East African rangelands, though limited by aridity and seasonality, are fertile areas supporting major livestock production systems, spectacular wildlife populations, and, increasingly, smallholder and large-scale commercial farming. While they have for centuries been dominated by pastoral and agro-pastoral peoples, the key resources (water and fertile land) have continually been contested by different ethnic and occupational groups. Mobility, in-migration, resource competition, negotiated access, conflict, and assimilation have thus remained perennial issues throughout their history. In the course of the twentieth century, ever larger areas have been expropriated for conservation or cultivation (e.g. Homewood and Rodgers 1991; Igoe and Brockington 1999; Ndagala 1990b; Fratkin 2001), with formerly fluid boundaries crystallising into legally defined, often patrolled and/or fenced, exclusion zones (Homewood 1995). Outbreaks of violence in East African rangelands have been variously presented as: Malthusian competition across ethnic and economic fault lines due to resource availability declines (Ndagala 1992a; Otieno 2002a, 2002b); resource competition between minority (resident) and majority (colonising) ethnic groups (Ole Kuney 1994; Africa Law Review 1998); part of a direct response of marginalised people to systematic dispossession (Shivji and Kapinda 1998; Munei and Galaty 1999); orchestrated events stage-managed by an elite seeking to retain monopoly on power and resources (Klopp 2001); or some combination of these political and environmental pressures and responses (Dietz 1996). However, within this broad range of contributing factors, in-migration is repeatedly identified both by local people and by outside observers as a source of tension (e.g. Ole Kuney 1994; Munei and Galaty 1999; Klopp 2001).

The present paper makes a comparative analysis of access to and control of resources by households of different duration of residence and ethnic affiliation in buffer zones surrounding the Serengeti-Mara Ecosystem (SME), which straddles the Kenya-Tanzania border. Our study describes patterns of tenure and access among Maasailand inhabitants in the two countries, and the extent to which the competition and inequalities they reveal are consistent with current
varying interpretations and theories of conflict in developing nations (Stewart 2002; Klugman et al. 1999; Hussein 1998; Kurimoto and Simonse 1998). The cross-border comparisons make it possible to contrast the outcomes of comparable ethnicities, economic systems and ecological processes in the different national economic and political contexts of Kenya and Tanzania. The discussion examines how trajectories of exclusion and socio-economic change have been influenced by contrasting national and regional policies, and have in turn influenced social cohesion, or conversely, conflict. We focus on the following research questions:

1. Are patterns of tenure and resource access or control in SME associated with duration of residence and/or with in-migrant status?
2. Are patterns of tenure and resource access or control in SME associated with ethnicity?
3. How do patterns of tenure and access to or control of resources in SME differ between Kenya and Tanzania study sites?
4. To what extent are patterns of access to and control over resources, and associated patterns of conflict, consistent with current theories on origins of violent conflict in developing countries in general, and East Africa in particular?
5. How have trajectories of tenure and access on the one hand, and dispossession and poverty on the other, been influenced by contrasting national and regional policies? What policy insights do these findings suggest?

The paper uses empirical data to provide the first quantitative cross-border comparison of the ways in which tenure and access are influenced by ethnicity and migration status in SME, and on the similarities and contrasts resulting from the different national contexts of Kenya and Tanzania as well as their expression through local policy in the study sites.

BACKGROUND: LAND TENURE, ACCESS AND CONFLICT IN MAASAILAND

Oral histories and colonial archives show the Central Rift Valley and adjacent highlands were dominated by Maa-speaking peoples from the seventeenth century on, with a history of mobility, migration and social assimilation punctuated by devastating episodes of warfare, drought and disease (Homewood and Rodgers 1991; Spear and Waller 1993; Waller 1988). Maa-speaking peoples were organised into geographic sections and locations (see e.g. Spear and Waller 1993) cross-cut by clan, age set and stock friendship relations (e.g. Ndagala 1990a; Potkanski 1994). Membership of these social networks structured customary systems of access to communal resources. Within any one location, access was decided by elders, regulated, and penalties for infringement enforced where necessary by warrior age sets, who also played a part in challenging as well as in enforcing the decisions of their elders.
Current work suggests women played an active part in management and decision-making, but that from the advent of the colonial period, they were progressively excluded from rights over land, livestock and resource management and became juridical minors and dependents (Hodgson 2000). Access by outsiders, whether to temporary use of resources, or to longer-term membership of the group, was open to negotiation. Newcomers could develop political alliances with established families through gifts, stock alliances, intermarriage and adoption (Brockington 2002; Waller 1993; Spear and Waller 1993). Competition might repeatedly erupt into conflict, raiding and violence, but until recently such conflict remained at a level which could be contained and resolved by customary means through mediation by elders (cf. Kurimoto and Simonse 1998; Fleischer 1999; Christiansson and Tobisson 1989). Permeable social and spatial boundaries made it possible to respond rapidly in a variable and unpredictable environment (Ndagala 1990a). This framework of natural resource management was disrupted at the end of the nineteenth century when the Maasai and their herds were decimated by warfare, human and animal epidemics (Waller 1988; Dawson 1979). The next two sections outline subsequent trends in land tenure, access and conflict in Kenya and Tanzania throughout the twentieth century.

Kenya Maasailand

Maasai were traditionally guided in ritual matters, including military strategy, by elders, sometimes by women, and by their prophets (laibon) who were especially responsible for some age-set rituals. Each age set nominated its own spokesmen (laigwenak). Colonial indirect rule was established in the early twentieth century with appointed chiefs, initiating an alternative legal system and hierarchy of power. As the incoming colonial administration took over land for white settler use, Kenya Maasai were moved (voluntarily or by force) from Laikipia and other northern rangelands and concentrated into the then Southern Masai Reserve, now Narok and Kajiado Districts (Waller 1988; Anderson 2002; Klopp 2001). The colonial administration classed this as:

‘trust land’, that is public land controlled by the government in ‘trust’ for the Maasai, a status that much land has maintained in the post Independence period.... the Maasai reserve ... [was] ... a ‘closed district’, colonial administrators attempted to create an ethnically pure enclave that fitted their notions of a tribe. [Klopp 2001: 487]

This planted the seeds of an ethnic dimension that would in due course affect future decisions over land allocation, as well as creating the administrative structures that would manage and control such decisions.

The colonial designation of a Maasai reserve imposed clear spatial and social boundaries where more fluid interactions had prevailed. It placed control over allocation of what had been communal land in the hands of colonially appointed Maasai chiefs and local Maasai
leaders as well as the district and provincial administration (Klopp 2001). Trust land was, and is, meant to be managed in the interests of customary users, avoiding alienation among other outcomes (Okoth-Ogendo 2000). However, following Independence in 1963 the Kenyan government, encouraged by the World Bank, began to divide Maasai rangelands into individual, corporate and group ranches. Group ranch leaders emerged from, or became part of, the local elite (see case study 1; Galaty 1980, 1993, 1994, 1999; Rutten 1992). Group ranch management elections have in practice been held infrequently, if at all, since the time of group ranch formation. As some members of the Maasai elite began to acquire and deal in individual titles, and ordinary members saw little benefit or revenues from group title, pressure built for group ranches to be subdivided into individual holdings (Munei and Galaty 1999; Rutten 1992). This is a process that continues today in Narok District (Thompson and Homewood 2002). The process and implications of the privatisation of land in Kenya Maasailand have been extensively documented and analysed (particularly Galaty 1980, 1994, 1999; Munei and Galaty 1999; Campbell 1993; Rutten 1992; Markakis 1999; Okoth-Ogendo 2000). Land law and legal procedures in Kenya have been misused by the well-placed to dispossess many poorer and less well-connected Maasai (Galaty 1999; Munei and Galaty 1999). Instances of manipulation of land-titling procedures, and in some cases corrupt and illegal practice, have been widely documented (Galaty 1994, 1999; Munei and Galaty 1999; Thompson and Homewood 2002) and have become established in what can be seen as a systematic process of accumulation of land and wealth by a circumscribed ‘elite’.

Land privatisation has had a serious impact on Maasai communities, with much land being progressively taken over by other groups and many Maasai eventually losing rights of access (Galaty 1999; Munei and Galaty 1999). ‘One would expect . . . that titling Maasai land would have reduced uncertainty of tenure and social conflict, but in fact, instances of uncertainty and conflict have risen’ (Munei and Galaty 1999: 68). The implications are particularly serious for women and other dependents not qualifying for registration and land title in the first instance (Talle 1988).

Formerly common land in Kenya Maasailand is now mostly privatised and much is currently undergoing rapid exclusion and/or conversion to cultivation (Campbell 1993; Galaty 1994; Homewood et al. 2001). Simultaneously, in-migration of non-Maasai into these areas has occurred. Between 1962 and 1989 the percentage of population represented by Maasai had declined from 79% to 47% in Narok District (Coast 2000), and from 78% to 57% in Kajiado (Rutten 1992). ‘The net result of this influx of migrants, along with the irregular land

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1 In our study area, Lemek group ranch has had one change of group ranch committee members in twenty-five years, Koiyaki one change in twenty years, and Siana two changes in twenty years (Thompson 2002).
allocations, was to intensify a sense of land pressure and insecurity on the part of the largely pastoralist Maasai’ (Klopp 2001: 508).

During the 1990s in Kenya Masailand, conflicts over land and associated agricultural or wildlife revenues have repeatedly erupted in violent confrontations (Klopp 2001; Dietz 1996; Thompson and Homewood 2002). Hundreds died, and tens or even hundreds of thousands were displaced (Klopp 2001). While one widespread perception sees this violent conflict as a reaction to in-migration creating and exacerbating land shortages (Galaty 1999), there is considerable evidence to suggest that much of this violence was deliberately orchestrated to undermine multiparty elections and allow leading politicians to retain a monopoly on power (Klopp 2001, 2002; Dietz 1996; cf. Fratkin 2001). In North Narok these conflicts may have been primarily attributable to political manipulation for electoral purposes, though they built on existing tensions (e.g. Galaty 1999). The conflicts by no means followed simple ethnic lines (Klopp 2002). There was a strong political and economic dimension: violence was primarily targeted at multi-ethnic communities of smallholders, and benefited large landowners and supporters of the regime of the then president of Kenya, Daniel arap Moi. Throughout Narok, violence hit Kikuyu and Kipsigis smallholders, while non-Maasai land barons were not affected: class and political clientage, rather than ethnicity, were the real determinants (Klopp 2001). Major tensions erupted among the Maasai, with ‘the unthinkable: physical conflict between those in the privileged relation of age-set sponsorship, and cursing of elders by juniors’ (Galaty 1994: 112).

Tanzania Masailand

The Maasai have inhabited northern Tanzania since the seventeenth century, when they displaced the Datoga from the Highlands of Ngorongoro. The wars and pandemics of the end of the eighteenth century devastated Tanzania Masailand (Waller 1979; Spear 1997). The Germans established a Maasai reserve south of the Moshi–Arusha–Dodoma road, intending to free up the northern Monduli–Ngorongoro–Loliondo–Longido areas for settlers. Following the First World War and the British colonial takeover, the 1923 Crown Land Ordinance placed all land under the control of the Governor. The government thus became ‘simultaneously trustee and conqueror’ (Igoe and Brockington 1999) controlling rights of occupancy, whether ‘deemed’ (customary) or ‘granted’ (newly allocated). The British administration also established Maasai reserves, and by 1926 the Masai District covered most of then Tanganyika Masailand, with some chunks excised for settler use. Local people’s customary rights were largely protected as ‘deemed rights of occupancy’. However, after the Second World War the colonial administration increasingly took land from local users to grant to settlers and to

2 By some counts, thousands lost their lives (see Klopp 2001).
gazette conservation areas, e.g. Mkomazi Game Reserve (Brockington 2002), and Serengeti National Park and Ngorongoro Conservation Area (Homewood and Rodgers 1991; Shivji and Kapina 1998). Nyerere's vision of a united nation in which every citizen would be Tanzanian, rather than a member of a tribe, led to a post-Independence policy with citizens having the right to live anywhere in Tanzania. This erased the ethnic dimension of access to land and foreshadowed the extinction of customary rights (Ndagala 1994). The post-Independence state granted extensive areas for parastatal farms, ranches and protected areas, overriding customary rights of former users in the process. Perhaps the most drastic was the granting of a cumulative total of 100,000 hectares of best Barabaig pasture land for a Canadian-funded wheat scheme, without consultation of or compensation to the agro-pastoralists whose livelihoods it had hitherto underpinned (Lane 1994, 1996a, 1996b; Ndagala 1990b).

During the 1970s, a major USAID-funded programme (Maasai Range and Livestock Development Project [MRLDP]) sought to establish and develop Ranching Associations (RA) throughout Tanzania Maasailand (Ndagala 1990b; Moris 1981). This process would have given security of tenure to resident pastoral and agro-pastoral people, but it ran counter to principles enshrined in the wider national programme of villagisation (ujamaa) then underway. By the end of the decade, the MRLDP had collapsed (Moris 1981; Homewood and Rodgers 1991) and Maasai areas were brought under the villagisation programme (Ndagala 1982). In principle, ujamaa villages would have their land demarcated and registered by District Development Councils, and Village Councils would then allocate land on which households could farm and build. In theory, land was available for every rural person's livelihood needs, although not for individual disposal. In practice, villagisation wrought havoc on rural land tenure, and left matters wide open for conflict, dislocation and land expropriation (Shivji 1998). Registration of village grazing lands, in an attempt to improve security of tenure, often led to fierce conflict between neighbouring villages, for example between overlapping Maasai and Sonjo users in Loliondo (ibid.).

From the mid-80s, with economic liberalisation and pressure from international financial organisations, such tenure changes increasingly benefited expatriate individuals and corporations, many involved in export cash crops (Igoe and Brockington 1999). The promotion of foreign investment has repeatedly led to alienation of village land to investors, under the guise of supposedly ‘joint’ ventures for tourism, mining, ranching or cash crops. Privatisation of land originally allocated to parastatals, and the upsurge in real estate development and speculation, have provided rich opportunities for further alienation to outsiders (Shivji 1998). Conservation legislation has increasingly constrained natural resource use by rural populations (Igoe and Brockington 1999). Since the mid-1980s, the rural poor have found themselves squeezed between alienation to large-scale state enterprises (whether cultivation or conservation) and foreign investors on the one
The Presidential Land Commission (1991–1992) undertook a comprehensive survey of land tenure issues in rural Tanzania, and its landmark Report (Tanzania 1994a, 1994b) set out both the detail of individual cases and overarching, radical analyses. It documented processes of expropriation and allocation, whether illegal, unconstitutional, or the product of confused and contradictory legislation, that have become common in Tanzania. The Regulation of Land Tenure Act of 1992 deliberately pre-empted the Presidential Commission’s findings and, in the face of mounting instability, sought to extinguish all customary rights, further deepening the ‘utter confusion in the legal framework of village land tenure’ (Shivji 1998: 16).

Unlike Kenya, the ethnicity criterion underlying colonial and subsequent land allocation was superseded, with Nyerere’s ‘one nation’ policy entitling citizens to apply to live anywhere in Tanzania. As in Kenya, the land law and legal processes which should protect the rights of customary users have repeatedly been bypassed, manipulated or reinterpreted in ways that have allowed individuals and groups in gatekeeper positions to sell or lease formerly communal land to national and foreign investors. Court challenges and rulings have been ignored. Conflicts over land and associated agricultural or wildlife revenues in Maasailand have started to lead to violent confrontations and have elicited repressive measures (Brockington 1999; Brockington and Homewood 1999; Lane 1996a, 1996b, 1996c; MNRT 1997; Shivji 1998; Shivji and Kapinga 1998; Otieno 2002a, 2002b).

CONFLICT: IN-MIGRATION, ETHNICITY AND RESOURCE ACCESS

Analyses of conflict in developing countries tend to focus on either contributing factors (Stewart 2002) or issues of scale and intensity (Hussein 1998). Violent conflict can result from ethnic or economic divides, environmental hot spots of resource concentration or deterioration, and/or failures of the social contract providing human or constitutional rights between state and subjects (Stewart 2002). Analyses of the scale and intensity of violent conflict concern frequency (in terms of numbers of separate incidents), intensity (in terms of numbers of casualties), and their scale (individual violent confrontations; instances of state violence against groups within national borders; political and military conflict between groups within or across national borders) (Hussein 1998). In East African rangelands, violent conflicts around power and control of land or natural resources have escalated to outright civil war in Uganda. The relative stability of Kenya and Tanzania since Independence has been explained as the result of relative equality of opportunity, whether political (Tanzania) or economic (Kenya) (Klugman et al. 1999).

However, other literature looking beneath and beyond the level of nation states has detailed increasing conflicts between farmers and
It has also noted widespread marginalisation of pastoral peoples in Maasailand, and East Africa, and more generally across sub-Saharan Africa (Galaty and Bonte 1992; IIED 1992–1999; Igoe and Brockington 1999; Markakis 1999; Fratkin 2001). Pastoralist peoples such as the Maasai have been divided by colonially determined boundaries (Galaty and Bonte 1992), making them minorities in the nations they inhabit. Internal administrative boundaries within nations further fragment already minority pastoralist peoples (e.g. Ndagala 1990a, 1990b). Caught in conflicts of interest whether within or between nations, pastoralist peoples have in many cases become the victims of state neglect, or even the targets of state violence. Social services, physical infrastructure, and political representation are routinely well below national averages in remote and low population density pastoral areas (Coast 2000). Where social services are provided, they may be preferentially accessed by more settled, non-pastoralist in-migrants to formerly pastoralist-dominated areas (for Tanzania Maasailand, see Moris 1981; Ole Kuney 1994; for Kenya, see Rutten 1992). Tensions over access to land and the concomitant intensifying competition for key resources, whether through population growth or the political economy of resource distribution, have meant even the apparently stable nation states of Kenya and Tanzania harbour considerable tensions and conflict issues around pastoralists. Mobility and migration are commonly high, and the associated complexities of perennially renegotiating temporary and flexible access to resources are made more problematic in a landscape that is progressively more rigidly surveyed, demarcated and allocated. These tensions may be expressed through silent discrimination and silent violence (Hussein 1998; cf. Hitchcock 1996), while recently demarcated boundaries are reinforced with fences and in some cases force. Throughout the 1990s there have been cases where state agencies, coerce, evict and exclude pastoralists from their customary rangelands. In some cases this is with outsider backing for conservation or development ends (Peluso 1998; Brockington 2002; Shivji and Kapinga 1998; Igoe and Brockington 1999; Brockington and Homewood 1999; Chatty and Colchester 2002), for development projects (Lane 1996b, 1998) while in other cases this has occurred simply in the course of violent power seeking (James 1996; Hutchinson 1996; Dietz 1996; Klopp 2001).

There are few data allowing evaluation of the degree to which violent conflict involving pastoralists may have increased and may still be increasing in sub-Saharan Africa (Hussein 1998). Herder–farmer relations continue to shift between cooperation, competition and conflict as they have done for millennia. Individual violent disputes involving theft, raiding fights and even killings are probably often overlooked in the national and international press. State violence may often be presented—and internationally perceived—as enforcement against poachers, trespassers or other outlaws. In reality, however, it may represent state action supporting politically dominant resource users against others, and result in mass eviction and forced displacement that destroys livelihoods on potentially enormous scales (Lane 1996a,
In cases across sub-Saharan Africa (and wider than in our Maasailand study areas), political violence using military action to subjugate populations and control resources has been the most violent and destructive form of conflict, affecting many pastoralist populations in the present day, and involving raiding of livestock and destruction of villages. Over the last century the nature and impacts of conflict have changed. In particular, the introduction of modern weaponry has changed the stakes. The acquisition of modern weapons can give a lethal advantage to one group, as in contemporary northern Uganda (see Mirzeler and Young 2000). This may have happened on occasion in the past (e.g. nineteenth-century Datoga in Tanzania and Laikipiak Maasai in Kenya), but where there was once at least the theoretical possibility of balanced and reciprocal raiding between groups, total victory or at least heavy casualties have become common possibilities (Turton 1996; Kurimoto and Simonse 1998). Lethal synergies may develop between geopolitical conflicts and local rivalries (Allen 1996; Fukui and Markakis 1994; Markakis 1993; Hogg 1997; Galaty and Bonte 1992). Across Africa, pastoralist groups have been disproportionately drawn into such conflicts, in part because of the colonial legacy of boundaries which left them fragmented between mutually hostile neighbouring nations, and cast as subversive minorities within whichever nation they find themselves (Markakis 1993; Galaty and Bonte 1992).

Kenya and Tanzania Maasailand have mainly experienced conflicts of interest, competition over natural resources, and periodic individual or state/group violence. These conflicts have not escalated to the point of extreme political and military violence seen in Uganda, northern Kenya and the Horn of Africa. However, both individual-level violent confrontations, and ongoing low levels of violence on the part of the state and politically dominant groups are widespread, as is the perception that such conflicts are created or fuelled by in-migration. This paper presents detailed household-level data and analysis of in-migration, resource access and exclusion in East African rangelands. It focuses on the extent to which access to land and other assets are structured by residence status, ethnicity, and economic/political status.

STUDY AREAS

The research presented here focuses on the protected area-adjacent zones around the Serengeti-Mara ecosystem (SME) straddling the Tanzania/Kenya border. These rangelands are characterised by strong ecological, ethnic and socio-economic continuities, across which contrasting political and economic contexts have been superimposed (Homewood et al. 2001). The SME illustrates processes common to many savannah protected area-adjacent zones elsewhere in sub-Saharan Africa. The contrasts between Kenyan and Tanzanian lands offer a controlled comparison, with related issues and factors operating in
essentially similar ecological, ethnic and socio-economic circumstances, but radically different macro-economic and political contexts (ibid.).

The SME consists of the contiguous core conservation areas of the Maasai Mara National Reserve (MMNR), Kenya, and the Serengeti National Park (SNP), Tanzania, surrounded by buffer zones that make up the ecologically continuous wet-season wildlife dispersal areas and migration routes (see Figure 1). Earlier work has characterised demography, land use and livelihoods within the protected area-adjacent zones to the north, east and south of SME, which are populated primarily by Maasai agro-pastoralists (group ranches of Narok and Kajiado Districts in Kenya; Loliondo Game Controlled Area and Ngorongoro Conservation Area [NCA] in Tanzania). In the present study, additional foci of in-migration familiar from this previous research were chosen as study sites (Coast 2000; Thompson 2002). In Kenya, in-migration research focused on Sikrar (Lemek Group Ranch, Narok District) and Emarti (Trans Mara District) but also draws on previous work in Lemek, Siana and Koiyaki Group Ranches (Thompson 2002; Coast 2000). In Tanzania, research focused on Endulen in the NCA, both the administrative and trading centre (madukani) and its rural environs, drawing on comparative work in other areas of the NCA and Loliondo (Coast 2000; Homewood et al. 2001). Maasai make up most of the protected area-adjacent population to the north, east and south of SME. For example, a census of the NCA population (n=51,621 individuals) reported that 97% were Maasai (NCAA 1999). In Endulen, Sikrar and Emarti sites, the balance of ethnicity has been significantly altered by in-migration, primarily of Kipsigis (Kenya) and Iraqw/Mbulu (Tanzania). The nature and implications of current in-migration can only be understood in context, and the following sections sketch historical and contemporary processes within the main study sites.

Kenya

Primary data for this study are presented from two sites, Emarti and Sikrar. Emarti centre lies on the western edge of the MMNR and has two government primary schools and water piped from the Mara River. Sikrar is located on Lemek group ranch and is furthest of all Kenyan sites from MMNR. It has a primary and secondary school, and unimproved piped water. Comparative data are drawn from previous research in sites on Siana, Koiyaki and Lemek Group Ranches, whose small trading centres each provide primary schools (and in Lemek, a secondary school), dispensaries, and where there has been little or no in-migration by non-Maasai. These sites are dominated by livestock production and cultivation, with varying degrees of involvement in tourism. For example Talek, on Koiyaki Group Ranch, has grown up around an MMNR entrance gate, and residents do not farm but are

3 See below for site-specific circumstances limiting this generalisation.
commonly involved in tourism-related as well as livestock activities. By contrast Nkorinkori on Lemek is in the centre of the mechanised wheat belt, with no tourist involvement but exceptional opportunities for mechanised farming and land leasing.
The study focuses on the Ngorongoro Conservation Area (NCA) which has been managed as a joint land-use area for wildlife conservation and pastoralism for the last forty years (Homewood and Rodgers 1991; Thompson 1997). This site is governed by conservation priorities presenting a unique and difficult set of rules and obstacles that do not pertain to Maasai in other areas of Tanzania. This does not undermine our overall analysis and comparison, but limits the extent to which we can generalise to the rest of Tanzania from this particular study site. Village grazing is demarcated within otherwise parastatal-controlled lands (Homewood 1995) allowing few rights over resource tenure and access for local users (Shivji and Kapinga 1998). Ngorongoro’s complex history of in-migration, driven by climatic fluctuations, security (periodic raiding and violence with Barabaig and Sukuma) and, over the last forty years, the alternation of development opportunities with periods of imposed restriction, is set out in a later section. The main study sites were in the rapidly growing trading centre of Endulen village, and in its rural environs. Comparative data are drawn from previous work in other areas of the NCA (Coast 2000), and from adjacent Loliondo and Longido (Homewood 2000; Homewood et al. 2001).

Endulen centre (hereafter madukani) dates back to the 1950s when the colonial district officer was based in the village. It has undergone a recent rapid rise in the speed of in-migration, making it the largest and densest settlement of all the study sites. Services include commerce,4 education,5 health,6 administration,7 and security.8 While Maasai lifetime residents populate the rural environs of Endulen, madukani draws in-migrant professionals to work in either government or Ngorongoro Conservation Area Authority (NCAA) positions. Increasingly they retire there and develop business interests. At the other end of the socio-economic scale in Endulen madukani, a significant proportion of households are in-migrant farm labourers, some of whom work in return for food and shelter, and are commonly referred to as kibarua.

**METHODS**

Detailed data relating to mobile and in-migrant populations are often poorly served by national demographic data collection exercises such as censuses, not least because of the difficulties involved in defining ‘migration’ and ‘migrants’. Migration is widely acknowledged to be the

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4 Shops, beer houses, butcheries, maize grinding mills, etc.
5 This role expanded recently, with the opening of a government secondary school in April 2001.
6 It is estimated that up to one-third of patients at Endulen Hospital travel more than 60 km to use its services.
7 NCAA zonal headquarters
8 Police post and NCAA Game Ranger post
most difficult component of the demographic balancing equation to conceptualise, measure and analyse (e.g. Anarfi 1998). In both countries, migration issues are highly sensitive; the current study was only possible because of previous long-term researcher field presence (Coast 2000, 2002; Thompson 2002). Both qualitative and quantitative methods were used, focusing mainly at the individual and household level. In both countries a Participatory Rapid Appraisal (PRA) style pilot study, based on past research experience and complemented by participant observation, semi-structured interviews and oral histories, formed the basis for a single-round household survey (Tanzania: n=90 households; Kenya: n=157 households). The questionnaire-based survey included a wide range of issues: household composition; duration of residence; dependence on cultivation, livestock and other income-generating activities; and land acquisition, leasing and sale. The comparative data are drawn from previous work comprising a multi-round survey of 288 households in Koiyaki, Lemek and Siana (Thompson 2002) and 505 households interviewed in Ngorongoro (Coast 2000) as well as 174 households interviewed in Ngorongoro and Loliondo of which thirty were re-visited in a multi-round survey.

As far as possible the same methods were used for the in-migrant survey in Kenya and Tanzania, but circumstances limit comparability. For example, post-Independence Tanzanian censuses do not record ethnicity, and analyses focusing on ethnic correlates of development or economic status are considered politically sensitive and potentially destabilising. In Kenya, by contrast, data on ethnicity are routinely collected in decennial censuses. In the present study ethnic affiliation was taken as the individual's mother tongue. Respondents may misreport ethnic group, especially if they are concerned that their rights might be affected. However, the use of lifetime residents as interviewers minimised misreporting. In-migration was defined as a shift of permanent residence to the study site. For all study sites, ‘long-term resident’ is defined by a household head who moved to the area prior to the 1970s. All households that moved to the study site after 1970 are referred to as ‘recent in-migrant’. These definitions are used throughout the paper.

RESULTS

Two sets of results are presented here. Firstly, a description of the nature and scale of in-migration, including historical trends and ethnic composition of in-migrants. Secondly, resource access is outlined with respect to ethnicity and migration status, with specific reference to access to land. Within each of these sections, comparative data are presented for both Kenya and Tanzania, and results are placed in the context of other work.
Based on oral histories and survey data, there are few in-migrant households⁹ in Lemek, Siana and Koiyaki sites in Kenya, or in the rural Endulen environs in Tanzania.

**Kenya**

Settlement and land use in Western Narok and the adjacent parts of Trans-Mara District were shaped by the interaction of the Maasai moves with climate, vegetation, land use, conflict and disease (Waller 1990; Lamprey and Waller 1990). Maasai spread into Western Narok between 1903 and 1913, while further south other Maasai dominated the Loita Hills, the southern part of Trans-Mara and northern Tanganyika. In the first decades of the twentieth century, the plains of Western Narok were used only seasonally, with Lemek, a site of permanent water, emerging as a centre of settlement, trade and livestock facilities (Waller 1990). Colonial survey reports show there was still no permanent settlement anywhere west of Lemek by 1946 (ibid.). From the mid-1950s onwards the colonial administration encouraged tsetse control, bush clearance and controlled grazing, halting the spread of tsetse by 1960.

Oral histories (Thompson 2002) dovetail with historical and aerial photo analyses (Lamprey and Waller 1990; Waller 1990) to give a picture of Sikrar and Emarti as two ‘frontier’ sites, with different timing of in-migration. Our survey showed that 75% of Sikrar and 56% of Emarti sample household heads had arrived in the Western Narok study sites since 1960, and 53% and 37% respectively since 1970 (see TABLE 1).

![](data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAAEAAAABCAYAAAAfFcSJAAAADUlEQVR42mP8///8wGAAAABJRU5ErkJggg==)

**TABLE 1 Percentage distribution of decade of arrival of household heads: Kenya**

<table>
<thead>
<tr>
<th>Decade</th>
<th>Sikrar (n = 94)</th>
<th>Emarti (n = 59)</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre-1960s</td>
<td>25</td>
<td>44</td>
</tr>
<tr>
<td>1960s</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>1970s</td>
<td>13</td>
<td>29</td>
</tr>
<tr>
<td>1980s</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>1990s</td>
<td>25</td>
<td>3</td>
</tr>
</tbody>
</table>

The earliest household arrivals (from 1938) were recorded for Emarti, an area designated as Maasai by the colonial administration and resettled in the wake of tsetse control. However, Emarti was still largely uninhabited in the late 1950s, allowing relatively free access

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⁹ Less than 0.02% of the study population in Kenya (Thompson and Homewood 2002; Coast 2000).
when in-migrants sought leave from the Maasai administrative chief to clear and cultivate land west of the Mara plains. These in-migrants were mainly Kipsigis, driven by land shortages in the then Kipsigis Reserve to the north to seek cultivable land in Maasai ‘closed’ areas (Manners 1967). Maasai of the Uas Nkishu Section followed, their cattle benefiting from the cleared land (see Anderson 2002, for the factors precipitating their removal from the Uas Nkishu Reserve). From the late 1960s, private land was allocated on the western side of Lemek to the emerging Maasai elite (cf. Galaty 1999; Munei and Galaty 1999), and then sold on to in-migrant Kipsigis. Maasai settlements spread out through the rest of Western Narok during the 1970s (Lamprey and Waller 1990). In 1980–84, when Emarti lands were being subdivided, Uas Nkishu Maasai families already in place called on others of their section to move to the Emarti area. This strategic move triggered a new influx, raising Maasai numbers in the ongoing contest with Kipsigis in-migrants. Both Maasai and Kipsigis families gained registration as group ranch members during this time, their petitions generally mediated by gifts of livestock to the lands committee.

Before Lemek group ranch was established in 1969, influential local Maasai (administration chiefs and other figures) applied successfully to central government for title deeds, ostensibly to guard against the continued westward movement of non-Maasai cultivating groups onto Maasai lands. Many of these new landowners rapidly sold land on a piece-meal basis to Kipsigis in-migrants (Thompson and Homewood 2002). Further opportunities for in-migration into Sikrar arose when Lemek Group Ranch was established. By the 1990s therefore, many Kipsigis families had been cultivating land in the area for over thirty years. At the time of registering group ranch membership, prior to the issue of title deeds in 1993–1999, many Kipsigis families were able to have their names included (though excluded from the committee itself), generally on the production of a gift to the group ranch lands committee.

These different histories are reflected in the differential association of ethnicity with duration of residence for the two sites. In Sikrar, over one third of the whole sample in Emarti were long-term resident Maasai.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Percentage distribution of household head by ethnicity and residence status: Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Sikrar</strong> (n = 94)</td>
</tr>
<tr>
<td></td>
<td>long-term resident (pre-1970)</td>
</tr>
<tr>
<td>Maasai</td>
<td>3</td>
</tr>
<tr>
<td>Kipsigis</td>
<td>45</td>
</tr>
</tbody>
</table>
The extent to which these differences are reflected in patterns of land allocation is explored in a later section.

By no means all Kipsigis applicants who tried to establish or maintain residence in these two areas were successful. It was reported that other Kipsigis families who had arrived more recently left again, fleeing to adjacent Bomet District during the politically driven and violent ‘ethnic clashes’. These took place during the 1980s in Emarti (reportedly linked to the land titling procedure), and in 1992 and 1997 in Sikrar (linked to land-titling and multiparty elections) (Klopp 2001, 2002). As a result of these clashes in both Sikrar and Emarti, Kipsigis and Maasai communities today form separate clusters, with the Kipsigis located to the west of each study site, placing them closer to the predominantly Kipsigis Bomet District.

**Tanzania**

The NCA has a complex history of settlement, with Maasai moving there from the Serengeti in 1959 as part of an agreement whereby the colonial authorities removed Maasai from the newly established Serengeti National Park, and created Ngorongoro as a Conservation Area with a dual wildlife conservation and residence/community development mandate, a unique situation in Tanzania. The Serengeti Maasai were promised water development and other benefits at Ngorongoro, most of which either proved short-lived or failed to materialise. The initial advisory board set up at the time included several Maasai representatives, rapidly reduced to one, and, from 1975, to none. There were major influxes of in-migrants in the mid 1970s when the NCA was—briefly and unsuccessfully—scheduled for Ranching Association status (Moris 1981; Ndagala 1990b; Homewood and Rodgers 1991; Perkin 1997) and again during periods when cultivation was relatively freely allowed. These periods were interspersed with the imposition of severe restrictions including eviction from the Crater, exclusion from the Northern Highlands Forest Reserve, Olduvai and Olmoti, and periods of harassment over established cultivation (Makacha and Ole Sayalel 1987; Shivji and Kapinha 1998). The NCAA considers cultivation to conflict with conservation. There are perennial threats to ban cultivation and to evict both non-Maasai and Maasai in-migrants and potentially even long-term residents from the NCA. For example, in October 2001 the Conservator of NCA announced a new policy to evict all individuals who have moved into the NCA since 1959. The extent to which this may apply in practice, in particular to non-Maasai, ex-government in-migrants and their families, is not yet clear. Reports in April 2002 suggested several in-migrant labourers had been arrested and given lengthy jail sentences (Jonas Olsen, personal communication) though their employers had not been penalised. In-migrants to the NCA have included Maasai seeking drought refuge grazing and, during putative Ranching Association status years, better veterinary and other livestock support provision. At other times in-migrants have included non-Maasai, both poor Iraqw and Mbulu labourers looking for farmwork (*kibarua*), and also relatively well-off Chagga and Mbulu tradesmen,
government retirees and their relations, looking for opportunities to farm fertile land, establish businesses and take advantage of school and other social services.

Endulen rural environs are more representative of conditions elsewhere within the NCA, with few (6%) in-migrants since 1970, and an entirely Maasai population (Coast 2000). In contrast, in-migration to madukani fluctuated prior to 1980 (Århem 1985) but has increased rapidly since then, with over one-third of current household heads arriving post-1990 (see Table 3). This reflects the recent blossoming of service and economic opportunities for the well-placed in an era of economic liberalisation, in a rapidly expanding settlement servicing Tanzania’s highest-earning game-viewing area.

<table>
<thead>
<tr>
<th>Decade of arrival</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-1970s</td>
<td>38</td>
</tr>
<tr>
<td>1970s</td>
<td>8</td>
</tr>
<tr>
<td>1980s</td>
<td>16</td>
</tr>
<tr>
<td>1990s</td>
<td>38</td>
</tr>
</tbody>
</table>

Not surprisingly for a growing trading centre, two-thirds of respondent household heads report themselves as in-migrant, and three-quarters of lifetime residents were born of in-migrant parents. In Endulen madukani, two-thirds of recent in-migrants were non-Maasai, predominantly Iraqw, originating from neighbouring Karatu and Mbulu (see Table 4).

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Long-term resident pre-1970</th>
<th>Recent in-migrant post-1970</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maasai</td>
<td>23</td>
<td>20</td>
</tr>
<tr>
<td>Iraqw</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>Chagga</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>other Tanzanian</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Kenyan</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
Where analyses of access to the means of production have in the past focused on land, labour and capital, a sustainable livelihoods framework (defined by Carney and Farington 1998) extends and restructures these factors in terms of the natural, physical, social, human and financial dimensions of capital. Detailed expositions can be found elsewhere (e.g. Ellis 2000) but for the purposes of the present paper natural capital is represented primarily by land for cultivation, grazing, wood poles and fuel it can provide. Physical capital is represented by roads, waterpoints and other infrastructural developments. Social capital comprises the network of social relations on which households can draw to gain access. Maasai customary entitlements are structured by the framework of section, location, clan, and age set, alongside more recent but powerful factors such as relation to local leaders. Human capital is represented by access to education and health services. Finally, financial capital in the context of the rural populations in East African rangelands is perhaps best measured by holdings of livestock and/or land, and level of employment. Types of employment may be classed as secure (often government) jobs, which are generally skilled and often with business connections; intermediate types comprise reliable though poorly paid non-farm jobs; the poorest options involve sporadic, casual and unskilled employment (cf. Iliya and Swindell 1997).

The present study therefore uses empirical data to examine natural, social and financial dimensions of livelihoods. Firstly, we examine access to land for a variety of purposes, including cultivation, livestock grazing and as an investment through the ownership and rental of property. Secondly, broad patterns of access to and engagement with different livelihoods are summarised (detailed data on education and livelihoods form the basis of a separate companion paper). Finally, socio-political networks and their role in exclusion and conflict are analysed here from policy documents, press reports, key informants and observation of individual cases. This paper does not deal with differential access to either physical or human capital, either with respect to national averages or other regions.

**Access to land**

East African rangelands are undergoing a widespread shift from primarily communal tenure of common property resources to largely privatised holdings (Toulmin and Quan 2000). There are both similarities and contrasts between the trajectories of land alienation for Kenya and Tanzania Maasailand (Homewood 1995). There are striking differences in the way land alienation is patterned with respect to in-migration and ethnicity, though trajectories in both countries are readily explained by what Klopp (2001: 509) calls ‘class’ (socio-economic status and concomitant power and wealth). Though the Ngorongoro Conservation Area represents a rather special situation within Tanzania, it broadly reflects trends elsewhere in Tanzanian
Maasailand (cf. Igoe and Brockington 1999), and supports the wider Kenya/Tanzania comparison.

*Kenya*

Maasai households in both Sikrar and Emarti report significantly (p < 0.0005) higher landholdings received at subdivision than Kipsigis (see Figure 2; Thompson and Homewood 2002). In Emarti, well-connected Maasai received large land allocations (more than 40 hectares) at subdivision, while poor Maasai and Kipsigis received smaller areas (between 1 and 8 hectares). Half of all Emarti Maasai received more than 20 hectares. By comparison, half all Emarti Kipsigis received up to 4 hectares, and 42% received none at all. In Sikrar, over 80% of Maasai received more than 40 hectares on subdivision while 80% of Kipsigis received 10 hectares or less.

![Figure 2: Mean land received at subdivision, by ethnicity and location](image)

In the Kenyan study sites, differences in land entitlement by ethnicity are greatest early on in the land allocation process (see Table 5). During the 1960s, Maasai individuals resident in the area and connected to the administration were able to register title to large areas of land at Lemek Group ranch (covering Sikrar, Lemek Centre and Nkorinkori).\(^{10}\) Life histories of Kipsigis and Maasai moving to the area from the 1950s onwards show how in-migrants were initially given permission to settle by Maasai administrators, and that by the 1960s these influential Maasai were leasing land to in-migrants. Subsequently, Lemek group ranch was subdivided; a process lasting from survey in 1995 to final allocation of

\(^{10}\) It was not possible to interview these large landholders. They declined to participate in interviews because of their positions as local MP, administrative chief or councillor.
title deeds in 1999. During this land registration process, land allocation favoured Maasai over Kipsigis in Emarti.

The following three case studies, based on detailed life histories, illustrate the key points outlined in TABLE 5 and demonstrate how ethnicity and migrant status have influenced land entitlements.

Case study 1: land allocation to Maasai ‘big’ men in Kenya
During the 1950s the colonial government operated a veterinary research station and cattle-holding pens on what later became Lemek group ranch. These stations were issued with title deeds held by the government. At Independence, Maasai petitioned the Lands Office in Nairobi to transfer the title deeds to themselves. Powerful traditional leaders, including administrative chiefs recognised by the colonial administration, were able to use their influence and have the title deeds allocated to themselves. For example, the paramount chief of the area went on to become an extremely respected and influential leader in the newly formed independent government, and received large land transfers at both locations. His subsequent accumulation of wealth can be judged from his obituary in the national press, listing ten wives and sixty-three children, several of whom hold positions of prominence as Members of Parliament, officials of the County Council and so on. He had shares in at least three tourist lodges, owning the land on which one was built, as well as large mechanised wheat and livestock holdings. [Interview Book 2, p. 65; Interview Book 1, p. 68; Thompson 2002; Daily Nation 10 April 2000]

Case study 2: land allocation to a long-term Kipsigis resident (poor man) and a recent in-migrant Maasai at Sikrar (rich man)
A Kipsigis man, X, arrived at Sikrar in 1969. The chief in Mulot (a Kipsigis area) brokered the original occupation of the land with the paramount chief of the Maasai Area. The paramount chief mandated the subdivision of an area of land amongst Kipsigis who had contributed livestock. Under this process, respondent X purchased 1 acre of land from the Maasai, costing him two cows. Respondent X has eight years of primary school education, and works as a driver. On subdivision of the group ranch some thirty years later he was allocated a further 4 acres. He owns four cattle (including three milch cows) and a total of seven sheep and goats. He cultivates the 4 acres in Sikrar but has had no harvest since 1997 due to drought.

In contrast, a Maasai man, Y, moved to Sikrar in 1996. A registered member of Lemek Group ranch, Y received 120 acres of land. He has a cattle herd of seventy animals including sixteen milch cows, and owns at least 150 sheep and goats. He cultivates 5 acres, although no harvest was obtained from 1998 onwards owing to drought. Maize from his last harvest in 1997 totalled 30 bags and lasted the family the entire year. He still rents out 40 acres of land each year in smaller 2–3 acre plots to Kipsigis farmers, at a rate of Kshs 1,200 (US$20) per acre. His wife runs a small shop at a nearby trading centre. [Interview Book 1, p. 147, 24 February 2001]

Case study 3: landless recent in-migrants (poor)
Z, a Kipsigis, moved to Emarti in 1983. His father had many sons and only a small farm at Kapkoimur near Nandi, a Kipsigis area to the west of our study area. Z sold his land (25 acres) and invested in two agents who convinced him they would buy cheaper land for him in Eldoret. The agents cheated him out of this money. Respondent Z moved to Emarti as the land had
<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>Before group ranch registration (1960–70s)</th>
<th>At group ranch registration (1982 (Emarti), 1999 (Sikrar))</th>
<th>After group ranch registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maasai</td>
<td>Maasai leaders ('big men')</td>
<td>Maasai 'rich men'</td>
<td>Emarti: mean 3.7 ha</td>
</tr>
<tr>
<td></td>
<td>Holding &gt;5,000 ha</td>
<td>Substantial land allocations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emarti: mean 20.4 ha</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sikrar: mean 46.9 ha</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Influence in local, district and/or national government (see case study 1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kipsigis</td>
<td>Early Kipsigis in-migrants lease smallholdings from Maasai leaders</td>
<td>Marginal livelihoods dependent on education and employment</td>
<td>Landlessness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Emarti: 7% households</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sikrar: 4% households</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Extreme cases involve</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>households moving</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>from group ranch to</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>group ranch in search</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>of land</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(see case study 2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(see case study 3)</td>
</tr>
</tbody>
</table>
not at that stage been subdivided, hoping to be placed on the land register. However, he did not succeed and now lives on Catholic church land at Emarti. Respondent Z owns one milch cow, two sheep and two goats. He does not cultivate. His wife works in the mission as a cook, and earns Kshs 500 (US$9) per month.

Building on the qualitative data above, we use regression analysis to explore the relative importance of ethnicity, migrant status and (in Model Two) wealth, in determining land received at subdivision (see TABLE 6 and TABLE 7).

TABLE 6 shows the results of a multiple regression analysing land areas received in Kenya as a function of two explanatory variables, ethnicity and migrant status. TABLE 7 shows the same, with the addition of a further explanatory variable in terms of the number of livestock currently owned (a proxy measure of wealth status at the time of land allocation). TABLES 6 and 7 thus represent statistical models which show the relative importance of individual explanatory variables (ethnicity, duration of residence, wealth) as well as their combined ability to account for the variation observed in land allocated at subdivision (the dependent variable). The main cells of the table show the size of the partial regression coefficients or beta values. The beta value indicates the proportion of the observed variation in allocated land areas which is explained by a given variable. The final line of each table shows the coefficient of determination, or the proportion of variation in land areas allocated which is jointly explained by all the explanatory variables acting together in the model. The number of asterisks shows the degree of statistical significance attached to each component and/or to the overall model.

TABLE 6  Model One: land received in Kenya as a function of ethnicity and migrant status

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Both sites</th>
<th>Sikrar</th>
<th>Emarti</th>
</tr>
</thead>
<tbody>
<tr>
<td>—Ethnicity</td>
<td>−0.634***</td>
<td>−0.856***</td>
<td>−0.364**</td>
</tr>
<tr>
<td>—Migrant status</td>
<td>−0.109</td>
<td>0.072</td>
<td>−0.351**</td>
</tr>
<tr>
<td>r²</td>
<td>0.658***</td>
<td>0.787***</td>
<td>0.292***</td>
</tr>
</tbody>
</table>

NOTE  *** p < 0.0005  ** p < 0.005  * p < 0.05
no asterisk = not statistically significant.

The table represents a statistical model which shows the relative individual and combined importance of ethnicity and duration of residence in accounting for the variation observed in land allocated at subdivision. The main cells of the table (beta values) indicate the proportion of the observed variation in allocated land areas which can be explained by the two factors (ethnicity and/or duration of residence) in one or both sites. The final line of each table shows the proportion of variation in land areas allocated which is jointly explained by both ethnicity and duration of residence acting together in the model. The degree of statistical significance of each component’s contribution, and of the overall model, in accounting for the observed variation in size of land holdings, is shown by the number of asterisks.
For both locations, the amount of variance explained by the model increases between Model One and Model Two, with the introduction of wealth in livestock equivalents as an independent variable. In Sikrar, however, ethnicity still remains the single great contributor to the variance in land received at subdivision (beta = −0.660, p < 0.0005).

The introduction of land received at subdivision in Model Two increases the amount of explanation of variance in current livestock ownership in both Sikrar and Emarti (from 50.6% to 60.4% and from 10.2% to 20.0% respectively) although it should be noted that the model only reaches statistical significance in Sikrar (p < 0.0005). The introduction of land received as an independent variable reduces both the strength and the significance of ethnicity as a contributor to the variance in livestock ownership.

Ethnicity emerges as the major determinant of land received overall (beta = −0.634, p < 0.0005) and in Sikrar (beta = −0.856, p < 0.0005). Ethnicity is also a strongly significant determinant at Emarti, but here (where the main phase of land allocation began pre-1970) migrant status is equally important and as strongly statistically significant. Overall, ethnicity and migrant status alone account for 65.8% of the variance in the amount of land allocated, and for 78.7% of the variance at Sikrar (29.2% of the variance at Emarti).

In Emarti, the amount of land received by Maasai households at subdivision differs significantly (p ≤ 0.005) between long-term residents (mean = 20.4 ha) and recent in-migrants (mean = 3.7 ha). In Sikrar, the relationship is not significant, although recent Maasai in-migrants reported considerably greater land (mean = 46.9 ha) at subdivision than long-term Maasai residents (mean = 20.1 ha).

In a second analysis (TABLE 7) we include a standardised wealth measure based on livestock equivalents per reference adult. Subdivision and allocation occurred at very different times in Sikrar (20–25 years prior to the survey) and Emarti (3–5 years before the survey), and we have no direct measure of wealth rank or socio-economic class at the time of subdivision. Although some households will have experienced major reversals of fortune, and current livestock holdings per reference adult is inevitably an imperfect measure, this is still likely to be the best predictor of wealth at an earlier period. Model Two is based on the combination of ethnicity, migrant status and current livestock holdings, and explains an even higher proportion of the variance in land allocated, and is highly significant at p < 0.0005. The model accounts for 82.9% of the variation at Sikrar, where ethnicity remains the main determinant. At Emarti, all three factors are of comparable importance and in combination they account for 39.1% of the variance in the amount of land allocated.

Ethnicity emerges as the main and most consistent determinant of access to land, with land received by Maasai at subdivision at Sikrar some fourteen times greater than Kipsigis (Maasai = 43.6 ha, Kipsigis = 3.1 ha), and five times greater at Emarti (Maasai = 15.0 ha, Kipsigis = 3.2 ha). The mean amount of land received at subdivision by Kipsigis, regardless of location, is remarkably similar. Our survey found no
TABLE 7  Model Two: land received at subdivision in Kenya as a function of ethnicity, migrant status and current livestock holdings

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Both sites</th>
<th>Sikrar</th>
<th>Emarti</th>
</tr>
</thead>
<tbody>
<tr>
<td>—Ethnicity</td>
<td>−0.390***</td>
<td>−0.660***</td>
<td>−0.310**</td>
</tr>
<tr>
<td>—Migrant status</td>
<td>0.010</td>
<td>0.045</td>
<td>−0.313**</td>
</tr>
<tr>
<td>—LE : RA</td>
<td>0.518***</td>
<td>0.292***</td>
<td>0.308**</td>
</tr>
<tr>
<td>r²</td>
<td>0.624***</td>
<td>0.829***</td>
<td>0.391***</td>
</tr>
</tbody>
</table>

NOTE  
*** p < 0.0005  
** p < 0.005  
* p < 0.05  
no asterisk = not statistically significant.

The table represents a statistical model which shows the relative individual and combined importance of ethnicity, duration of residence, and also wealth in livestock equivalents per reference adult, in accounting for the variation observed in land allocated at subdivision. The main cells of the table (beta values) indicate the proportion of the observed variation in allocated land areas which can be explained by each of the three factors (ethnicity, duration of residence, wealth in livestock equivalents/reference adult) in one or both sites. The final line of each table shows the proportion of variation in land areas allocated which is jointly explained by all three factors ethnicity, duration of residence and also wealth in livestock equivalents per reference adult, all acting together in the model. The degree of statistical significance of each component’s contribution, and of the overall model, in accounting for the observed variation in size of land holdings, is shown by the number of asterisks.

FIGURE 3  Mean livestock equivalent per reference adult, by ethnicity and location

landless Maasai households, but 4% of Kipsigis households in Sikrar and 7% in Emarti reported no access to land for cultivation.

Livestock ownership is also significantly (p ≤ 0.005) differentiated by ethnicity, with markedly higher levels of ownership amongst Maasai
households compared with Kipsigis in both Emarti and Sikrar (see Figure 3). Recent in-migrants to Emarti have smaller land areas and smaller livestock holdings than long-term residents, reflecting the relative poverty of later arrivals in this area, whether Maasai or Kipsigis.

During the post-registration period, new land allocations have been much smaller in size. Land is frequently acquired by purchase via market dealings rather than involving new allocation. Again, transactions involving Maasai are much larger than those involving Kipsigis (see Table 8). Around one household in six in Sikrar and Emarti had been involved in a recent land transaction. Despite the small numbers, patterns of land transactions suggest that Maasai in Sikrar tend to be involved in deals over major land areas, while Kipsigis are involved in larger numbers of smaller deals.

**Table 8  Land transfers reported 1996-2001 by ethnicity, Kenya (mean ± SD)**

<table>
<thead>
<tr>
<th></th>
<th>Sikrar</th>
<th></th>
<th>Emarti</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kipsigis</td>
<td>Maasai</td>
<td>Kipsigis</td>
<td>Maasai</td>
</tr>
<tr>
<td>ha purchased</td>
<td>1.3 ± 1.1</td>
<td>21.5 ± 26.9</td>
<td>0.12</td>
<td>1.2</td>
</tr>
<tr>
<td>(n = 6)</td>
<td>(n = 2)</td>
<td>(n = 1)</td>
<td>(n = 1)</td>
<td></td>
</tr>
<tr>
<td>ha sold</td>
<td>1.2 ± 1.2</td>
<td>23.6 ± 18.0</td>
<td>3.6 ± 5.7</td>
<td>1.2</td>
</tr>
<tr>
<td>(n = 9)</td>
<td>(n = 4)</td>
<td>(n = 3)</td>
<td>(n = 1)</td>
<td></td>
</tr>
</tbody>
</table>

The figures represent the mean numbers of hectares purchased (or sold) along with the standard deviation, which gives a measure of the variability of the sample around that average value. In each case the variability is high (standard deviation at least of the order of the average transaction).

**Table 9  Land transfers reported 1996-2001 by residence, Kenya (mean ± SD)**

<table>
<thead>
<tr>
<th></th>
<th>Sikrar</th>
<th></th>
<th>Emarti</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Long-term resident</td>
<td>Recent in-migrant</td>
<td>Long-term resident</td>
<td>Recent in-migrant</td>
</tr>
<tr>
<td>ha purchased</td>
<td>0.7 ± 0.9</td>
<td>9.7 ± 17.2</td>
<td>0.7 ± 0.8</td>
<td>–</td>
</tr>
<tr>
<td>(n = 3)</td>
<td>(n = 5)</td>
<td>(n = 2)</td>
<td>(n = 0)</td>
<td></td>
</tr>
<tr>
<td>ha sold</td>
<td>0.8 ± 0.6</td>
<td>16.6 ± 17.7</td>
<td>0.6 ± 0.5</td>
<td>10.1</td>
</tr>
<tr>
<td>(n = 7)</td>
<td>(n = 6)</td>
<td>(n = 3)</td>
<td>(n = 1)</td>
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The figures represent the mean numbers of hectares purchased (or sold) along with the standard deviation, which gives a measure of the variability of the sample around that average value. In each case the variability is high (standard deviation at least of the order of the average transaction).

In both areas, long-term residents have similar low-level involvement in land transactions. In Sikrar, but not Emarti, recent in-migrants are more involved in large land transactions than are long-term residents (see Table 9).
Access to land in the NCA was governed in the past by customary systems of rights and reciprocity among and between Maasai families and clans and sections (Ndagala 1990a; Homewood and Rodgers 1991; Potkanski 1994). Since Independence and ujamaa villagisation, official processes for land allocation, operating through village governments, interact with and override customary channels. These processes are often overseen by groups that are more sedentary, with greater educational uptake and achievement and more familiar with administrative systems (see, for example, Ole Kuney 1994). Maasai residents and in-migrants in the NCA apply to their village land committee for farming and building plots. Land in the NCA is in theory not open to private ownership, though NCAA has granted leases to hotels and lodges (with no legal right to do so) and has applied for tenure rights to the Conservation Area (Shivji and Kapinga 1998). Ownership of buildings in the administrative centres to some extent confers de facto landownership, with land transactions couched in terms of the transfer of such property. The formal system for the allocation of land favours those involved in its organisation and is open to manipulation. The costs of court proceedings mean that wealth and patronage commonly settle the frequent disputes over access to land for building. Village government (and land committee) membership is largely drawn from a small group of resident Maasai elite educated men (see case study 4).

Case study 4: resident access to land in madukani
Some lifetime Maasai residents have acquired considerable property portfolios. Four Maasai men are responsible for thirteen madukani rental properties. All four are unusual in that they inherited wealth, had at least primary school education and have been members of the village land committee. Men who have been Village Chairman or Secretary own the majority of rental properties. Such positions provide an opportunity to learn how systems work, to develop useful networks and to diversify to protect households from risk, such as livestock disease.

Wealthy non-Maasai in-migrants (civil servants, retired government and NCAA employees, businessmen) are able to negotiate from the land committee or buy building plots from individual residents (see case study 5). Elsewhere in the NCA, similar patterns are found. For example, in remote Naiyobi, in-migrant non-Maasai cultivators are reported to access land through patron-client relations with politicians outside the NCA.

Case study 5: in-migrant access to land in madukani
Government employees retire at fifty-five, and older civil servants tend to diversify their occupations well before retiring. Government and NCAA employees have started to request posting to Endulen in order to establish businesses before retiring there. Common ventures include shops, bars and transport services. In-migrants to madukani apply to the village land committee for plots to build and/or cultivate. Outcomes depend on the interplay of wealth and influence as opposed to customary rights in village government decisions. One retired government official was able to acquire
rights to land within madukani in order to build a bar, by offering an arrangement for cheap or free beer to a Maasai resident who was a known alcoholic and had land rights. Key informants suggest this is not an unusual case.

The currently extremely sensitive nature of cultivation within the NCA precluded data collection on areas of farmland controlled and/or cultivated during the present study. Instead, the number of cultivated fields (shambas) per household was recorded from key informants, because of the unreliability of individual household responses. There is no significant difference in the distribution of numbers of fields cultivated by households of different ethnicity in Endulen madukani (see FIGURE 4).

**FIGURE 4** Percentage distribution of number of fields (shambas) by ethnicity, Endulen madukani

Most (80%) residents of Endulen environs have one shamba, and the rest have two or more. However, the variance is much greater for residents of madukani and for recent in-migrants. A significant proportion, particularly recent in-migrant kibarua households, has none (see FIGURE 5).

Three-quarters of landless kibarua households have been able to negotiate some access to much smaller cultivation plots (bustani, ‘gardens’). All kibarua households stated that they would like to cultivate, but some were unable to access a shamba. In recent years there has been a proliferation of religious organisations in Endulen, each acquiring relatively large tracts of land for buildings. Key informants stated church membership is one way for landless households to acquire a shamba (see Hodgson 2001), but the areas accessed are typically very small. At the other end of the scale, a higher proportion of madukani residents and recent in-migrants have two, three or more shambas.

**LIVELIHOODS IN KENYA AND TANZANIA MAASAILAND**

This section summarises livelihoods data pertinent to issues of resource access, exclusion and conflict. The authors are preparing a
companion paper which analyses livelihood change and diversification in Maasailand with respect to ethnicity and migration status. Historical data (Hodgson 2001) suggest this diversification has been taking place over many years among the Maasai, since at least the 1950s. For most people in both Kenyan and Tanzanian study areas, with the exception of Endulen madukani, livelihood strategies depend primarily (85–100% of households) on herding and/or small-scale farming (see Figure 6). In Endulen madukani, around three-quarters of long-term residents (all Maasai) but fewer than half of recent in-migrants (around half of whom are Maasai) have livestock. Sikrar and Emarti have been pooled, as
there are so few differences in the distribution of livelihoods by migrant status. Income streams from wages and remittance have been pooled, as have strategies associated with poverty such as casual labour (including *kibarua*), charcoal and honey production.

The main points to take away from the summary of the distribution of livelihoods by migrant status and location presented in Figure 6 are that:

- People in all sites are predominantly agropastoralist with the exception of the trading settlement Endulen *madukani*, where significantly lower proportions both of residents and more particularly of in-migrants have livestock or fields.
- Only in Koiyaki, Lemek and Siana do households show a significant participation in tourism earnings.
- Recent in-migrants, both in Endulen *madukani* and in the Sikrar/Emarti sites, show the highest involvement with strategies to alleviate poverty (casual labour, charcoal, and honey).
- The long term Maasai residents of Endulen environs show least engagement with livelihoods other than agropastoralism.
- Business and property rental are more common sources of income in Endulen *madukani* than elsewhere.

Kenyan and Tanzanian Maasai rangelands are seen by outsiders as dominated by people who are culturally and occupationally pastoralists, themselves under pressure of invasion by farming in-migrants. Our survey suggests a picture more closely consistent with a broadly agropastoralist population undergoing the same general process of diversification of rural livelihoods that is taking place across sub-Saharan Africa (Ellis 2000; Bryceson and Jamal 1997; Bryceson 1999; Iliya and Swindell 1997). This is taking place alongside in-migrant households with a range of occupations from poverty strategies through to business investment, depending on their circumstances. Our findings here are supported by historical data showing a long trajectory of diversification (Hodgson 2001).

**Socio-political networks, exclusion and conflict**

Both Kenyan and Tanzanian study areas experienced those processes of loss of access to resources, exclusion of the less well-off by the more wealthy and powerful, and ultimately the increasing tension and conflict that have been outlined in an earlier section for Kenya and Tanzania overall. In the Kenya study areas, machinations over land by the group ranch elites were countered to some extent by group ranch members enlisting the intervention of the district government. Appeals involve travelling up to 150 km to Kirindon or Kilgoris District Officers, and require influence and resources, mirroring processes observed elsewhere in Kenya (Klopp 2001). These processes are illustrated in the following three case studies.
Case study 6: district government intervention in group ranch management, Kenya
At the time of the subdivision of Lemek, registered members were each entitled to 100 acres of fertile or 128 acres of steeply sloping/marshy land. All circumcised males deemed by the land adjudication committee to have been resident on the group ranch prior to the closing of the register in 1993 were registered. According to Narok County Council there were 1,021 registered members on Lemek. Initial attempts by local elites to allocate larger shares to themselves were thwarted in 1995, when a revised survey was undertaken under the supervision of the District Commissioner to ensure allocated plots were of equal size. [Thompson and Homewood 2002]

Case study 7: district government intervention in wildlife association/farming association disputes, Kenya
In 1996, a group of educated men established a Farming Association on Lemek group ranch, independent of the recognised group ranch committees responsible for controlling land allocation and for running Koiyaki-Lemek Wildlife Association. The Farming Association land lies in the MMNR wildlife dispersal area, close to luxury tented camps from which group ranch committee members draw income. At the time of first ploughing, the group ranch Chairman tried to halt farming on the grounds of conflict with tourism on the ranch in general, and operation of the luxury camps in particular. The tented camp operators also threatened to vacate the area. The District Officer was called on to resolve the issue, which he did in favour of the Farming Association’s right to generate income for its members. The tour operators have since stayed put. [Thompson and Homewood 2002]

Case study 8: ‘ethnic conflict’, violence and government involvement in Narok
In common with other parts of Kenya Maasailand the study areas experienced violent ethnic clashes over land issues, peaking in the 1990s. In Emarti in 1980–1984, violence erupted during group ranch member registration, and oral histories suggest approximately 3,000 in-migrants were chased out. Others stayed on, recognised by Maasai as having legitimate claims. The land committee ensured physical separation by ethnicity through grouping Kipsigis land titles to the west of Emarti. In Sikrar, similar violence erupted in 1998–9, when title deeds were allocated on newly subdivided Lemek. Sporadic fighting culminated in non-title-holding Kipsigis being driven out towards established in-migrant settlements to the west. All Kipsigis workers on Lemek wheat farms and Siana tourist lodges were forcibly removed and some were killed in their places of work. Central government later replaced key Kipsigis figures in Narok District, including the District Commissioner, District Officer, and senior police personnel. Local MPs, Maasai and Kipsigis leaders facilitated peace meetings, and Kipsigis title deeds were allocated, again to the west of the area. Maasai land sales and leasing to Kipsigis have subsequently resumed. [Interview book 1, p. 67 (28/1/99), p. 114–115 (4/8/99), p. 147 (24/2/2001)]

These outbreaks of conflict followed the issuing of land title deeds. During this period in our study areas, some Maasai benefited and many Kipsigis lost and were killed or driven out. In North Narok, comparable clashes are generally accepted to have been orchestrated by President Moi’s power brokers in a ploy to disrupt multiparty elections which threatened their power base (Klopp 2001). In other parts of Maasailand, the ethnic dimension to these conflicts may be a more direct...
expression of existing tensions than a product of political manipulation. Our results show ethnicity is strongly linked to access to resources in Kenya—particularly land—but also of relatively more secure livelihoods, irrespective of in-migrant or long-term resident status. For example, 48% of Kipsigis households report some involvement in business compared with only 29% of Maasai. Our sample focuses on rural smallholders, but it was clear that large landowners whether Maasai or non-Maasai, long-term resident or recent in-migrant, were not affected, suggesting the class dimension overrides ethnicity and duration of residence.

In Tanzania, normal channels of representation operate through the village, district, regional and national governments. The ‘legal quagmire’ of cumulative changes in land tenure law has left a situation where legally defensible decisions with far-reaching implications are increasingly made centrally without local knowledge or input. The impact of Tanzanian national politics on local access to resources has been as marked as in Kenya, and access has been as open to manipulation.

The situation in the NCA is even more extreme than for Kenya or that outlined by Igoe and Brockington (1999) for other parts of Tanzanian Maasailand, because the normal channels of representation and civil administration are overridden by the NCAA’s own powers. In effect, the area is governed by the NCA Authority, but this functions as a parastatal not as a local government administration (Shivji and Kapinga 1998). The NCA is meant to be a multiple-use area of land and the NCAA is meant to have responsibility for community development and welfare as much as for wildlife conservation, but in practice conservation has taken priority since Independence (MLNRT 1990; Thompson, 1997). For most of the three decades since its inception there was effectively no representation or consultation and a harshly repressive attitude. In 1990 an ad-hoc ministerial commission on Ngorongoro recommended that:

- villages should have tenure
- the NCAA should hold regulatory powers
- the NCAA should have no tenurial rights
- a Pastoral Council should be constituted to liaise with the Authority and provide a channel for residents’ concerns

In 1994 the Pastoral Council came into being. In practice it is largely made up of ex officio members elected to local government positions (Shivji and Kapinga 1998) with other priorities. Ex officio members apart, in-migrant non-Maasai have proportionally much greater representation than do resident Maasai. The extent to which the Pastoral Council operates independently from the NCAA, or represents the wider resident community, is in doubt (Shivji and Kapinga 1998; Kaisoe and Ole Seki, 2002). The Pastoral Council has functioned as a channel for negotiation in some instances of conflict (see case study 9).

**Case study 9: conflict management between NCAA and residents, Tanzania**

In 1997, NCA wardens under the head of the NCAA law enforcement unit
attacked Maasai herders and cattle grazing in an area to which they had right of access. This area was near, but not in, the Northern Highlands Forest Reserve where grazing is not allowed. Herders were wounded, their spears taken, and cattle wounded and scattered. Seven cattle subsequently died. Some 500 warriors (moran) mobilised for conflict and the NCAA faced a major crisis. The Pastoral Council acted as a channel for negotiations, which resulted in compensation being paid to the owners of the livestock and to the herders who were attacked, together with sanctions against the NCAA official who had instigated the attack. It is not clear, however, that the official concerned was dismissed, as demanded by the resident Maasai. [Shivji 1998]

However, there is considerable scope for local leaders to be dissuaded from supporting their local communities’ interests (see case study 10).

Case study 10: cultivation bans, Tanzania
In 2001 the NCA conservator proclaimed a ban on cultivation and the intention to evict all those who have entered the NCA since 1959. At the same time, many migrant labourers were arbitrarily declared illegal in-migrants and arrested and jailed for substantial terms. Maasai elders and women’s representatives were deeply divided over the best way to respond. Local representations to the Pastoral Council and the NCAA were not effective, not least because elders were put under considerable pressure to agree with the official position. It was agreed that women’s representatives should go to Dar es Salaam to petition the President, as this would make clear that NCA Maasai were making a peaceful representation about issues of fundamental importance to livelihoods. The women’s delegation made the journey, but came under considerable pressure from government representatives and were eventually persuaded to return to NCA without having achieved their audience.

Church groups, donor projects, NGOs and civil society organisations, whether international or indigenous, may become informal channels of representation (see Spear 1997; Hodgson 2001). However, they occupy a precarious position, viewed with suspicion by the government as potentially politically destabilising, and by local people as open to manipulation by ambitious individuals (see Lissu 2000). Because of their structure and composition they function more as pressure groups than as representative bodies participating in local government (Shivji and Kapinga 1998). Some conservation agencies function not only as pressure groups but also as an integrated element in the NCAA administration:

The Law Enforcement Department of the Authority is heavily financed by the Frankfurt Zoological Society (FZS) in terms of provision of vehicles, uniforms and communications equipment (e.g. walkie-talkie radio transmitters, etc). It is said the FZS financed the anti-cultivation operations of 1987/8 during which pastoralist settlements were raided and their crops burnt and slashed, and nearly 25 per cent of all pastoralist leaders were arrested and fined and others incarcerated at the behest of the MNR [Management of Natural Resources] officials (interviews with residents, 2–5 July 1997...). [Shivji and Kapinga 1998: 23]

Most recently, and in clear contravention of the ad hoc ministerial commission recommendations and historical agreements with the
Maasai, the NCAA has sought title to the Conservation Area. Shivji and Kapinga (op. cit.) point out this situation would be essentially illegal as it would amount to a double allocation of land rights already held as deemed rights of occupancy by the Maasai customary users. However, the NCAA has for some time been issuing leases to tourist hotels as though it did in fact hold such title. In Kenya this is mirrored by the issuing of title deeds to politically connected lodge operators inside the government gazetted Maasai Mara Game reserve (Thompson, Interview book 1, p.114–115, [4/8/99]). Maasai rights in Ngorongoro are made more complex by the delicate balance between the need to assert basic human and constitutional rights, and the risk of eliciting repressive measures from an administration that feels under threat, particularly from international human rights advocacy (Shivji and Kapinga 1998).

CONCLUSION

This paper has analysed the patterns and implications of in-migration and ethnicity in East African Maasai rangelands under contrasting Kenyan and Tanzanian macroeconomic and macropolitical contexts. It compares patterns and mechanisms of access to land, livelihoods, and socio-political networks for residents and in-migrants of different ethnicities in areas with strong cultural and ecological continuities between Kenya and Tanzania. This conclusion considers the implications of our findings for the role of in-migration in the moderation of poverty, social exclusion and conflict.

Both Kenya and Tanzania are seen as having been relatively stable due to their comparative equality of opportunities, whether economic (Kenya) or political (Tanzania) (Klugman et al. 1999). However, below the national level, pastoralist groups have been consistently marginalised in Kenya and Tanzania (Igoe and Brockington 1999; Shivji and Kapinga 1998; Lane 1996a, 1996b, 1996c; Markakis 1999) and across sub-Saharan Africa as a whole (Galaty and Bonte 1992). From this viewpoint, pastoralist groups such as the Maasai are differentiated from the rest of the national population in terms of ethnic, economic, and environmental stresses and also in terms of social services provision. Divergence along these dimensions has been identified as leading to instability, conflict and violence (Hussein 1998; Stewart 2002).

Our study documents levels of differentiation between and within groups in Maasailand that belie the postulated equality of economic opportunity in Kenya, and of political participation in Tanzania. In Kenya, processes of land allocation have resulted in many people keeping only a tenuous foothold in agropastoral livelihoods, having adverse knock-on effects on their access to natural resources (Southgate and Hulme 1996, 2000) or losing their rights of access altogether (Rutten 1992), and being dispossessed by ‘legal’ or illegal means (Munei and Galaty 1999), with serious repercussions (Hodgson 2001; Talle 1988). Our results show the rights of some long-term residents of different ethnicities have been less secure than those of more recently in-migrant Maasai in the study areas. Kenya politicians have used disorder
as a political instrument, raising tensions over land allocation in Maasai areas, deflecting discontent through attacks on vulnerable scapegoats, so as to manipulate election results through intimidation and ethnic conflict (Klopp 2001; Dietz 1996). Here it has been the well-off rather than the dispossessed who have pursued violence, manoeuvring to consolidate control. The instigators of Kenya’s ‘ethnic clashes’ played on existing tensions arising from rapid in-migration (Klopp 2001) and systematic dispossession of poorer Maasai (Munei and Galaty 1999), though many less well-off rural people resisted having their ethnic affiliation and legitimate concerns exploited for political ends (Klopp 2002). In the aftermath of violence, wealth and power emerges in our study as a major dimension of resource access in Kenya Maasailand, linked to ethnicity (favouring Maasai in areas formerly within the colonial Maasai reserve).

In Tanzania, rural populations have been left vulnerable to loss of land and livelihoods by the confused legacy of land law created by successive periods of colonial administration, 

\underline{ujamaa} villagisation and economic liberalisation (Shivji 1998). Tanzania in theory gives legal status to some customary land rights, but in practice disregards them (McAuslan 2000). Central government and its representatives may legally grant land leases to investors without consulting or compensating the local users dispossessed by the transfer. Mobile pastoralist populations have suffered more than many in this process, and the events in Maasai rangelands have been well documented (Brockington 2002; Igoe and Brockington 1999; Africa Watch 1990). There have been recent and increasing instances of ethnic clashes over land and access to key resources in Tanzania Maasailand (Otieno 2002a, 2002b; Dean 2000; Kiondo 2002). Officially, ethnicity is not an issue: in truth, the Tanzanian government regards issues, analyses and organisations focusing on ethnicity as potentially destabilising (Cameron 2001).

In line with work by Ole Kuney (1994), Igoe and Brockington (1999) and Brockington (2002), our study shows that beneath this denial of ethnicity as an important dimension, there are indications of systematic discrimination against the rural Maasai agropastoralist population. The virtual absence of ethnic pattern in our findings on access to farmland in the NCA, despite the long Maasai demographic and military pre-eminence in this area, underlines this point. The parastatal administration of the study area by the NCA allows pastoral residents very limited channels of representation or consultation and regularly overrules their constitutional (and human) rights. Agropastoralist access to education, land, and non-farm livelihoods including employment with the thriving tourist industry is severely limited by the NCAA administration. The NCAA prioritises conservation (despite its brief for development) and overrides normal channels and laws. By contrast, in-migrant non-Maasai appear to have proportionally better representation (Shivji and Kapenga 1998). They

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11 Cf. the silent discrimination against San in Botswana (Hitchcock 1990, 1996).
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are able to secure land grants from village governments and/or leases from the NCAA, at the expense of the local rural population, despite the lack of any legal basis for the NCAA to issue such leases. Other aspects of natural resource use are similarly stacked against local pastoralists. Legal appeals and violent protest are on the increase, despite eliciting punitive measures (Brockington 2002; Lane 1996b, 1996c; MNRT 1997; Shivji 1998; Shivji and Kapinga 1998).

The common predictors of violent conflict (Stewart 2002) are all visible in the NCA. The ethnic differences may be silent but appear deep-rooted. The economic differentials are intensifying: the relatively uniform nature of the long-term resident rural population is giving way to madukani’s mix of, on the one hand, landless households dependent on casual labour and poverty strategies, and, on the other, well-off officials and businessmen. There is a long-running struggle for control of the hot spot of valuable environmental resources the conservation area represents. The NCA is a premier tourist destination earning over 50% of Tanzania’s game viewing fees (Leader-Williams 2000). It is generally understood this revenue bankrolls Chama cha Mapinduzi, the ruling party in Tanzania, and senior representatives of the NCAA have repeatedly stated its intention to restrict further and ultimately evict the pastoralist population, despite the official mandate it holds for joint community development and wildlife conservation. The social contract that should give people some security at least of human and constitutional rights is barely in evidence. Despite Tanzania’s avowed adoption of community conservation policies, this highest earning of conservation areas is unable to manage community development so as to achieve health, education, water or transport infrastructures that approach national average standards. Where such services are installed they are largely monopolised by privileged in-migrant elites. International conservation organisations equip, arm and train paramilitary forces used by the NCAA to control or coerce the local population: harassment is common, violence and even executions well documented (Shivji 1998).

This paper originated in response to an increasingly strong assumption, both in the literature and among local people, that in-migration is leading to increased competition for key resources, which in turn may drive poverty and social exclusion on the one hand, and conflict and violence on the other. It has shown that economic and political systems that are relatively equitable at the national level (Klugman et al. 1999) may conceal marked inequalities between groups at the local and regional level. These differences are predictors of conflict but the inequalities displayed in our findings are not associated in any simple way with in-migration. The inequalities are shaped by national context and, in Kenya, they show an ethnic dimension, but the overriding association is with wealth and power, rather than ethnicity or in-migrant status. It is the political economy of land appropriation which primarily drives conflict in Maasailand. State violence is a major contributor, causing exclusion, eviction and extinction of rights, whether disguised as in Kenya, or direct as in Tanzania where a cumulative 30% of the land has
progressively been gazetted as protected areas in which local land use is restricted or forbidden (Brockington 2002; IUCN 1987). In both countries, state violence has been responsible for hundreds (if not thousands) of deaths and for the displacement of tens of thousands of people, who in turn become the poorest of migrants drifting through the East African rangelands,12 or completely excluded and camped, for example, in churchyards locally (see case study 3 above), or elsewhere in conditions akin to refugee status, for example at Limuru near Nairobi or Malea near Naivasha (Klopp 2001, 2002). Any programme aiming to reduce poverty, enhance social cohesion, and ultimately reduce the potential for violent conflict, needs a better understanding of these processes.

In both Kenya and Tanzania, processes of intervention and change in land tenure have repeatedly allowed elites to manoeuvre to their own advantage. Land allocation systems have been problematic and consistently work for those organising them. In both countries this favours the well-off. In Kenya Maasailand, for historical reasons, this includes a substantial Maasai elite and smallholder/landowner class; while in Tanzania, few Maasai agropastoralists but many well-off in-migrants dominate the process. Appeals in land allocation disputes are not easily accessed, are open to corruption, and plural legal systems increase the chances of conflict. Dispossession and exploitation have combined to initiate a political alliance among educated young professionals from pastoralist groups in Kenya. Focusing on issues of land, education and political representation, this forms a new channel to discuss and put forward pastoralist concerns through civil society processes (Markakis 1999). In Tanzania, Maasai residents have been isolated from and bypassed by political processes, which are dominated by an administration with few pretensions to balanced local government. The struggle between conservation interests and human rights is unlikely to be resolved in any positive way for the agropastoralist population of the NCA in the foreseeable future.

Reviews of tenure, access and conflict management in rangeland areas have emphasised the need to foster systems for negotiated access that can better accommodate multiple user groups within the social, spatial and temporal variability so characteristic of African arid and semi-arid lands (Behnke 1993; Niamir-Fuller 1999; Scoones 1995; Toulmin and Quan 2000). However, when such different trajectories of tenure reform have had such comparably adverse impacts on vulnerable people in both systems, is further review of land titling procedures likely to improve things? Any such review needs to take account of the way every change has offered opportunities for the well-placed to increase their control at the expense of the poor, not only in Kenya and Tanzania, but more widely (McAuslan 2000). Pathways to reduce tensions must make access to education, political representation and job opportunities more equitable for residents and in-migrants, whatever their ethnicity. In particular, the lack of equitable and effective channels of representation

12 See, for example, Igoe and Brockington (1999) on the Usangu Plains.
for both residents and in-migrants currently forms a major barrier to civil society in East African rangelands. This is being tentatively addressed through current initiatives for poverty reduction throughout sub-Saharan Africa which are already targeting rapid expansion of education in areas such as the NCA—though there are fundamental problems with the lack of infrastructure and teachers (see Carr-Hill 2002; Bishop 2003). Any results will have a long lead-in time: in the meanwhile, insecurity of tenure, denial of access to the basic resources for rural agropastoral livelihoods, and the potential for violent conflict are increasingly explosive issues which need immediate attention.

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ABSTRACT

East African rangelands have a long history of population mobility linked to competition over key resources, negotiated access, and outright conflict. Both in the literature and in local discourse, in-migration is presented as leading to increased competition, driving poverty and social exclusion on the one hand, and conflict and violence on the other. Current analyses in developing countries identify economic differences, ethnic fault lines, ecological stresses and a breakdown in state provision of human and constitutional rights as factors in driving conflict. The present paper explores this interaction of in-migration and conflict with respect to Kenyan and Tanzanian pastoralist areas and populations. Using quantitative and qualitative methods, patterns of resource access and control in Kenya and Tanzania Maasailand are explored in terms of the ways land and livestock are associated with migration status, ethnicity and wealth or political class. Contrasts and similarities between the two national contexts are used to develop a better understanding of the ways these factors operate under different systems of tenure and access. The conclusion briefly considers implications of these patterns, their potential for exacerbating poverty, and policies for minimising social exclusion and conflict in East African rangelands.

RÉSUMÉ

Les prairies d’Afrique orientale connaissent depuis longtemps une mobilité des populations, liée aux problèmes de concurrence pour les ressources clés, d’accès négocié et de conflits purs et simples. Dans la littérature comme dans le discours local, l’immigration interne est présentée comme cause de concurrence accrue, motrice de pauvreté et d’exclusion sociale d’une part, et de conflit et de violence d’autre part. Des analyses menées actuellement dans les pays en développement identifient comme facteurs moteurs de conflit des écarts économiques, des failles ethniques, des tensions écologiques et une détérioration des droits humains et constitutionnels. Cet article examine l’interaction entre immigration interne et conflit au sein des régions et populations pastorales du Kenya et de la Tanzanie. Il utilise des méthodes quantitatives et qualitatives pour étudier les modèles d’accès et de contrôle des ressources dans le pays masai du Kenya et de la Tanzanie en termes d’association des terres et du bétail au statut d’immigration, à l’ethnicité et à la catégorie de richesse ou politique. Les contrastes et similarités entre les deux contextes nationaux servent à mieux comprendre le mode de fonctionnement de ces facteurs dans des régimes fonciers et systèmes d’accès différents. La conclusion examine brièvement les implications de ces modèles, leur capacité à exacerber la pauvreté et les politiques de minimisation de l’exclusion sociale et des conflits dans les prairies d’Afrique orientale.