



Regional Learning & Advocacy Programme for Vulnerable Dryland Communities

SUMMARY BRIEF: Why halting the fragmentation of the rangelands will improve the drought resiliency of Ethiopia’s pastoralists?

By Fiona Flintan, independent consultant, October 2011.¹

Summary

Ethiopia’s rangelands are becoming highly fragmented. Traditional grazing areas are being divided by and lost to agriculture or intensive livestock systems demanding enclosures and fences, as well as large-scale bush encroachment, invasion of non-local plant species, in-migration and unplanned settlements, and processes. Mobility is greatly challenged.

The root causes of these changes can be found in weak and compromised planning and development interventions related to land use; insecurity of tenure over land and resources; and the marginalisation of pastoral systems and customary institutions.

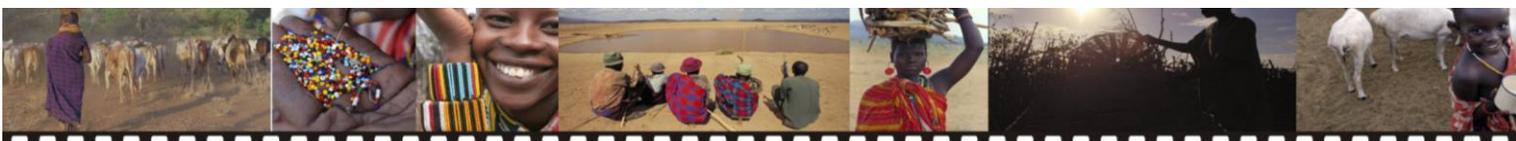
The result is a pastoral people and pastoral systems that are increasingly vulnerable to drought and predicted long-term changes to climate. Halting current trends in land fragmentation can reduce this vulnerability. This can be achieved by ensuring that future development in the rangelands takes place in a manner and at a scale that supports rangeland systems and pastoral livelihoods. Securing access to land and resources for pastoralists is a vital part of this. The value of pastoralism as the most effective land use system in many parts of the drylands must be recognised and form the basis of decision-making at all levels. Government and non-governmental organisations need to work together to identify how best this can be supported in a way that does not create dependency or do harm to the overall productivity of rangelands.

Processes, causes and impacts of land fragmentation²

Ethiopia’s rangelands are experiencing unprecedented and accelerating levels of land use change. This is having a highly negative impact on pastoralism as an effective production system in these predominantly dryland areas, and increasing the vulnerability of those who rely on pastoralism for their food and livelihood security.

¹ The ideas and opinions expressed in this brief are those of the author, and do not necessarily reflect the views of REGLAP, or its members or donors. The author can be contacted at: fionafintan@yahoo.co.uk

² The evidence presented in this policy brief is based on case study work carried out in Ethiopia’s rangelands – Borana zone, Oromia region and Harshin District, Somali region. Community mapping of natural resources and their access and use was used as the starting point for understanding and exploring the causes, processes and impacts of land use change in these areas, including fragmentation. The full report by Fiona Flintan, Boku Tache and Abdurehman Eid (2011) *Rangeland fragmentation in traditional grazing areas and its impact on resilience of pastoral communities to drought* can be found on: <http://www.disasterriskreduction.net/east-central-africa/reglap>



The negative impacts of rangeland fragmentation including loss of dry season grazing areas and restrictions on mobility were documented as early as the 1970s: removal of Afar lands for large-scale agriculture had a direct result on their inability to deal with the drought experienced during that period where as many as 200,000 Afar pastoralists died and three quarters of all livestock were lost. Yet still, the fragmentation of the rangelands continues.

Conversion of land to agriculture and other land use change

A major process of rangeland fragmentation has been the loss of land through conversion to agriculture despite the precarious nature of such land use change. Though agriculture may be viable in more fertile areas next to permanent or reliable seasonal water sources, agriculture in the rest of the rangelands is highly risky (if not impossible) due to the variable and unpredictable rainfall of these dryland environments. It has been shown time and again that crops fail or poorly perform leaving communities highly food insecure. In addition when the relatively resource-rich areas such as along rivers are converted to agriculture it restricts, if not prevents, access by pastoralists to these sites and without this access it becomes impossible to utilise the rest of the rangeland.



A study comparing the economic returns derived from devoting the Awash Valley to pastoralism versus irrigated cotton or sugar cultivation demonstrated that pastoralism is equally comparable, if not more advantageous, than the cultivation of these crops. Further, agriculture (from large-scale schemes) in drylands has not been shown to either increase the stability of agricultural performance or the food security of local populations as a whole. What it has done is made money available for the government through taxations and other means.

In addition pastoralists face other threats from land use change including large-scale bush encroachment, invasion of non-local plant species, the enclosing of land for private use such as fattening of livestock and charcoal production, unsystematic settlement patterns, rangeland degradation, and increasing population including from uncontrolled in-migrations. The root causes of these changes can be found in:

- i) Weak and compromised planning and development interventions related to land use;
- ii) Insecurity of tenure in pastoral lands and resources; and
- iii) Disenfranchisement and marginalisation of pastoral systems and customary institutions.

Photo: Conversion of dry season grazing areas along rivers to agriculture increases the vulnerability of pastoral production systems and communities to drought

Weak and compromised planning and development interventions

It is often the case that development support in the rangelands provided by NGOs, development agencies and government occurs in an uncoordinated and ad hoc manner, reliant on project-by-project funding sources, targeting individual sites and/or communities, or as a response to drought. There is little coordinated strategic planning based on agreed common visions to development in pastoral areas, or true participation of community members in related decision-making processes. There is little concern for the impacts of individual interventions on the rangeland and pastoral systems as a whole.

Though such activities as the development of community action plans (CAPs) are common, these rarely feed into the design of NGO-developed proposals written in the offices of Addis Ababa. Projects tend to be funding-driven rather than strategically developed. Government policy and legislation can be detached from the realities and experiences of local rangeland users. As a result, development interventions are unlikely to reflect the priorities



of such as pastoralists, who more often than not are described as a 'problem' requiring external expertise and 'modernisation'.

A key example of this are the plans to sedentarise pastoralists, enclose land, provide 'permanent'³ water sources and restrict livestock numbers to the perceived 'carrying capacity' of the land⁴. However concepts of carrying capacity and predetermined livestock population levels sit uneasily with ecological understandings of dryland environments and how best they can be utilised to optimise production. Experience from Dida Hara in Borana, and Harshin in Somali region show how the introduction of water points and storage facilities can play a critical role in effectively destroying what were highly resource-rich and productive pastoral systems.

In Harshin for example, the establishment of birkas (cemented water storage cisterns) has contributed to the growth of settlements and of grazing enclosures. This has resulted in the total breakdown of what was an almost self-sustaining traditional grazing system.



The ranching-style arrangement that has replaced pastoralism is highly dependent on the provision of water from NGOs and government. This has left Harshin pastoralists in a highly vulnerable position with one livelihood system well on its way to being destroyed and seemingly only risky and unsustainable alternatives to take its place.

In Borana planned large-scale irrigation projects and the leasing of land to commercial investors (approximately 1,024,511 hectares) in neighbouring zones (Equatorial Development Consultancy), as well as developments across Borana itself through the Oromia Regional Government's Land Use Master Plan are likely to have fundamental impacts on land use in the area and access to resources, in particular for pastoralists. Magodo in Golboo *dheeda*⁵ for example is one of the pilot areas for the Master Plan

The building of birkas in Somali region has contributed to the fragmentation of the rangelands and vulnerability of pastoralists to drought.

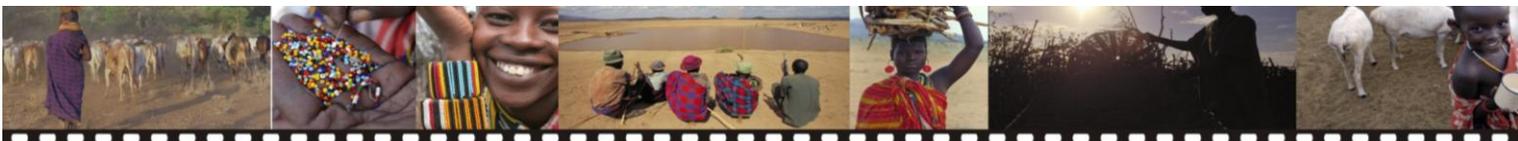
and the impacts of a chain of water points across the rangelands (2000 km of pipeline planned altogether) are already being seen.

Interventions in times of drought also contribute to social and land use change, with emergency aid being provided without due attention to its long term impacts on social systems and such as rangeland fragmentation through encouraging more individual short-term gain. Though improvements have been made by NGOs including contingencies for drought response within their ongoing development support, often emergency aid is still de-linked from longer-term support for livelihoods and food security (Pantuliano et al, 2008). Rarely are such activities as facilitating agreements to enable access to grazing and water or to ensure mobility included. This is despite the fact that movement remains the most common community response to severe drought in most areas and in Kenya was shown to be the most effective drought response mechanism in 2009 (ILRI, 2010).

³ Though the permanency of any piped water can be questioned – pipes can break, pumps may not be appropriately maintained, and/or priorities can change.

⁴ See for example Somali Regional State (2010) *A proposal for mass sedentarization program in riverine areas*. Unpublished report, Jijiga.

⁵ *dheeda* being the traditional landscape level grazing unit in Borana.



Insecurity of tenure in pastoral lands and resources

The removal of key resources and the conversion of land to non-pastoral uses have been facilitated by the overall lack of recognition given to customary pastoral land and resource tenure. In Ethiopia pastoralism as a livelihood system is protected by the Constitution, and pastoralists have the right to grazing land, but the regional governments are still in the process of developing land policies and legislation for pastoral areas including common property tenure.

In this tenure security vacuum pastoral lands are often considered ‘vacant’ ‘idle’ or ‘wastelands’—with their removal justified in the name of ‘development’. Pastoralists use different parts of a rangeland and its resources at different times of the year in order to optimise production. This contributes to tenure insecurity as it can be argued that ‘use rights’ are not permanent, but rather appear vague and unclear to an outsider. Also, in general pastoralists do not pay tax for occupying the rangelands, allowing the State to ignore their land usage and/or offer the land for the growing of crops— seen as more ‘legitimate’, and for which tax is paid. As a result it is relatively easy for settlers and agriculturalists to move into pastoral areas and leads to pastoral responses such as the enclosing of land in Harshin as a strategy to protect remaining resources.

In customary law the granting of secondary user rights of access is a legal obligation, and reinforces, rather than undermines, primary holders’ claims of ownership rights and sovereignty over their territory (Pavenello et al, 2011). Yet, within formal land tenure systems such secondary use is rarely accounted for. Further, as was seen in Harshin often women lose out in land allocations. This undermines customary social and production systems and increases the vulnerability of both primary and secondary users. There is now indecision and disagreement as to who should be protecting which rights to land and resources for which groups or individuals.

The disenfranchisement and marginalisation of pastoral systems and customary institutions

Pastoral systems including customary institutions are being ignored, undermined and side-lined by government administrative processes, and this has contributed to the breakdown of authority and effectiveness of such institutions. Government representatives through the *kebele*⁶ structure have taken over the decisional roles of pastoral elders. When *kebeles* were created boundaries were drawn around small administrative units and individual herders and their families are registered to that area. It is here that taxes are paid, food aid is received and any other dealings with the state occur. This has encouraged a reduction in mobility. At the same time federalism has prompted a race towards control over lands as *kebele*, district and regional government push for territorial gains that “translate into more administrative power, land, tax revenue and potentially food aid.” (International Crisis Group, 2009).

The problem is coupled with the peripheral status of pastoral areas. Not only has this meant that successive



At the height of the charcoal trade in 2005 as much as 63,000 sacks of charcoal per month left Harshin for Somaliland: this burgeoning trade has been facilitated by the enclosing of the rangelands for individual gain.

governments have ignored or been slow to see the potential benefits of investing in such areas, but also traditional leaders often prefer to live close to urban areas in order to access services and decision-making structures. *Golboo dheeda* for example is remote from the traditional

Gada centre (central Dirre and Arero); and today there is not a single *Gadaa* councilor (*hayyuu/lichoo*) residing there.

⁶ *kebele* is the lowest government administrative unit covering a village or two villages.



Land fragmentation has driven forward and been driven by the privatisation of rangeland resources and the breakdown of communal and collective pastoral systems. Though a minority group of relatively resource and asset-rich pastoralists with greater power in local decision-making processes have been able to benefit from such processes, many pastoralists have lost out, dropped out or become increasingly vulnerable to drought.

In Harshin the breakdown of customary institutions has increased the vulnerability of local communities who now act on individual or household decision-making rather than communal. Though this may work during 'normal' times it is likely that in times of severe drought the lack of customary institutions to negotiate access to emergency grazing and water sources for example, will result in an inability to cope with and overcome the drought, and increased conflict between land users.

Conflict has been shown to contribute to land fragmentation both within communities and between a community or clan and others. As competition over resources grows conflicts are also likely to increase unless ways and means to prevent them are identified. The nature of conflicts has also changed as a result of land fragmentation. Today in Harshin for example, there are fewer inter-clan conflicts between clans and more intra-clan conflicts as neighbours argue over access to resources and boundaries. Differences between government and customary systems of land allocation and conflict resolution cause confusion and poor governance.

Recommendations

1. Protect the rights of pastoralists to their grazing areas

Land fragmentation reduces the ability of pastoralists to overcome drought and adapt to climate change. It also compromises the effectiveness of pastoralism as a productive land use system in the drylands. Therefore it must be halted and/or its impacts mitigated. In particular large-scale land appropriation for commercial agriculture must be planned and controlled in a manner that protects the access of pastoralists to the vital key resources that they depend upon for livestock production including adequate dry season grazing sites. This can include facilitating agreements for access between pastoralists and commercial investors, protecting migration routes, and/or developing and enforcing common property tenure systems that secure key resources and land for pastoralists. Plans to encourage further sedentarisation in the rangelands and agricultural production should be re-considered in light of the evidence that suggests that in many cases, such processes increase the vulnerability of the targeted 'beneficiaries.'

2. 'Development priorities should not harm/ undermine the pastoral production system

Policy-makers, donors, development actors and communities need to re-consider the perceived long-term future of pastoral areas taking into account current trends of land use change. In particular this should focus on the potentially negative as well as positive impacts of interventions that change access to water and grazing for livestock, and encourage individualisation and privatisation of rangeland resources.

The appropriateness of continually supporting communities in areas such as Harshin with high levels of aid and relief over the long-term also needs to be considered. Ways to reduce the dependency of communities who were once relatively rich (and many still are) in resources and assets should be identified.

The importance of land and resource access needs to be prominent in drought risk management and humanitarian responses to drought. The facilitation of access to grazing areas and water sources, and



agreements between different land users should be key activities in drought preparation and response. Planning for and response to drought should be part of an integrated livelihood-focused approach.

3. Planning for the drylands should function at an appropriate rangeland level and support cross border livelihood systems

Planning of interventions in the rangelands and in particular those that involve the use of natural resources and land should be carried out at a larger scale such as a 'rangeland' or traditional grazing area. This will mean planning across small administrative units. Community mapping of traditional grazing areas is an important tool for understanding mobility and access to resources that pastoralists need, and the scale at which such needs require support. The development of communal and collective activities should be promoted over and above individual/household ones.

Cross-border movement requires government support and facilitation. Current institutional frameworks can be improved including the development of cross-border peace committees that manage key shared resources collectively – initiatives such as these can provide important starting points for developing a coherent strategy on cross-border movement. Further lessons can be learnt from examples found in West Africa⁷.

4. Secure rights to resources and land is fundamental for reducing the vulnerability of pastoralists to drought

Despite the challenges of working on 'rights' issues, pastoralists (men and women) require support in taking steps forward towards securing stronger rights to their resources and land. Policies and legislation being developed in Somali and Oromia regions provide opportunities to engage with respective regional governments on this. Important lessons can be learnt from other countries with large populations of pastoralists as to how best their resources can be protected and their use optimised (Flintan, 2011b).

Livestock migration routes and spill-overs during drought need to be understood and then protected for pastoralists through negotiations with other land users. NGOs and governments can play a more pro-active role in negotiating access and facilitating resource-sharing agreements, in both 'normal' times and in times of drought.

5. Support appropriate institutions for managing and controlling access to the rangelands and their resources

Good governance structures and institutions are vital for effective management of rangeland resources and pastoral production systems. It is important to identify which governance structures are most appropriate for different roles and responsibilities given the changes that have taken place in pastoral areas and described above. In many cases customary institutions are still the most appropriate structure. However in others, new structures may be required. A landscape/rangeland approach to development and management offers greater opportunities for all actors to be involved and for common visions, agreements and partnerships to be negotiated and established. The interlinkages between the rangeland and social aspects of pastoral systems should also be recognised and facilitated. This will help to prevent conflicts in the longer term.

Conflict resolution and peacemaking initiatives need to reflect the changes that have occurred in recent years in types of conflicts and the actors involved. Customary institutions can still play an important role in conflict

⁷ In West Africa, the Economic Community of West African States (ECOWAS) is supporting an institutional framework to facilitate cross-border livestock mobility. The ECOWAS International Transhumance Certificate provides for cross-border movements between its fifteen member states and the facilitation of trans-border agreements. In theory herders can obtain certificates allowing movement across states from their local authorities. East Africa's COMESA also has a livestock trade initiative aimed at improving livestock trade in its region. There are plans to introduce a livestock 'green card' to ease cross-border movement modeled on the ECOWAS cattle certificate.



resolution if given the authority to do so. Governments and customary institutions should work together to identify their respective roles and responsibilities in relation to conflict prevention and resolution, such as in land and resource allocation. This includes facilitating cross-border movement, and in particular in times of drought.

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