



Regional Learning &
Advocacy Programme
for Vulnerable Dryland
Communities

SUMMARY BRIEF: The causes, processes and impacts of land fragmentation in the rangelands of Ethiopia, Kenya and Uganda

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Summary

Many parts of the rangeland in the Horn and East Africa have become highly fragmented, putting the pastoral systems in these areas at risk of complete collapse. Land fragmentation occurs when land gets converted for agriculture or ranching, is invaded by non-local plants, is enclosed for individual use, is appropriated for mineral extraction, or is removed from use to become a protected area. The pastoralist production system suffers as it is dependent on having access to communally held seasonal grazing areas and water sources, and when migration routes to grazing and water get blocked, pastoralist production becomes impossible on the remaining areas of the rangeland. Fragmentation is the result of inappropriate development processes and ineffective land use planning that fail to recognise how rangeland is used, and the importance of its interconnected areas. Insecurity of tenure and resource rights are key factors making this possible.

Land fragmentation is one of the key reasons why the ability of pastoralists to overcome drought has been severely reduced. With less grazing land available, the poorest pastoralists in particular are now unable to retain herds of a sufficient size to survive protracted dry periods. And as resources become scarcer, those resources that remain are becoming 'privatised' by more powerful community members—keen to maintain their own access to them. Such individualistic attitudes are new, and disadvantage the poorest even further by affecting the traditional customary safety nets and livestock redistribution practices that used to support them. Now neither the government nor customary governance systems are effectively protecting resource access for the poorest.

This brief summarises the report *'Broken Lands: Broken Lives?'*, which identifies the key trends and processes of land fragmentation in Ethiopia, Kenya and Uganda. It explores the relationship between this fragmentation and the reduced ability of pastoralists to overcome drought—highlighting their strong linkages. Recommendations are made as to how the negative impacts of land fragmentation on pastoral livelihoods can be reduced or mitigated.

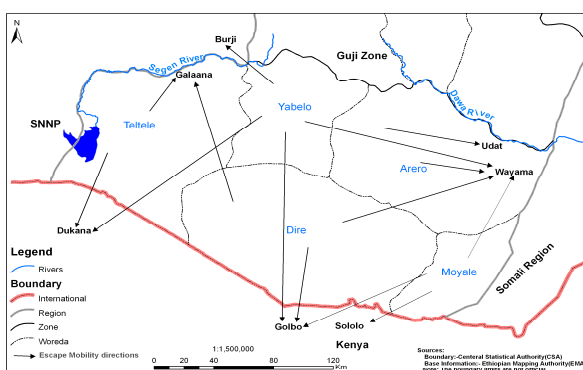
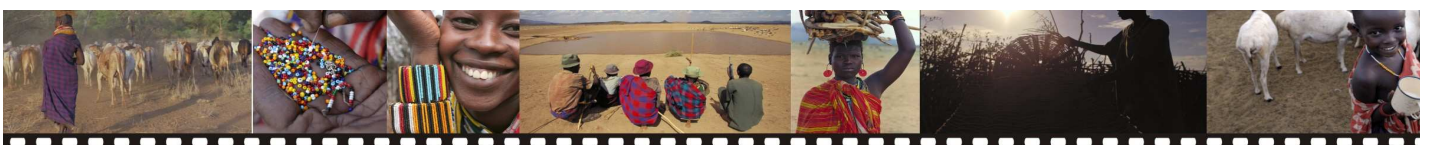


Figure 1: Map of 'escape routes' from Borana in times of drought (Source: Eyasu Elias 2009).

¹ The ideas and opinions expressed in this brief are those of the author, and do not necessarily reflect the views of REGLAP, nor its members or donors. The author can be contacted at: fionaflintan@yahoo.co.uk



The root causes and processes of land fragmentation vary across the three countries studied in the report, but some common themes exist:

Lack of support for pastoralism and inappropriate land use planning

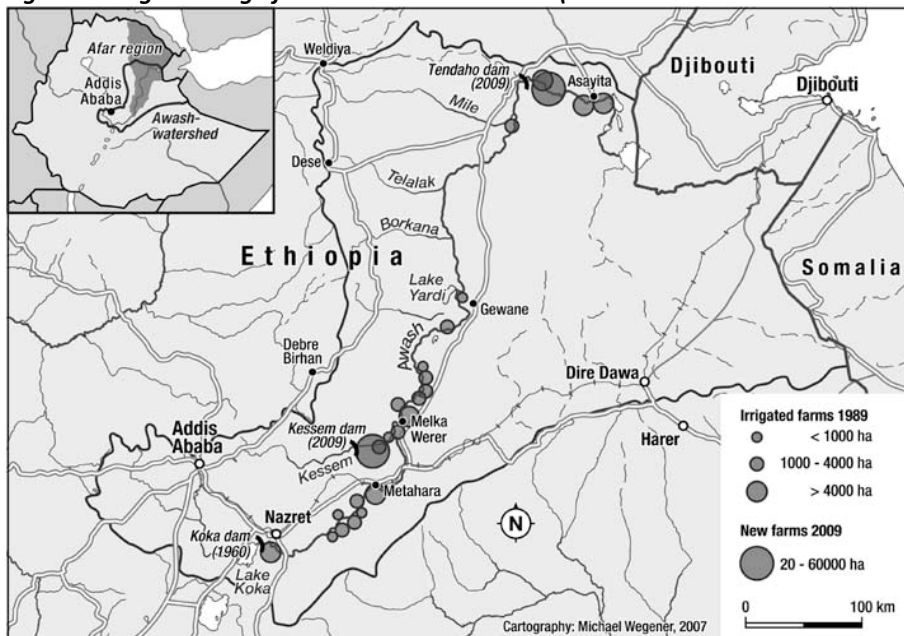
Overall there is a lack of support for pastoralism as the most appropriate land use system for dryland areas. Pastoralism is uniquely capable of utilising the 'poor quality' parts of rangelands, as long as access to key seasonal 'rich quality' resources is secured. This lack of support comes from a general misunderstanding of the interconnectedness of pastoralism, where the different parts of the pastoral system (social and ecological) can be impossible to separate. Inappropriate development and land use planning systems for the rangelands fail to take this interconnectedness into account when they limit planning to small areas, individual resources or government administrative units, that in fact are only a minor part of the greater rangeland. A rangeland that is customarily and holistically managed ensures that the complete whole remains healthy, and is capable of supporting pastoral systems in times of drought.

The establishment of water points or enclosures is often used to provide short-term relief during drier periods, but in the longer-term these are also likely to contribute to rangeland fragmentation. For example the establishment of water points and private enclosures in both northern Kenya (Enghoff et al 2010; Walker and Omar 2002; Kitalyi et al 2002) and Ethiopia (Sugale and Walker 1998) may have had immediate benefits, but have also contributed to rangeland fragmentation (Yacob Aklilu and Catley 2010). In the eyes of land use planners and decision makers pastoralism is often not recognised as successfully competing with other land uses, and the pastoral system as a whole gets inadvertently destroyed by the removal or blocked access to its key resources.

Conversion for agriculture

Large-scale agricultural irrigation schemes, introduced as part of agriculture-led development policies, have been a major cause of rangeland fragmentation. By 1989 Ethiopia had developed 68,800 hectares of land adjacent to the Awash River (Beyene 2008), and in Kenya the Tana Delta absorbed one quarter of Kenya's total agricultural development funding for several years in the 1970s.

Figure 2: Irrigated large farms in the Awash Basin (Source: Müller-Mahn et al 2010).



The process resulted in the settlement of over 26,000 people (Umar 1997), and the major displacement of others, including the 6,000 displaced by the Kiambere Dam and its associated irrigation project (World Bank in FIAN 2010). Elsewhere in Kenya other agricultural schemes have been introduced in drier areas, such as the 9,000 hectares Turkwell Gorge project in Pokot district (Nangulu 2001).

“By denying us access to the flood plain pastures and the Awash River water, the sugar enterprise has already brought us to the verge of death. And out of brutality, they are now planning to deprive us even a burial place for the dead among us.” Karrayu elder, Eyasu Elias (2009).

Of greater concern currently is the increasing trend of leasing large tracts of land in pastoral areas for commercial investment (both foreign and national). In Kenya and Ethiopia particularly this is a significant concern, as it is being carried out in areas of lower and variable rainfall where irrigation therefore becomes necessary. This forces new farms to congregate along rivers and waterways, threatening the vital access of pastoralists to key resources (water and grazing) found here during the dry seasons. In Kenya the Tana Delta is again the primary target for this investment, as well as a development scheme planned for the LAPSET (Lamu Port-Southern Sudan-Ethiopia Transport) Corridor. Both present a huge risk to pastoral areas through increased competition over resources and knock-on negative impacts. In Ethiopia in 2009 the government launched a new investment plan to provide 3.7 million hectares of land for agricultural development. To date around 1.3 million hectares have been designated—the majority of which is found along the major rivers in pastoral areas. In South Omo for example 180,625 hectares have been delineated in districts that are all dominated by pastoral livelihood systems.

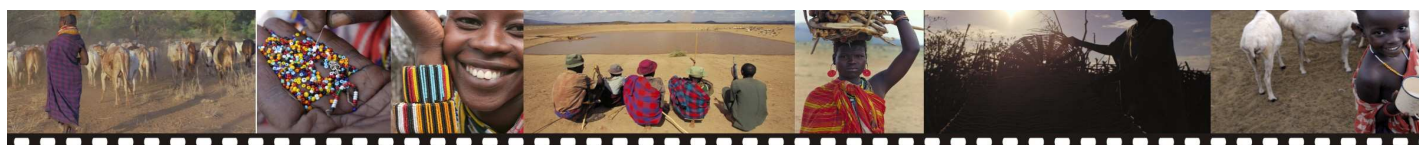
Unless appropriate measures are taken to secure the necessary resources required for maintaining pastoral livelihood systems alongside the agricultural development, the conversion of such large areas of pastoral lands to agriculture is likely to have a huge negative impact.

Box 1: Tana Delta

In 2008 a plan to produce biofuels in the Tana Delta was approved by the government, despite concerns for the wealth of biodiversity in the area and the livelihoods of the land users. The Delta regularly provides grazing land for up to 350,000 heads of cattle in the dry season (FIAN 2010), and in the 2009 drought the area provided grazing for 3 million head of cattle coming from as far as Wajir district (Nunow 2010). A number of further land deals are now in the pipeline through the Tana and Athi Rivers Development Authority (TARDA). TARDA is a government agency that owns between 130,000-200,000 hectares in the Delta, including a rice project initiated in the early 1990s. The land is now partly used by pastoralists and farmers, including 40,000 hectares provided to the Qatar government to grow horticultural products, and 16,000 to Mumias Sugar Company Ltd to grow sugar cane and bio-fuels. Another 4,000 hectares is converted for out-grower schemes (FIAN 2010). Deals of 90,000 ha and 120,000 ha are also on the table. It is predicted that 25,000 people living in 30 villages stand to be evicted from their ancestral community land that has now been given to TARDA. Resettlement schemes are being established, but these are unlikely to benefit the pastoralists (Nunow 2010).

Conversion for ranching

In Uganda there has been an emphasis on the development of intensive livestock ranches on pastoral lands, fragmenting the rangelands for mobile livestock keepers. The Ankole rangelands form part of the western section of Uganda’s cattle corridor, and are home to the Bahima, amongst others. Over a period of fifteen years 50 ranches of around 1,200 hectares (12 sq km) each were established, with many given to absentee landlords (Lamprey 2003). The large numbers of pastoralists who were displaced were forced into a protracted migration across southern and central Uganda as they tried to access grazing in protected areas and remaining common property areas. The result was one eviction after another and/or conflicts with other land users. Although some of the Uganda ranches have



now been restructured, and land provided to those who were originally displaced, more powerful landowners have been able to hijack the allocation process and use the opportunity to expand their own landholdings (Muchunguzi, forthcoming). Commercial companies have also bought up some of the ranches and subsequently evicted any pastoralists found on the land. In 2010 for example 300 households with 20,000 cattle were evicted from the Kiryana Ranch by Mukwano Enterprises who will use the ranch to produce livestock for export (New Vision 2010).

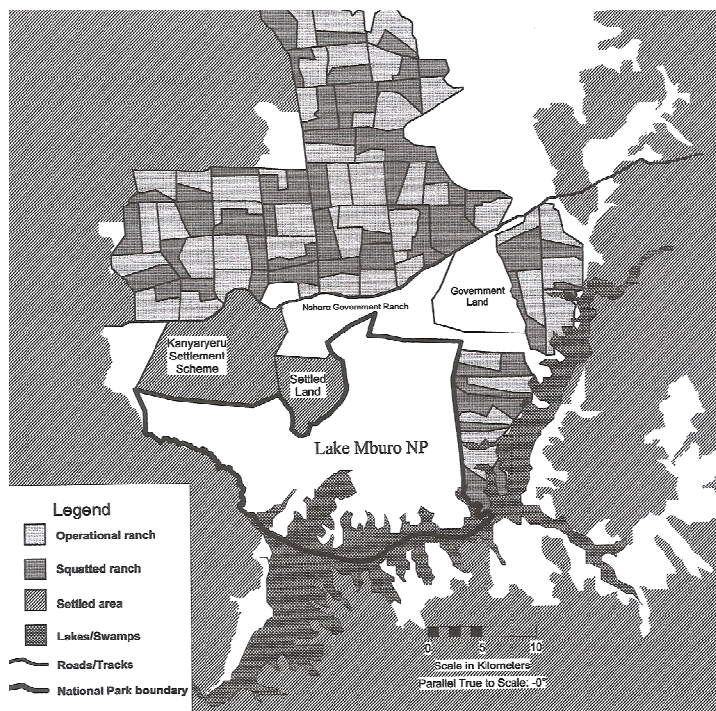


Figure 3: Ranch subdivision and land fragmentation in the Ankole Ranching Scheme around Lake Mburo NP (Lamprey 2003).

Ranching was also introduced to Kenya by the newly independent government in the late 1960s. The Maasai, who had already lost around 50 to 70 per cent of their lands through ‘agreements’ with the colonial government in 1904 and 1911 (Keen 1962), were once again victims. The development of ranches in the northern and southern rangelands resulted in the removal of much of the remaining Maasai areas, and their conversion to ranches that were later subdivided and individualised. Although many Maasai were employed on ranches in the northern rangelands to produce livestock that would be fattened in the south (where Maasai were provided titles to group holdings), many were not able to benefit from the scheme (Umar 1997). The eventual individualisation of group holdings (only one group ranch now exists in Kajiado district) has

led to a breakdown of the pastoral production systems, increased vulnerability to drought due to restricted mobility, and created significant disparities in wealth. (Mwangi 2007; Behnke 2008).

Across Kenya settlement has been encouraged in pastoral areas, and some districts—such as Machakos—are now totally converted to agriculture. The northern rangelands have been carved up into individual commercial ranches and farms. In Laikipia 48 individuals control 40.3% of the land (937,583 hectares) as commercial ranches or conservancies (the latter with an area dedicated to wildlife conservation). Many are held without clear legal title. In addition there are 23 large-scale farms covering 1.48% of Laikipia (Letai 2011). The farms are fenced off and rarely provide through migration routes for pastoralists (Kantai 2007). 27.21% of the land is under small-holder agriculture. Most pastoralists are limited to 13 group ranches in the drier northern parts covering 7.45% of the district (Letai 2011). Corruption and bias in land allocations in Kenya has contributed to the displacement of the poorest in particular, and the marginalisation of women (Mwangi 2007; Odhiambo 2006). The Government continues to show a lack of interest in resolving the issue, or of providing the Maasai with any form of support (Kantai 2007).

Insecurity of tenure

The removal of key resources, and conversion of land to non-pastoral uses, has been facilitated by the overall lack of recognition given to customary pastoral land and resource tenure. Across the region governments have failed to provide protection to pastoralists through legislation and formal tenure systems. Kenya in particular has driven towards individualisation of land, and until recently failed to develop security of rights for common property. The Land Policy of 2009 offers some opportunities for securing ‘community land’ but implementation is still some way off. Uganda now also has some facilitating legislation but it requires improvement and implementation. In Ethiopia pastoralism as a livelihood system is protected by the Constitution, and pastoralists have the right to grazing land, but the regions are still in the process of developing land policies and legislation for pastoral areas including common property.



In this tenure security vacuum pastoral lands are often considered ‘vacant’ ‘idle’ or ‘wastelands’—with their removal justified in the name of ‘development’. The vacuum also allows settlers and agriculturalists to move into pastoral areas. The fact that pastoralists use parts of the rangeland and its resources only at certain times of the year plays a major role in tenure insecurity, making these areas an easy target for conversion to agriculture and other land uses. Pastoralists also do not usually pay tax for occupying the rangelands, making it easier for the State to ignore their land usage and/or offer the land for the growing of crops—which is seen as more ‘legitimate’, and for which tax is paid.

Additional causes of rangeland fragmentation

Mineral Exploitation - The drive for economic development has encouraged the exploitation of minerals in pastoral areas. This is particularly the case in Uganda where, in 1996, 22,010 sq km of land were licensed to 13 companies for mining. Since then the sector has grown by 13% per annum. Generally leases are provided without consultation among communities, and their access to the areas becomes restricted if not totally prevented, with few local people benefitting (Rugadya et al, 2010; Iriama, 2010). In Kenya and Ethiopia mineral exploitation is less developed, though large areas are being explored for oil and gold deposits.

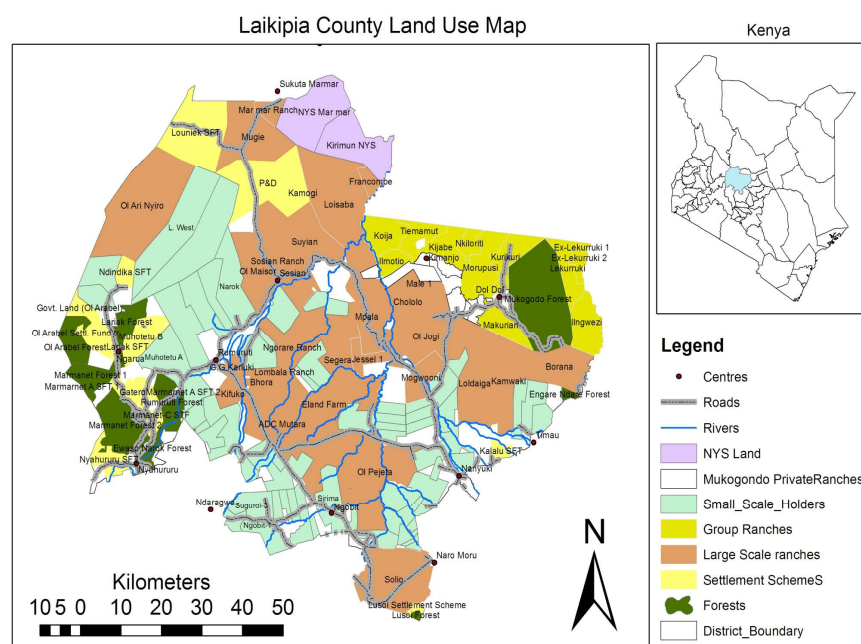
Alien Invasive Plants - Invasion by non-local plants that prevent access to water sources, and take over grazing areas, have also become a significant problem in many pastoral areas. In Ethiopia and Kenya *Prosopis juliflora* is particularly challenging. Introduced initially as a soil conservation measure, the plant has spread rapidly, mainly carried by livestock. Today over 1 million hectares of land in Afar alone has been invaded by *Prosopis*, accounting for approximately 30% of the region’s productive land (based on figures by Dubale Admassu 2008). In Kenya, areas such as Baringo and the Tana Delta are affected, though the plant is spreading across other parts too. To date neither government has developed a national strategy for dealing with this and other invasive plants, though Kenya has declared *Prosopis* and some other invaders as ‘toxic’ plants not to be planted.

Conflict – Conflict, and interventions attempting to deal with conflicts, have also contributed to rangeland fragmentation. In Uganda’s Karamoja region insecurity is the primary reason why water and pasture cannot be accessed when needed (Stites et al 2007). The government has attempted several disarmament programmes that have generally failed (Knighton in press). Restrictions were imposed on movement of livestock between districts and across borders in the early 2000s, and in 2005 the government intensified this initiative during a forced disarmament, followed in 2006 by the introduction of protected kraals. These served to limit livestock access to pastures and water, and disrupted normal dry season grazing patterns. They also disrupted household access to grain and livestock market opportunities (Browne and Glaeser 2010).

Protected Areas - Extensive protected area systems have been established in the pastoral areas of each of Ethiopia, Kenya and Uganda. In Karamoja nearly all land was under some form of conservation protection until 2002 when 54% was de-gazetted— although 40.8% still remains protected (Rugadya et al 2010). However, although pastoralists do get evicted from pastoral areas on occasions, more often than not protected area boundaries are not fully enforced, and in Uganda and Ethiopia pastoralists rely on these areas for dry season grazing and in times of crisis. In Kenya the boundaries are more strictly kept—perhaps as there is a greater reliance on wildlife for tourism. Here, in an attempt to stop the ‘dispersal’ land—upon which the wildlife around the protected areas rely heavily— being completely converted to agriculture, the focus is on identifying ways in which wildlife can coexist with livestock. Formal arrangements may be made to allow access to resources, and increasingly neighbouring landowners are being encouraged to allow wildlife on their land.



Figure 4: Current land use in Laikipia: Most pastoralists are limited to northern dry areas in the group ranches (Source Letai 2011).



Pastoralist Enclosures – In all three countries the land insecurities and increased competition for resources that pastoralists face have pushed individuals to enclose and protect land so making it unavailable to other rangeland users. This may be in order to establish a private grazing reserve; to use some of the land for agriculture or production of fodder crops or hay; to exploit the trees for charcoal or production of gums and resins; or to rent the land to other pastoralists for fattening or resting cattle on their way to markets. Not only does this trend remove the area of rangeland from the pastoral system, but threatens pastoralist society and lives. As the area of ‘open’ rangeland shrinks, the process of enclosures speeds up: “enclosure begat enclosure in a self-reinforcing process” (Behnke 2008). And the cycle of more and more land fragmentation continues.

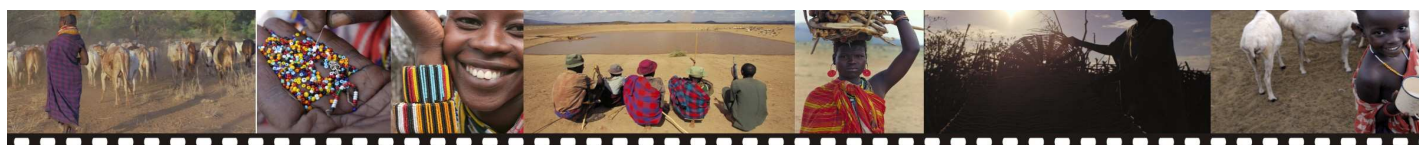
Impacts of land fragmentation in the rangelands

Across Ethiopia, Kenya and Uganda the rangeland fragmentation that is taking place is having a significant impact on pastoralists and pastoralism:

Livestock is being redistributed from the poor to the wealthy

Some pastoralists are benefiting from the fragmentation process, whilst others are losing out. Those who benefit are generally the more powerful, with greater assets on hand, capable of influencing decision makers and land allocations, of enclosing property, building up their herds, or making the most of new livelihood diversification opportunities. In Kitengela, Kenya, for example, one-half of the cattle are now owned by the 20% of the households with the highest overall incomes. These households also have greater ‘off-land’ income, which means they can also invest in buying more livestock. They are also the ones educating their children past primary school so have improved employment opportunities (Nkedianye et al 2009).

In Ethiopia too processes of individualisation of property rights have resulted in smaller herds. This gradual redistribution of livestock from the poor to the rich (Yakob Aklilu and Catley 2010), explains why pastoral areas can be seen to be exporting increasing numbers of livestock whilst also being characterised by increasing levels of



destitution. For the poor the situation has become critical, as they are no longer able to access the common property resources upon which they relied, and there is increasing competition and conflict over the remaining resources—often with loss of life. As they lose control over their livelihoods they become increasingly vulnerable to crises such as drought (Eyasu Elias and Feyera Abdi 2010; Rettberg 2010; Diress Tsegaye et al 2010). The result is large numbers of people dropping out of the pastoral system without assets or a means to survive.

The opinion of pastoralists currently is that it is not drought itself that makes them vulnerable, but rather the increasing marginalisation of their drought-response mechanisms, coupled with the gradual eroding of their asset base and the barriers being put on their mobility (Ethiopia – Devereux 2006; Eyasu Elias and Feyera Abdi 2010; Siefulazia 2004; Rettberg 2010; Kenya – ILRI 2010; Nkedianye et al 2009; Uganda – Muchungazi forthcoming).

Box 2: Mobility as a drought response

The 2008/9 drought in Kenya highlighted the negative impact that land fragmentation is having on pastoralists' vulnerability, resilience and ability to overcome drought. It resulted in high loss of human life, high livestock losses, and heavy reliance on humanitarian aid, which amounted to around US\$4.6 million in six districts (ILRI 2010). Livestock loss was estimated to be a staggering US\$1 billion and the drought also slashed maize harvest from 30 million bags to 15 million (Western 2009). Those who were not able to move their herds saw 100% losses (UN-OCHA 2010). *"If we could have had access to grazing areas that we used 30 years ago, this drought would not have affected us and there would have been no need for you to come here"* - Samburu pastoralist talking about the 2009 drought. (ILRI 2010)

Customary institutions are struggling to keep control

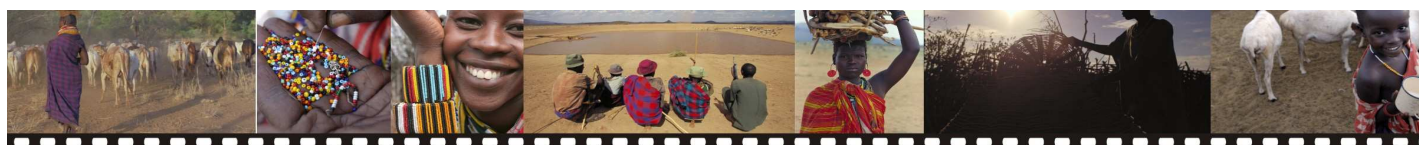
"Today there are divisions and differences between those who have and those who have not. Everyone wants his own clan to get something and doesn't care about the other clan. We didn't have such things before" (Afar clan leader 2005 in Rettberg 2010).

Mechanisms for resilience built up by pastoralists over centuries—including adaptive strategies, mutual support and safety-net systems, as well as social/customary organisations and institutions—are being severely challenged by the multiple internal and external factors affecting land use change and fragmentation. New values and practices, focused on the exclusive acquisition of monetary profit, are now in conflict with the egalitarian culture of 'sharing' that previously existed, and was supported by traditional values of solidarity, cooperation, reciprocal arrangements and collective wealth.

In Ethiopia, where customary institutions are still relatively strong, they too are struggling to control land fragmentation. Communal directives are ignored and individuals continue to plant crops and put up enclosures. Herders who are prevented from accessing grazing areas by community leaders will petition local government offices and return with formal permission to access them. As new opportunities open up, such as new markets and marketing routes (as in the Somali and Oromiya regions), there are greater incentives for individual rather than group gain (Yakob Aklilu and Catley 2010; Boku Tache Dida 2011). This individualisation further weakens the authority of customary institutions, which are already being challenged by the youth.

Additional vulnerable groups are being created

As the local resource base gets fragmented, and informal safety nets and social support systems are less able to support community members who lose assets, new vulnerable groups are now emerging in pastoralist communities across the region. These include: asset-poor households; small stockowners; families with few or no working members who become unable to access distant resources i.e. collecting water from far-off watering points; widows; aged persons; and households with limited access to social networks. The weakening and gradual disintegration of local security systems is leaving an expanding void in pastoral areas, which non-herders from urban centres use to their advantage. Pastoral resources outside the control of the development schemes are now gradually coming



under the possession of urban-based traders and herd owners, who exploit the uncertainty surrounding pastoral land rights (e.g. Karrayu – Ayalew Gebre 2009). In this context, local institutions for conflict resolution and jurisdiction, based on customary law, become increasingly ineffective and incapable of solving land-related conflict.

Increased competition over remaining grazing lands creates regular conflict hotspots

Increasing conflict within and between groups threatens the social cohesion of the whole pastoral clan society, and weakens risk-averting strategies that depend on negotiations with other pastoral groups. As good quality grazing lands are reduced, competition increases over those that are left and these become regular conflict hotspots. Groups who were once allies are now in conflict over land access. In many cases areas have become ‘no-go’ zones in order to avoid conflicts between opposing groups, including the Alledoghi Plain in Afar (Ethiopia)—the end result of the preclusion of 75,000 hectares of wet season grazing (Ahmed et al 2002). Tensions also increase as different ethnic groups are pushed closer together when access to their traditional areas is curtailed (Eyasu Elias and Feyera Abdi 2010). In many areas land uses that are incompatible with wildlife are on the increase, to the detriment of the wildlife and ecological processes.

In Karamoja (Uganda) the increasing incidences of violence are pushing poorer households closer to food insecurity, whilst chipping away at the assets of the better off (Browne and Glaeser 2010). Restrictions on movement further aggravate the situation (Muhezera 2006), and people live in a constant state of conflict and insecurity. Not only do the conflicts have costs for the communities, but it is estimated that the Government spends about 50% of its national budget on military interventions amounting to US\$100m a year with a significant proportion dedicated to resolving conflicts in the dryland areas (Adan and Pkalya 2005).

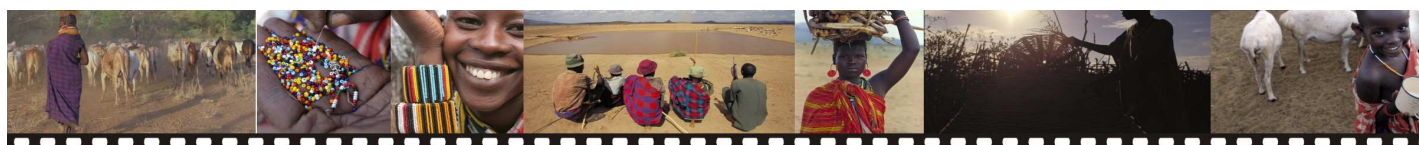
Though community-based responses to conflict and peace-facilitating activities have had some success, the root cause of land insecurity and continuing loss of access to land and resources is not being addressed. For northern Kenya it has been said that: *“the key to peace is... legalising as firmly as for the ownership of skyscrapers and international hotels of Nairobi the rangelands for the pastoralists, through enactment of relevant and agreeable tenure arrangements that recognise the regime of common property ownership”* (Umar 1997).

Women are losing out

Women and men experience the changes resulting from land fragmentation differently. When land tenure is formalised women have not automatically benefited and in some cases have lost out. For example the establishment of group ranches marginalised women in particular (Verma 2010). A lack of males—due to their taking livestock on protracted migration routes, or out-migration to towns to find jobs—has had an impact on gender relations. Women are now often left as ‘de facto’ heads of their households but without the decision making power or a voice in community discussions. However it seems that women are better able to make the most of new and opening opportunities. Though workloads have increased, many women are happy to have a more independent income, but women who have had less exposure to alternative lifestyles, and perhaps led a more ‘traditional’ life, feel highly insecure about the future.

Conclusions and recommendations

It is clear that there are both ‘internal’ and ‘external’ forces of change pushing forward the fragmentation of the rangelands. No one group of actors can be blamed. However, governments hold ultimate responsibility for the land use changes taking place as they have the greatest power for influencing such changes, and could offer better protection for pastoralists in terms of land and resources. When the adaptive management strategies of pastoralists fail, the ability to retain production falls, impacting not only individual herd owners but pastoralism as a whole. Without controlling mechanisms and institutions, common property becomes open access with the likelihood of over-exploitation increasing.

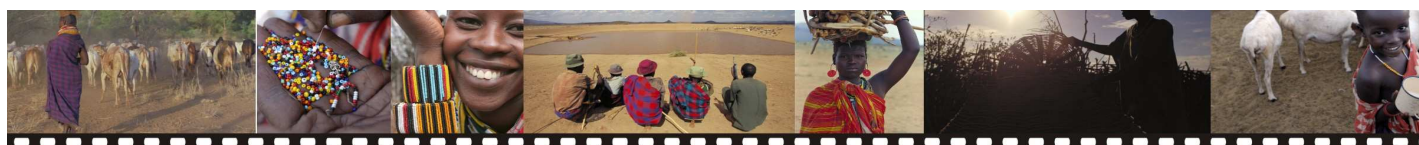


Some positive trends are developing however. In Ethiopia there is a growing awareness of the value of pastoralism as an effective livestock production system, and its current and potential contribution to national and regional economies. Pastoralists are beginning to make their views known in decision-making processes at all levels, and some needs—such as marketing facilities—have been improved. The establishment of land policies and legislation by regional governments offers opportunities for addressing many of the land insecurities that pastoralists face, and the possibility of securing of rangeland resources. The extent to which government and communities can work together with commercial investors, for example, in ensuring that measures are taken to protect pastoral resources whilst taking forward agricultural development, remains to be seen.

The Government of Kenya has recently introduced a new Land Policy and approved a new Constitution, both of which offer greater opportunities for securing rights to resources for pastoralists. Other positive steps are the establishment of a new Ministry, and strategies that are focused on the development of arid lands. Substantial funds are being allocated to ASAL development over the next thirty years with a revised Strategic Plan for the ASALs currently under development. In Uganda too the new draft Land Policy (2011) is a very positive step, and an important starting point for engaging with government on securing rangelands for pastoralists. A policy for Uganda's rangelands is also being developed.

An active civil society has enabled pastoralists to gain some attention for their cause, and several court cases in their favour have gained back lost lands. Many land users (including ranchers, pastoralists and conservationists) are now realising the dangers of land fragmentation, and have begun to reconsolidate small parcels, broker new agreements and partnerships, and identify options for multi-land use systems. In order to build on these gains the following recommendations are highlighted:

1. Increase awareness and understanding among development actors of the causes, trends and impacts of rangeland fragmentation, to enable more informed decisions to be made on how to slow and prevent fragmentation and how best to deal with its negative consequences.
2. Create a better understanding and recognition of the benefits of pastoral systems amongst policy makers, to ensure that appropriate support is provided to enable pastoralism to contribute further to national development processes. Investments that secure pastoral systems, including rights to land and resources, are likely to be much more cost effective than spending millions of dollars on food aid.
3. Ensure that development and land use planning in the rangelands occurs at the appropriate scale —i.e. one that takes into account all the different parts of the rangeland system and the overall requirements of pastoralists, as well as other rangeland users. The impact that changing one part of the rangeland system has on the rest of it needs to be better understood, and any negative impacts mitigated. The process should start with improved understanding of the land use systems that already exist.
4. Protect and secure rights to land and resources, such as (serviced) migration routes for pastoralists. This is fundamental if pastoralism is to survive as an effective production system and achieve its full potential. National governments, donors, the African Union and regional bodies, NGOs/CSOs, pastoral local leaders and communities can all play a role in this. An understanding of the current resource tenure systems, and the gaps within them, is needed.
5. Raise awareness on land issues, existing rights and how to access them, and how to gain protection for pastoralist rights. Awareness on how to influence decision-making processes related to commercial investment is also urgently needed. CSOs and NGOs need to work together to assist communities with this, and to develop a more united front from which to promote pastoral livelihood security.



6. Secure cross-border movement and regional pastoral development, as part of the process of sustaining and enhancing the pastoral production system as a whole—including marketing/trade and all its spin-off benefits. Governments, regional and pan-Africa bodies can facilitate this.

7. Understand the indigenous knowledge of communities, and ensure this is built upon within decision-making bodies concerned with rangeland use planning and development. Understanding early warning systems and drought cycle management is essential here. Communities may require support in strengthening or establishing new collective/customary community institutions, where necessary.

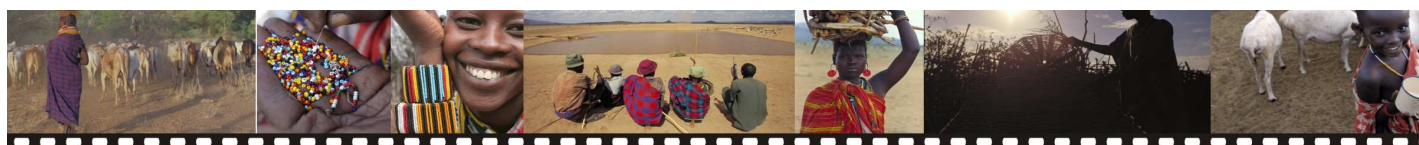
8. Incorporate land issues into vulnerability assessments, drought crisis preparation, and management and response processes. Mobile pastoralism needs to be the cornerstone of integrated poverty reduction programmes and the platform on which resilience for pastoralists is built.

9. Complete the gaps in the research on land fragmentation, and clarify the most appropriate land and resource securing system(s) that can best support pastoral rights and livelihoods. There is a lack of information from northern Kenya and parts of Uganda (other than Karamoja), and not enough empirical data on the impacts of land use change on pastoral livelihoods and strategies in times of drought. Research is also needed on processes of sedentarisation under different circumstances and in different contexts, and on gender differences and issues.

As this brief is being written, pastoralists in northern Kenya and southern Ethiopia are being severely affected by another drought-induced crisis across their lands. Their situation is made all the worse by land fragmentation, highlighting the need to address rangeland fragmentation as a matter of great urgency.

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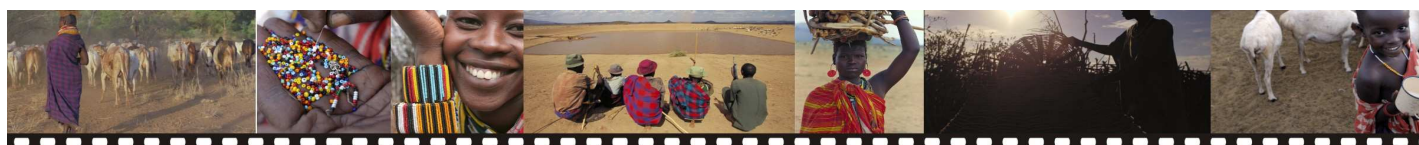
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Humanitarian Aid

The project is funded by the European Commission Humanitarian Aid Department (ECHO)

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