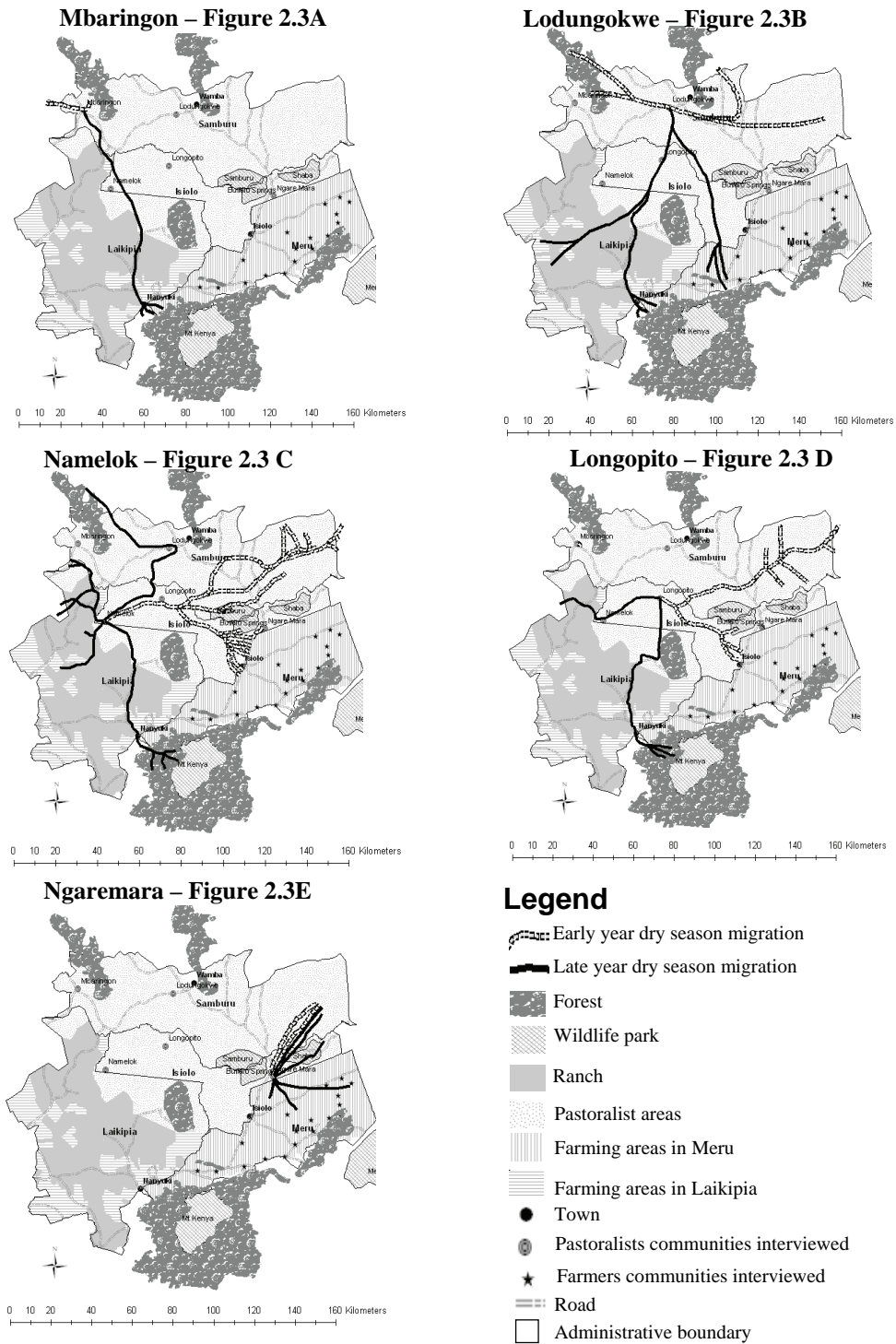


Figure 2.3 Seasonal migration routes drawn by pastoralists in participatory mapping sessions

As can be seen from the maps, all the migration routes in the early year dry season spread out farther to the east, towards a place the respondents called Losesia. During this period many pastoralist groups converge here – as shown in Figures 2.3B, 2.3C, 2.3D and 2.3E. Respondents mentioned the availability of pastures in the Losesia area during the early year dry season. The land in the Losesia area has not been registered, so when pastoralist groups converge they can move freely to graze their livestock before heading back at the onset of rains. In the late-year dry season, the migration routes and patterns advance northwards, westwards and southwards, where the land tenure is mostly in the form of private holdings or government land. A noticeable feature on Figures 2.3A, 2.3B, 2.3C and 2.3D is that migration routes converge and follow one route further south towards Mt Kenya forest. This is because herders follow a main public road which leads to Nanyuki town before advancing further into Mt Kenya forest. They follow this public road because the land on both sides of the road is mostly in private ownership.

The estimated spatial extent of migrations and the pattern of movement can be influenced by the distance between community lands and the dry season grazing areas. Figure 2.3A, for example, shows movement to the north-west which continues out of the study area, in contrast to the other communities, who move eastwards. Figures 2.3B-D show migrations over long distances up to 200 km in both the early-year and late-year dry seasons. The migration routes shown on Figure 2.3E are shorter than those of the other communities because of the community's proximity to the Losesia as well as the farming areas.

During seasonal migrations, the livestock not only have to move, but also need to feed. This suggests that non-pastoralist land use actors along or near migration routes are likely to encounter migrating herders. Tables 2.2 and 2.3 show whether or not the pastoralists' migration routes and patterns approach or cross into the different categories of land uses within the study area.

Table 2.2 Pastoralist migration routes in the early-year dry season (January-March)

Migration routes in the early-year dry season approach or cross into non-pastoralist land uses					
Figure	Farming areas	Private Ranches	Urban areas	Wildlife Parks	Forests
3-A	-	-	-	-	+
3-B	-	-	-	-	+
3-C	+	-	+	+	-
3-D	+	-	+	+	-
3-E	-	-	-	+	-

Key: + = yes - = no

Table 2.3 Pastoralist migration routes in the late year dry season (July-September)

Migration routes in the late-year dry season approach or cross into non-pastoralist land uses					
Figure	Farming areas	Private Ranches	Urban areas	Wildlife Parks	Forest
3-A	+	+	+	-	-
3-B	+	+	+	-	+
3-C	+	+	+	-	+
3-D	+	+	+	-	+
3-E	+	-	-	+	-

Key + = yes - = no

Comparing Tables 2.2 and 2.3 we conclude that fewer pastoralist communities approach farming areas in early-year dry season than in late-year dry season; none of the pastoralist communities approach private ranches in the early-year dry season, but more communities do in the late-year dry season; fewer pastoralist communities approach urban areas in early-year dry season than in late-year dry season; more pastoralists approach wildlife parks in the early-year dry season than in the late-year dry season; and lastly, fewer pastoralist communities approach forests in early-year dry season than in late-year dry season. Apart from the wildlife parks, the late-year dry season presents a period with more interaction between migrating pastoralists and non-pastoralist land use actors than the early-year dry season.

Table 2.4 Land use actors reporting conflicts with pastoralists

			Land use actors experience conflict with migrating pastoralists			Total
			no	sometimes	yes	
Category	Farmer	Count	0	0	16	16
		% within Category	0%	0%	100.0%	100.0%
	Private Ranchers	Count	0	0	2	2
		% within Category	0%	0%	100.0%	100.0%
	Urban Residents	Count	0	1	12	13
		% within Category	0%	7.7%	92.3%	100.0%
	Wildlife Park Wardens	Count	0	0	4	4
		% within Category	0%	0%	100.0%	100.0%
	Forest officers	Count	0	1	5	6
		% within Category	0%	16.7%	83.3%	100.0%
Total		Count	0	2	39	41
		% within Category	0%	4.9%	95.1%	100.0%

Table 2.4 shows that the percentages of non-pastoralist land use actors reporting conflict with migrating pastoralists are high for all categories: farmers (100.0%), private ranchers (100%), urban residents (92.3%), wildlife park wardens (100.0%) and forest officers (83.3%). Farmers, private ranchers and urban residents stated that conflicts were caused by pastoralists entering their land without permission and destroying fences and crops. Wildlife park wardens mentioned that often herders would graze their livestock at a distance from the parks, but let their livestock move into the parks uncontrolled. Park rangers are often forced to confiscate livestock and wait for the owners to come and collect them. In forests, conflicts arise between migrating pastoralist and forest rangers when livestock graze on seedlings, or when pastoralists occupy the forest. However, conflicts did not always arise, as indicated by the 7.7% of urban residents who allowed pastoralist herders access, but experienced conflict if a fence was destroyed or herders stayed longer than the agreed period. Similarly, 16.7% of forest officers indicated that livestock grazing in forests reduced the chances of forest fires in the dry periods.

Table 2.5 shows awareness among land use actors of the land rights that LA provides and of pastoralist customary land rights (communal), as an indication of their awareness of the registration system for their lands; in

other words, whether the actors have their land rights registered. Table 2.5 reveals that the percentage of pastoralists with registered land was the lowest (20.0%), while a high percentage of all the categories of non-pastoralist land uses were registered: farmers (68.8%), private ranches (100.0%), urban residents (92.3%), wildlife parks (100.0%) and forests (100.0%). These non-pastoralist land use actors can exercise their rights against intruding pastoralists. A small group of farmers (12.5%) rented land from other people and did not know whether this land was registered or not. These, as well as the 18.8% of farmers and 7.7% of urban residents who did not have their lands registered, reported having their lands fenced and exercised absolute rights as provided by land laws and by LA. Most pastoralists, on the other hand, do not have registered rights, but were aware of their customary rights of communal use, on which seasonal migrations are based.

Table 2.5 Land use actors' awareness of the registration system for their land

Category	Pastoralists	Count	Land use actors aware of the registration system for their land (whether land rights registered or not)			Total
			don't know	no	yes	
		Count	0	4	1	5
		% within Category	0.0%	80.0%	20.0%	100.0%
	Farmer	Count	2	3	11	16
		% within Category	12.5%	18.8%	68.8%	100.0%
	Private Ranchers	Count	0	0	2	2
		% within Category	.0%	.0%	100.0%	100.0%
	Urban Residents	Count	0	1	12	13
		% within Category	.0%	7.7%	92.3%	100.0%
	Wildlife Park Wardens	Count	0	0	4	4
		% within Category	.0%	.0%	100.0%	100.0%
	Forest officers	Count	0	0	6	6
		% within Category	.0%	.0%	100.0%	100.0%

2.5 Discussion

This study set out to investigate current pastoralist land use practices and interactions with non-pastoralist land use actors in the context of existing land laws and property rights. Much of the pastoralists' dependency on livestock and the spatial and temporal variability of their migratory routes in northern Kenya has been described. Conflicts resulting from seasonal encounters with non-pastoralist land use actors and the perception of land rights among the different categories of land users are also described.

Livestock dependency is observed to be high among pastoralists. Seasonal migrations are held regardless of pastoralist tenure types, whether group ranches or trust lands, as shown by the results of this study. Pastoral lands are considered common and open to all, and migrations to dry season resources (perceived as areas with more rain and plentiful good quality grass) occur regardless of the pastoralists' locations (Fratkin, 2001; Ngugi and Conant, 2008). These active pastoral practices sustain pastoralists' livelihoods, but are being affected by the expansion of other land uses into the rangelands (Fratkin, 1997). These effects include settling down and the diversification of livelihood activities in response to declining livestock productivity in the rangelands (Western, 1982; Fratkin, 1997). Where pastoralism is still the dominant mode of livelihood, however, seasonal livestock migrations are still an important management strategy for survival in the dry seasons and drought (Oba and Lusigi, 1987). This research has similarly shown that even with the existence of non-pastoral tenures adjacent to pastoral areas, pastoralists tend to maintain their seasonal migrations, whether they lead them onto non-pastoral lands or not.

Migration corridors from pastoralist homelands spread out over a wide area and into non-pastoral areas. Extensive mobility allows herders to exploit different ecosystems in different places and times to compensate for fluctuations in pastoral production (Goodhue and McCarthy, 1999). Under Acts 287 and 288 of the Kenya land laws the pastoralist communal land use and livestock movements are supposed to be practiced in pastoral homelands, within the group ranches and in trust lands. These laws may be effective in the wet seasons, when climatic conditions support pasture and resource availability in pastoral homelands, but they do not contain provisions for pastoralists to move out of the group ranches and trust lands during dry seasons, the periods when pastoral land use system demands mobility. The case of the

Mbaringon group ranch in this study, for example, is comparable with the experiences of group ranches established in pastoral areas in southern Kenya, where adjudication authorities ignored the migration routes and the group ranch boundaries were not drawn to accommodate the main traditional methods of livestock management, such as seasonal migrations (Coldham, 1979). Burnsilver (2005) notes that even though the purpose of group ranches was to settle pastoralists and incorporate them into the market economy, pastoralists continued to manage their herds largely according to subsistence strategies, moving their livestock across group ranch boundaries when climatic conditions demanded it, a picture that is reflected in the results of this study. Migrations beyond group ranch boundaries or trust land highlight the significance of mobility for pastoralism. They still occur, even though they are not supported by land laws or property rights in LA.

The results of this study show clear differences between the migration patterns in the early-year and late-year dry seasons. This is in line with Blench (2001), who states that although pastoral migrations may seem opportunistic by moving from pasture to pasture, they generally follow established seasonal migratory routes. The maintained migration routes and the differences in movement patterns make it possible to predict to a certain degree where, when and which non-pastoralist land use actors are likely to encounter migrating pastoralists. Figure 2.3 shows that the migration corridors of the late-year dry season cross into non-pastoral areas where tenure types are mostly private (individual holdings or government land) and the property rights of universality, exclusivity, transferability and enforceability are exercised. We can therefore predict that most non-pastoralist land use actors, such as farmers and ranchers, are more likely to encounter pastoralists during the late-year dry season than the early-year dry season. Despite this predictability, the land laws and property rights contain no provisions supporting temporary access by pastoralists. Instead, they enhance private ownership rights by allowing penalties to be imposed on intruders/trespassers – including pastoralists.

As pastoralists ignored group ranch boundaries on their migration routes in southern Kenya, ignoring their need for wider access has no effect on their traditional grazing patterns (Coldham, 1979). Our research similarly showed that pastoralists are likely to ignore the boundaries not only of group ranches and trust lands, but also of non-pastoral land use actors along the migration routes or where pastures exist. This is probably because pastoralists' customary land rights are non-excludable (Fratkin,

2001), and so they see their traditional migrations as conferring access rights, even in non-pastoral areas. The fact that all the non-pastoralist land use actors – farmers, private ranchers, urban residents, wildlife park wardens and forest officers – experienced conflict when encountering migrating pastoralists (see Table 2.4) suggests that pastoralists do not consider what the land is used for when they encroach on non-pastoral land, but are probably attracted by any available resources on any property along their migration paths. Galvin and Ellis (2007) state that the pastoralist land use system is not concerned with exclusive ownership of land, but with access to the required resources. Yet again, land laws and property rights do not take into account the need to give pastoralists temporary access during their seasonal migrations, challenging the very functioning of pastoralism in non-pastoral areas.

While most non-pastoralists had their land rights registered, most pastoralists did not, but were aware of their customary rights (see Table 2.5). This is evidence that pastoralists may not be aware of what land laws and property rights in LA consist of. Herders may believe that their customary rights of communal use and unrestricted access should extend even to non-pastoralist areas. Pastoralists may be ignorant of statutory rights, just as non-pastoralists may be about pastoralist customary land rights. But if pastoralists are aware of statutory rights, by encroaching on private land they contravene their obligation to keep off the land. Perhaps migrating pastoralists do not perceive private tenure as a factor that stands in the way of access. This further suggests that the probability of recurrent encounters and conflicts will remain high.

The results presented in this study force us to consider land rights that accommodate both pastoral and non-pastoral land rights within LA as a potential solution to this long standing problem. There are calls for pastoralists to abandon their way of life by modernizing and settling down, but this would jeopardize a sustainable pattern that has survived a harsh environment for millennia (Toulmin, 2009). Alleviating the land rights problems facing pastoralists may lie in supporting them – for example by supporting herders' rights of way along the agreed migration corridors, as outlined in the legislation in some West African countries (Touré, 2004). Other measures are guaranteeing security of mobility and access rights, legal recognition and formalization of essential rights, and introducing processes that enable groups to identify rights holders and resolve conflicting claims, with consideration for the scales to which these rights could be applied (Mwangi and Dohrn, 2008).

Legal recognition requires the state to acknowledge and respect pastoralist rights and practices as being legitimate by giving them formal legal validity (Hobbs et al., 2008; Toulmin, 2009). The recognized rights (including unwritten customary or indigenous norms and values) then become eligible for registration, as long as the rules for allocation, acquisition and transfer are known. The advantage of registering the existing land tenures is that it provides the legal basis by which legally recognized rights are held. At the same time it ensures the certainty and validity of rights, unless they are revoked in a legal and comprehensible way (Molen, 2002; Zevenbergen, 2004; Dekker et al., 2006). Registered information usually includes the spatial extent and the nature of the interests in the land, and other interests (Dale and McLaughlin, 1999).

While LA focuses on the cadastral parcel as the basic unit for managing land information (spatial extent, nature of rights, etc.) (Kraak and Ormeling, 2003), the attributes of pastoral land rights differ in the sense that they constitute changing routes and areas at different times. Eligibility in the formal LA system would mean that the cadastral processes of survey, adjudication and registration would have to accommodate the dynamics of the spatial and temporal components of pastoral rights, and record these in the registry. Their migration corridors, shown in Figure 2.3, could perhaps be used to inform land administrators of the scale on which herders' rights apply. It would therefore be necessary to secure spatiotemporal rights through survey, adjudication and registration such that mobility is not obstructed even with the expansion of private tenures.

Under Cap. 300 of the Kenya land laws, once land is allocated to private ownership (even when the land lies within herders' migration routes), land owners do not have to take account of others' interests if they are not recorded in the register. Including herders' mobility rights in LA could follow the approach taken in Malawi, where adjudication statutes allow the conversion of customary rights to equivalent statutory and registerable rights, including customary rights of way through easements, the details of which should be entered in the final adjudication record (Lawrance, 1985). Lawrance points out that those details are crucial for the future completeness and correctness of the land rights on which land registers depend. Securing pastoralists' spatiotemporal rights through adjudication and registration could provide a measure of security against loss, destruction or fraud, at the same time ensuring legal empowerment should herders lose their rights (Dale and McLaughlin, 1999). Moreover,

if the land owners decide to sell or transfer land, the continuation of easements crossing private land, which enable herders to exercise their spatiotemporal land rights, is assured. This approach could perhaps be used to secure migration corridors for the early-dry season period within the trust lands of northern Kenya, as land awaits subdivision into either group or private tenures.

In the late-year dry season, pastoralists' migration routes currently cross private tenures. From a legal perspective, herders' rights have effectively been terminated. Pastoralists migrations here are therefore illegal within the formal system, but are legal under their customary rights. Pastoralism is recognized as a viable production system that contributes to livelihoods and national economies. If the need to secure herders' access rights in non-pastoral areas can be established as being urgent and requiring as much support as other production systems, then the information on the spatial extents of migration corridors could be used to inform land administrators about overlaps between herders' rights and non-pastoralists statutory rights. This in turn could be used to find possible solutions. However, the lack of understanding of existing and possible tenure arrangements and the actors involved, and past failures to accurately record existing information about land rights in the formal system, makes it difficult to identify appropriate land tenure arrangements that would adequately deliver the services required to secure tenure, markets, planning, taxation and management of resources for all parties (FIG, 1995; Molen, 2002).

Instead of emphasizing ownership rights based on land parcels, land administrators should be challenged to design a flexible system able to accommodate a variety of rights, including overlapping land rights. An ongoing investigation suggests that overlapping land rights could be accommodated in the Social Tenure Domain Model (STDM) (Lemmen et al., 2009). The STDM is a land administration tool currently under discussion and development by the International Federation of Surveyors (FIG), UN-Habitat and the Global Land Tool Network (GLTN). According to Lemmen et al. (2009), the STDM should be able to capture all land rights as they exist in reality, including all forms of rights holding and all kinds of property/spatial objects, regardless of their level of formality. By capturing an inventory of land rights as they exist, such as the spatial and temporal aspects of pastoral land rights revealed in this study, the STDM could provide a basis for documenting and securing pastoralists spatiotemporal land rights.

A detailed inventory of such rights could support land administrators in making decisions, for example on mechanisms for enabling the co-existence of pastoral and non-pastoral tenures and maintaining social relations between the actors. Local conventions applying participatory processes have facilitated negotiation, regulation and resolution of land use conflicts between farmers and pastoralists in Mali (Betke, 2006). According to Betke (2006), these local conventions have been observed to bind actors to agreements because the regulatory mechanisms are initiated and supported by the actors themselves and are recognized by the state authorities. Some have even been adapted and passed into law. These examples could inform Kenyan actors about possible approaches to supporting pastoralism and easing the problems arising from the continued exclusion of pastoralists from the legal system. Besides denying pastoralists access to required resources (Brink et al., 2005; Meinzen-Dick and Mwangi, 2009), it puts them in a weaker legal position than non-pastoralist land use actors.

The results provide an evidence base to meet the purpose of this research: to investigate current pastoralists land use practices and their interactions with non-pastoralist land use actors in the context of existing land laws and property rights, and to feed the discussion on possible solutions for pastoralists spatiotemporal land rights within LA. However, the population sizes used for the different categories of non-pastoralists land use actors may not be adequately representative of the populations within the study area, which could affect the reliability of the results. The sample sizes were limited by time constraints, as the post-election crisis of December 2007 and January 2008 in Kenya interfered with the data collection process. However, although the sample size is small, the results are considered valid in view of the similar opinions and sometimes marginal differences in the responses. Another limitation is the method used to gather the information for the migratory routes maps in Figure 2.3. Although unique material described by herders themselves, this map may not be very accurate. Nevertheless, it evidently portrays current migratory behaviour in search of dry season resources. Pastoralists were able to delineate their standard migratory routes by discussing the names of places and identifying features on the satellite images.

2.6 Conclusions

The research demonstrated that mobile pastoralism is still active in northern Kenya. Seasonal migrations are extensive and based on communal tenure and unrestricted access. Traditional migration corridors lead away from pastoral home areas and sometimes cross non-pastoral lands, where tenures are mostly private. The resulting encounters between migrating pastoralists and non-pastoralist land use actors – especially in the late year dry season – lead to conflict over seasonally overlapping rights. However, their differing land rights are legitimate and based on either statutory or customary rights sources. Although pastoralists' problems have been known for a long time, land laws, property rights and land administrators have continuously neglected the issue. Nevertheless, seasonal migrations persist. How actors manage the seasonally recurrent encounters and conflicts is a topic for further study.

While this study may not offer new insights into the consequences of the exclusion of pastoralists in LA, evidence from the results shows that it is possible to predict where (spatially) pastoralists are likely to be in defined dry seasons (temporal aspect). Instead of disregarding herders' rights, the spatial element could be used to inform land administrators of the locations and coverage of pastoral land rights. The temporal aspect could inform them of the periods in which those rights should apply. In the context of existing laws and property rights, we argue that transferring pastoral rights into the formal system, for example by registration them in form of rights of way and recording the information in the land registry, could offer protection against loss of herders' rights, thereby sustaining pastoral livelihoods. To start with, this approach could be used for the early-year dry season in Northern Kenya, where migration corridors seem to be concentrated within the pastoral home areas and where the land has not yet been divided into private holdings. Pastoralist's seasonal migrations could then be kept unobstructed, even when private tenures expand into pastoral areas. In places where former migration corridors and dry season grazing areas currently coincide with private tenures, the spatial extents of migration corridors could be used to identify where pastoralists and non-pastoralists' land rights overlap. This would be needed to re-establish herder's lost rights, or for alternative solutions.

This research suggests that understanding tenure arrangements that can accommodate both pastoral and non-pastoral rights may make it possible to deliver the services that LA should to all the actors involved. Guidance

and regulatory and institutional frameworks to support the co-existence of pastoral and non-pastoral land rights are needed. Land laws, surveys and land registration should not focus just on ownership and full control of land by individuals, but also on defined periods where temporal rights of access are granted to pastoralists. Non-pastoralist land use actors would be better prepared for encountering pastoralists, possibly reducing conflicts.

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Livestock grazing on stubble after harvesting [Photo Musa Lengoiboni]



Farmer at Wamba angry that pastoralists' livestock grazed on her farm overnight [Photo Monica Lengoiboni]

Chapter 3

Pastoralism within the cadastral system: seasonal interactions and agreements between pastoralists and non-pastoralist in Northern Kenya

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Pastoralism Within the Cadastral System: Seasonal interactions and access agreements between pastoralists and non-pastoralists in Northern Kenya

Abstract

The imposition of exclusive statutory real property rights in or near pastoralists' areas and their migration corridors permanently excludes and extinguishes pastoralist rights to mobility and access to required resources. Seasonal interactions with non-pastoralist land use actors often occur during pastoralist migrations between rangelands and highlands or dry season grazing areas. In an embedded case study in Northern Kenya, in which interviews based on semi-structured questionnaires were held with pastoralists and non-pastoralists, we investigated how non-pastoralist land use actors manage encounters with migrating pastoralists within the context of the land administration system. We found that the majority of non-pastoralist land use actors encounter migrating pastoralists during distinct periods. Most never allow herders access to privately owned land. A small proportion allow access and make temporary verbal or written access agreements containing provisions on grazing fees, grazing regulations and rules to protect private property. The majority of non-pastoralists are unwilling to have access arrangements formalized. We argue that land rights adjudication should identify and confer all existing land rights to all users to avoid obstruction or renegotiation for access, and recommend the inclusion of pastoralists' access rights as real property rights in the land administration system.

Keywords: land administration, land rights adjudication, real property rights, pastoralists, non-pastoralist land use actors, access agreements

3.1 Introduction

The basic aim of land administration (LA) systems is to improve security of tenure and access to land. The core of a land administration system is the cadastre (Williamson, 2001). 'A Cadastre is normally a parcel based and up-to-date land information system containing a record of interests in land (e.g. rights, restrictions and responsibilities). It usually includes a geometric description of land parcels linked to records describing the nature of the interests, the ownership or control, and often the value of the parcel and its improvements. It may be established for fiscal purposes (e.g. valuation and equitable taxation), legal purposes (conveyancing), to assist in the management of land and land use (e.g. for planning and other administrative purposes), and enables sustainable development and environmental protection' (FIG, 1995). Cadastral parcels are held in a variety of tenures, which describe how rights to land are held (Dale and McLaughlin, 1999).

Creating a cadastral parcel involves land rights adjudication, boundary survey and registration of land rights (Molen, 2002). Adjudication establishes the existing rights on land; boundary surveys identify, define, demarcate, measure and map new or changed parcel boundaries; and registration confirms the property rights attached to the land (Lawrance, 1985; FIG, 1995). Defining parcels is a prerequisite for adjudication, and the land rights adjudicated will correspond to the rights to be registered (Lawrance, 1985).

Property rights to a thing are often represented as a bundle of sticks. These sticks represent separate legal powers the property right might entail, such as the right to transfer, possess, to reap the fruits, to dispose, to mortgage etc. (Dale and McLaughlin, 1999). As – theoretically – the composition of a bundle might differ from case to case, a variety of different property rights can possibly exist. In general the differences have to do with the different interpretations of which legal powers are assigned to the sticks in the bundle. For example, bundling the property rights of universality, exclusivity, transferability and enforceability creates an ownership bundle (Bennett, 2007). Universality concerns ownership rights; exclusivity concerns the right to benefit from the land and to exclude others; transferability concerns the right to transfer property rights to another owner or party; and enforceability refers to a legal system of penalties to prevent others from encroaching on or taking over property rights without the agreement of the owner (Dale and McLaughlin, 1999). Property rights are usually protected by provisions in

national constitutions and legislation (Dale and McLaughlin, 1999; Alden-Wily, 2008; Enemark and Molen, 2008).

However, when creating a cadastre the adjudication process is designed to identify and confer ownership rights and often ignores any derived rights, which are likely to be important in customary tenure systems (Platteau, 2000). Conferring ownership rights denies overlapping interests and rights by creating more exclusive forms of ownership to a resource (Woodhouse, 2003; Meinzen-Dick and Mwangi, 2009). For example, pastoralist herders relying on long-standing seasonal or secondary rights to use stubble, water and pasture resources may find their passage to previously common grazing land blocked by fences and crops planted on cattle tracks (Toulmin, 2009). This often leads to conflict or recurrent renegotiation of access rights (Mwangi and Dohrn, 2008).

Little is known about whether and how property right holders manage seasonal encounters with migrating pastoralists by allowing them access to grazing on private land. In this study we investigated this issue in an embedded case study in which interviews based on semi-structured questionnaires were held with non-pastoralists and pastoralists to answer the following questions: Do landowners make seasonal access agreements to allow pastoralists to graze livestock on private land? What is the nature of those agreements? and What are their opinions on formalizing pastoralists' access rights in the form of real property rights? Drawing on our analysis of the results, we discuss possibilities for including pastoralists' seasonal access rights as real property rights during the compilation of a cadastre as a strategy for mitigating the marginalization of pastoralists and securing their access to dry season resources. Before presenting the methods and result, we begin by explaining pastoralism and describing the effects of the expansion of non-pastoral land uses and private tenures into pastoral areas.

3.2 Pastoralism and the expansion of statutory tenures into pastoral areas

Pastoralists live in rangelands and depend mainly on raising domestic animals for their livelihoods. Their strategy for providing year-round food for their herds is to move their livestock to pasture rather than bringing fodder to them (Dyson-Hudson and Dyson-Hudson, 1980). Pastoralists not only use their livestock as a source of food, but also sell or exchange livestock and livestock products to pay for basic needs, such

as grains, tools, clothing, school fees and medical treatment (Fratkin, 1997; Barrett and Luseno, 2004). Households are the basic units of production, and pastoralists tend to accumulate large herds of animals as a symbol of wealth and status, but also as insurance against drought losses (Hidore and El-Tom, 1975; Bates and Lees, 1977; Dyson-Hudson and Dyson-Hudson, 1980). In dry seasons, pastoralists usually move to highlands or dry season grazing areas where vegetation persists. When the rains begin they move back to the rangelands to take advantage of the new grass. This land use pattern has survived for millennia (Toulmin, 2009), although the areas of land used by pastoralists and their migration routes are considered to be vaguely defined. Moving between rangelands and dry season grazing areas allows them to exploit resources in different areas at different times to make up for fluctuations in production (Goodhue and McCarthy, 1999).

Pastoralist communities are adversely affected by the expansion of other land uses into pastoral areas (Fratkin, 1997). In Africa this began at the start of the colonial period under the policy of giving the best native lands to the settler communities and enforcing strategies to protect and exploit natural resources (Fumagalli, 1978). In 1935 controlled grazing areas were established in pastoral areas in Northern Kenya. This was followed by policies to delineate boundaries, protect wild game and forests and prevent erosion, which meant closing dry season grazing areas to livestock grazing (Fumagalli, 1978). To maintain the carrying capacity of the land a destocking policy was introduced, in which pastoralists were persuaded to reduce their livestock herds (by marketing excess livestock) to avoid overgrazing and reduce soil erosion, and to manage their livestock levels consistent with reasonable annual off-takes (Fumagalli, 1978; Dyson-Hudson and Dyson-Hudson, 1980). Campbell et al. (2000b) mention that prior to the colonial period, the land in Southern Kenya was used predominantly by the Maasai to herd cattle, sheep and goats, and that wildlife was abundant and tolerated by the Maasai. Under the colonial land demarcation, the area became part of the Maasai Reserve and pastoralists were prohibited from grazing their livestock. The government authorities believed that cattle competed for resources with the wildlife, which was becoming increasingly important as a source of foreign revenue from tourism (Homewood, 1995).

The post-colonial government supported other sectors of the economy, such as urban development and agriculture, which further hampered pastoralist systems and led to increasing economic marginalization of

pastoralists (Anderson and Broch-Due, 1999). Urban expansion into the pastoralists territories date back to colonial times when district officers were posted in villages and commercial, education, health, administrative, security and other services were introduced (Homewood et al., 2004). While pastoralists occupied areas around trading centres, immigrants from other areas moved in to work either in government or trade, and some did not return to their homelands when they retired (Homewood et al., 2004). The expansion of agricultural communities into the better high-rainfall grazing lands where permanent water is available further reduced the area of grazing lands available to pastoralists and restricted access during the dry seasons (Talbot, 1986).

According to the Kenya National Land Policy, expropriation of land with a high potential for uses outside the pastoral sector has created uncertainty about access, control and exploitation of land-based resources by pastoralists (Kenya, 2007c). Moreover, formalization of property rights through cadastral processes has weakened traditional and established pastoralists norms and rules for regulating the use of pastures by opening up customary land to non-pastoral users who are not bound by pastoral customary norms (Mwangi and Dohrn, 2008). The increasing scarcity of land during the dry season is thus compounded by increased pressure on its use, leading to conflict. As pastoralists no longer hold rights to previously accessed grazing lands, many such conflicts are about resources and access to resources (Deininger, 2003). While the pastoral economy remains dependent on herding livestock (Fratkin and Roth, 2005) and pastoralist mobility remains generally high, the associated complexities of perennially renegotiating temporary and flexible access to resources are made more problematic as land is continuously being adjudicated, surveyed and allocated for private purposes (Homewood et al., 2004).

3.3 Study area

The study area is the Samburu–Isiolo–Laikipia–Meru landscape in Northern Kenya, where a variety of sedentary land uses and land use actors are found. Six main categories of land use actors were identified for this study, adapted from Lengoiboni et al. (2010). These land use actors are: farmers, private ranchers, urban residents, wildlife park wardens, forest officers and pastoralists. Most farmers and forest officers are located in the highlands, whereas most private ranchers, urban residents, wildlife park wardens and pastoralists are located in rangelands

or in transition areas between highlands and rangelands. Figure 3.1 shows the spatial distribution of the six categories of land uses. In this study, farmers, private ranchers, urban residents, wildlife park wardens and forest officers are categorized as non-pastoralists or right holders interchangeably. Their tenures are commonly private (under individual or government land ownership). Figure 3.2 shows where individually held tenures and pastoral communal lands are mainly found.

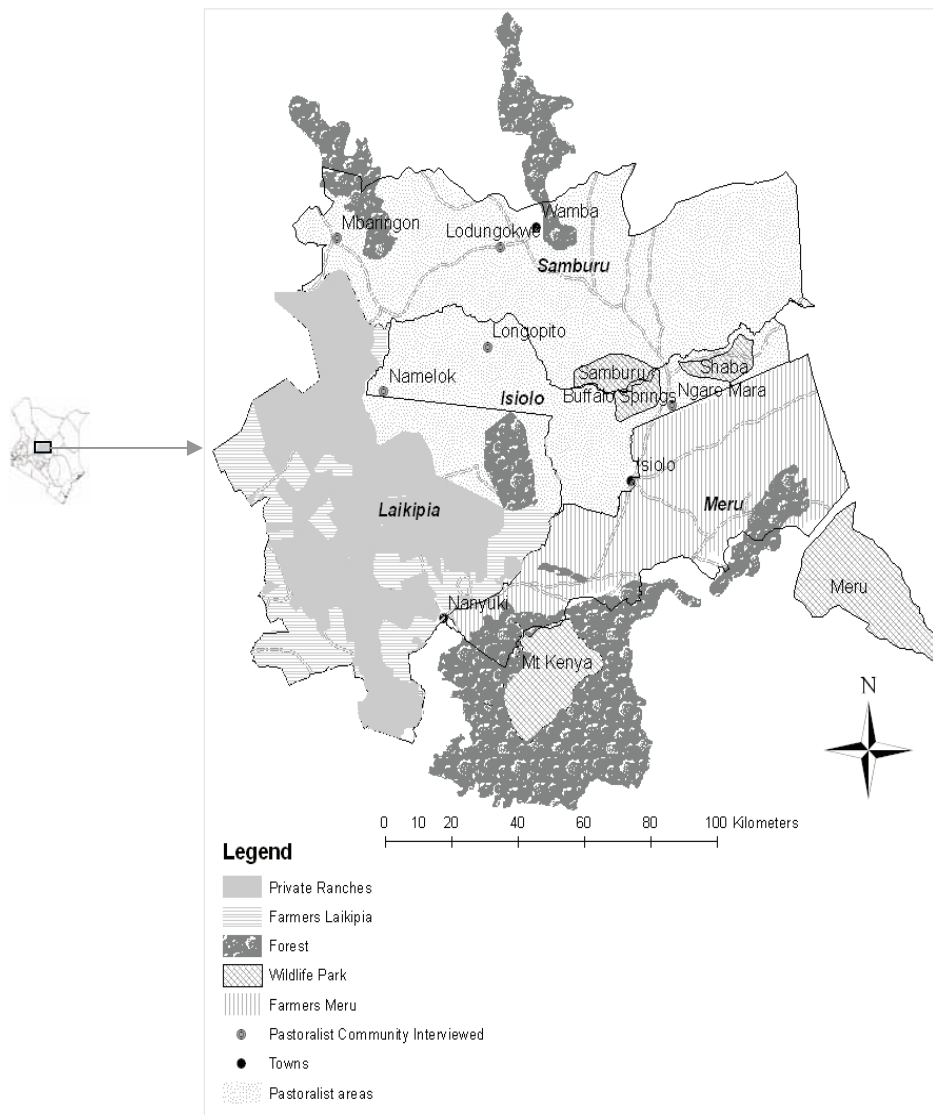


Figure 3.1 Study area, land uses and land use actors in the Samburu-Isiolo-Laikipia-Meru landscape. Source: Lengoiboni et al., 2010

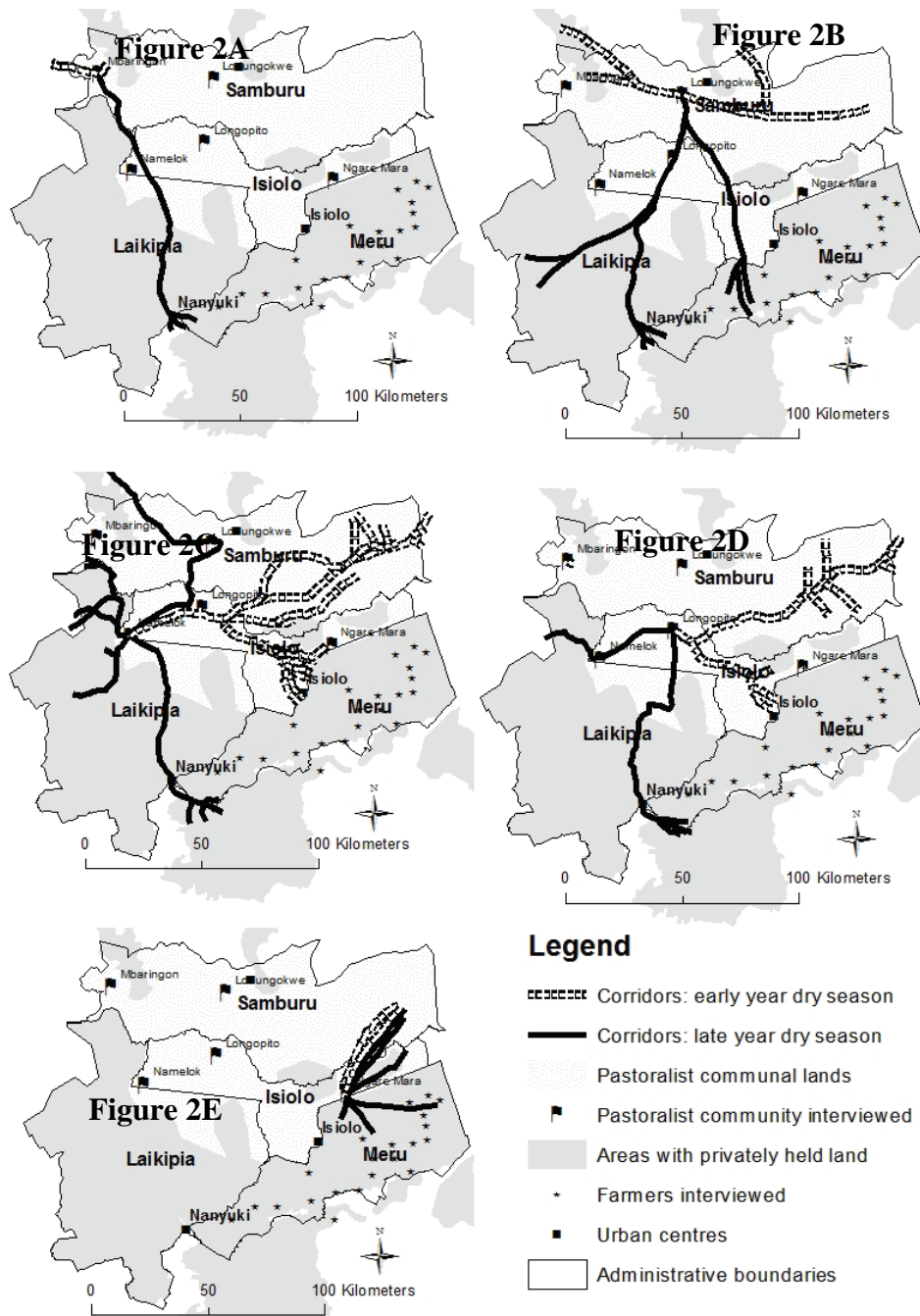


Figure 3.2 Maps showing areas with private tenures, pastoralist communal lands and the dry season migration corridors of five pastoralist communities: Mbarington (2A), Lodungokwe (2B), Namelok (2C), Longopito (2D) and Ngare Mara (2E). Source: Lengoiboni et al. 2010

3.3.1 Pastoralists and migration corridors

The five pastoralist communities participating in this study practise communal land tenure and migrate in the dry seasons (Lengoiboni et al., 2010). The climate in the study area has two rainy seasons and two dry seasons (McClanahan and Young, 1996). The first dry season usually begins in January and lasts until the end of March; the second starts in July and lasts until the end of September, sometimes extending into October. These trigger two pastoralist migrations each year. Figure 3.2 shows the migration corridors for the two dry seasons. The migration corridors lead from the pastoralist communities to the dry season grazing areas. The same corridors are used for migration to and from the dry season grazing areas. Although the routes of the corridors are known as shown on the map, the actual limits of the dry season grazing areas have not been mapped.

3.3.2 Registration of property in the study area

In Kenya the registration of an individual as the holder of a property right to land gives that person an ownership or use right to the land, together with all implied rights and privileges belonging to it (Section 27(a) and (b) of the Registered Land Act (Kenya, 1963)). Holders of registered real property rights are free from all other interests and claims by others, and are not liable to be defeated unless the claims are expressed in the register, or if those claims are declared to exist as overriding interests at the time of first registration, in which case they could exist without being noted in the register (Section 28 and 30 of the Registered Land Act). Previous research has found that most non-pastoralists in the study area have had their rights to land registered (Lengoiboni et al., 2010).

Figure 3.2 also shows that the migration corridors of the early year dry season (January–March) remain within the pastoral territories, while the late year migration corridors (July–October) lead into the areas dominated by sedentary land uses and private tenures (Lengoiboni et al., 2010). It is therefore during the late year dry season that we may expect interactions between pastoralists and non-pastoralists. Pastoralists may interfere with private property through the use of the migration corridors and in their search for grazing resources (e.g. crop residues left in fields after the harvest) on private land.

The variety of land uses, tenures and land use actors existing side by side in the study area provided an ideal setting for this research. Each category of land use actor was treated as a unit of analysis to allow

comparison between the responses by different groups to their encounters with migrating pastoralists.

3.4 Methods

The research methodology used to investigate how non-pastoralists manage seasonal encounters with migrating pastoralists was an embedded case study. This methodology, was preferred because it is appropriate for studies containing more than one sub-unit of analysis in which the purpose is to integrate details about each unit of analysis in a single research study (Yin, 1994; Scholz and Tietje, 2002). Also, a case-based research methodology was preferred because it allows the use of various methods to obtain and analyse data (Glesne, 1999). Semi-structured questionnaires were used to obtain data in face-to-face interviews and by email. Both open and closed questions were put to non-pastoralists to ask them: i) if they encountered migrating pastoralists and in which periods or months; ii) if they made agreements to allow migrating pastoralists access to their land; and iii) what those agreements stipulated regarding the amount of time herders are allowed on privately owned land, the rules that pastoralists must adhere to while on the private land, and the penalties imposed on pastoralists when they breach the rules. Non-pastoralists also gave their opinions on regularizing access arrangements by making them formal rights in the land administration system. Pastoralists were asked closed questions about their views on arrangements supporting seasonal mobility.

Data were collected between November 2007 and February 2008. A variety of methods, such as quota sampling and cluster sampling, were used to identify interviewees in a similar process as that described in Lengoiboni et al. (2010). From a total of 58 group and individual interviews and 26 requests to participate sent out by email, we obtained 64 completed questionnaires from non-pastoralists: farmers (n = 21, from a total of 71 farmers who participated in individual or group interviews); private ranchers (n = 6, from a total of 26 ranchers who were invited to participate by email); urban residents (n = 25, from a total of 40 urban residents who participated in individual and group interviews); wildlife park wardens (n = 4, all individual interviews); forest officers (n = 8, all individual interviews). In addition, five questionnaires were obtained from pastoralists communities (n = 5, from a total of 72 participants who were interviewed in five focus groups). The total number of completed questionnaires was therefore 69.

3.4.1 Data analysis

The responses were analysed using a variety of methods. Figures and cross-tabulations were used to present the results. The figures and cross-tabulations were used to show the distribution of responses across the different categories of land use actors. Cross-tabulation was preferred because the different categories of land use actors contained unequal sample sizes. The cross-tabulations allowed us to examine the frequencies of responses for each category of land use actors and to identify relations between cross-tabulated variables.

In this study, we focused on spatiotemporal interactions and spatiotemporal access agreements, and did not consider the numbers of livestock herded by the pastoralists during migration.

3.5 Results

3.5.1 Encounters between non-pastoralists and migrating pastoralists

Table 3.1 shows the proportions of respondents from each category of non-pastoralists who encountered migrating pastoralists wanting to enter privately owned land. The encounter rates are high for all the categories except the ranchers. There are two reasons for this: first, the response rate from the ranchers was low; second, the majority of the ranchers responding reported no encounters with migrating pastoralists, stating that their ranches were fenced or surrounded by other privately owned land, or were situated far from the pastoralists' migration corridors.

Table 3.1 Proportions of non-pastoralists reporting seasonal encounters with migrating pastoralists

Categories of non-pastoralist	Total responses	Encounter migrating pastoralists entering private land	% within category reporting pastoralists entering private land
Farmers	21	16	76
Private ranchers	6	2	33
Urban residents	25	13	52
Wildlife parks	4	4	100
forests	8	6	75

3.5.2 Interaction periods

All the respondents who encountered migrating pastoralists (in Table 3.1) were asked to state which months of the year these encounters occurred. The results are given in Figure 3.3 for each category of non-pastoralist land use actors as percentages of these respondents reporting encounters per month.

Figure 3.3 shows that encounters between non-pastoralists and migrating pastoralists are concentrated in two periods. The first period runs roughly from January to March, after which the frequencies of encounters fall off. The second period runs roughly from July to October, after which the frequencies of encounters again fall off. The encounter rates in the first period are observed to be lower for most non-pastoralists than in the second period. They were reported almost exclusively by forest officers, wildlife park wardens and urban residents. This may be because these land uses are located within or near pastoral areas (see Figure 3.1), which would increase the chances of encounters.

The reported encounter rates were higher during the second period for all non-pastoralist categories. Fewer than 10% of the farmers reported encounters during the first period. The higher frequencies of encounters in the second period indicate that pastoralists migrate through the non-pastoralist areas mainly from July to October. The patterns of pastoral migrations in the late year dry season (Figure 3.2) match this response.

The encounters reported by the two ranchers are not shown in Figure 3.3. The ranchers preferred not to state the specific months they encountered pastoralists, because they allowed access throughout the year.

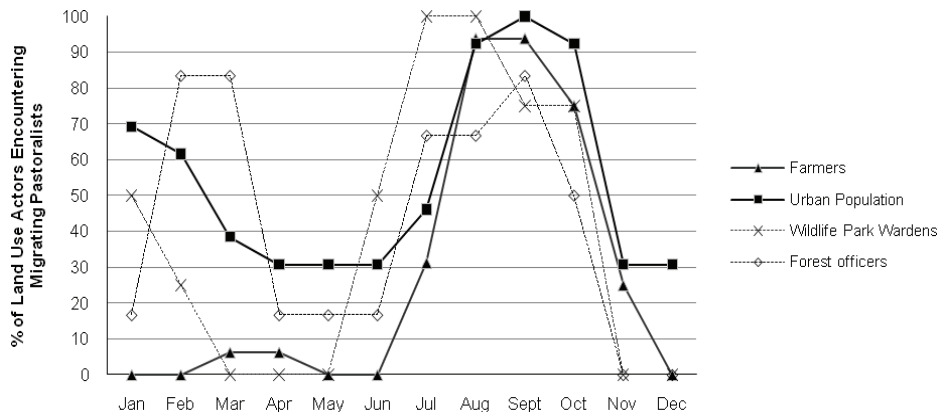


Figure 3.3 Rate of encounters between non-pastoralist land use actors and pastoralists per month

3.5.3 Access agreements

The non-pastoralists who reported encounters with migrating pastoralists (in Table 3.1) were asked whether they made agreements to allow pastoralists to enter their land. Their responses are presented in Table 3.2, which shows the proportion of respondents who encounter migrating pastoralists and make access agreements with them to graze livestock on private land. The results in Table 3.2 show that most respondents in all the land use categories except ranchers never make agreements to allow herders access to private land. However, only two of the six ranchers responding reported encounters with pastoralists. The main reasons given for denying access were to protect or conserve private property and perennial crops. Landowners expected herders to keep off their private land when no access agreements were made.

Table 3.2 Proportions of non-pastoralists making spatiotemporal access agreements with pastoralists

		make agreements with pastoralists to allow access				
			never	sometimes	always	Total
Land use category	Farmers	Number	15	1	0	16
		% within Category	93.8%	6.2%	.0%	100.0%
	Private ranchers	Number	0	1	1	2
		% within Category	0%	50.0%	50.0%	100.0%
	Urban residents	Number	11	1	1	13
		% within Category	84.6%	7.7%	7.7%	100.0%
	Wildlife park wardens	Number	3	0	1	4
		% within Category	75.0%	.0%	25.0%	100.0%
	Forest officers	Number	4	1	1	6
		% within Category	66.7%	16.7%	16.7%	100.0%
Total		Number	33	4	4	41
		% within Category	80.5%	9.8%	9.8%	100.0%

The respondents who sometimes or always allow access were asked further questions about the contents of their access agreements with the pastoralists. Their responses are shown in Table 3.3.

Table 3.3 Content of spatiotemporal access agreements created by pastoralists and non-pastoralists

Land use actors	Type of negotiation	timing	rules	penalties
farmers	verbal	not specific	leave when rains begin pay grazing fees pay overnight stay fees	eviction access denial
private ranchers	written	renewable 14 days agreements renewable monthly agreements	pay grazing fees follow grazing plan no night grazing	eviction deny future access
urban residents	verbal	not specific	pay grazing & fees pay overnight stay fees no destroying fence	enforcement through local leaders
wildlife park wardens	verbal	not specific	no grazing in park access to water points only	eviction confiscation of livestock
forest officers	N/A	not specific	N/A	suspension

Table 3.3 shows that the majority of non-pastoralists use verbal agreements to grant pastoralists access to their lands. Only private ranchers use written agreements. No access agreements have been made for access by pastoralists to forests. Forest officers indicated having grazing arrangements with communities living around forests, but not with pastoralists. Upon arrival, pastoralists were not refused entry, even though no grazing agreements were made.

Private ranchers are the only land use actors that have regulated the duration of access to their land by pastoralists, in the form of fortnightly or monthly agreements. The remaining non-pastoralists have not agreed any specific arrangements on the length of time pastoralists are allowed onto private land. The farmers and urban residents indicated that they negotiated access agreements when the pastoralists arrive and that the herders withdrew after the stubble was depleted.

The rules governing access and use of land in the agreements centre on the payment of grazing fees, the regulation of grazing and protection of private property from damage. Grazing fees were set at 25 Kenyan Shillings (Ksh 25, which is approximately €0.25 or US\$0.30) per head of cow per month. Private ranchers allow specific pastoral communities onto designated grazing zones on their ranches, conditional on the pastoralists forming grazing associations. The ranchers communicate with the pastoralist communities through a grazing committee consisting of representatives from the grazing associations. The grazing committees manage the operation of the agreements, including the collection of grazing fees, regulating the entry of herds coming to graze and the termination of grazing contracts, and act as mediators to resolve conflicts. Unlike other right holders, ranchers do not limit access to grazing land to dry seasons only. Access is allowed in any month as long as the conditions are complied with.

The most common action taken by non-pastoralists when pastoralists violate access agreements is to evict them. This is also the case in the forests where no access agreements were made. Other penalties mentioned were denial of future access, and confiscation of livestock and fines enforced via local leaders. Fines were paid either to compensate for damages caused by livestock or to regain confiscated herds, after which the herders withdrew from the private property.

3.5.4 Views on the regularization of spatiotemporal access arrangements as property rights

All the categories of non-pastoralists who encountered migrating pastoralists (in Table 3.1) also gave their views on whether they would be willing to regularize arrangements allowing pastoralists access to private land as formal spatiotemporal access rights. The landowners' views are summarized in Table 3.4.

The majority of non-pastoralists said they were not willing to formalize arrangements allowing pastoralists access to private land in the form of real rights, with the exception of the forest officers, all of whom were in favour of formalizing access arrangements.

Table 3.4 Non-pastoralists' views on willingness to formalise arrangements allowing pastoralists access to private land as formal spatiotemporal access rights

		Would agree to granting pastoralists access in the form of real property rights			
			no	yes	Total
Land use actors category	farmers	Number	13	3	16
		% within category	81.2%	18.8%	100.0%
	private ranchers	Number	2	0	2
		% within category	100.0%	.0%	100.0%
	urban residents	Number	9	4	13
		% within category	69.2%	30.8%	100.0%
	wildlife park wardens	Number	4	0	4
		% within category	100.0%	.0%	100.0%
	forest officers	Number	0	6	6
		% within category	.0%	100.0%	100.0%
total		Number	28	13	41
		% within category	68.3%	31.7%	100.0%

3.5.5 Pastoralists' views on support for livestock movements and livelihood prospects

All the five pastoralist communities that were interviewed reported a lack of legal arrangements to support livestock movements across the traditional migration routes to and from dry season grazing areas (see Table 3.5). All the pastoral communities also agreed that the absence of arrangements supporting seasonal migrations threatens the sustainability of their livelihoods. They mentioned that migrating herders are left to

seek alternative migration routes, which means it takes longer to access the required resources. The consequences of this situation were summarized as: poverty caused by the need to sell livestock in order to settle fines owed to landowners or the courts for breaching property rights, in turn leading to a reduction in the size of their livestock herds; conflicts, leading to mistrust and hostilities between pastoralists and non-pastoralists; and suffering and even death from starvation of their livestock resulting from denial of access to grazing areas. Despite these challenges, all the pastoralists communities expressed their desire to continue their pastoral livelihoods, and proposed that giving access to private land for seasonal migrations would reduce the conflicts often experienced.

Table 3.5 Pastoralists views on support from government and future perspectives

Pastoralist community	government provides alternative arrangements for migration	Closure of migration routes and dry season grazing areas threaten sustainability of pastoralism	desire to continue with pastoralism
Namelok	-	+	+
Longopito	-	+	+
Ngare Mara	-	+	+
Lodungokwe	-	+	+
Mbaringon	-	+	+

Key - = no + = yes

3.6 Discussion

The results in Table 3.1 reveal that a majority of non-pastoralists encountered migrating pastoralists entering privately owned land in search of resources in the dry seasons. Pastoralist seasonal migrations follow established routes (Blench, 2001) and can be seen as a form of non-written customary right, which to the pastoralists amounts to the same thing as statutory real rights. Neither the colonial government nor subsequent national governments have included these customary rights of seasonal movements and access to dry season resources as existing land rights during the adjudication of rights on land for cadastral registration.

Consequently, these customary land rights did not acquire a real property rights status in the formal system. While the expropriation and allocation of customary land for private ownership excluded and extinguished these customary real rights, no alternative options to support seasonal migrations and grazing were instituted, as the results in Table 3.5 show. As pastoralists must move their animals to follow seasonal changes in water and grazing cycles (Toulmin and Quan, 2000; Mwangi and Dohrn, 2008; Toulmin, 2009), they are left to make their own arrangements to secure access to required resources within the new statutory system.

The majority of non-pastoralists have never allowed pastoralists access to their private land, as shown in Table 3.2. This position may be motivated by the legal basis on which real property rights are founded. Property rights are considered as rights in rem (cadastral parcels in the context of this research) (Lawrance, 1985), which means that they are protected by law and landowners are therefore protected against the actions of third parties who interfere with their possession and use of the land (Molen and Österberg, 1999). Interestingly, in a few cases seasonal encounters between migrating pastoralists resulted in collaboration rather than exclusion within the formal system (as shown in Table 3.2). A small proportion of landowners make agreements with the pastoralists allowing them access to privately owned land to graze their livestock. Holders of private property rights to land can make access by others possible by separating or unbundling their property rights to give a right of access to others, for example by providing a right of way, renting out land or through other instruments (Dale and McLaughlin, 1999). In this case, a real right would be granted. The research shows that the private land owners do not provide such rights of way, but are sometimes willing to use the instrument of an access agreement which is choosing not for a real right, but a personal right. The landowners therefore dispose parts of their land rights on a personal base (right 'in personam') by making verbal and written access agreements granting pastoralists access and temporary use of private land, as shown in Table 3.3.

3.6.1 Problems of contractual agreements with landowners

Access agreements and permitting entry to private land may be beneficial to pastoralists. The access agreements, whether verbal or in the form of written contracts, are based on personal negotiations between the parties involved. Personal agreements create purely personal rights which remain outside the domain of property rights and can only be enforced against the specific parties to the contract (Gray and Gray, 2005). The

problems of these contractual agreements are that they do not provide certainty of access. The landowner may deny future access or sell the land, in which case the new owner is not obliged to continue to make access agreements with pastoralists.

The majority of non-pastoralists who encounter migrating pastoralists are not willing to allow herders access to private land if access arrangements are formalized in the form of a real right (see Table 3.4). This minimal support for formalizing access arrangements suggests that non-pastoralists generally prefer to keep access agreements outside the realm of real property rights. It is a reflection of the processes of adjudicating the rights on land which excludes previous uses of land not only by pastoralists, but also other seasonal users of land such as hunter-gatherers. If pastoralists are repeatedly denied access to the resources they need during dry seasons, their livestock may die of starvation, causing economic losses and increasing poverty (Campbell et al., 2000a). The lack of arrangements to support access to resources during migrations therefore threatens pastoralism as a way of life (see Table 3.5), despite it being a main source of employment and a livelihood system that directly contributes to the national economy. In Kenya, pastoralists provide most of the meat consumed in the country and contribute up to 10% of the gross domestic product through sales of livestock and livestock products (Hesse and MacGregor, 2006). Considering the low level of cooperation by landowners revealed by this study and the problems of contractual agreements, securing access to land by negotiating cross-boundary access agreements with different stakeholders (for mutual benefit) is therefore not likely to be an optimal approach to facilitating the nomadic nature of pastoralism (Kenya, 2007c).

During the fieldwork in Kenya for this study, we discovered that in their search for options to reduce the negative impacts of exclusion, pastoralists have not only renegotiated to secure access to land, but have also purchased land in the highlands. This was prompted by the adoption of the Forest Policy of 2007 (Kenya, 2007b) and the Forest Act of 2005 (Kenya, 2005), which encourage communities living adjacent to forests to participate in forest management by forming Community Forest Associations (CFAs) consisting of various forest user groups, including grazing groups. Under management plans for using and managing forest resources prepared by the forest officers, the grazing groups are eligible to graze their livestock in the forest after paying grazing fees to forest

offices. However, implementation of the Forest Policy and Forest Act has led to seasonal conflicts between migrating pastoralists and grazing groups in the area around Mount Kenya. The grazing groups claim that pastoralists are non-CFA members and do not pay forest grazing fees. As the Forest Policy and Forest Act did not include pastoralists as seasonal users of the forests, some pastoralists have purchased land in the Mount Kenya highlands, where CFA grazing groups exist, as strategy for becoming part of the community, which in turn qualifies the pastoralists to become CFA members and therefore benefit from grazing their livestock in the forest. Local communities agreed to sell land to pastoralists because they benefit from the manure, which is in great demand among the local farmers. In dry seasons, the pastoralists bring livestock to their private lands in the highlands and move back to the rangelands at the onset of the rains. However, this is not a solution for all migrating pastoralists, as only the rich can afford to buy land. For many herders, the seasonal migrations are also becoming an expensive undertaking in the new system, as they need money to negotiate access and pay compensation for damages, as a similar study from Côte d'Ivoire reports (Bassett, 2009).

3.6.2 Including customary seasonal land rights as real rights

Statutory rights can be acquired through long-term use (Lawrance, 1985). Consequently, historical claims on land should be incorporated in the formal system as real property rights, instead of being dependent on perennially renegotiated personal agreements and the purchase of access rights. How then could the pastoralists' seasonal land rights on migration corridors and dry season grazing areas be included as real property rights?

The term 'property right' includes informal practices and cultural traditions as well as formal legal institutions which shape the content of people's opportunities (Cole and Grossman, 2002). When introducing a real property rights system, it is necessary to investigate the existing informal, traditional or customary rights to land in order to transfer them with a certain degree of accuracy to the formal system (FIG, 1995). Moreover, criteria for determining what constitutes a legal claim to land have to be developed to support the land rights adjudication process (FIG, 1995). Governments should therefore be obliged to do social research to identify the various kinds of rights and codify what human-land relationships exist and where, because existing rights on land need to be recognized in the legislation for them to be eligible for adjudication,

and therefore registration (Hobbs et al., 2008). In its true sense, the process of adjudication does not alter or create new rights, but establishes existing rights as they are (Lawrance, 1985). The principles of land rights adjudication should therefore support the identification of people as owners of land, or users of partial rights, to enable the conversion of all rights to statutory and registrable rights (Lawrance, 1985). The aim should not be to concentrate all rights on land to a single individual, but to separate and confer the separate rights to their rightful claimants. The contents of the access agreements identified in this study suggest that the formalization of access rights for multiple users requires negotiation between all the stakeholders concerned in order to identify their requirements and translate these into land rights, restrictions and responsibilities.

Lessons on how to regulate pastoral seasonal land rights could be learned from countries with legislation on pastoralism. A first example is Mauritania, which has legislation that grants different kinds of land rights to different land users (including pastoralists), with flexible provisions for conflict resolution (Wabnitz, 2006). A similarity with this study is the notion of recognizing the rights of different users. A second example is from Guinea, where organized livestock movements are based on migration calendars, routes to access areas and negotiated conflict resolution (Touré, 2004). A similarity with this study is that migration calendars could be drawn up for the periods when encounters between non-pastoralists and migrating pastoralists occur, as shown in Figure 3.3 (for example between July and October), to reflect the patterns of movements (see migration corridors in Figure 3.2). A third example is Niger, where migrations are regulated by a zoning of pastoral areas and information flows between pastoralists and government (Thébaud and Batterbury, 2001). This suggests that third parties, such as local authorities, may need to be involved in coordinating the seasonal migrations.

This study therefore suggests going further than the legal recognition of seasonal land uses and rights. We propose securing the seasonal land rights through adjudication and registration as real property rights. This is because land rights adjudication and registration provides the means by which interests in land are legally secured against loss, destruction or fraud (Dale and McLaughlin, 1999). The Adjudication Act (Cap 284) of the Kenya land laws, for example, does support the adjudication of multiple rights on land at first registration. During the ascertainment of

the rights on land, all persons who consider having an interest within an adjudication section are required to make their claims to the recording officer, and point out their boundaries to the demarcation officer within a given fixed period after notification. These are usually placed in the Kenya gazette (Section 13.(1) (Kenya, 1968b). The recognized rights, including those not amounting to ownership, such as lease, right of way, etc., can be determined and recorded to persons or group entitled to benefit from them (Section 23.2.e) (Kenya, 1968b). If pastoralists' seasonal rights were legally recognized, they could also be secured in this way. On the other hand, it is very likely that the pastoralists would not be aware of the adjudication notices in the government gazette, nor understand their purpose. Where adjudication concerns the dry season grazing areas this may be particularly problematic because pastoralists may not even be present to claim, or even defend, the existence of their seasonal access rights. The problem of the non-formalization of pastoralists' customary seasonal land rights may therefore not only lie in their political marginalization, but also in their low visibility. A factual evidence base on pastoral seasonal land use systems and the nature of their rights may help us to understand how to support spatiotemporal land rights when introducing a cadastral system.

3.7 Conclusions

The results of our study indicate that the majority of private right holders encounter seasonally migrating pastoralists entering private land in search of dry season resources. Most landowners do not allow pastoralists access to privately owned land, but a small proportion of landowners cooperate by allowing pastoralists access to their land. These landowners made access agreements with the pastoralists containing rules regulating their use of the land. The agreements focus on grazing fees, the protection of private property and grazing regulations. These verbal and written agreements are based on personal negotiations. They do not create a real right and future access is therefore uncertain, because this depends on renegotiation during each subsequent migration. As only a few right holders made access agreements, most pastoralists stated that the lack of government support for mobility threatens their livelihoods. Nevertheless, they expressed their desire to continue their pastoral way of life.

The reasons for seasonal encounters between non-pastoralists and migrating pastoralists can be traced back to the pastoralists' historical

practices of seasonal migrations in search of dry season resources. During the introduction of formal real property rights, the cadastral processes of adjudication tend to change the reality of land rights by conferring full ownership rights to individuals, thereby excluding pastoralists' seasonal customary rights. This exclusion and the lack of alternative structures to support pastoralist migrations have not only threatened pastoralism as a livelihood system, but have also restricted the effectiveness of land administration in delivering the desired results, especially maintaining social stability between the land use actors involved. In this paper we have argued that historical rights on land should be formalized as real rights, rather than being subject to the renegotiation and purchase of access, which is currently the case for pastoralists under existing land administration systems. To avoid the obstruction or renegotiation of pastoralists' access rights, adjudication should identify and confer all the existing land rights to all users of the land. For seasonal land rights, land administrators could use information on the spatial extents of the migrations, periods of seasonal encounters and the characteristics of access agreements as guiding principles for defining and formalizing pastoralists' seasonal access rights. Further research is required to explore how pastoralists' seasonal land rights could be secured through their registration as overlapping statutory rights in a cadastral system.

Acknowledgements

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Grazing at Kirisia Forest [Photo AWF Nanyuki]



Preparing for night camping at the Kirisia Forest [Photo AWF Nanyuki]

Chapter 4

Pastoralism within land administration: securing seasonal migrations and access rights through registration

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*In preparation

Pastoralism within land administration: securing seasonal migrations and access rights through registration

Abstract

Adjudication in land administration often establishes private land rights and neglects overlapping rights. This study explored how pastoral seasonal land rights could be secured through their registration as overlapping rights. Experts on pastoral land rights gave their opinions on whether pastoral land rights in northern Kenya should be supported and secured through registration. These suggest that seasonal migrations can be supported, but that access to grazing should be subject to negotiation with landowners. We argue that the risk of failure to agree access rights to seasonal resources through negotiation could be avoided through legal empowerment by adjudication and registration of pastoralists' rights.

Key words: Pastoralists; adjudication; registration; mobility and access rights; Kenya; Africa

4.1 Introduction

This paper reports on the continuation of a study by (Lengoiboni et al., 2010) on the conflicts between pastoralists and non-pastoralist land use actors in Northern Kenya that arise in relation to land rights. That study showed that pastoralists seasonal land rights have been neglected in the formal land administration system and described the problems that arise as a result. This paper explores possible ways to secure seasonal land rights for pastoralists. They need these rights because livestock migration is a key element in their strategy for managing uncertainty of resource availability in heterogeneous environments (Anderson and Broch-Due, 1999; Goodhue and McCarthy, 1999; Niamir-Fuller, 2005; Davies and Hatfield, 2007; Mwangi and Dohrn, 2008).

Pastoralism is a livelihood system that depends on raising domestic animals and involves seasonal migrations in search of pastures. To exploit seasonal resources, pastoralists can travel hundreds of kilometres from their home areas, usually along established migratory routes (Blench, 2001). Pastoralism can therefore be viewed as a migratory land use in time and space, with land rights applying across different areas at different times. This land use system is depicted in Figure 4.1, in which 'A' represents pastoralists territories, 'B' represents migration corridors that pastoralists generally use to access dry-season pastures, and 'C' represents areas accessed for dry-season grazing, which can be non-pastoral areas such as farmland and forests.

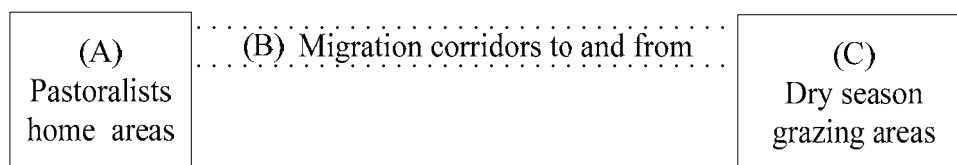


Figure 4.1 Spatiotemporal land use by pastoralists

The periods when pastoralists migrate to and from dry-season grazing areas are usually determined by climatic conditions. Pastoralists therefore rely on freedom of movement and unrestricted access to grazing resources to obtain their daily sustenance needs and support their economic livelihoods (Fratkin, 2001; Davies and Hatfield, 2007).

Under their customary tenure arrangements, pastoralists' rights of movement and access to required resources are usually exercised as non-excludable rights in the form of communal tenure (Migot-Adholla et al., 1991; Fratkin, 2001). Communal property regime is important because it creates pastoral rights of access, providing the best framework for pastoralists to exploit the available resources across various agro-ecological conditions, thereby reducing their levels of vulnerability (Oba and Lusigi, 1987; Anderson and Broch-Due, 1999; Goodhue and McCarthy, 1999). Based on their customary arrangements, pastoralists' rights of access to dry season resources are based on reciprocal arrangements on the use of property rights between agriculturalists and pastoralists, and these depend on factors like climatic conditions and the social relations between the communities, among others (McCarthy et al., 1999). It is this flexibility that provides a measure of security in times of drought or other disasters by creating reciprocal expectations of resource sharing between groups (Meinzen-Dick et al., 2005). Therefore, seasonally overlapping land rights. These customary rights to sharing seasonal resource even between different communities came into existence because they were recognized by those communities (Bruce and Migot-Adholla, 1994). However, this system has been neglected in formal land administration systems, which give preference to private ownership (Alden-Wily, 2008). A land administration system is defined as the processes of determining, recording and disseminating information about tenure, value and use of land when implementing land management policies (FIG, 1998). The basic function of LA is to document land rights through registration, the purpose being to assemble a complete picture of the legal status of the land. This can be used for various purposes, such as judicial, regulatory, fiscal and information management (Palmer and McLaughlin, 1997; FIG, 1998). Cadastral processes of surveying and adjudication precede the documentation of land rights. Surveys identify the area of land to which the adjudicated rights apply.

In Kenya, the Adjudication Act (Cap 284, section 23-2(b) provides that the adjudication officer can prepare an adjudication record if he is satisfied that 'any group has, under recognized customary law, exercised rights in or over land which should be recognized as ownership [and] shall determine that group to be the owner of that land'. Section 23-2 (e) of the same Act provides that if 'any person or group is entitled to any interest in land not amounting to ownership, including any lease, right of occupation, charge or other encumbrance whether by virtue of recognized customary law or otherwise, [the adjudication officer] shall

determine the nature, incidents and extent of the right to enable it to be recorded in the name of the person or group entitled to the benefit of it'.

Bennett (2007) proposes that five aspects of real property rights, restrictions and responsibilities (RRRs) regarding what may or may not be done on the land should be considered when adjudicating rights of ownership, tenure or use of land:

- (1) the objectives for which a right is created;
- (2) which actions the rights should regulate, covering: access – the ability to enter a defined physical area and enjoy benefits; management – the ability to transform the resource by making improvements; withdrawal – the ability to obtain resource units or products from the resource; exclusion – the ability to determine who will have access rights and withdrawal rights, and how those rights may be transferred; and alienation – the ability to sell, lease or mortgage management and exclusion rights. These have also been identified by (Schlager and Ostrom, 1992);
- (3) the areas of land to which the rights should apply;
- (4) the duration of the rights;
- (5) the people affected by the rights.

The rights as determined are vested in individuals upon registration (Dale and McLaughlin, 1999). Although the Kenya land laws provide that any person or group is entitled to ownership rights or rights not amounting to ownership, in many cases priority is given to conferring ownership rights and any derived customary rights are ignored (Okoth-Ogendo, 2008). Moreover, the exclusive nature of real property rights and the continued sprawl of private tenures have obstructed pastoralists' freedom of seasonal movement and access to resources – a practice that pastoralists depend on for effective productivity (Toulmin and Quan, 2000; Woodhouse, 2003; Homewood et al., 2004; Davies and Hatfield, 2007). Despite this, pastoralists continue to cross areas held largely in private ownership in search of seasonal pastures (Coldham, 1979; BurnSilver, 2005; Lengoiboni et al., 2010), thereby violating the statutory land rights and triggering recurrent conflicts (Mwangi, 2007). It is unclear how customary systems, such as pastoral rights to migratory land use in time and space, can be registered and secured in the formal system (Mwangi and Dohrn, 2008).

Given this situation, increasing attention is being given to the need to recognize and support pastoralism by providing security of access to the land and the resources required by pastoralists (Alden-Wily, 2008; Mwangi and Dohrn, 2008; Toulmin, 2009). In its National Land Policy (2007c), the Kenyan government states its intention to introduce registration methods that could support the migratory nature of pastoralism and provide negotiated cross-boundary access to the resources required by groups and communities.

Our objective was to assess how pastoral land rights, which apply across different areas at different times, could be secured through registration. We studied the legislation in countries that support seasonal mobility (or migrations) and access rights to identify how these rights are aligned and supported by law. The results were included in a questionnaire sent to experts on pastoral land rights on whether mobility and access rights in northern Kenya could be secured through registration. Reflecting on the results, we discuss the possibilities for registering pastoral rights within Bennett's RRR framework (Bennett, 2007). In this research, the terms 'mobility and access rights' and 'spatiotemporal rights' are used interchangeably.

4.2 Study area

The study area is the Samburu–Isiolo–Laikipia–Meru landscape in northern Kenya. Two kinds of land uses are found in the study area: pastoral and non-pastoral. In the pastoral areas, land use is almost entirely pastoral, except for some wildlife parks and forests (mostly under government ownership) and trading centres (where individual land ownership is concentrated). Pastoralist land tenure and land use is characterized by communal land use and seasonal migrations. Two seasonal migrations occur each year owing to the two rainy and two dry seasons in northern Kenya (McClanahan and Young, 1996). Figure 4.2 shows the study area, the spatial distribution of both pastoral and non-pastoral tenures and the migration corridors used by pastoralist communities to access dry-season grazing areas, as derived from (Lengoiboni et al., 2010). The corridors show that the pastoralists migrate in different directions in each of the dry seasons.

The migration routes during the early year dry season (usually in January through March) are depicted by dotted lines. They run to the east and to the north-west and remain largely within the pastoralist territories, where customary tenure is dominant. We would expect little interaction

between pastoralists and non-pastoralists during this period. Where land is not under pressure and where local practices seem to work reasonably well, the need for legal legitimization of pastoral rights may be assumed not to be urgent (Simpson, 1976; Toulmin, 2009). This seems to be the case in early year migrations.

The migration routes during the late year dry season (usually in July through September/October) are depicted by thick black lines. They run mostly to the south and south-west into non-pastoral areas, where land tenure is mostly private holdings, with land in individual or government ownership. Seasonal encounters and conflicts may increase during this period if pastoralists trespass on private land, thereby violating statutory land rights. The pastoralists, however, may consider their rights of mobility and access to private land to be legitimate under their customary norms and values. These conflicts can be considered to be a result of overlapping rights arising from different sources of legitimacy: statutory and customary law. In this paper we explore and suggest potential solutions for this late year dry season.

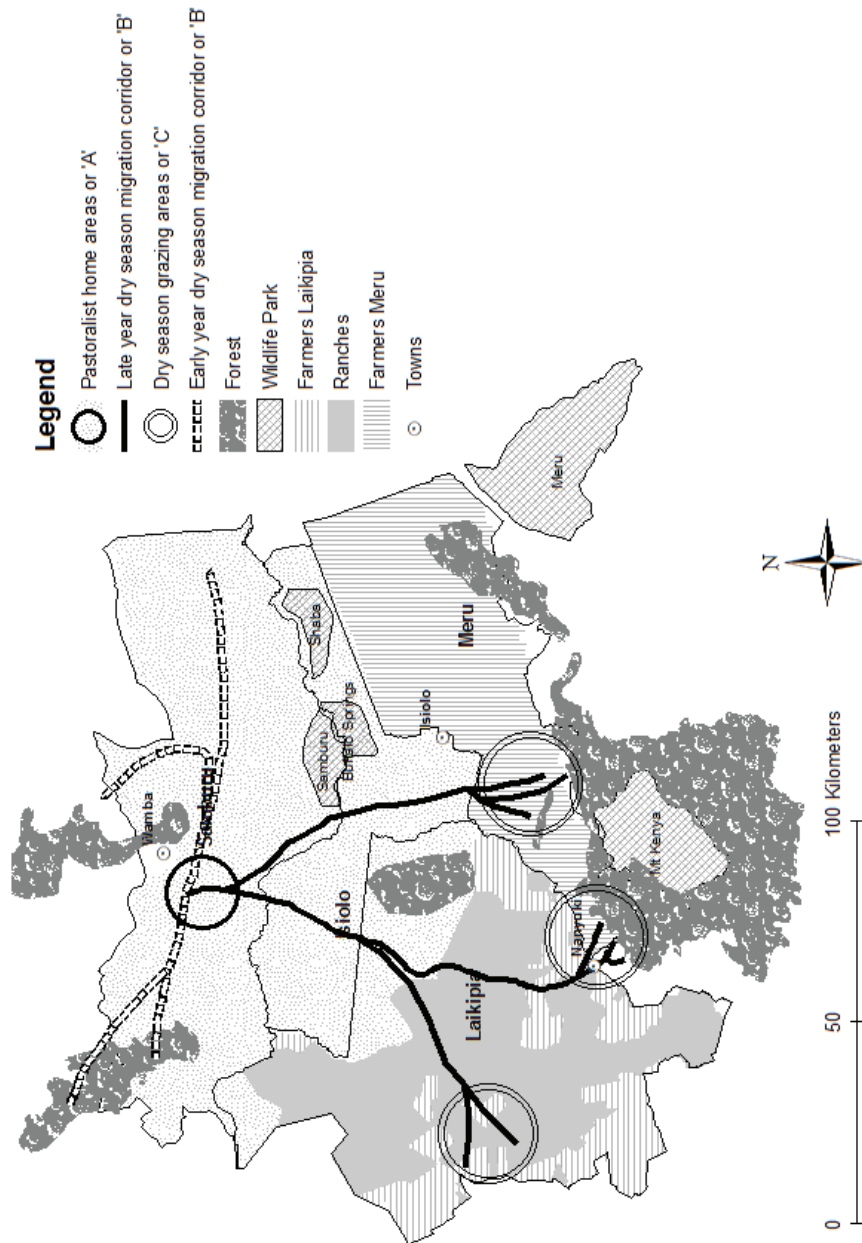


Figure 4.2 Study area, land use and land use actors in the Samburu–Isiolo–Laikipia–Meru landscape, and pastoralist community dry season migration corridors

Land use in the non-pastoralist areas is varied; including farming, ranching, urban, wildlife parks and forestry (see Figure 4.2). During a field study from November 2007 to February 2008 we recorded the monthly variation in land use activities by private landowners. The non-pastoralist land use actors were identified using the procedure described in (Lengoiboni et al., 2010). For this paper, we asked land users in which months they made intensive use of the land and in which months the land was idle or relatively idle. The purpose was to identify which land uses and periods present the best opportunity for allowing pastoralists access for temporary grazing. The following information was obtained from (i) farmers, (ii) ranchers, (iii) urban residents, (iv) wildlife park wardens and (v) forests wardens.

Figure 4.3 shows that about 50% of the farmers use their land intensively from January to around July. Farming activities seem to decrease from July (after harvest) until September, after which it picks up again. This period coincides with pastoralist migrations to farming areas. The other 50% of the farmers cultivate perennial crops and therefore use their land throughout the year.

The uses made of the land by private ranchers was difficult to represent due to the multiple land uses they practice, including ranching, wildlife conservation, tourism and forestry. Their information is therefore not presented.

Residents of urban areas said that they used their land mostly for kitchen gardening throughout the year. Urban residents (of Nanyuki) were included in this study because the migration corridor of the late year dry season crosses the urban area before advancing into Mt. Kenya forest (see Figure 4.2). The green vegetation in these kitchen gardens is of nutritional value to livestock, and likely to attract migrating herders.

Figure 4.4 shows that the number of visitors to the wildlife parks increase from mid-May to August and falls again from September. This suggests that pastoralist migrations coincide with the tourism high season. These data are from two of the four wildlife parks investigated in the study area. Data from two wildlife parks (Shaba and Buffalo Springs) could not be accessed.

Lastly, forest wardens said that forest land use activities do not vary because they consists mainly of year-round monitoring and resource protection.

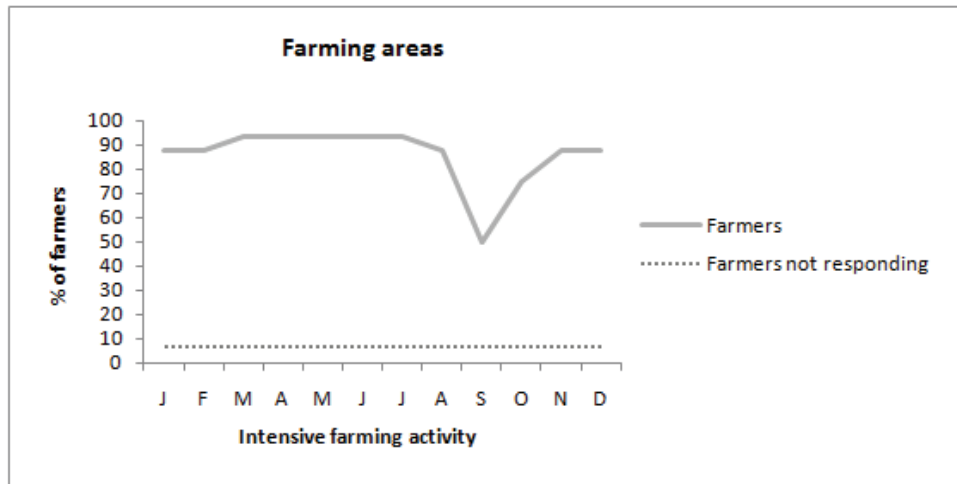


Figure 4.3 Monthly variation in farming activities

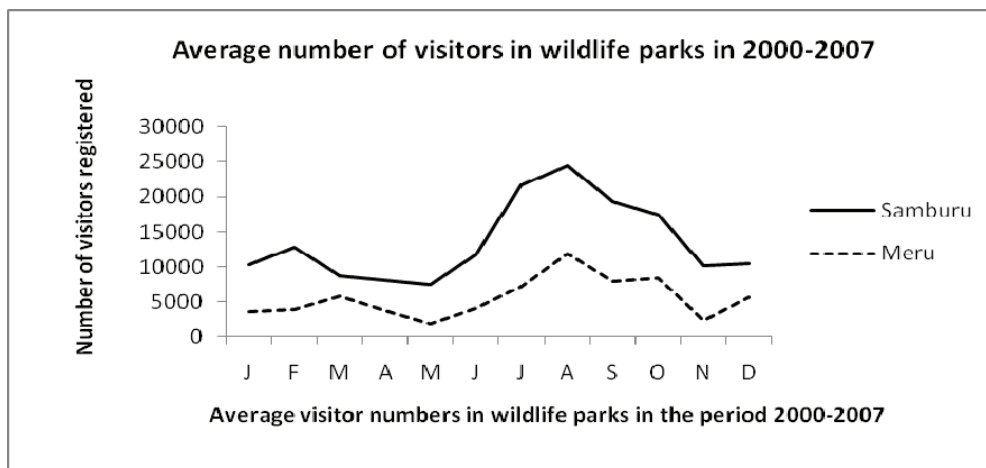


Figure 4.4 Monthly variation in visitor numbers in the wildlife parks

4.3 Research methodology

The research was conducted in two phases. In phase 1, pastoral legislation was identified and assessed using a comparative methodology. This methodology was preferred because it is appropriate for studies that seek to establish or discover empirical relationships between variables, and it can also be used for cross-national research to assess similarities or differences between cases or entire groups (Lijphart, 1971). We first

looked at the general characteristics of pastoral systems: herbivorous livestock husbandry and seasonal mobility. We expected that the relevant legislation would contain provisions supporting pastoral mobility and access to dry-season pastures, and that, at the general level, different countries would take similar approaches to supporting pastoralism. We therefore expected that the laws would be comparable, regardless of the differences between the peoples and contexts. Three criteria were used to select the legislation: first, that pastoralism is practised in the country and is characterized by mobility between seasonal pastures; second, that laws governing pastoralism exist; and third, spatiotemporal land use (as illustrated in Figure 4.1) is supported and stated in the law. Inventories of the following were obtained: a) pastoral rights to migrate, and the tenure regime conferring rights in migration corridors ('B' in Figures 4.1 and 4.2); and b) pastoral rights in dry-season grazing areas, covering i) non-pastoral areas where pastoralists are allowed access for dry-season grazing, ii) the time/period of access, iii) the duration of grazing rights, and iv) the form of tenure regime conferring right of access to private land.

A list of 113 countries where pastoralism is practised was obtained from the World Initiative for Sustainable Pastoralism (WISP, unpublished). This list reflects the occurrence of pastoralist practices of herbivorous livestock keeping characterized by seasonal mobility. From the 113 countries, we identified those countries with pastoralist legislation (laws/codes) using publications by Thébaud et al. (2001), Rass (2006), IUCN-WISP (2008), Lavigne-Delville (2000), Hinton et al. (2008), Touré (2004) and Tyler et al. (2007). This resulted in a list of eight countries: Burkina Faso, Mauritania, Mali, Guinea, Niger, Norway, Mongolia and Australia. Further selection of legislation addressing similar circumstances to the late year dry period in northern Kenya – dry-season grazing areas occurring in non-pastoral areas – led us a final list of five countries: Burkina Faso, Mauritania, Mali, Guinea and Niger. The laws governing pastoral activities were obtained from the FAO Legal Office (FAOLEX). The legal provisions obtained in phase 1 were compiled and categorized according to their similarities by merging similar concepts. The results are described in section 4.4.

In phase 2, a questionnaire survey was held to ask experts on pastoral land rights for their opinions on whether the approaches to supporting mobility and access to dry-season grazing in these laws could be applied to pastoralists' spatiotemporal land rights in northern Kenya. The

questionnaire contained a description of the outcomes of the comparative study and the situation in northern Kenya, as described in section 4.2. The experts were researchers with a range of experience in the field of pastoral land rights: 0–4 years – two respondents; 5–9 years – three respondents; 10–14 years – five respondents; 15–19 years – zero respondents; and 20–25 years – two respondents. First, they were asked whether, in principle, pastoralists in northern Kenya should be allowed to migrate and access grazing resources in non-pastoral areas. Second, reflecting on the trends in non-pastoralists' monthly land use activities, they were asked to gauge which periods present opportunities for grazing, and whether pastoralists could be allowed access to grazing resources in non-pastoral areas throughout the year, or only during the July–October dry season. More specifically, they were asked which land uses in northern Kenya the pastoralists should be allowed to access. The experts also gave their opinions on whether pastoral rights should be embedded in statutory rights, through registration, to guarantee seasonal mobility and access to some or all non-pastoral lands in northern Kenya. They also suggested the most appropriate tenure regime to confer access rights to migration corridors and dry-season grazing areas.

A total of 20 questionnaires containing closed questions were sent out. Thirteen were issued to experts on pastoral land rights identified at the Workshop in Political Theory and Policy Analysis (WOW4) held at Indiana University in 2009. Seven questionnaires were sent by email to experts whose contacts were obtained from the conference participants. Ten questionnaires were returned by the conference participants and two of those sent by email were returned, a 60% response rate. The results of the analysis of the questionnaire responses are presented in bar charts showing the frequencies of the distribution of responses. The questionnaire results are discussed in section 4.5.

4.4 Laws supporting pastoralist mobility and access rights in non-pastoral areas

4.4.1 Temporary rights in migration corridors

Table 4.1 contains the legislative provisions granting mobility rights to pastoralists in migration corridors in the selected five countries. Spatial extents/distances are described in terms of the scale of movement, such as local, regional, and even across national borders. The governments confer access rights in migration corridors based on an open access tenure regime.

Table 4.1 Rights in migration corridors and tenure regime conferring use rights

<i>Pastoralists' rights to migrate</i>	<i>Form of tenure regime conferring rights to the use of migration corridors</i>
herders have the right move animals at local and regional scale, within the national territory and across national borders ^{1,2,3,4,5,6,7}	migration corridors are public domain for state or local government, for communal use ⁸

The numbers refer to the specific laws and regulations describing these rights, which are listed in the appendix

4.4.2 Temporary access to grazing in non-pastoral areas

Tables 4.2 summarises legislative provisions that support access to dry-season resources in non-pastoral areas. Areas that can be accessed for temporary grazing are shown in column A. The access period is specified for agricultural fields (left fallow or after harvesting), and also for plains with wild fonio (a variety of millet) after harvesting. According to column B, the periods of access to farming areas are determined by local authorities after consulting with farmers, the responsible government departments and pastoralist organizations. Similarly, periods of access to plains with wild fonio are fixed after consultation between local authorities and user groups. In both of these instances, access dates are fixed collectively. The provision in column C states that the duration of access to grazing in agricultural areas is the period between the harvesting and sowing periods and is subject to personal agreements between land owners and pastoralists. For most of the land uses described in column A we could find no detailed regulations on access for grazing, the duration of grazing and the form of tenure regime conferring access to grazing, such as personal agreements or statutory rights.

Table 4.2 Legislation supporting pastoralist access to grazing land in non-pastoral areas

A) <i>Areas accessed for dry-season grazing</i>	B) <i>Periods of access for temporary grazing</i>	C) <i>Duration of grazing period in non-pastoral areas</i>	D) <i>Form of tenure regime conferring access to grazing in non-pastoral lands</i>
forests ^{9,10,11,12}	-	-	user rights catered for in the forest laws ^{13, 14,}
agricultural fields left fallow ^{15,16,17}	determined by local authorities after consulting farmers ¹⁸ and the departments concerned. ¹⁹ Access dates determined by the local authority after consultation with farmers ²⁰ and pastoral organizations ²¹	open to grazing for a period between harvest and sowing, at the consent of the owner ²²	land left fallow is accessible to grazing animals, but access is subject to particular restrictions arising from the local usage or the express prohibition of the owner ^{23, 24}
cultivated fields after harvesting ^{25,26,27}	same as above	-	after removal of crops, fields are open for grazing, but access is subject to prior agreement by the owner ²⁸
public ranches ²⁹	-	-	-
pastoral perimeters ³⁰	-	-	-
plains with wild fonio after removal of cereals ³¹	access dates are fixed by the local authority, in connection with the user communities of the fonio plains ³²	-	-
urban areas ³³	-	-	-
flood plains ('bourgous/bo urgoutières') ^{34,35}	-	-	-

- = no information found

The numbers (superscripted) refer to the specific laws and regulations describing these rights, which are listed in the appendix.

4.5 Expert opinions on mobility and access rights in northern Kenya

4.5.1 Mobility and access in non-pastoral areas

Figure 4.5 presents the experts' views on whether pastoralists should be allowed to migrate and access grazing in non-pastoralist areas. Most respondents view that herders should be allowed to migrate in search of dry season grazing in non-pastoralist areas in northern Kenya (4.5A). This may be because the migration corridors and grazing areas have historically supported pastoralist migratory land use and because pastoralist activities have continued over the years in those non-pastoral areas, perhaps dating from before the tenures were individualized. Most respondents view that migration and access rights should not be allowed at any time of the year (4.5B), but only during the July–October dry season (4.5C). Figures 4.5B and 4.5C show the averaged responses for migration and access rights, which were separate questions in the questionnaire. The responses indicate that pastoralists should be allowed access to basically all land uses, with slightly less support for access to urban areas (4.5D). These results suggest pastoralists should have access to migration corridors in the July–October dry season, and to grazing on basically all land uses in non-pastoral areas.

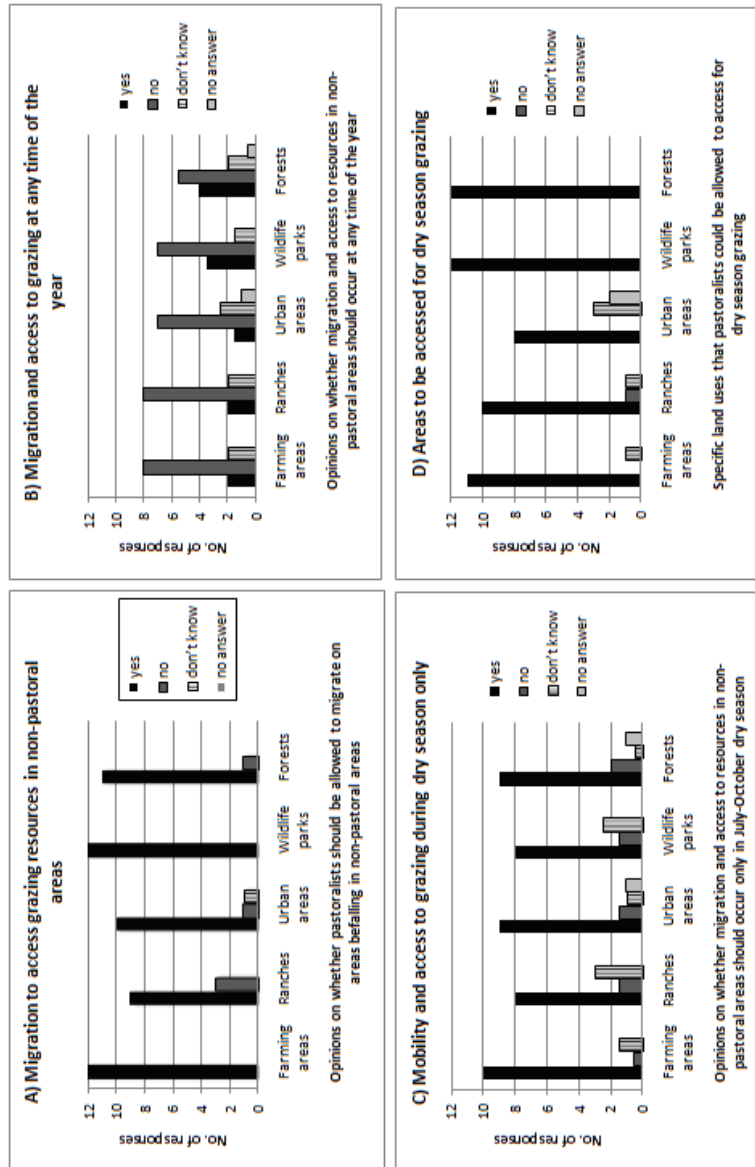


Figure 4.5 Expert opinions on migration and access to resources in non-pastoral areas

4.5.2 Registration to guarantee access to resources in non-pastoral areas

Figure 4.6 presents the experts' views on whether registration would be a feasible way to guarantee security of migration and access rights during the July–October dry season in areas under any or all of the five non-

pastoral land uses, where tenures are mostly private. The figure shows the averaged responses for migration and access rights. For farming areas, less than half of the respondents favoured the registration of migration and access rights, but almost as many disagreed or had no firm opinion either way. This mixed reaction may be because, as shown in Figure 4.3, about half of the farmers use their land throughout the year for the cultivation of perennial crops. It is clear that the respondents do not favour registration of pastoral rights on the ranches. This response may be influenced by the lack of data on the monthly variations in the intensity of the multiple land uses by ranchers. Less than half of the respondents view that migration and access rights should be registered in urban areas, but the remainder were split between those who did not favour this or did not know. More than half of the respondents were in favour of registration in forests and wildlife parks, despite the fact that pastoral migrations in the July–October dry season coincides with the tourism high season in the parks (see Figure 4.4). In general, a small majority seem to favour registration in farming areas, wildlife parks, forests and urban areas. These results therefore suggest that it should be possible to introduce and register pastoralist spatiotemporal rights to use land in private tenure.

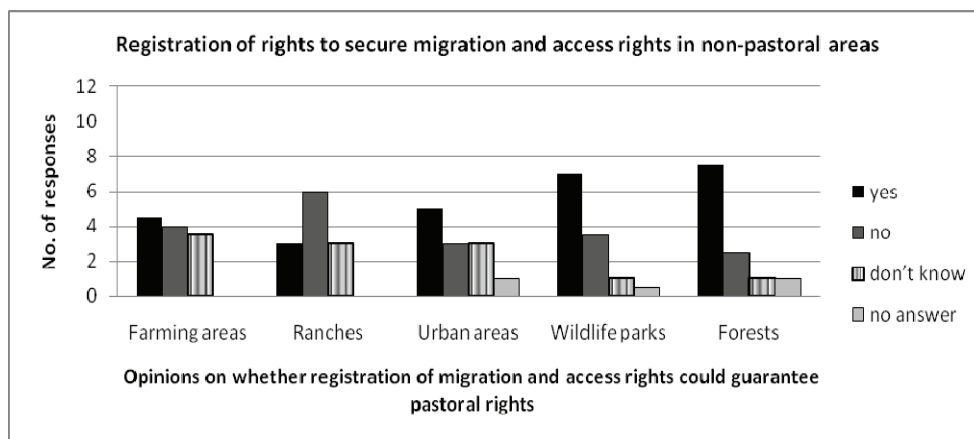


Figure 4.6 Expert opinions on whether registration could guarantee access to dry-season resources in non-pastoral areas

4.5.3 Tenure regime to confer access to migration corridors and private land

Figure 4.7 shows the experts' opinions on which tenure regime should be used to give migration and access rights to the pastoralists. The results are the averaged responses for migration and access rights. The majority view is that in farming areas, ranches and urban areas, pastoralist rights to migration and access to private land should be held by the landowners. This suggests that pastoralists should obtain the landowner's permission to use the resources they need on individually held lands. However, opinions were divided on the tenure regime to confer access to wildlife parks and forests, with the largest group giving no answer. It is not clear why this is the case, as most respondents in Figure 4.6 favoured registration of access rights to wildlife parks and forests.

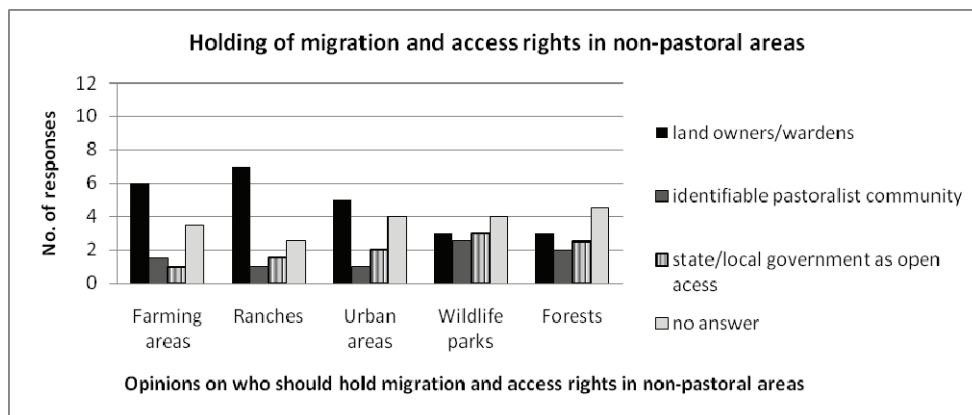


Figure 4.7 Expert opinions on holding of spatiotemporal rights

4.6 Discussion: Securing spatiotemporal rights in non-pastoral areas

4.6.1 Pastoral legislation supporting mobility and access rights

The results of the comparative study (Tables 4.1 & 4.2) revealed that legal strategies to support pastoralist seasonal migration and access to dry-season resources in non-pastoral areas do exist. The migrations can occur at various scales – local, regional, national and even across country borders. In one country (Niger) the tenure regime in the migration corridors permits public access for communal use. Several countries designate the areas which pastoralists can enter for dry-season grazing.

Various laws contain provisions for regulating access, for example the periods when access is permitted or restricted and the duration of the grazing period, especially in the agricultural areas, and access to grazing on private land is granted by personal agreements between landowners and pastoralists. These approaches can be viewed as principles enabling pastoralists to exercise spatiotemporal land rights in non-pastoral areas. Although the successes and weaknesses of these approaches in achieving the desired policy goals may need to be quantified, the pastoral legislation in the West African sub-region has brought about some positive developments, such as the recognition of the economic importance of livestock rearing, the reinstatement of pastoralism as a productive land use, the preservation of pastoral mobility, opportunities for herders to gain access to required resources, and the reinstatement of indigenous methods of conflict resolution (Touré, 2004).

4.6.2 Mobility and access rights in non-pastoral areas in northern Kenya

The general outcome of the survey of expert opinions is that mobility and access to grazing in non-pastoral areas in northern Kenya should be allowed during the July–October dry season (Figure 4.5C). The comparative study indicates that mobility and access to dry-season grazing in non-pastoral areas can be supported. Regarding the registration of access rights, the experts are most in favour of this for forests and wildlife parks (Figure 4.6) and to a lesser extent for farming areas and urban areas. These results imply that in northern Kenya it should be possible to give pastoralists spatiotemporal rights to land in private tenure. However, although the Kenyan Adjudication Act stipulates that any person is entitled to any kind of right, priority is given to registering private rights and the overlapping customary rights of pastoralists are largely ignored. The registration procedure in Kenya can be viewed as a practice that modifies existing rights and confers legal rights of land ownership. This endangers the livelihood of those relying on overlapping rights.

Meinzen-Dick and Mwangi (2009) argue that different people can have different interests or rights in a parcel of land, and that their rights can be seen as overlapping. In this view, all rights on a parcel do not have to be held by one individual. Examples of this principle are rental agreements, easements and a host of regulations enacted by various tiers of government regarding what may and may not be done with a piece of property (Dale and McLaughlin, 1999; Meinzen-Dick and Mwangi, 2009). All existing informal, traditional or customary rights need be

transferred to the formal system in a way that reflects actual practice as closely and fully as possible, including all rights and restrictions (FIG, 1995, 1998). Moreover, registration cannot be expected to confer tenure security unless the rights reflect the basic norms and values underlying the uses of the land made by communities to sustain their livelihoods (Okoth-Ogendo, 2008). Adjudication should therefore be able to determine what constitutes the legal rights of the different actors involved. It should not alter or create new rights, but establish rights as they exist (Lawrance, 1985; FIG, 1995). How then could spatiotemporal rights be introduced as real property rights that overlap with private tenures?

4.6.3 Registering spatiotemporal rights in non-pastoral areas

As we stated in the Introduction, the five aspects of RRRs are to be made available for registration (Bennet 2007). First, the objective of creating these rights under the Kenya National Land Policy (Kenya, 2007c) is to support pastoral migratory land use by registering mobility and access rights. While our results generally suggest that spatiotemporal rights could be registered in non-pastoral areas where tenures are already in the form of private holdings (Figure 4.6), Cap. 300 of the Kenya land law stipulates that upon registration, land owners cannot be legally required to comply with claims not entered in the register. This is because the registered rights are of absolute ownership, and this makes introducing new rights difficult. To confer spatiotemporal rights to pastoralists, therefore, will require either mechanisms leading to negotiations with land owners to grant seasonal access, or rectifying the spatiotemporal rights that were lost as a consequence of omission during adjudication of private tenures. Negotiations with holders of private rights could facilitate mobility and access to resources, but they are said to be slow to produce agreements, and sometimes even slower to produce results on the ground (Nianogo and Thomas, 2004). Registration of spatiotemporal rights could minimize the risk of losing access rights in negotiations and increase security of mobility and access for pastoralists. The holders of these real rights would then be assured that their rights would probably be upheld if challenged in an administrative or judicial setting (Schlager and Ostrom, 1992). Registration would therefore provide a measure of security against loss or tampering of rights (Dale and McLaughlin, 1999)

Second, the RRRs to regulate access, management, withdrawal, exclusion and alienation rights need be made available for registration (Bennett, 2007). Schlager and Ostrom (1992) state that RRRs can also

apply to overlapping rights, and that RRRs authorizing the exercising of property rights that each individual holds should exist. An individual can hold one or more aspects of a right. For example, it is possible have entry rights without withdrawal rights, to have withdrawal rights without management rights, etc, but at the same time, it should be realized that withdrawal rights without access rights would not be meaningful (Schlager and Ostrom, 1992). Pastoralist spatiotemporal rights include access to migration routes and to grazing land, and can viewed to be rights of access and withdrawal (Brink et al., 2005).

Third, the areas where spatiotemporal rights apply need to be considered for registration. Bennett (2007) observes that the areas over which RRRs apply are increasingly non-parcel based; some are even dynamic, which means that RRRs can be applied in different areas over time. Pastoralist migration corridors – as shown in Figures 4.1 and 4.2 – connect the dry season grazing areas to pastoral homelands, and so pastoralist land rights can also be viewed as being dynamic in nature. The spatial extents of migration corridors have been shown for the pastoral community in northern Kenya, but the areas within the potential range of pastoralist migrations in search of dry-season pastures need to be clearly defined and the boundaries identified. This information could inform land administrators about the extent to which pastoralists' rights overlap with non-pastoralists' rights (Lengoiboni et al., 2010). According to Lengoiboni et al. (2010), migration corridors used by all the relevant communities could provide comprehensive information of the spatial extents and scales of migrations, and these could be used as basis for inclusion in the law when defining where overlapping pastoral rights apply. The Niger pastoral code, for example, even takes into consideration the local contexts when determining the requirements for minimum widths of the migration corridors, and also provides for enforceability through a structure of penalties for obstructing the corridors during the period that pastoral rights apply (Niger, 2008). Because spatiotemporal rights are dynamic, and patterns and spatial extents of migrations are likely to change during extreme droughts, Behnke (1994) notes that including buffer zones for dry-season grazing areas would allow room for manoeuvre, for example by extending the spatial extent of overlapping land rights during extreme drought periods if needed.

Fourth, the duration of spatiotemporal rights needs to be considered for registration. Usually, the duration of rights can be either unlimited (e.g.

in freehold) or limited (e.g. with leasehold, rental agreements, derived rights like usufruct, easements, mortgages, etc.) (Oosterom et al., 2006). The duration of spatiotemporal rights is also limited because they are to be limited to the July–October dry period (Figure 4.5C) or between the period between harvesting and sowing (Table 4.2, column C).

Lastly, when introducing property rights, the people impacted need to be considered for registration. Clearly, spatiotemporal rights concern the interaction between pastoralists and non-pastoralists. To qualify as real property rights in the non-pastoral areas, spatiotemporal rights need to be registered to an identifiable party. According to the expert opinions (Figure 4.7), spatiotemporal rights should be vested in landowners (in farming areas, urban areas and ranches). This is also in line with the West African laws, which state that access to grazing land by herders is dependent upon the consent of the landowners (Table 4.2: column D).

It may seem logical and fair for herders to obtain permission to access private land, but what if negotiations turn out to be unsuccessful? Legal tenure regimes provide options within which overlapping property rights are held: as private rights whereby rights of access are granted to non-owners, for example through easements; as state land whereby user rights are granted to non-owners; or even as communal rights whereby usufruct rights can be granted to a particular group of people (Barrow et al., 2002). Here, access rights are vested in the non-owners, who then do not need permission from the landowners to access the land. In these cases, registration can be viewed as a means to reduce negotiations because the RRRs are the legal rules which should control the land use actors and activities they undertake (Bennett, 2007). To avoid the risk of losing access by relying on negotiations, registering spatiotemporal rights to the users (pastoralists) would be a secure means of guaranteeing access, contrary to what the experts suggest. For pastoralists, therefore, the issue is whether the spatiotemporal rights should be vested in individuals, groups, the community or even communities. A further point of discussion is which spatial units should be covered by these rights, because spatiotemporal rights should also take account of non-pastoralists' local land use practices (Lengoiboni et al., 2010).

Registering spatiotemporal rights to the use of private land implies the registration of use rights to multiple actors. Overlapping rights for the multiple actors requires that the rights that each actor holds should be combined with an obligation requiring enforcement, and that each right holder must be made aware of the duties that accompany those rights, not

just their rights alone (Mwangi, 2009). Mwangi (2009) explains that bylaws and procedural rules can mandate participation and representation among groups, while taking into account enforcement and accountability when rules are breached. In line with this, it is also important that communication, control, coordination and maintaining the reciprocity in the execution of spatiotemporal rights in non-pastoral areas is supported. During the fieldwork study in northern Kenya, pastoralists revealed that they coordinate their activities by first sending scouts to reconnoitre potential grazing lands in non-pastoral areas. Nowadays they report back to their fellow herders using mobile phones. The review of existing pastoralist legislation shows that local authorities act as an oversight authority coordinating how pastoralists access seasonal pastures in non-pastoral areas (Table 4.2, column B). Similarly, in Mali local institutions play a key role in regulating pastoral access to resources in non-pastoral areas according to local conventions (Betke, 2006). These local conventions can be viewed as contracts between local actors and government institutions, who work together to determine the rules for access and the utilization of resources to ensure their conservation and sustainable exploitation, and also to ensure that mechanisms for resolving disputes are within the framework of the law (Alinon and Kalinanire, 2008). The implication here is that an oversight body is required to regulate or coordinate the execution by pastoralists of their spatiotemporal rights in the non-pastoral areas to avoid potential chaos.

While securing the property rights of resource users in African drylands have been observed to give rise to a new set of problems – because they involve a variety of actors, require decision making at various levels of governance, and require the involvement of bureaucratic authorities to support implementation – Mwangi (2009) considers these to be new approaches to rangeland management that are based on local solutions, innovation and adaptability, and which still need to be improved.

The expert opinions supported the view that pastoralism should be maintained in the non-pastoral areas. This raises the question of how pastoral land rights could be aligned and secured as real land rights in the LA system through registration. In this study, securing spatiotemporal rights through registration is viewed as means to avoid vulnerability and uncertainty about access to dry-season resources within the legal LA framework. It is through legal empowerment that the vulnerable and excluded are able to use the law, the legal system and legal services to protect and advance their rights and interests as citizens and economic

actors, instead of being excluded and oppressed by the law (CLEP and UNDP, 2008).

During this study we encountered a number of limitations. The first was the absence of English versions of the national laws of the Francophone African nations included in the comparative study of pastoralist legislation. For this reason unofficial translations were sought from native speakers of French. Also, although the laws of some countries, including Botswana, Uganda and Tanzania, provide for secure pastoral land use based on customary tenure, the detailed information such as rights on migration corridors, access for grazing in non-pastoral areas, often could not be found.

4.7 Conclusions

The results of the comparative analysis of existing legislation and the survey of experts indicate that spatiotemporal rights should be supported as overlapping rights on private land only during defined periods, but that access to grazing on private land should be subject to permission from landowners. These results are consistent with the approaches used to support spatiotemporal land use in West Africa, which also make pastoral access to grazing on private land subject to agreements with land owners. We argue against making access subject to personal agreements, stressing the risk of negotiations failing. Moreover, negotiated agreements are only binding on the parties involved, because they are outside the legal system of property rights. To avoid the risk of failure to acquire access through negotiation, registration is proposed as a legal tool to ensure security of access. The adjudication process for conferring private rights on land should view pastoral rights as being dynamic, because they apply across different areas at different times.

We discussed the attributes of pastoral rights in northern Kenya within the framework of managing property rights, restrictions and responsibilities (RRRs), and described how spatiotemporal rights could be aligned and included in the legal LA system through registration. Moreover, because pastoral rights seasonally overlap with those of actors outside the pastoral sectors, we described how overlapping real rights of multiple actors could be aligned. However, the registration of rights for multiple actors should not be an end in itself. The actors involved should be made aware of the restrictions and responsibilities as well as the enforcement mechanisms accompanying their rights. This research has shown that instead of focusing on conferring private rights to a piece of

land, overlapping rights for vulnerable groups such as pastoralists could also be protected in the legal LA system. Future research is needed to determine the types of real property rights that will be needed to retain connectivity between pastoral home areas, the migration corridors and dry season grazing areas.

Acknowledgments

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Appendix

¹ Loi n°034-2002/an portant loi d'orientation relative au pastoralisme au Burkina Faso (JO N° 01 2003): article 36

² LOI L/95/51/CTRN du 29 août 1995, portant Code Pastoral. – Guinea: article 55

³ Loi N° 01-004 DU 27 FEV. 2001 – Portant Charte Pastorale Du Mali : article 5

⁴ Republique Du Niger, Ministere de L'elevage et des Industries Animales, Projet de Loi Relative au Pastoralisme - Mars 2009: Article 38

⁵ Loi n°034-2002/an portant loi d'orientation relative au pastoralisme au Burkina Faso (JO N° 01 2003): article 36

⁶ Loi N° 01-004 DU 27 FEV. 2001 – Portant Charte Pastorale Du Mali : article 4

⁷ Republique Du Niger, Ministere de L'elevage et des Industries Animales, Projet de Loi Relative au Pastoralisme - Mars 2009: Article 38

⁸ Republique Du Niger, Ministere de L'elevage et des Industries Animales, Projet de Loi Relative au Pastoralisme - Mars 2009: Article 27

⁹ Loi n°034-2002/an portant loi d'orientation relative au pastoralisme au Burkina Faso (JO N° 01 2003): article 3

¹⁰ LOI L/95/51/CTRN du 29 août 1995, portant Code Pastoral. – Guinea: article 10

- ¹¹ Loi N° 01-004 DU 2 7 FEV. 2001 – Portant Charte Pastorale Du Mali : article 28
- ¹² Republique Du Niger, Ministere de L’elevage et des Industries Animales, Projet de Loi Relative au Pastoralisme - Mars 2009 : article 29
- ¹³ Loi n°034-2002/an portant loi d’orientation relative au pastoralisme au Burkina Faso (JO N° 01 2003): article 25
- ¹⁴ LOI L/95/51/CTRN du 29 août 1995, portant Code Pastoral. – Guinea: article 10
- ¹⁵ Loi n°034-2002/an portant loi d’orientation relative au pastoralisme au Burkina Faso (JO N° 01 2003): article 3
- ¹⁶ LOI L/95/51/CTRN du 29 août 1995, portant Code Pastoral. – Guinea: article 12
- ¹⁷ Loi N° 01-004 DU 2 7 FEV. 2001 – Portant Charte Pastorale Du Mali : article 37
- ¹⁸ Loi n°034-2002/an portant loi d’orientation relative au pastoralisme au Burkina Faso (JO N° 01 2003): article 27
- ¹⁹ LOI L/95/51/CTRN du 29 août 1995, portant Code Pastoral. – Guinea: article 22
- ²⁰ Loi N° 01-004 DU 2 7 FEV. 2001 – Portant Charte Pastorale Du Mali : article 22
- ²¹ Republique Du Niger, Ministere de L’elevage et des Industries Animales, Projet de Loi Relative au Pastoralisme - Mars 2009 : article 34
- ²² LOI L/95/51/CTRN du 29 août 1995, portant Code Pastoral. – Guinea: article 21
- ²³ Loi n°034-2002/an portant loi d’orientation relative au pastoralisme au Burkina Faso (JO N° 01 2003): article 27
- ²⁴ LOI L/95/51/CTRN du 29 août 1995, portant Code Pastoral. – Guinea: article 12
- ²⁵ Loi n°034-2002/an portant loi d’orientation relative au pastoralisme au Burkina Faso (JO N° 01 2003): article 3
- ²⁶ LOI L/95/51/CTRN du 29 août 1995, portant Code Pastoral. – Guinea: article 9
- ²⁷ Loi N° 01-004 DU 2 7 FEV. 2001 – Portant Charte Pastorale Du Mali : article 35
- ²⁸ Loi n°034-2002/an portant loi d’orientation relative au pastoralisme au Burkina Faso (JO N° 01 2003): article 27
- ²⁹ Republique Du Niger, Ministere de L’elevage et des Industries Animales, Projet de Loi Relative au Pastoralisme - Mars 2009 : article 29
- ³⁰ LOI L/95/51/CTRN du 29 août 1995, portant Code Pastoral. – Guinea: article 24
- ³¹ Loi N° 01-004 DU 2 7 FEV. 2001 – Portant Charte Pastorale Du Mali : article 30

³² Loi N° 01-004 DU 2 7 FEV. 2001 – Portant Charte Pastorale Du Mali : article 30

³³ Republique Du Niger, Ministere de L'elevage et des Industries Animales, Projet de Loi Relative au Pastoralisme - Mars 2009 : article 30

³⁴ Loi N° 01-004 DU 2 7 FEV. 2001 – Portant Charte Pastorale Du Mali : article 31

³⁵ Republique Du Niger, Ministere de L'elevage et des Industries Animales, Projet de Loi Relative au Pastoralisme - Mars 2009 : article 58

Securing Pastoralists seasonal land rights through registration



Pastoralists on the move [Photo Richard Wainwright]



Pastoralists on the move [Photo Sue Cavanna]

Chapter 5

Resolving the issue of land tenure and supporting pastoralists seasonal migrations in land administration: a study of northern Kenya

Monica Lengoiboni, Paul van der Molen, Arnold K. Bregt

In review

Geoforum

Resolving the issue of land tenure and supporting pastoralists seasonal migrations in land administration: a study of Northern Kenya

Abstract

Land administration has almost always been restricted to forms of statutory land tenure. However, statutory land tenure has been associated with negative impacts on pastoralists, whose traditional land use system requires landscape connectivity to allow them to migrate between seasonal pastures or resources. This research explores the land tenure options suitable for supporting the pastoralists' seasonal land use system within the land administration domain. The results of a survey research support the view that pastoralists' seasonal land rights should reflect their temporal land use. Further, the results of a decision matrix lead to the conclusion that reserved land is the most appropriate tenure option for granting pastoralists limited rights of access to migration corridors and dry season grazing areas. We propose that registration of those limited rights provides a means to integrate pastoralists' seasonal land rights into the statutory system. Registration would protect the migration corridors and dry season grazing areas, thereby maintaining connectivity between seasonal pastures. We conclude that pastoralists' seasonal land rights can be secured and enforced within the statutory system of land administration.

Key words: land administration; pastoralists; migration corridors; dry season grazing areas; land tenure, limited land rights

5.1 Introduction

Nomadic pastoralism is a major land use in the arid and semi-arid rangelands of the world. Plant growth in these regions is seasonal, occurring only when temperature and rainfall allow it (Dyson-Hudson and Dyson-Hudson, 1980). The pastoralists occupy tribal territories, which are often partitioned into wet and dry season ranges (Oba and Lusigi, 1987). Migrations between seasonal ranges or pastures are traditionally facilitated by social rules governing pastoralists' movements, which maximize their chances of survival in the relatively harsh and uncertain environment (Dyson-Hudson and Dyson-Hudson, 1980; Oba and Lusigi, 1987; Behnke, 1994; Chang and Koster, 1994; Niamir-Fuller, 2005; Galvin and Ellis, 2007; Alden-Wily, 2008). These social rules enable pastoralists to maintain connectivity between seasonal pastures. Galvin (2008) explains that the ability to access seasonal resource patches is known as ecological landscape connectivity; a landscape is considered connected if it allows movement between resource patches.

Most colonial and subsequent governments in Africa have attempted to sedentarize pastoralism. Various countries introduced economic development policies and projects to increase productivity by transforming pastoral production systems into market economies (Fumagalli, 1978; Sandford, 1981; Mwangi, 2007). In an effort to implement pastoral development policies, a number of countries, including Kenya, Botswana and Rwanda, established ranches in pastoralist areas. In 1968 the Kenyan government introduced group ranches to the Maasai communities. A group ranch is land that has been demarcated and legally allocated to a group, such as a tribe, clan, family or other group of persons, as private land (Kenya, 1968a). The group jointly owns a freehold title to the land. To create this form of private tenure the government adopted basic 'Western' concepts of land administration: the cadastral procedures of adjudication, boundary survey and rights registration, which lead to the conferring of statutory land rights. The parcel boundaries were based on a combination of boundaries of administrative divisions and Maasai locations, or subsections (Bekure, 1991).

In these group ranches, grazing quotas were to be allocated to members to limit animal numbers to the carrying capacity, and grazing was to be confined within the ranch boundaries (Bekure, 1991). The pastoralists were at first apprehensive and resisted the new system of ownership and

land utilization, but warned by their leaders that neighbouring communities wanted to take their lands, many pastoralists joined group ranches simply to preserve their claim to the land, although they had no intention of changing their customary techniques of livestock production and land management (Lanyasunya, 1990; Bekure, 1991). Meanwhile, government support for agriculture, conservation and urban development encouraged individual ownership of land throughout the country (Fumagalli, 1978). Land appropriation and the expansion of non-pastoral land uses into the pastoralist areas has led to fragmentation of pastoralist land, obstructing the connectivity between pastoralists' seasonal pastures (Homewood, 1995; Fratkin, 1997; Anderson and Broch-Due, 1999; Homewood et al., 2004).

The registration of pastoralists' land rights in group ranches gave the pastoralists security of tenure. Where the opportunity existed, a number of group ranches in Kenya started to diversify the use of their private land to include the cultivation of crops (in areas where climatic conditions favour crop farming), leasing land for commercial agriculture or to farmers outside the pastoral community (Lesorogol, 2005) and leasing land for wildlife conservation and tourism activities. In recent years, some pastoralists have even taken up individual tenures by subdividing group ranches into individual parcels (Rutten, 1992; Mwangi, 2007).

However, the pastoral economy still remains largely dependent on livestock rearing (Fratkin and Roth, 2005). Effective productivity in pastoralism depends on the movements between seasonal resources, which are influenced by climatic conditions. Active pastoralists therefore continue their seasonal migrations in accordance with their customs – thereby ignoring the boundaries of their group ranches and individual parcels – to maintain connectivity between the seasonal resources (BurnSilver, 2000; Lengoiboni et al., 2010). In the now fragmented landscapes this causes pastoralists several problems, including the need to renegotiate access with landowners, competition for access to resources, reduced livestock productivity and seasonally recurring conflicts (Talbot, 1986; Fratkin, 1997; Mwangi, 2007; Lengoiboni et al., 2010). Ownership rights in group ranches are therefore not a sufficient condition for securing pastoral land use.

The Kenya National Land Policy acknowledges that the individualization of land rights has undermined the traditional pastoralist systems for making productive use of the land (Kenya, 2007c). In response, the

government intends to recognize and protect the rights of the vulnerable groups by instituting alternative methods of land registration that define individual rights in pastoral communities and at the same time allow pastoralists to maintain their migratory land use system and livelihood (Kenya, 2007c).

This study investigated tenure options that would allow pastoralists to maintain the connectivity between seasonal grazing areas within the legal framework of land administration in Kenya. The study focused on applicable tenure options that best support seasonal land rights. The issue of resource availability is not discussed in this paper.

5.2 Study area

The study area is located in the arid and semi-arid environments of Samburu, Isiolo and Laikipia, and the highland areas of Meru in Northern Kenya. The study area has two rainy seasons (in March–May and October–December) and two dry seasons (in January–February/March and June/July–September) (McClanahan and Young, 1996; Wittemyer, 2001). Both pastoralism and sedentary land uses are found in the study area. The pastoralists mainly keep livestock and migrate seasonally in search of fodder for their livestock. They hold land under two main forms of tenure: a) group ranch – a private statutory tenure in which the members have equal shares of ownership; and b) customary land tenure in the trust lands. Trust lands can be described as areas where no adjudication and demarcation of individual or group tenures has occurred. Trust lands are vested to the local county councils (local government), as they await subdivision into group ranches or individual tenures, or other land uses (Kenya, 1960). In this study, we refer to group ranches and trust lands as communal lands. Meru lies in an area of high agricultural potential and farming (subsistence and commercial) is the dominant land use type.

A previous study by Lengoiboni et al. (2010) showed that the pastoralists in both group ranches and trust lands in this study area maintain seasonal migrations. Figure 1 shows the traditional migration corridors used by five pastoralists communities according to customary practices. The maps show that the migration corridors used in the early year dry season (January–March, shown as dotted lines) are mainly located within the pastoralists' communal lands. The late year dry season migration corridors (July–September/October, shown as thick black lines) extend into the Laikipia and Meru areas, where non-pastoral land uses dominate,

such as commercial and private ranching, crop farming and urban uses. Most of the non-pastoral land use actors hold land under individual ownership. The study area also contains government land in the form of wildlife parks and forests. In this study we classify the government land as non-pastoral land use. According to Lengoiboni et al. (2010), most of these non-pastoralist land use actors have reported seasonal encounters with migrating pastoralists. The migration patterns during the late dry season (July–October), as shown in Figure 1, support this claim. During this dry season, pastoral land use based on customary land rights and non-pastoral (statutory) land rights overlap. The study area therefore provides us with an ideal setting, in which the interests of pastoralists and their land rights requirements seasonally coincide with private land tenures. This situation is also representative of the Maasai pastoralists of Southern Kenya, where Maasai cattle have been reported ‘wandering’ in the capital city, Nairobi, and even ‘roaming’ close to the State House while searching for pastures during drought (Muthengi, 2000). In Northern Kenya, the pastoralists currently depend on the willingness of landowners to negotiate access to resources on private land, in forests and wildlife parks. In the absence of such agreements, pastoralists entering private lands are in violation of the landowners’ property rights. In this study, the terms ‘pastoral areas’ and ‘pastoralists’ communal lands’ are used interchangeably. Pastoralists’ communal lands includes the group ranches and trust lands.

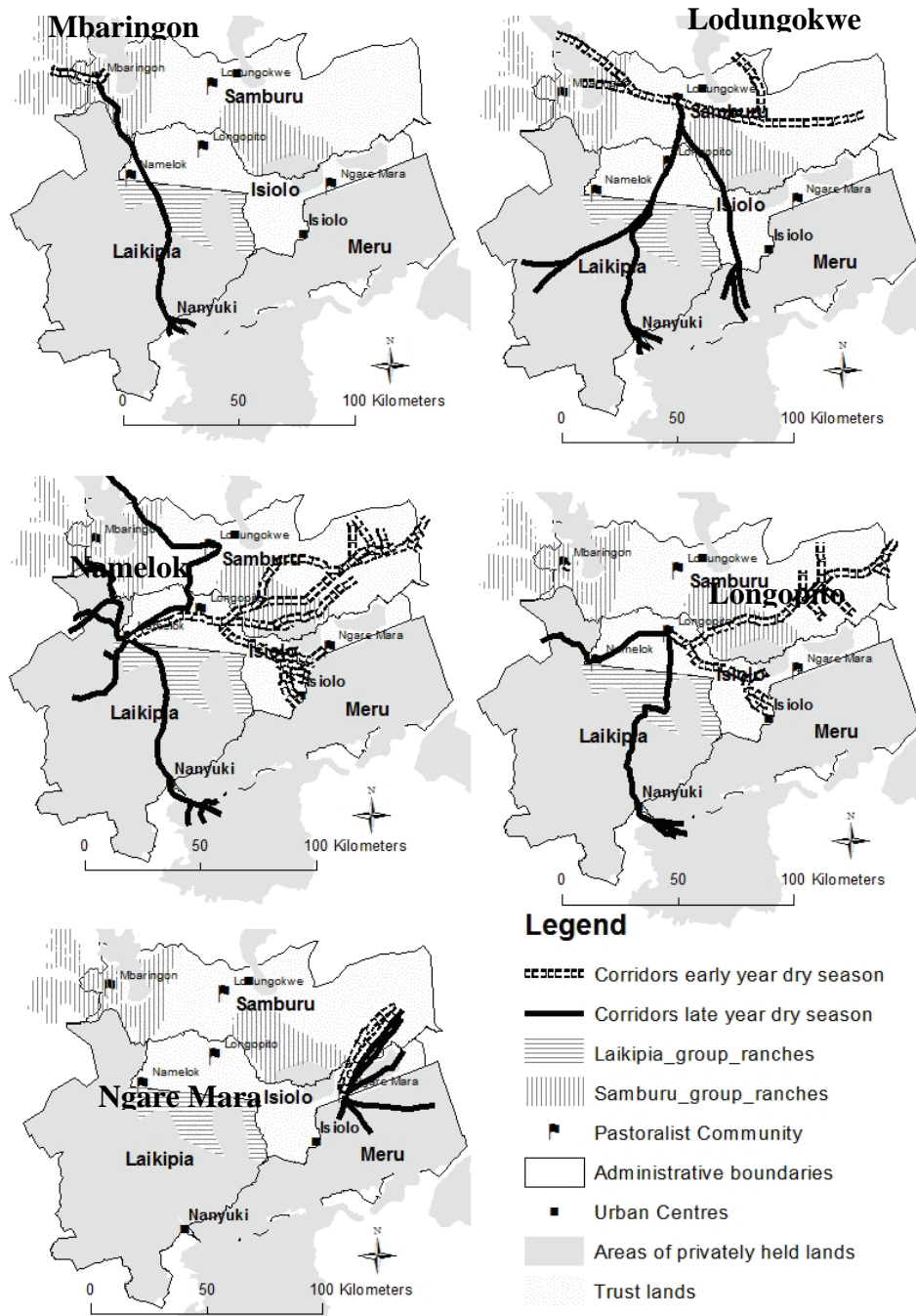


Figure 5.1 Pastoralist migration corridors and land tenure forms in the study area. Source Lengoiboni et al. 2010

5.3 Research methodology

The objective was to identify land tenure options that could support the pastoralists' seasonal land use. Possible solutions were sought from land professionals working in the field of land administration in Kenya. Land professionals were selected for this study for three main reasons: first, because land administration is almost always restricted to statutory land tenures (Molen, 2003a); second, land tenure depends on registration of land rights, which is an instrument for implementing land policies (i.e. through adjudication and registration of land rights), and the role of the government is to lay down a legal framework for administering the statutory land rights (Molen, 2003a); and third, in the cadastral processes of adjudication, survey and registration of statutory land rights, land professionals are directly involved in introducing the Western-style ownership tenures to replace the customary tenures.

5.3.1 Organization and survey sample

Land professionals from the Ministry of Lands (MoL) and district local governments – the county councils (CCs) in Kenya were approached to participate in this study. The MoL is responsible for land policy, physical planning, land rights adjudication and settlement, undertaking land surveys and mapping, registration of land rights, land valuation and administration of state and trust land. The MoL consists of four main departments: Lands, Physical Planning, Survey, and Land Adjudication and Settlement. The Survey department is responsible for all matters concerning land surveys and mapping. The Land Adjudication and Settlement department is responsible for land rights adjudication and allocation of agricultural land to landless citizens on a loan basis. The Physical Planning department is responsible for preparing urban and rural development plans. The Lands department is responsible for registering land rights and issuing certificates relating to land titles and leases. A comprehensive questionnaire survey was held among the land professionals in the four departments and across all tiers of the MoL, at district, provincial and national level.

At district level, the questionnaire survey was held among the MoL staff located in Samburu, Isiolo and Laikipia. The land professionals at district level were included because they implement the policies relating to land use (through the planning system) and tenure (through adjudication, survey and registration of land rights). Moreover, they are located in the arid and semi-arid environments, where pastoralism is still active

(Lengoiboni et al., 2010). The land professionals are therefore likely to be aware that pastoralists' land rights require seasonal movements beyond their pastoral communal lands. Moreover, because the cadastral processes of adjudication, boundary survey and registration tend to attach rights to land within a parcel/land object (and overlook the need to conserve the migration corridors), the land professionals are also likely to be aware that their approach to conferring formal rights to land conflicts with the pastoralists' seasonal land use system.

Each of the four MoL departments in each district visited had one land professional (from MoL) among its staff – except in Isiolo, which had no Land Adjudication department and relied on the land adjudicator from Meru. As the pastoralists' migration corridors cross various administrative boundaries, including district boundaries (see Figure 1), two MoL departments – Physical Planning and Survey – were approached at provincial level, which is responsible for coordinating tasks across district boundaries. At the national level, the directors of all the four departments of MoL were invited to evaluate the tenure options.

County councils (CCs) are mandated to alienate land from the trust lands within their jurisdiction and have their own land surveyors. The CC land surveyors were included as land professionals in this study because the alienation of sections of trust lands, for example for private purposes, may interfere with pastoralists' customary land rights. Two CC land professionals (from Samburu and Laikipia) participated in this research. Isiolo CC did not have a surveyor when this survey was conducted and relied on the MoL for land surveyors.

Fieldwork was carried out in July 2010. Appointments were made in advance to invite the land professionals to participate in the study. Their assignment was to evaluate the tenure options that could be used to secure: a) the migration corridors which pastoralists use for their seasonal movements; and b) dry season grazing areas, where pastoralists graze their livestock during the dry seasons. Of the 18 land professionals approached to complete the questionnaire, 13 completed the questionnaire, 2 were unavailable (out of office) and 3 declined to complete the questionnaire. The experience of the land professionals varied from a few years to more than 20 years: 0–4 years: three respondents; 5–9 years: one respondent; 10–14 years: one respondent; 15–19 years: five respondents; and >20 years: three respondents.

5.3.2 Questionnaire

The questionnaire was administered in the form of a structured interview and contained two parts. The first part (3 statements) dealt with whether pastoralists should be allowed to migrate with their livestock in search of dry season pastures in the non-pastoral areas of Northern Kenya (where tenures are already under private ownership). The respondents answered closed questions with ‘yes’, ‘no’ or ‘don’t know’ as their preferred answer.

The second part dealt with the tenure options that could support seasonal migration corridors and dry season grazing in two contexts. The first context is when the pastoralists migrate to the non-pastoral areas in the late year dry season (July–October); the second context is in the early year dry season (January–March), when migrations and dry season grazing areas are mainly confined within pastoralists’ communal lands. In the first context, we wanted to find out what tenure option would be desirable to support pastoralists’ seasonal land rights in non-pastoral areas. In the second context, we wanted to find out what tenure option would be suitable to support seasonal land rights within the pastoralists’ communal lands. For both the first and second contexts, respondents used a decision matrix to rank the tenure options against a list of criteria.

5.3.3 Pugh Decision Matrix and tenure options

The Pugh Decision Matrix was used in this research. It was developed by Stuart Pugh to help decision makers choose from a number of options (Pugh, 1996). Multiple options are evaluated against each other using predetermined criteria to help decision makers select a satisfying or most promising option that is likely to result in successfully solving a problem. In this study we evaluated various types of tenure options: statutory tenures, tenures based on customary rights, and negotiated agreements. Tenure options were evaluated because the extent to which people can access and use land is often built into the land tenure system (Dale and McLaughlin, 1999). Eight tenure options were included in the evaluation:

- i **Freehold:** an ownership of land rights in perpetuity. It is a statutory right described in Kenya’s Registered Land Act (Cap 300). Individuals have rights of ownership, and have responsibilities and restrictions placed by the state or other third parties (Dale and McLaughlin, 1999).

- ii **Lease:** ownership of rights for a limited period of time. These are recognized by the Registered Land Act.
- iii **Easement:** ‘a right attached to a parcel of land which allows the proprietor of the parcel either to use the land of another in a particular manner or to restrict its use to a particular extent, but does not include a profit’ (Kenya, 1963). It is a limited land right, a non-ownership right recognized by the Registered Land Act. These limited land rights can coexist with other interests in land.
- iv **Profit (profit à prendre):** the ‘right to go on the land of another and take a particular substance from that land, whether the soil or products of the soil’ (Kenya, 1963). It is a limited land right recognized by the Registered Land Act, and can also coexist with other interests in land.
- v **Customary land rights:** the nature of traditional pastoralist land rights. Customary land rights are accommodated in Kenya’s Trust Lands Act (Cap 288). Section 69 of Cap 288 allows the occupiers of trust lands to enjoy land rights according to their customary law, including any subsequent modifications of the land rights, but only as long as such rights do not conflict with any of the provisions of the Act or rules made under it, or to the provisions of any other law currently in force.
- vi **Negotiations with landowners:** this mode of access to land is derived from current practice in the study area, whereby pastoralists negotiate for access with private landowners. Entering private land without the permission of the landowner is considered to be trespass and liable to punishment by law (Kenya, 1963).
- vii **Open access:** this mode of access to land exists where there is no defined group of owners. Benefits are available to anyone and there are no duties or obligations (Dale and McLaughlin, 1999).
- viii **Reserved land (government land):** land that the government reserves for public benefit. State agencies set rules for access and use of the reserved land, and individuals have duties to respect those rules (Dale and McLaughlin, 1999). Reserved land is recognized by the Land Acquisition Act (Cap 295). This Act provides for the compulsory acquisition of land by the government to be reserved for the public benefit, such as land for schools, hospitals, parks, etc. This mode of access to land was suggested by the land professionals

during the early stages of testing the questionnaire. Reserved land was therefore included as an additional tenure option in the decision matrix.

Different tenure options were evaluated for the two seasonal migrations periods described in section 3.2, which are given as two different contexts, as follows:

Context 1: Evaluating applicable tenure options to support pastoralism in the non-pastoral areas

In context 1, the evaluations for both migration corridors and access to grazing in non-pastoral areas omitted open access. It was assumed that much of the land in the non-pastoral areas is under some form of control, by either individuals or the government.

Six tenure options were evaluated for application in the migration corridors. The evaluation for migration corridors in the non-pastoral areas also omitted the profit option, because pastoralists require access to this land simply to travel across it. The tenure options evaluated for migration corridors in the non-pastoral areas were:

- freehold; lease; easement; negotiations; existing customary tenure; reserved land.

The evaluation for access to grazing in the non-pastoral areas also omitted easements, because pastoralists require access to this land to remain on it for a period of time to reap benefits from the land. The tenure options evaluated for access to grazing in the non-pastoral areas were:

- freehold; lease; profit; negotiations; existing customary tenure; reserved land.

Context 2: Evaluating applicable tenure options to support pastoralism within pastoralists' communal lands

In context 2, five, instead of all eight tenure options were evaluated. As in context 1, the evaluation for migration corridors omitted profit and the

evaluation for access to grazing omitted easements. Reserved land and negotiations were also not included in these tables, because customary social systems continue to enable herders to maintain connectivity between the seasonal resources where those resources are located within the pastoralists' communal lands. In other words, customary land rights and practices have not yet been extinguished, especially in the trust lands.

The tenure options evaluated for migration corridors in the pastoralists' communal lands were:

- freehold; lease; easement; open access; existing customary tenure.

The tenure options evaluated for access to grazing in the pastoralists' communal lands were:

- freehold; lease; profit; open access; existing customary tenure.

The tenure options were listed across the first row in the decision matrix. The Pugh Decision Matrix requires establishing a baseline or a reference point, which can be one of the options (Pugh, 1996). According to Pugh (1996), the baseline should be considered a somewhat average/neutral idea – neither the best nor the worst. In this study, customary tenure was used as the baseline, because it is the mode that pastoralists use to exercise their seasonal migrations and access dry season resources. Each option is rated on how well it meets each criterion in comparison with the baseline (Pugh, 1996).

5.3.4 Criteria

The criteria were listed in the left-hand column in the decision matrix. The criteria can be viewed as tools for assessing issues and considerations likely to affect an option's implementation and its feasibility in achieving the intended goals (Bardach, 2009). The criteria are therefore a list of factors considered important when making a decision. In this study, the goals which the land tenure options should achieve are social, economic, legal and other requirements related to the pastoralists' use of migration corridors and access to dry season grazing areas. Six basic criteria were used in this study. A brief discussion of the rationale behind each criterion was included. The criteria are:

- i administrative feasibility – to judge the ease of implementation of options;

- ii economic benefits – to judge whether the option is likely to benefit the actors involved and has the lowest cost of implementation;
- iii effectiveness – to judge whether the option is likely to contribute to security of access to migration corridors and dry season grazing areas, and at the same time provide security of tenure to the actors involved;
- iv equity – to judge whether the option is likely to take fairness into account regarding access to land (e.g., will some actors be left out in a given tenure option?);
- v technical feasibility – to judge whether the resources and skills needed to implement the option are readily available; and
- vi legal acceptability – to judge whether use of the option to support migration and dry season grazing areas is permissible under existing land laws.

These criteria were adapted from Bardach (2009), and Patton and Sawicki (1986), who give frameworks for criteria used in policy analysis. The policy analysis criteria are considered relevant for use in this study because they relate to the factors considered when implementing the policies. As land tenure, through adjudication and registration of land rights, is a means by which land policies are implemented, the policy analysis criteria provide guidance for assessing the goals that the options should meet. It is therefore reasonable to assume that these criteria are directly relevant to the analysis of tenure options likely to support pastoralists' migratory land use.

5.3.5 Ranking the criteria

The Pugh Decision Matrix was also preferred because it does not require the criteria to be weighted. This means that all criteria are considered to be equally important, and therefore have the same weight. To complete the decision matrix, the respondents were asked compare each option to the baseline and assign one of three possible scores. Respondents assigned a [+1] score to options they thought would satisfy the criterion better than the baseline, a zero [0] to options that would satisfy the criterion to the same degree as the baseline, and a [-1] to options that would not satisfy the criterion as well as the baseline. The respondents were asked to individually provide a ranking according to their own judgement. The respondents also referred to Figure 1 when making their judgements.

5.3.6 Data analysis and scoring the criteria

All the [+1], [-1] and [0] scores for each criterion were then added together. For example, if 10 respondents gave a [-1] score to a criterion, then the total score for this criterion was [-10]. To rank the tenure options, the total scores for each criterion were summed up, the option with the highest score being considered the most desirable option. However, according to Pugh (1996) the option with the highest score might not necessarily guarantee the optimal solution, but give rise to a discussion, for example about further development or modification of the option.

Bar graphs were used to present the opinions of the land professionals on whether pastoralists should maintain their seasonal migrations, and whether their seasonal land rights should overlap with other tenures in Northern Kenya. Tables were used to present the results from the decision matrix on potential tenure options for securing migration corridors and access to dry season grazing in non-pastoral areas (on privately held land and government land) and within pastoralists' communal lands.

5.4 Results: Securing pastoralists' seasonal land rights in non-pastoral areas

5.4.1 Securing pastoralists' seasonal rights to land in non-pastoral tenures

Figure 5.2 presents the views of land professionals on whether pastoralists should be allowed to migrate with their livestock and access dry season resources in non-pastoral areas (individually held land or land held by the government). Figure 5.2A shows that most respondents consider that pastoralist migrations to access seasonal grazing should not be allowed on private land, but should be allowed on government lands: wildlife parks and forests. Those answering 'yes' and 'don't know' in Figure 5.2A proceeded to give answers to questions 5.2B and 5.2C. All but one of the respondents said that pastoralists should not be allowed access to any of the areas at any time of the year (5.2B), but that they should be allowed access during the July–October dry season (5.2C).

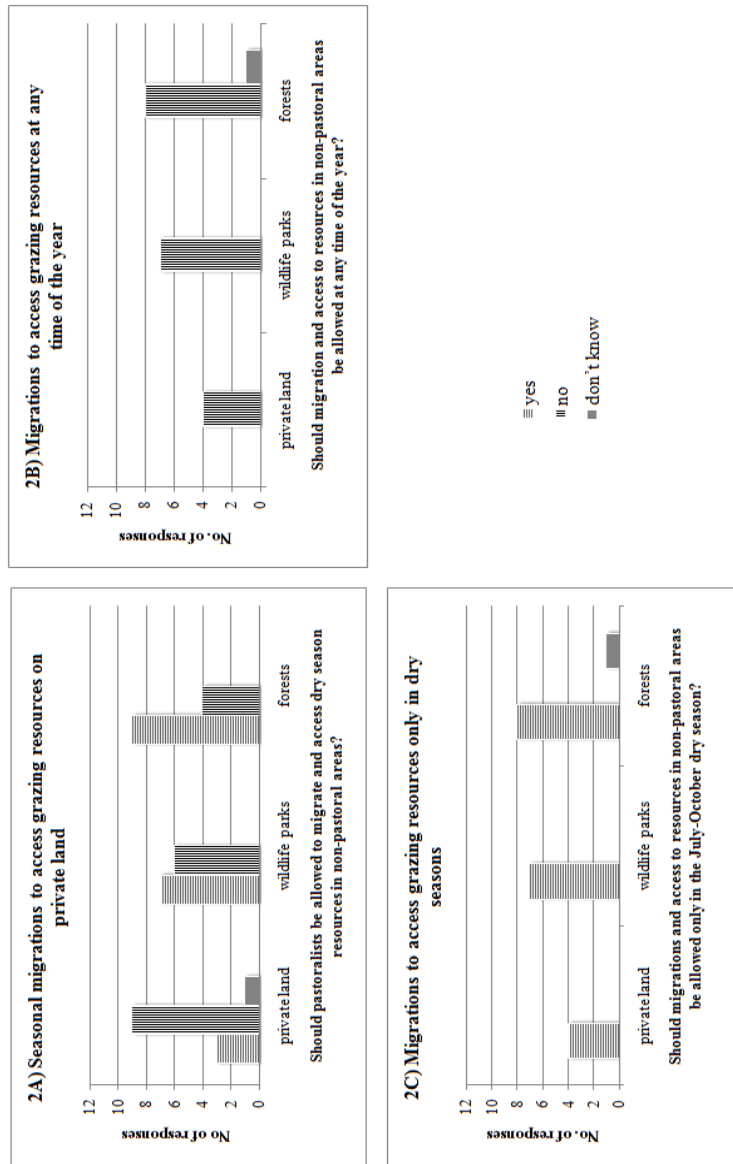


Figure 5.2 Land professionals' opinions on whether pastoralists should maintain their seasonal migrations in non-pastoral areas

5.4.2 Securing access to migration corridors and dry season grazing areas in non-pastoral areas

5.4.2.1 On privately held land

The tables below present the scores given for the suitability of the tenure options for access to migration corridors (Table 5.1A) and dry season grazing resources in non-pastoral areas, such as farming areas (Table 5.1B). Some land professionals did not respond to this question, arguing that pastoralists land rights should not seasonally overlap with private tenures. They argued that it is cumbersome to coordinate overlapping land rights, especially where different land uses are exercised. Tables 5.1A and 5.1B give the scores of the land professionals responding.

Table 5.1A: Tenure options for securing access to migration corridors through private lands

evaluation criteria	freehold	lease	easement	negotiations	baseline	reserved land
administrative feasibility	-9	-7	0	2	0	7
economic benefits	-2	-2	6	4	0	5
effectiveness	-7	-5	4	1	0	9
Equity	-5	-4	4	4	0	9
technical feasibility	-7	-5	0	3	0	6
legal acceptability	-9	-7	1	5	0	8
Total Score	-39	-30	15	19	0	44
Position	6	5	3	2	4	1
proportion of respondents (total = 13)	9 responded; 4 did not complete this question					

Table 5.1B: Tenure options for securing access to grazing on private lands

evaluation criteria	freehold	lease	profit	negotiations	baseline	reserved land
administrative feasibility	-7	-5	-5	2	0	5
economic benefits	-2	-2	3	4	0	3
effectiveness	-5	-3	4	3	0	7
Equity	-3	-2	3	2	0	7
technical feasibility	-7	-5	-3	1	0	3
legal acceptability	-7	-5	-1	3	0	5
Total Score	-31	-22	1	15	0	30
Position	6	5	3	2	4	1
proportion of respondents (total = 13)	7 responded; 6 did not complete this question					

Tables 5.1A and 5.1B show that reserved land is the preferred tenure option for securing access to migration corridors and dry season grazing areas in non-pastoral areas. Reserved land scores best overall. The effectiveness and equity criteria received good scores in both tables. This means that reserved land is likely to contribute to improving the security of access to both migration corridors and dry season grazing areas (effectiveness) and is a fair option (equity) because the actors or groups involved are likely to be included through this tenure option.

The negotiations option received the second best score. Its main advantage lies in its potential for economic benefits (Tables 5.1A and 5.1B) and acceptability in the legal domain (Table 5.1A). The ownership rights of freehold and leasehold received the worst scores in Tables 5.1A and 5.1B. This is mainly because it is not administratively feasible to implement these options where land is already in private ownership.

Tables 5.1A and 5.1B suggest that a potential solution for securing seasonal rights in the non-pastoral areas is for the government to take back the private lands and hold them as reserved land. But the land professionals also indicated that in the public interest it might be necessary to provide alternatives by realigning the migration corridors and relocating the dry season grazing areas outside the non-pastoral areas. Either way, this clearly suggests that the Kenyan land

professionals are not in favour of pastoral seasonal land rights overlapping with or seasonally coexisting with private tenures.

5.4.3 Securing migration corridors and dry season grazing on government lands

5.4.3.1 Wildlife parks

Tables 5.2A and 5.2B present the scores given for the suitability of the tenure options for supporting seasonal land rights in wildlife parks. Land professionals who did not respond said that wildlife needs to be protected and conserved and is a very important source of revenue for the government. Those responding believed that the seasonal migrations across wildlife parks can be coordinated, because most of the wildlife parks are located within the pastoral communal lands. Tables 5.2A and 5.2B show the scores given by the land professionals responding.

Tables 5.2A and 5.2B show that reserved land received the highest scores for all but two criteria. As the wildlife parks are government land reserved for wildlife conservation, these results suggest that either special areas within the parks should be designated for use by pastoralists use (given the results in Figures 5.2A, 5.2B and 5.2C), or that additional areas outside the wildlife parks should be reserved specially for the use of pastoralists (given the responses in Tables 5.1A and 5.1B and the alternative options suggested by land professionals of realigning the corridors and relocating grazing areas to other places).

The non-ownership rights of easement (Table 5.2A) and profit (Table 5.2B) take the second best position. The easement option received the highest scores for equity and economic benefits, whereas profit only received the highest score for equity. The disadvantage of both the easement and profit option lies in their legal acceptance in the wildlife parks (Tables 5.2A and 5.2B). Freehold and lease received the worst scores in both tables.

Table 5.2A: Tenure options for securing access to migration corridors through wildlife parks

evaluation criteria	freehold	lease	easement	negotiations	baseline	reserved land
administrative feasibility	-6	-6	6	6	0	9
economic benefits	-2	-2	10	8	0	7
effectiveness	0	0	8	3	0	9
Equity	2	0	10	4	0	10
technical feasibility	-4	-4	4	4	0	8
legal acceptability	-4	-4	0	2	0	7
Total score	-14	-16	38	27	0	50
Position	5	6	2	3	4	1
proportion of respondents (total = 13)	10 responded; 3 did not complete this question					

Table 5.2B: Tenure options for securing access to grazing in wildlife parks

evaluation criteria	freehold	lease	profit	negotiations	baseline	reserved land
administrative feasibility	-5	-5	0	3	0	7
economic benefits	-3	-1	2	5	0	6
effectiveness	-5	-3	3	0	0	6
Equity	-3	-3	7	1	0	6
technical feasibility	-5	-3	1	1	0	5
legal acceptability	-5	-3	-2	-1	0	5
Total Score	-26	-18	11	9	0	35
Position	6	5	2	3	4	1
proportion of respondents (total = 13)	7 responded; 6 did not complete this question					

5.4.3.2 Forests

Tables 5.3A and 5.3B present the scores given for the suitability of the tenure options for seasonal land rights in forests. As for wildlife parks, the land professionals who did not respond emphasized the need to

protect and conserve the forests. They said that opening them up and allowing migrations and grazing would provide an avenue for exploitation and destruction of the forests. Tables 5.3A and 5.3B show the scores given by the land professionals responding.

Table 5.3A: Tenure options for securing access to migration corridors through forests

evaluation criteria	freehold	lease	easement	negotiations	baseline	reserved land
administrative feasibility	-9	-7	1	3	0	9
economic benefits	-5	-3	7	5	0	9
effectiveness	-5	-3	5	2	0	9
Equity	-3	-1	7	3	0	9
technical feasibility	-7	-5	1	5	0	5
legal acceptability	-7	-5	-2	2	0	5
Total Score	-36	-24	19	20	0	46
Position	6	5	3	2	4	1
proportion of respondents (total = 13)	9 responded; 4 did not complete this question					

Table 5.3B: Tenure options for securing access to grazing in forests

evaluation criteria	freehold	lease	profit	negotiations	baseline	reserved land
administrative feasibility	-7	-5	-3	1	0	7
economic benefits	-5	-3	4	3	0	7
effectiveness	-7	-5	3	2	0	7
Equity	-5	-3	5	1	0	7
technical feasibility	-7	-5	-1	3	0	3
legal acceptability	-5	-3	0	2	0	3
Total Score	-36	-24	8	12	0	34
Position	6	5	3	2	4	1
proportion of respondents (total = 13)	7 responded; 6 did not complete this question					

Reserved land consistently received high scores in Tables 5.3A and 5.3B, indicating that most criteria can be met. The forests, like the wildlife parks, are government lands and so these results again suggest that either special areas within the forests should be designated for use by pastoralists (given the results in Figures 5.2A, 5.2B and 5.2C), or that additional areas outside the forests should be reserved specially for the use of pastoralists.

The negotiation option received the second best scores. From the high scores given for the economic and technical criteria, it can be concluded that negotiated agreements are likely to generate economic benefits for the actors involved, and are also technically achievable. Freehold and easement received the worst scores.

5.4.4 Securing migration corridors and dry season grazing within pastoral areas

Tables 5.4A and 5.4B present the scores given for the suitability of the tenure options for securing migration and grazing areas within the pastoralists' communal lands. All 13 land professionals responded to the questions.

Table 5.4A shows that the easement option received the highest scores for migration corridors. Its main advantages are in economic benefits, effectiveness and equity, but the use of corridors in the form of easements received low scores for legal acceptability. Because the corridors run across trust lands and across group ranches (see Figure 5.1), and because various pastoral communities are likely to use the same corridors, the land professionals thought it appropriate to secure the corridors as public roads instead of rights of easements. They also noted that the land needs to be owned by a different party for it to be legally possible to create an easement. For this reason easements cannot apply on the trust lands.

The non-ownership right of profit received the highest score for permitting access to dry season grazing areas (Table 5.4B). As in Table 5.4A, the right of profit option received high scores for the economic, effectiveness and equity criteria, its main disadvantage being its legal acceptability. Land must be held by another party for a right of profit to be established, which means that, like easements, this option cannot be used in the trust lands.

The baseline (customary rights as they presently exist) was viewed as the second best option for securing access to migration corridors (Table 5.4A). This suggests that if this option were chosen, there would be no change in the customary land use and management practices. Open access was considered by the land professionals to be the second best tenure option for access to grazing areas, although its total score is just one point higher than the baseline (Table 5.4B). This position is due in large part to the relatively good score (6) for the equity criterion, reflecting the fact that the option is non-discriminatory because it does not exclude others from access to the land.

Table 5.4A: Tenure options for securing access to migration corridors within pastoralists' communal lands

evaluation criteria	freehold	lease	easement	open access	baseline
administrative feasibility	-7	-3	6	-6	0
economic benefits	2	7	12	-3	0
effectiveness	-3	-3	9	-1	0
Equity	-3	-3	9	5	0
technical feasibility	-1	-3	3	4	0
legal acceptability	-6	-7	2	-1	0
Total score	-18	-12	41	-2	0
Position	5	4	1	3	2

Table 5.4B: Tenure options for securing access to grazing within pastoralists' communal lands

evaluation criteria	freehold	lease	profit	open access	baseline
administrative feasibility	-4	-4	4	-4	0
economic benefits	6	3	8	-4	0
effectiveness	-1	-3	8	3	0
Equity	1	-1	9	6	0
technical feasibility	-3	-4	1	1	0
legal acceptability	-4	-6	-3	-1	0
Total score	-5	-15	27	1	0
Position	4	5	1	2	3

5.5 Discussion

5.5.1 Securing pastoralists' land rights in non-pastoral areas

Figure 5.2 shows that most respondents considered that pastoralists' land rights should not seasonally overlap with private tenures in the non-pastoral areas. This reflects the land professionals' approach to dealing with land, their reference point being the legal situation under statutory law. The adjudication process of creating ownership rights terminated the pastoralists' seasonally overlapping land rights in the non-pastoral areas. To resolve this problem – as the Kenya National Land Policy envisages – the land professionals' collective opinion is that reserved land is an appropriate tenure option for securing access to migration corridors and dry season grazing areas in the non-pastoral areas (Tables 5.1A and 5.1B). Using this option may mean realigning corridors and grazing areas outside non-pastoral areas or expropriation of private land.

Expropriation can be seen as the ultimate form of interference in private land rights by the government, in which the government revokes private land rights and takes possession of the land itself or for specific purposes (Molen, 2002). As this process may involve many legal procedures, the suggestion of realigning corridors and grazing areas outside the non-pastoral areas is therefore not a surprising option for securing pastoral land rights in the non-pastoral areas. The support for the reserved land tenure option for migration corridors and grazing areas – whether achieved through expropriation or realignment outside non-pastoral areas – implies that the land professionals prefer one type of land use to overlapping land uses. This may be because they consider the processes involved in synchronizing, coordinating and regulating overlapping land rights for the varied land users to be burdensome and demanding, and hence unattractive. The reserved land option therefore has more potential than overlapping land uses. Negotiations were considered to be the second best option after reserved land, should the actors agree to overlapping land uses. This is in line with practices in countries like Burkina Faso and Guinea. In these countries, pastoralists' migration corridors to non-pastoral (e.g. farming) areas are secured in the pastoral codes and the main means by which pastoralists gain access to private land are negotiations with farmers (Guinea; Burkina-Faso, 2002). This outcome of the survey therefore suggests that negotiations also have potential as a means for granting pastoralists access to private land, although access cannot be guaranteed because it is dependent on the landowner's permission.

5.5.2 *Securing pastoralists' land rights on government land*

In the view of the land professionals, seasonal land rights could be allowed on government land (wildlife parks and forests) during the late year dry season (Figures 5.2A, 5.2B and 5.2C). This result supports the idea that pastoralists' seasonal overlapping interests on government land should be in accordance with temporary rights. It is also in line with the views of experts in pastoralist land rights, who also expressed the view that pastoralists land rights should be restricted to a time window to match their seasonal use of land (Lengoiboni et al., 2011). The land professionals' preference for overlapping seasonal rights on government land (wildlife parks and forests) rather than individually held land may be, at least in part, because they consider government land more accessible to the public than private land.

The Conservation and Management Act on wildlife parks and the Forest Act are embodied in the Government Lands Act in Kenya. One of the objectives of the Government Lands Act is to protect forests and wildlife. The Government Lands Act vests the rights of management and conservation in the government and excludes other forms of land use in the wildlife parks and forests (Kenya, 1948). This automatically disqualifies overlapping pastoral seasonal land rights in the wildlife parks and forests (results in Figures 5.2A, 5.2B and 5.2C). If additional land outside the forests and wildlife parks were to be reserved for pastoral purposes (Tables 5.2A, 5.2B, 5.3A, and 5.3B), under what tenure arrangement should that be?

Subject to any other written law, the Kenya Government Lands Act allows for the registration of limited use rights on 'unalienated Government land'. The Act states that "unalienated Government land" means Government land which is not for the time being leased to any other person, or in respect of which the Commissioner has not issued any letter of allotment'. Examples of government land include areas reserved for a township, farmlands and such like. Examples of limited rights granted on unalienated government land are leases and licence certificates for temporary occupation (Kenya, 1948). These leases or certificates, including their limitations, modifications, transactions and extinguishment of the rights to land, must be entered in the Government register, otherwise they are void (Kenya, 1948). Registration gives the lessees and certificate holders the security to hold and enjoy their rights on the premises without legal interruption by the government, as long as they pay royalties or imposed taxes and fulfil any other conditions stated

in the contract. Although the lease tenure option generally received the worst scores, it appears here that leases on land reserved for pastoral purposes may be a better solution than temporary licences, because according to the Government Lands Act, the license certificates are terminable at short notice. Conditions and regulation of access to and use of the leased land must therefore be confined to the dry seasons only (taking in to account the results of Figures 5.2B and 5.2C).

The use of reserved land for pastoral purposes is supported by examples from a number of countries. In Niger, reserved lands are allocated for the purpose of grazing. They are classified as the public or private domain of the State or of a territorial reserve for grazing or pastoral development (Niger, 2008). In Mongolia, reserved rangelands can be entered in the event of natural disasters, such as droughts. The government determines the extent of the reserved lands, including their boundaries, and the limitations on their use (Mongolia, 2002) In Burkina Faso, local communities and local authorities are involved in establishing local regulations on access to land reserved for grazing for the purpose of sustainable management of these resources (Burkina-Faso, 2002). These examples not only show that reserved lands may serve as an option for securing and preserving the dry season grazing areas, but also that local communities and the government can be involved in laying the basis for ecologically and economically sustainable utilization of grazing resources. In these countries, the users of reserved land do not have the rights to control the land, but they have limited access and use rights crucial for pastoralists.

The second best tenure options for migration corridors and for access to grazing in the wildlife parks are the non-ownership rights of easements and profit respectively (Tables 5.2A and 5.2B). The Registered Land Act (Cap 300) requires easements to be executed by landowners, who thereby give rights to another party to enter their property for a specific purpose. In addition, the nature of the easement, the period for which it is granted and any conditions, limitations or restrictions on its enjoyment should be stated (Kenya, 1963). The easements may be appurtenant (registered land right, therefore belonging to land) or in gross (based on personal agreement and does not require registration). This also applies to the right of profit.

An example of the potential of easements and profit to ensure access to the resources required by pastoralists already exists in the study area. Easements and profit in gross currently allow pastoralists to access

designated water points in the Samburu wildlife park (Lengoiboni et al., 2011). The easements, used communally, lead to water points along the Ewaso Nyiro river, which crosses the Samburu wildlife park and is the only source of water for pastoral communities around the park. Unlike easements and profits appurtenant, easements and profits in gross are based on personal negotiations and therefore do not run with the land. The park management and the Samburu County Council set the rules and regulations of access. In this case pastoralists and local authorities work together to establish pastoralists overlapping interests in the wildlife parks. Coordination and regulations of access and use is therefore possible through the involvement of local authorities. By giving pastoralists the easements and profit in the parks, the local authorities form a link between pastoralism and the legislation governing the wildlife parks, although the wildlife policy and laws (Kenya, 1983, 2007a) prohibit this form of access to wildlife parks. This example reveals a need for the wildlife policy and laws to recognize and support pastoralists' overlapping interests. Such inclusive arrangements of overlapping pastoral land rights and other land uses may further help alleviate potential conflicts, especially in East Africa, where many wildlife parks are located within pastoral areas.

5.5.3 Supporting pastoralism within the pastoral communal lands

Public roads are an appropriate alternative to the limited rights of easements for securing the migration corridors within the pastoralists' communal lands (Table 5.4A). Gray and Gray (2005) explain that four requirements need to be fulfilled in order to create the limited rights of easements: i) every easement is linked to two parcels of land, its benefit being attached to a 'dominant tenement' and its burden being asserted against a 'servient tenement'; ii) land parcels should be close to one another; iii) the dominant and the servient parcels should be owned by different persons; and iv) easements must be created through express grant, implication or prescription. These conditions are irrelevant in the trust lands, but group ranches easily fulfil the requirements for easements. The implications are that regulations on the creation of easements should apply equally, whether the land is held by an individual or a group. However, considering the lengths of the migration corridors in the study area (approximately 100–150 km), the easements would have to lead from one group ranch parcel to another over long distances, which may not be practical. The idea proposed by the land professionals that reserved land (in form of public roads) could also be established for

migration corridors may therefore be more useful. Use of public roads to support migration corridors supported by examples from a number of countries such as Niger, Australia, Norway, Mali, and other countries (Australia, 1989; Mali, 2001; Australia, 2007; Norway, 2007; Niger, 2008).

The right of profit received a high score as an appropriate tenure option for securing grazing areas within the pastoral communal lands (Table 5.4B). Like easements, the land laws supporting their creation are irrelevant in the trust lands. Because customary land rights in the trust lands have not yet been terminated, the existing dry season grazing areas need to be defined and preserved prior to the encroachment of other land uses or tenures. The implications are that the rights of easements and profit require modification in order to be applicable in the trust lands.

Flexibility and mobility are key requirements for pastoral land use, because of the variability in pastoral resources (Niamir-Fuller, 1999). If the customary tenure systems are dynamic, then it is relevant that governments undertake procedures to facilitate their adaptation to formal land tenure systems (Migot-Adholla et al., 1991). Our study offers a rationale by which the transformation of pastoral systems into the formal system need not be associated with the negative impacts arising from reduced mobility. A key outcome in this study is that reserved land for pastoral purposes provides a means through which pastoralists seasonal land rights can be accommodated within the framework of real property rights in the land administration system. Such types of interventions can go a long way towards resolving many of the conflicts associated with deprivation of access to land (Migot-Adholla et al., 1991). Furthermore, because the climatic conditions regulating pastoral land use may not always be precisely defined, special designated areas need to be reserved for access in case of extreme drought (Behnke, 1994). Timely identification and creation of the reserved lands – the corridors and dry season grazing areas – may reduce the likelihood of land being appropriated for other purposes and disputes arising in future. Land professionals and pastoralists must therefore work together to determine where corridors and dry season grazing areas are located so that seasonal land rights may be documented and thus validated.

5.6 Conclusions

This research endeavoured to answer two questions. First, should pastoralists' seasonal land rights be secured as uses overlapping with other land uses? The method used to answer this question was a survey questionnaire among land professionals in Kenya. The second question was which land tenure options (within the land administration domain) are appropriate for supporting pastoralists' seasonal land rights on: i) migration corridors; and ii) dry season grazing areas? The Pugh Decision Matrix was used to evaluate eight categories of tenure options that enable access to land. These tenure options are freehold, leasehold, easements, profit, negotiations, open access, customary rights and reserved land. The tenure options were tested against six criteria used in policy analysis: administrative feasibility, economical benefits, effectiveness, equity, technical possibility and legal acceptability. The criteria can be viewed as tools for measuring issues and considerations likely to affect an option's implementation and its feasibility in achieving the intended goals.

The results of the survey of Kenyan land professionals support the idea that pastoral land rights should reflect the areas of land they use and the periods of time they use them. The results of the decision matrix show that reserved land is considered to be the most appropriate tenure option, with limited rights on migration corridors and dry season grazing areas conferred on pastoralists. The results indicate a preference against pastoralists' seasonal land use overlapping with other land uses in Northern Kenya. This may be attributed to the legal and administrative difficulties regarding their implementation, the fact that most non-pastoral land use actors have indefeasible rights of ownership, and also the varied land uses in the study area. The preference of the land professionals for conferring limited rights to migration corridors and dry season grazing through the establishment of reserved land in Northern Kenya is also consistent with practices in Norway, Mongolia, Australia and Niger (among others).

Understanding how people use the land for production is important when introducing statutory forms of tenures. When integrating pastoral tenures into the formal land administration system, this study has shown that the best tenure option for achieving connectivity is by conferring limited rights on land reserved for pastoral uses. Registration of the limited rights, for example leases (with conditions on seasonal access and use), provides an opportunity to secure pastoralists' seasonal land rights as real property rights to land. This implies that pastoralists would be able to

obtain a strong legal position on security of seasonal access to their migration corridors and dry season grazing areas in the statutory system. Where pastoralists seasonal land rights overlap with other tenures, consideration should be given to how pastoralists should interact with other land uses and their respective laws. Before creating the reserved lands, further research is needed on how and where the migration corridors and dry season grazing areas could be aligned, based on the principles of resource availability.

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Chapter 6

Synthesis

6.1 Main findings

The overall objective of this thesis was to explore how pastoralists' seasonal land rights can be accommodated within the legal framework for real property rights and land administration (LA). I set out to find or suggest real rights to land that reflect the pastoralists' customary rights of access to seasonal resources and which could be supported in the formal system. The research examined the situation in the Samburu–Isiolo–Laikipia and Meru landscapes, where pastoral and sedentary land uses exist side by side. To meet the overall objective, I addressed four separate sub-objectives:

1. Investigate whether pastoralism is still active in Northern Kenya and how formal rights can meet the requirements of the pastoralists' seasonal land use.
2. Understand how non-pastoralist land use actors manage seasonal encounters with migrating pastoralists.
3. Describe how seasonal migrations and access rights could be aligned and secured as rights that overlap with private rights, within the legal framework for real property rights and land administration.
4. Assess what tenure options are potentially suitable for securing seasonal migrations and access rights within the legal framework for land administration.

The results on the first sub-objective show that pastoralism in Northern Kenya is still active. Pastoralists continue to go on extensive seasonal migrations according to their customary norms. Evidence of the spatial extents of the migration corridors and the periods of the migrations was obtained through participatory mapping by the herders. Their migration corridors lead away from the pastoral home areas and sometimes cross non-pastoral areas, where the dominant form of land tenure are property rights in the formal system. In most cases, the seasonal migrations led to the violation of property rights as pastoralists forced their way onto private land. The conclusions for this sub-objective are that an understanding of the spatial and temporal components of pastoral land rights could inform land administrators about where the seasonal land rights exist. The spatial and temporal components of pastoral land use should also challenge land administrators to think about tenure arrangements that may accommodate the co-existence, or overlapping, of spatiotemporal real rights with private tenures.

The results on the second sub-objective, understanding how the private landowners manage seasonal encounters with migrating pastoralists, show that the arrival of pastoralists in non-pastoral areas did not always result in conflict. A minority of non-pastoralist land use actors made personal agreements with the pastoralists to allow them onto their private land. Practical arrangements were made to regulate pastoralists' presence on private land, with rules on grazing fees, grazing regulations and protection of private property from damage. If these access agreements were regularized in land administration as real property rights, most landowners said they would not want to continue to allow pastoralists onto their land. The study concluded that understanding the periods of seasonal encounters and the nature and contents of the access agreements made by landowners could inform, or be used by, land administrators as guiding principles for aligning the rules of spatiotemporal real rights to land to co-exist with private tenures.

The third sub-objective investigated how pastoral spatial and temporal land uses are aligned and supported in the legislation of some countries, with a view to identifying guiding principles for aligning pastoral seasonal land rights for registration as real property rights. Experts on pastoral land rights contributing to this study felt that seasonal rights should not be converted into real property rights, but that pastoralists should rely on negotiations with landowners to secure access to private land. This study argues that there is a risk that negotiations may fail. To avoid such risks, this study highlighted how the spatial and temporal components of seasonal land rights could be aligned within the framework of managing property rights, restrictions and responsibilities (RRRs) when creating real property rights to land. This would allow connectivity between pastoral home areas and seasonal grazing areas to be supported within the legal framework for property rights and land administration.

For the fourth sub-objective, land professionals were invited to propose tenure options with the greatest potential for securing connectivity between seasonal resources. The land professionals implement land policies through land use planning and conferring property rights through the cadastral processes of survey, land rights adjudication and registration. They expressed a preference for pastoralists' land rights not seasonally overlapping with private tenures. Instead, government land could be reserved to secure migration corridors (as public roads) and dry season grazing areas, which involves conferring use rights to pastoralists.

This is viewed as a desirable tenure option to securing pastoralists' seasonal land use within the legal framework for property rights and land administration.

This research contributed to the overall objective of the thesis: to explore how pastoralists seasonal land rights could be accommodated within the legal framework for real property rights and land administration. The spatial extents and temporal aspects of pastoral seasonal land rights in the context of existing property rights and land administration were studied, and possible ways to incorporate them as spatiotemporal real rights to land were described. I established that the connectivity between seasonal resources could be safeguarded within the legal framework for property rights by conferring limited rights on land reserved for pastoral uses, based on the findings of this study. To match the pastoralists' seasonal use of land, their access to and use of the reserved land must be limited to the dry seasons only. Registration of these limited rights implies that pastoralists would be able to obtain a strong legal position regarding security of access to their migration corridors and dry season grazing areas, and all the privileges attached to their limited rights within the statutory system.

6.2 Reflections

Although the debate on the promotion of pastoral production as an economically and ecologically valid use of rangelands may remain controversial, the argument that it is an effective use of land that cannot otherwise be used for agriculture suggests that governments and others will continue to invest in it (FAO, 2001). This is evidenced by the trend in recognizing pastoralists' tenures in the form of communal or group ownership of land under statutory law and the incorporation by some countries of pastoral land rights of migration and access to seasonal grazing into their national legislation (Guinea; Australia, 1989; Mali, 2001; Burkina-Faso, 2002; Mongolia, 2002; Norway, 2007; Niger, 2008). This research supports the view that in the framework of the process of formalizing rights to land in Land Administration, pastoralists' customary land rights need not be omitted as they can be accommodated in a manner that conforms to their seasonal use of land. In reflecting on the main results of this thesis, I attempt in this chapter to answer the question, What are the general contributions and implications of this study on pastoralism within the context of formal land administration?

The general objective of this thesis was to explore how pastoralists' seasonal land rights could be accommodated within the legal framework for real property rights and land administration. This objective was motivated by the considerations included in the National Land Policy of Kenya (2007c), which intends to secure pastoralists' livelihoods and tenure in land and support the nomadic nature of pastoralism. The first phase of the research (Chapters 2 and 3) illustrated how pastoralists' seasonal land rights relate to the laws concerned with property rights and land administration in Kenya. In the second phase of the research (Chapters 4 and 5), solutions were sought on how these seasonal land rights could be aligned to 'fit in' as real rights in the process of formalizing rights to land in land administration.

6.2.1 How to determine where and when pastoralists' seasonal land rights exist

A participatory mapping methodology was applied to study the spatial extents of the seasonal migrations and the locations of the dry season grazing areas. This revealed two different patterns of movements each year in the study area. In the early dry season, which usually lasts from January to March in Northern Kenya, the migrations remained within pastoral communal lands. However, in the late dry season, from July to October, the migration corridors extended into non-pastoralists areas (where private tenures are dominant). The participatory mapping exercise clearly revealed that it is in the late dry season, from July to October, that pastoralists' seasonal land rights overlap with private tenures. Most conflicts between pastoralists and private land holders were also reported in this dry season. This predictable pattern of migration routes, spatial extents and timing suggests that the seasonal land rights could be based on the predictable behaviour of the pastoralists' use of land.

6.2.2 How to determine the content of spatiotemporal land rights between pastoralists and non-pastoralists

The survey research revealed that landowners made agreements with pastoralists to allow them onto their land and to regulate access. These agreements include provisions to protect private property from damage, to restrict access to specific parts of the private land, such as water points, and to specified time periods, requirements to adhere to grazing plans, and conflict resolution mechanisms, including suspension and enforcement. Although pastoralists rely on landowners' consent to obtain access, the contents of these agreements give an indication of the

obligations pastoralists should comply with when on private land if pastoral land rights were to be included in the formal system. The implication here is that formalizing access arrangements for pastoralists and non-pastoralists will require all the stakeholders concerned to be involved in identifying their specific requirements regarding rights and obligations. Before developing policies supporting pastoralism, policy makers and decision makers must draw upon evidence-based analysis to identify and separate the various rights on land, as well as defining their rightful claimants.

6.2.3 Implications for adjudicating and registering spatiotemporal land rights

In the process of formalizing land rights, all existing informal, traditional or customary land rights should be transferred to the formal system in a way that reflects actual practice as closely and fully as possible, including all obligations (FIG, 1995, 1998). The methods used to adjudicate land rights should therefore be able to identify people as owners of land or users of limited rights so that all rights can be converted to statutory and registrable rights (Lawrance, 1985). The results of my research showed that most respondents were not in favour of creating formal pastoral land rights that seasonally overlap with private tenures. The majority of landowners did not want access arrangements allowing pastoralists seasonal access to private land to be formalized (Chapter 3), while the experts on pastoralists land rights recommended that negotiations are better for securing access to private land than registration (Chapter 4). During fieldwork for this thesis in 2007, pastoralists expressed their opposition to subdividing the communal lands into private holdings. While pastoralists desire to continue their pastoral way of life, including their migrations in search of dry season resources (Chapter 3), leaving pastoral land rights outside the realms of formal property rights – based on the results from the landowners and experts – would put pastoralists in a weaker position in the formal legal system: negotiated agreements between pastoralists and landowners cannot provide guaranteed access to private land. Moreover, the tendency in many developing countries towards increasing individualization of land tenure implies that pastoralists will continue to face the threat of their spatiotemporal land rights being extinguished when adjudication confers ownership rights to other parties, such as individuals, groups, companies, the government, or any other legal entity.

The land professionals also suggested that a suitable tenure option for securing pastoralists' spatiotemporal land rights is reserved land, where limited rights can be vested to pastoralists. Limited rights such as easements, profit and leases, among others, are contained in the legal framework for real property rights. To create easements and profits a number of criteria first have to be met. In Chapter 5 I argued that the criteria for the creation of rights of easements and profit are unpractical, and sometimes irrelevant, for the pastoral communal lands. This leaves three possible approaches to formalizing seasonal land rights in migration corridors and dry season grazing areas located within pastoral communal lands. The first is that the government of Kenya creates a new type of limited right that reflects the seasonal uses of the migration corridors (comparable to rights of easements) and dry season grazing areas (comparable to rights of profit), and include these as registrable rights in the land law to empower the pastoralists. The second approach is that the government creates reserved land in the migration corridors and grazing areas, with limited rights conferred to pastoralists. In Chapter 5 I concluded that limited rights of lease are applicable on the reserved land, and that access must be restricted to the dry seasons to match the pastoralists' seasonal use of land. A key theme in this thesis is that the registration of spatiotemporal rights to land provides the means to secure legally recognized rights to land and to regulate the nature and transfer of these rights. It also provides the documentary evidence necessary for resolving property disputes (Dale and McLaughlin, 1999). The third approach would be for the government not to subdivide the pastoral communal lands and let the pastoralists' customary systems govern seasonal access to land, especially where there is no pressure for individualization of land tenure.

As the migration corridors of the July–October dry season currently run across private lands (Chapter 2), how can the injustices caused by neglecting pastoralists seasonal land rights during the adjudication process in the past be corrected? For example, how could reserve land be introduced to secure spatiotemporal land rights where private tenure already exists? This may present major difficulties. Moreover, changes that have occurred over the years (for example, in population density, in land uses, e.g. from pastoral to conservation, and the fencing of land) further complicate the situation. In Chapter 5, the land professionals suggested that it would be more appropriate to realign the migration corridors around private land to avoid pastoralists' land rights to seasonally overlap with private tenures. This suggests that the most

practical option for securing spatiotemporal land rights is to designate reserved land where pastoralists have limited rights of access and grazing. But in essence, it should not really matter who owns the land on which limited rights – based on spatiotemporal rights – are registered. Spatiotemporal rights on land can be registered to pastoral entities whether the ownership rights to that land are registered to an individual, the government or any other legal body. Where different rights on land are held by different parties in the legal framework for property rights, the parties do not have to rely on permission to exercise their rights to the land. This is the main advantage of registration of the rights to land; those holding formal rights can expect their rights to be respected and they can call on the power of the state to enforce their rights (Deininger, 2003). Under this principle, pastoralists are likely to obtain an equally strong legal position regarding security of access to land as the other holders of real property rights. There would therefore be no legal basis in principle for rejecting pastoralists' limited land rights. However, secondary matters could be subject to negotiation. For example, negotiation may be a practical option for regulatory issues, such as introducing flexibility times of access, coordination and regulations on the use of the rights, the use of resources, etc.

6.2.4 Policy implications

Many studies have advocated legally recognizing, codifying and adapting customary rules into statutory systems (Migot-Adholla et al., 1991; Vedeld, 1996; Niamir-Fuller, 1999; Lavigne-Delville, 2000; Fratkin et al., 2003; Mwangi and Dohrn, 2008; Toulmin, 2009). In line with this aim, the challenge facing the Kenya National Land Policy (2007) is to provide an empirically sound basis for formulating policies and programmes to secure seasonal land rights for pastoralists within the legal framework for real property rights and land administration. Mainstreaming spatiotemporal land rights into the formal system should not include conditions unlikely to secure pastoralists' access to the land. Socially desirable real property rights for multiple parties can be achieved when all parties – pastoralists, non-pastoralists, government authorities and even non-governmental organizations – are involved in the process of formulating the rights. Where the seasonal overlapping of spatiotemporal land rights with other tenures is justified, the legal framework should specify the obligations on each party involved.

Efforts therefore need to be directed at putting in place programmes to identify and define what land rights exist and where, and institutions to

protect those land rights. The programmes need to capture and document all forms of tenure – customary, formal, informal, etc. – as they exist in reality, in preparation for their recognition or transformation into the formal system. Determining the scale of spatiotemporal rights to land will require programmes to clarify and establish the migration routes and the location of the dry season grazing areas. This should include retracing the migration corridors through areas that have now become private land. Consideration should also be given to establishing buffer zones to cater for access during critical periods, for example in extreme droughts (Behnke, 1994). Documentation and eventual demarcation of the boundaries of community lands can reduce the threat of encroachment by outsiders and may help in finding alternative solutions for compensation where pastoral land rights have previously been neglected and extinguished. Procedures used by communities to manage rights within the group can also be defined and documented (Deininger, 2003). Such programmes should help in the design and implementation of policies and land laws enabling access to land, and even promote social justice when the land rights are tampered with, based on equal treatment of all actors involved.

Implementing pastoral policies may require the provision of infrastructures to support pastoralists and their livestock during the migrations. These could include facilities for communication between the relevant actors about the migration calendars and the construction of water holes, resting stations and night camps on the migration corridors and in the dry season grazing areas. Such amenities are essential for herders to comply with the associated regulations during their migrations. They may also prevent herders from deviating from designated migration corridors or grazing areas.

Spatiotemporal rights also concern the seasonal interactions of pastoral land use and other land uses, such as forests and crop farming. Policies need to consider how pastoralists should interact with other land uses. Moreover, the implementation of policy programmes supporting seasonal land rights should incorporate evaluation and monitoring of those rights in relation to the other aspects of land administration. As stated earlier in this thesis, land administration is a process concerned mainly with three aspects within the overall context of land management: tenure, land value and use of the land. Spatiotemporal rights to land naturally fall under land tenure, but should also be expected to have an effect on the value of land and on land use, especially where land rights overlap. Pilot studies

may be needed to assess how the policies and land laws can include all the required land rights as well as being flexible enough to allow for adjustments to improve them.

Ultimately, securing spatiotemporal land rights and land use in the legal framework for property rights and land administration will depend heavily on political will. It is worth noting that the conditions of pastoralists will become more difficult if land is expropriated by both farmers and conservation lobbies, and so working with pastoralists on the basis of understanding their production systems could also help to protect their way of life and sustain their livelihoods in marginal environments (FAO, 1999).

Lastly, this research complements other studies of communities in which land rights are defined by spatiotemporal land use, such as hunter gatherers, communities dependent on collecting seasonal wild fruits, etc. Empirical research to understand the mechanisms that govern resource use on a spatiotemporal basis may provide avenues for regulating and sustaining such livelihoods within the legal framework for property rights and land administration.

6.3 An eye to the future

In this thesis I have given evidence for and discussed the weak legal position of pastoralists' land rights within the formal system of land administration. It is clear that legal provisions need to be made for pastoralists to guarantee their seasonal access to migration corridors and dry season grazing areas, and that their rights need to be enforceable within the statutory system. To do so, the following questions need to be investigated in future research:

- How could the limited rights of easements and profit be modified to suit the requirements of pastoralists' seasonal rights on migration corridors and dry season grazing areas respectively?
- What criteria must be met for the creation and allocation of limited rights of easements and profit (applicable to pastoralists) in both pastoral and non-pastoral areas?
- How should the injustices caused by neglecting pastoralists' seasonal land rights during the adjudication of land rights in the past be corrected? and
- How can reserved land be established to secure pastoral seasonal land rights in areas where private tenures already exist?

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Summary

This thesis argues that incorporating pastoral land rights into the formal system requires identifying and securing pastoralists' rights on migration corridors and dry season pastures in a manner that, first, reflects their customary practices about 'where' and 'when' they require access to the land, and second, aligning both the 'when' and the 'where' within the legal framework for property rights and land administration. This approach may facilitate the legal recognition of pastoralists' seasonal mobility and access to required resources in the formal system. Legal empowerment also gives pastoralists the ability to use the formal law to enforce their land rights, thereby securing their access to required seasonal resources.

The main objective of this thesis is to assess how pastoralists' seasonal land rights could be accommodated within the legal framework for property rights in land administration. Focusing on Northern Kenya, the main objective was divided into four sub-objectives:

1. Investigate whether pastoralism is still active in Northern Kenya and how formal rights can meet the requirements of the pastoralists' seasonal land use.
2. Understand how non-pastoralist land use actors manage seasonal encounters with migrating pastoralists.
3. Describe how seasonal migrations and access rights could be aligned and secured as rights that overlap with private rights, within the legal framework for property rights and land administration.
4. Assess what tenure options are potentially suitable for securing seasonal migrations and access rights within the legal framework for land administration.

Each of these sub-objectives are analysed in Chapters 2 to 5. The chapters are based on a series of papers published in, or submitted to international peer-reviewed journals.

Chapter 2 assesses how the existing land laws supporting property rights are able to serve the requirements of pastoralists' seasonal land use. This chapter forms the basis for the thesis. Data on the degree of livestock dependency among pastoralist communities, the spatial extent and patterns of their dry season migrations, the resulting encounters between pastoralists and non-pastoralist land use actors, and the perceptions of

land rights held by actors were collected through a variety of methods and analysed. The results show that pastoralism is still active. The migration corridors reveal that herders maintain extensive dry season mobility, even though some of the corridors currently overlap with areas where land is privately owned by non-pastoralist land use actors. Moreover, the results show that most non-pastoralist land use actors have their land rights registered, but seasonal encounters with migrating pastoralists persist as pastoralists continue to exercise customary rights of communal use. This chapter concludes that existing land laws and property rights in land administration are suitable for sedentary land use, but do not address how to serve pastoralists land rights in time and space. Also, the map of the pastoralist's migration routes obtained indicated that it is possible to predict where pastoralists will be at a given time/drought period. This information could be used by decision makers as a foundation for including pastoralists' spatiotemporal land rights in land administration.

Chapter 3 looks at the consequences for migrating pastoralists of the adjudication to non-pastoralist land users of exclusive real property rights during the process of setting up a cadastre in a land administration. It examines how non-pastoralist land use actors manage encounters with migrating pastoralists who need to enter their land to follow their traditional migration routes. The results of empirical research show that only a small percentage of non-pastoralist land users are willing to negotiate access contracts with the pastoralists; further, the majority are unwilling to have access arrangements formalized in the process of Land Administration. As land is continuously being adjudicated, surveyed and allocated for private purposes, the imposition of statutory rights on pastoralists' areas, including migration corridors, permanently cuts out and extinguishes pastoralists' rights to mobility and their access to required resources. The concluding argument in this chapter is that land adjudication should identify and confer all existing land rights to all users in order to avoid obstruction or renegotiation of pastoralists' access rights.

Chapter 4 explored how pastoral seasonal land rights could be secured through registration as overlapping rights. An opinion survey of experts on pastoral land rights revealed the view that seasonal migrations can be supported, but that access to grazing should be subject to negotiation with landowners. This chapter argues against making access subject to personal agreements, stressing the risk of negotiations failing, mainly

because negotiated agreements are only binding on the parties involved. To avoid the risk of failure to acquire access through negotiation, registration is proposed as a legal tool to ensure security of access. The adjudication process for conferring private rights on land should view pastoral rights as being dynamic, because they apply across different areas at different times. The chapter discusses the attributes of pastoral rights within the framework of managing property rights, restrictions and responsibilities (RRRs), and describes how spatiotemporal rights could be aligned and included in the legal system through registration.

Chapter 5 explores the tenure options potentially suitable for securing and protecting migration corridors within the legal framework for property rights. It focuses on the various tenure options that allow access to and use of land in Kenya: statutory (ownership and non-ownership rights), government land, customary rights, open access and negotiations. The opinion survey of land professionals led to the conclusion that spatiotemporal land rights can be secured within the legal framework for property rights and that government land reserved for pastoral purposes is a promising tenure option for securing spatiotemporal land rights. Where customary rights have not already been extinguished, migration corridors could be secured as public roads (government land) and dry season grazing areas could be secured as reserved land for the purpose of seasonal grazing. This would give pastoralists limited rights of use on the government lands. Through registration, the limited rights are enforceable within the statutory system of land administration. Where customary rights have already been extinguished, realignment of migration corridors or the establishment of new corridors and grazing areas might be necessary to avoid pastoralists' seasonal land rights overlapping with private tenures or other land uses.

The last chapter reflects on the main outcomes of the thesis. It argues that legal provisions need to be provided to cater for pastoralists' seasonal land rights on migration corridors and dry season grazing areas. This chapter emphasizes that registration of the seasonal land rights gives pastoralists legal protection of their land rights and thus security of access to seasonal use of the land.

Summary

Samenvatting

Deze dissertatie gaat over het seizoensgebonden gebruik van trekroutes en weidegronden door herdersvolken en hoe dit gebruik geregeld zou moeten worden in de formele wetgeving. In de eerste plaats is hier van belang hoe de lokale praktijk is, als herders toegang willen hebben tot grond (in termen van 'waar en wanneer') en in de tweede plaats hoe dit 'waar en wanneer' zich verhoudt tot het vigerende wettelijke raamwerk dat de toegang regelt tot grondbezit en grondgebruik. Deze benadering maakt het mogelijk dat de seizoensgebonden mobiliteit van herdersvolken en de daaraan verbonden toegang tot trekroutes en weidegronden wettelijk wordt erkend. De wettelijke versterking van hun positie geeft de herders de mogelijkheid om de formele wet te gebruiken om hun rechten op die gronden veilig te stellen.

De hoofddoelstelling van deze dissertatie is om na te gaan hoe de rechten op bezit en gebruik van grond door herders deel uit kunnen gaan maken van de onroerend goed wetgeving.

Met een focus op het noorden van Kenia, is de hoofddoelstelling van het onderzoek uitgewerkt in een viertal subdoelstellingen.

1. Het onderzoeken of herdersvolken nog steeds hun wijze van veeteelt bedrijven en of - momenteel - formele rechten tegemoet komen aan de eisen van seizoensgebonden mobiliteit, en wel in het noorden van Kenia.
2. Het beschrijven hoe eigenaren en gebruikers van grond handelen als zij geconfronteerd worden met een herdersvolk dat hun grond met hun kudde wil passeren of wil gebruiken om hun kudde te laten grazen.
3. Het beschrijven of en hoe de rechten van herders om naar de weidegronden te trekken en daar te verblijven, in overeenstemming kunnen worden gebracht met de wet door ze te beschouwen als rechten die een overlap hebben met bestaande private eigendomsrechten.
4. Het onderzoeken welke vormen van zakelijke rechten in potentie geschikt zijn om het recht op migratie naar weidegronden en het gebruik van die weidegronden zelf veilig te stellen.

Elk van deze subdoelstellingen worden geanalyseerd in respectievelijk de hoofdstukken 2-5. De hoofdstukken zijn gebaseerd op artikelen die zijn

gepubliceerd in dan wel zijn aangeboden aan internationale wetenschappelijke tijdschriften.

Hoofdstuk 2 onderzoekt hoe goed het bestaande - door de wet ondersteunde - stelsel van eigendom- en gebruiksrechten het seizoensgebonden grondgebruik van herders ondersteunt. Dit hoofdstuk vormt de basis voor de rest van de dissertatie. Verschillende onderzoeksmethoden werden toegepast om relevante gegevens te verzamelen over de mate waarin herdersvolken in de genoemde gebieden afhankelijk zijn van de exploitatie van hun vorm van veeteelt, over de ruimtelijke en tijdsaspecten van de omtrekkende bewegingen die zij met hun kudde maken om voedzame weidegronden te bereiken en te begrazen, over wat er gebeurt als zij daarbij te maken krijgen met private grondeigenaren en over hoe betrokken partijen daarbij denken welke rechten ieder heeft (wat ieders juridische positie is). Het onderzoek toont aan dat de agrarische bedrijfsvorm van de exploitatie van rondtrekkende kuddes nog steeds gaande is: herders trekken nog steeds rond met hun kuddes en wel afhankelijk van het seizoen. Zij maken daarbij gebruik van paden die van oudsher bestaan, hoewel die paden soms gelegen zijn op gronden die tegenwoordig in private eigendom zijn. Daarbij blijkt dat - hoewel deze private eigendomsrechten krachtens de bestaande onroerend goed wetgeving vaak geregistreerd zijn en dus een 'exclusief' karakter hebben - er voortdurende confrontaties zijn met herdersvolken die menen dat zij krachtens 'ongeschreven gewoonterecht' ook toegang tot die gronden hebben. Dit hoofdstuk concludeert dat de bestaande onroerend goed wetgeving vooral de eigendomsrechten op een vaste locatie ('perceel') ondersteunt, maar niet de rechten van herdersvolken daar waar de toegang en het gebruik van grond afhankelijk is van verschillende plaats en tijd. Het onderzoek wijst overigens uit dat deze plaats en tijd zeer wel te voorspellen zijn, zodat duidelijk is waar herdersvolken zich op een zeker moment bevinden (of willen bevinden). Deze kennis komt van pas als men de rechten van herdersvolken op wil nemen in het formele wettelijke systeem

Hoofdstuk 3 kijkt naar de consequenties voor deze rondtrekkende herders van de wijze waarop destijds private rechten op grond zijn uitgegeven of vastgesteld onder de bestaande wetgeving, waardoor private eigenaren exclusieve rechten hebben gekregen op toegang en gebruik van hun grond. Hoe gaan deze eigenaren om met herdersvolken, als deze met hun kuddes over hun grond willen trekken of die willen gebruiken om hun kuddes te laten grazen en daar krachten gewoonterecht aanspraak op

maken. Empirisch onderzoek toont aan dat slechts een gering percentage grondeigenaren bereid is om met de herders een regeling te treffen. Als men al tot een 'overeenkomst' komt, dan wil van dit beperkte aantal een meerderheid niet dat deze overeenkomsten een zekere formele status krijgen, bijvoorbeeld door registratie.

Aangezien de uitgifte en het vaststellen van private eigendomsrechten een continu proces is in Kenia, wordt de bewegingsruimte van herders steeds geringer, zowel daar waar het gaat om het gebruik van (andermans) grond om naar voedzame weidegronden te trekken, als wel het gebruik van zulke weidegronden zelf om de kudde te laten grazen. Het hoofdstuk concludeert dan ook dat het proces van uitgeven en vaststellen van private eigendomsrechten op grond een volledig beeld moet geven van alle geldende rechten, zodat de rechten van herdersvolken niet genegeerd worden, waardoor thans herdersvolken steeds opnieuw moeten onderhandelen over het gebruik van grond die ze van oudsher gebruikten.

Hoofdstuk 4 onderzoekt of de gewoonterechten van herdersgemeenschappen veilig gesteld zouden kunnen worden door ze te beschouwen als rechten die geregistreerd worden als beperkte rechten op een zaak, in de zin dat zij bestaande private eigendomsrechten overlappen. Experts op dit gebied - gevraagd naar hun mening - vinden dat de seizoensgebonden bewegingen van herders weliswaar ondersteund zouden moeten worden, echter middels onderhandeling met de private grondeigenaren. In het hoofdstuk wordt de stelling ingenomen dat dit juist de zwakke positie van de herders continueert, omdat onderhandelingen immers ook verkeerd kunnen aflopen ten nadele van de herders. Daarbij komt dat onderhandelingen geen zakelijk recht scheppen (met als kenmerk de derdenwerking), maar een persoonlijk recht (namelijk een verbintenis, die slechts geldig is tussen partijen). Daarom wordt in dit hoofdstuk gepleit voor het versterken van de juridische positie van herders door hun recht op toegang en gebruik van gronden voor hun seizoensgebonden bewegingen als een zakelijk recht op te nemen in het formele wettelijke systeem door registratie.

Bij het uitgeven en vaststellen van rechten op grondbezit moet er rekening mee worden gehouden dat de rechten van herdersvolken van nature dynamisch zijn, omdat deze toegepast moeten worden verschillend naar plaats en tijd. Het hoofdstuk gaat dan in op de beschrijving van dit soort rechten - variërend in plaats en tijd - in termen van de trits 'rechten', 'beperkingen' en 'verantwoordelijkheden' en beschrijft hoe

deze dynamische rechten in het formele systeem kunnen worden opgenomen.

Hoofdstuk 5 geeft een beschouwing wat voor soort 'rechten' in beginsel geschikt zijn om binnen het bestaande wettelijke raamwerk de herdersvolken te ondersteunen. Daarbij wordt gekeken naar wat zich in Kenia voordoet aan mogelijkheden, zoals daar zijn de wettelijke eigendom, staatseigendom, gewoonterecht, non-exclusief gebruik ('vrije toegang'), en persoonlijke rechten zoals overeenkomsten. Experts in Kenia op het gebied van onroerend goed recht (bijvoorbeeld gecertificeerde landmeters van de Institution of Surveyors of Kenia ISK), gevraagd naar hun opvatting, menen dat rechten op grond 'naar tijd en ruimte' zekergesteld kunnen worden in het wettelijke stelsel en dat de vorm van 'staatsgrond' daarvoor een veelbelovende optie is. Daar waar gewoonterechten nog uitgeoefend kunnen worden, kunnen trekroutes de status krijgen van openbare weg, en de weidegronden de status van staatsgrond speciaal gereserveerd voor dat doel. Dat zou herders een formeel beperkt zakelijk recht geven op staatsgrond, welke rechten door registratie ook ingeroepen kunnen worden. Daar waar door eerder gerealiseerde uitgifte van private eigendomsrechten deze gewoonterechten illusoir zijn geworden, zou de overheid in Kenia nieuwe migratiepaden en weidegronden moeten aanwijzen en veiligstellen, zodat overlap met privaat grondeigendom wordt vermeden.

Hoofdstuk 6 bediscussieert de resultaten van het onderzoek. Daarbij wordt beargumenteerd dat een formele voorziening noodzakelijk is ten einde de seizoensgebonden mobiliteit van herdersvolken wettelijk te steunen. Het hoofdstuk benadrukt dat formele registratie van seizoensgebonden eigendom- en gebruiksrechten van herders aan hen de noodzakelijke rechtszekerheid biedt, zodat de toegang tot seizoensgebonden grondgebruik voor hen veiliggesteld is.

Ufupisho

Tasnifu hii inaonelea kwamba kujumuisha haki za ardhi katika mfumo rasmi kunahitaji utambuzi na uhifadhi wa haki za kutumia vijia vya uhamaji na machungaji wakati wa msimu wa jua kwa namna ambayo itaonyesha mazoea yao ya kimila juu ya “mahali” na “wakati” ambapo wafugaji wanahitaji ruhusa ya kutumia ardhi; na pili, kufungamanisha “wakati” na “mahali” ndani ya mfumo wa kisheria wa umilikaji wa mali na usimamizi wa ardhi. Mkabala huu utawezesha uhamaji na ruhusa ya matumizi ya raslimali zinazohitajika ya wafugaji kutambulika kisheria katika mfumo rasmi. Uwezeshwaji wa kisheria pia unawapa wafugaji uwezo wa kutumia sheria rasmi kusimamia haki zao za ardhi, kwa kufanya hivyo wanalinda fursa zao za matumizi ya raslimali za msimu wanazozihitaji.

Lengo kuu la tasnifu hii ni kutathmini namna ambavyo haki za msimu za matumizi ya ardhi ya wafugaji zinaweza kuingizwa katika mfumo wa kisheria wa haki za umiliki wa mali na za usimamizi wa ardhi. Kwa kutumia kigezo cha Kenya Kaskazini, lengo kuu limevunjwa katika malengo madogo madogo manne:

1. Kuchunguza kama ufugaji bado uko hai, na jinsi ambavyo haki rasmi zinavyoendana na mahitaji ya matumizi ya msimu ya ardhi Kenya kaskazini.
2. Kuelewa jinsi ambavyo watumiaji wa ardhi ambao si wafugaji wanavyomudu uwepo wa wafugaji wahamaji.
3. Kuelezea namna ambavyo uhamaji wa msimu na haki za matumizi ya ardhi zinaweza kuchukuliwa na kulindwa kama haki zisizoweza kutenganishwa na haki binafsi, ndani ya mfumo wa kisheria unaowezesha umiliki wa makazi na usimamizi wa ardhi.
4. Kutathmini njia mbadala zinazoweza kuwa nzuri kuwezesha uhamaji wa msimu na matumizi ya ardhi katika mfumo wa kisheria wa usimamizi wa ardhi.

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Sura ya 2 inatathmini namna ambavyo sheria za ardhi zilizopo zinazosimamia haki za umiliki mali zinaweza kusimamia mahitaji ya msimu ya matumizi ya ardhi. Sura hii ndiyo msingi wa tasnifu yenyewe.

Taarifa juu ya kiwango cha utegemezi wa wanyawa wa jamii za wafugaji, usambaaji na miundo ya uhamaji wakati wa kiangazi, migogoro inayojitokea baina ya wafugaji na wasio wafugaji, na mtazamo juu ya haki za umiliki wa ardhi za wahusika wenyewe zilikuswanywa kwa kutumia mbinu mbalimbali na zikachambuliwa. Matokeo yanaonyesha kwamba ufugaji bado uko hai. Vijia vya uhamaji vinaonyesha kwamba wafugaji wanaendeleza uhamaji mkubwa sana katika vipindi vya ukame, hata pale ambapo baadhi ya vijijia kwa sasa vinaingiliana na maeneo ambayo ardhi inamilikiwa binafsi na watumiaji wengine ambao si wafugaji. Zaidi ya hayo, matokeo yanaonyesha kwamba watumiaji wa ardhi ambayo si kwa ajili ya ufugaji wamesajili umiliki wao, lakini mikabala ya msimu na wafugaji wahamiaji imeendelea kuwepo kwa sababu wafugaji wameendelea kutumia umiliki wa ardhi wa kijadi wa kijamii. Sura hii inahitimisha kwamba sheria za ardhi na za umiliki wa mali zilizopo kwenye usimamizi wa ardhi ni nzuri kwa matumizi tulivu ya ardhi, lakini hazishuhulikii haki za msimu na za maeneo za wafugaji. Pia njia za uhamaji za wafugaji na miundo iliyopo imeonyesha kwamba kuna uwezekano wa kutabiri wafugaji wataelekea wapi katika kipindi gani/msimu gani wa ukame. Taarifa hizi zinaweza kutumiwa na watoa maamuzi kama msingi wa kujumuisha haki mahalia na za muda za wafugaji za usimamizi wa ardhi.

Sura ya 3 inaangalia madhara ya uhamaji wa wafugaji kwa haki za watumiaji ardhi ambao si wafugaji juu ya haki kamili ya umiliki wa mali ndani ya mfumo wa uandaaji wa daftari la Usimamizi wa Ardhi. Inauliza ni kwa vipi watumiaji wasio wachungaji wanashuhulikia wafugaji wahamaji, ambao kutokana na njia zao za asili za uhamaji, wanahitaji kutumia ardhi yao? Matokeo ya utafiti yanahitimisha kwamba ni asilimia ndogo sana ya watumiaji wasiowakulima wako tayari kujadiliana na wafugaji hao juu ya wao kutumia ardhi yao; zaidi ya hayo, wengi hawapendi wafugaji wahalalishiwe matumizi ya ardhi hiyo kwa msimu. Kwa namna ambavyo ardhi inazidi kuwa na migogoro, ardhi iliyopimwa na kugawiwa kwa matumizi binafsi, kulazimisha haki za kisheria za matumizi ya wafugaji, pamoja na vijia vya uhamaji, zinaondoa moja kwa moja na kufutilia mbali haki za wafugaji za kuhamahama na kutumia raslimali zinazohitajika. Hoja ya mwisho katika sura hii ni kwamba utatuzi wa migogoro ya ardhi uonyeshe na kugawa haki zilizopo za matumizi ya ardhi kwa watumiaji wote ili kuondoa vikwazo au kuwataka wafugaji kuomba ruhusa ya matumizi ya ardhi kila mara.

Sura ya 4 imechunguza namna ambavyo haki za matumizi ya msimu ya ardhi zinavyoweza kupatikana kwa njia ya usajili mtambuka wa ardhi. Uchunguzi wa maoni kutoka kwa wataalamu wa haki ya matumizi ya ardhi unaonyesha kwamba uhamaji wa msimu unaweza kukubalika, lakini ruhusa ya kuchunga ni lazima itokane na majadiliano na wamiliki ardhi. Hoja ya Sura hii ni kwamba ruhusa ya matumizi ya ardhi isitokane na majadiliano binafsi baina ya watu, ikikazia uwezekano wa makaubaliano kutofikiwa. Hii ni kwa sababu makubaliano yanayotokana na majadiliano yana nguvu kwa wale tu waliohusika na makubaliano hayo. Ili kuepusha hatari ya kutofanikiwa kwa majadiliano katika upatikanaji wa ruhusa ya matumizi ya ardhi, inapendekezwa kwamba usajili uwe ni njia mbadala ya kisheria ya kulinda haki hiyo ya matumizi ya ardhi. Mchakato wa majadiliano kwa nia ya kutoa haki ya matumizi ya ardhi binafsi kwa matumizi ya ufugaji uone kwamba haki za wafugaji kama hai, kwa sababu zinaweza kutumika sehemu mbalimbali katika nyakati mbalimbali. Makala inajadili sifa za haki za wafugaji ndani ya mfumo wa usimamizi wa mali, vizuizi na majukumu (RRRs), na kuelezea namna ambavyo haki msimu-mahali zinaweza kubebeshwa na kujumuishwa ndani ya mfumo wa kisheria kwa njia ya usajili.

Sura ya 5 imeangalia namna mbalimbali za umiliki wa ardhi ambazo zinaweza kuwa nzuri kuendeleza na kulinda vijia vya uhamaji ndani ya mfumo wa sheria unaowezesha haki za umiliki wa mali. Imejikita kwenye fursa mbalimbali zinazowezesha upatikanaji na matumizi ya ardhi nchini Kenya, kama vile za kisheria (haki za umiliki au zisizo za umiliki), ardhi ya serikali, ya kimila, ya wazi au ya makubaliano. Ukusanyaji wa maoni kutoka kwa wataalamu wa ardhi umeniwezesha kuhitimisha kwamba haki msimu-mahamila zinaweza kuingizwa ndani ya mfumo wa sheria ya umiliki wa mali; na kwamba ardhi ya serikali iliyohifadhiwa kwa ajili ya matumizi ya uchungaji ni namna mbadala iliyo nzuri zaidi ya kuwezesha haki ya tumizi ya ardhi msimu-mahamila. Mahali ambapo umiliki wa kijadi haujasitishwa, vijia vya uhamaji zinaweza kutumiwa kama barabara ya umma (ardhi ya serikali), na maeneo ya uchungaji wakati wa kiangazi yanaweza kutunzwa kama hifadhi za machungo ya msimu. Kwa namna hii, wafugaji wanapata kiasi fulani cha haki kutumia ardhi ya serikali. Kwa njia ya usajili, hiyo nusu haki inaweza kutekelezeka ndani ya mfumo wa kisheria ya Usimamizi wa Ardhi. Wakati huo huo, pale ambapo haki za kimila zimekwisha kufutwa, itakuwa ni lazima kuwe na uanzishwaji au uelekezaji mpya wa vijia na machungaji mapya kwa nia ya kuondoa muingiliano wa haki

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Coming from a nomadic pastoralist community, from my youth I have been aware of the tensions experienced by pastoralists when migrating with livestock in search of dry season resources. My immediate family did not practice the seasonal migrations, and so I never quite understood the reason for the tensions. But I had heard that the tensions occurred because the herders were not allowed to pass through certain areas. Because these tensions occurred frequently, this phenomenon made an impression on me and stayed at the back of my mind. But that is not the reason I wrote this thesis. The opportunity to do this PhD research on how the seasonal land rights of nomadic pastoralists could be accommodated within the legal framework of property rights and land administration was unexpected, and came at a time when I had no in-depth knowledge about land cadastres and land administration. It proved to be a challenging undertaking and it took a lot of effort to learn about cadastres and land administration from scratch. Looking back, it seems strange that after so many years I now have a deeper understanding of the seasonal tensions. But I am also humbled to have had an opportunity to investigate a potential solution to the problem. I hope the outcome will be useful not only to the pastoralists of Northern Kenya, but in other regions as well.

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About the Author

Curriculum vitae



Monica Lengoiboni was born on 25 March 1976 in Maralal, Samburu County in Northern Kenya. She undertook her primary education at St Mary's Girls in Maralal, which she completed in 1989. She joined Kapropita Girls High School in Kabarnet in 1990 for her secondary school education, and completed in 1993. She obtained a BA degree in Geography (major) and Biology (minor) at the University of Eastern Africa, Baraton in 1999. In the same year, she was employed at Samburu

District Development Programme (SDDP) as a field officer to facilitate community development. SDDP was a bilateral programme sponsored by GTZ. In 2001, she pursued further studies at Wageningen University, and obtained an MSc. degree in Geoinformation Science in 2003. After her studies she did volunteer work at Earthview Geoconsultants in Nairobi for 5 months. Later on she moved to Maralal and continued with volunteer work and community development at the Arid Lands Resource Management Project. In 2005, she was employed at Kadaster International, a department of the Netherlands' Cadastre, Land Registry and Mapping Agency (Kadaster). From January 2007 to December 2010 she was involved in a 4-year PhD research program at ITC, in collaboration of the Kadaster and Wageningen University.

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Lengoiboni, M., van der Molen, P. and Bregt, A.K. (2009) Pastoralism within land administration: seasonal interactions and access agreements between pastoralists and non-pastoralists: a case of Northern Kenya. In: Proceedings of WOW4: workshop on the workshop 4: workshop on political theory and policy analysis, workshoppers around the world, what lessons have we learned? Indiana University Bloomington, June 3-6, 2009. Bloomington: Indiana University

PE&RC PhD Education Certificate

With the educational activities listed below the PhD candidate has complied with the educational requirements set by the C.T. de Wit Graduate School for Production Ecology and Resource Conservation (PE&RC) which comprises of a minimum total of 32 ECTS (= 22 weeks of activities)



Review of literature (6 ECTS)

- Pastoralists seasonal land rights in land administration: a study of Northern Kenya

Writing of project proposal (4.5 ECTS)

- Spatio temporal land rights in land administration: sharing land with nomadic people through spatio temporal arrangements (2007)

Post-graduate courses (7.9 ECTS)

- Information management research methodologies; Tilburg University (2007)
- Scenario development: understanding and applying multi-scale and participatory concepts and tools; Wageningen University (2007)
- Participatory rural appraisal methodology (2007)

Competence strengthening / skills courses 3.6

- Techniques for writing and presenting scientific papers; Wageningen University (2007)
- Information skills; ITC (2007)
- Scientific writing for non-native speakers; ITC (2008)
- How to supervise MSc students; UT (2008)

PE&RC Annual meetings, seminars and the PE&RC weekend 2.7

- PE&RC Day (2008)
- PE&RC Weekend (2008)
- ITC PhD Weekend (2009)
- Scaling and governance (2009)
- PE&RC Day (2009)

Discussion groups / local seminars / other scientific meetings (8.5 ECTS)

- PhD Tutorial, and PGM PhD Discussion Club (2007-2009)
- Africa Studies Centre seminars; Leiden (2008)
- PhD Day ITC (2010)

International symposia, workshops and conferences (7.4 ECTS)

- FIG Working week; Stockholm, Sweden (2008)
- Land Governance in Support of the Millennium Development Goals: Responding to New Challenges; Washington DC, USA (2009)
- Changing Governance, Land Use and Livelihoods among Kenyan Pastoralists; Indiana University, Bloomington, USA (2009)
- FIG International Congress Sydney, Australia (2010)

Lecturing / Supervision of practical's / tutorials (9 ECTS)

- Research skills; 10 days (2008)
- The social tenure domain model for land administration; Ethiopia; 10 days (2009)
- Principles of land administration; 2 days (2009, 2010)
- Land policy and land management; 2 days (2009, 2010)
- Data handling technologies; 6 days (2010)

Supervision of 2 MSc students; 2 hours per week per student (6 ECTS)

- Modelling pastoral mobility to accommodate pastoral land use in land administration, a case study of the Isiolo Area; Kenya
- Analysis of pastoralists and farmers in Northern Tanzania from a land administration perspective

ITC Dissertation List

http://www.itc.nl/Pub/research/Graduate-programme/Graduate-programme-PhD_Graduates.html