

# Managing Mobility in African Rangelands

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## BACKGROUND

In arid and semi-arid lands in Africa, livestock mobility is one way pastoralists manage uncertainty and risk and access a range of markets. Mobility enables opportunistic use of resources and helps minimize the effects of droughts. Benefits include lower-cost fodder at minimal labor cost and increased resistance of animals to diseases. Other benefits are ecological: continuous, sedentary grazing in the wet season may result in lower pasture palatability and productivity, higher soil compaction and lower water infiltration, ultimately leading to pasture degradation. Undergrazing of remote pastures or undergrazing in protected areas can lead to invasion of unpalatable plants, lower vegetation cover, and lower diversity of plants, and can sometimes be a more serious problem than overgrazing. Many areas used by pastoralists over millennia are now considered as “grazing dependent” and mobile pastoralism can therefore be bio-friendly.

The scale and magnitude of persistent environmental decline in dryland Africa—and how livestock grazing has affected such changes—appear to have been overestimated. Indeed, the pattern of anthropogenic land degradation is much more severe around permanent settlement sites than in open rangelands. Mobility can contribute to pasture sustainability and improvement, since mobile (or transhumant) pastoralists can modify herds and access alternative areas while waiting for degraded pastures to regenerate.

## MOBILITY VS. SEDENTARIZATION

Mobile pastoral systems also appear to be more economically efficient than sedentary ones and commercial ranching. If flexible access to different habitats and resources is ensured, higher populations of herbivores can be maintained in any given area. The mobile system involves common-property regimes that share the risk and spread the burden in arid lands, where uncertainty is high and the risks of production and survival are higher. Though sedentarization has positive results—such as access to education and health—benefits are not evident for all.

High rates of sedentarization and declining mobility have been driven by a combination of factors, including major droughts, increased individualization and disruption of political structures within pastoral societies, the growing economic vulnerability of transhumant groups, increased competition and conflicts over land, and increased land ownership by investors

outside the pastoral sector. In particular, government policies have upset the economic balance between crops and livestock by favoring crops and agricultural encroachment onto rangelands. Governments have discouraged investments in the range and livestock sector and claimed “vacant” pastoral land for national parks and government-owned farms.

## THE IMPACT OF DEVELOPMENT ASSISTANCE PROJECTS

Projects in Africa have long sought to develop livestock productivity rather than enhance livelihoods. Drawing on the classical ranching model from the United States, interventions encouraged sedentarization, destocking, and water development. However, they did not increase livestock productivity, and some were very destructive. In Francophone West Africa, failed, underfunded efforts were made to create official transhumance routes, with permits, supervised crossborder movements, watering points, and quarantine stations. The early 1980s saw the advent of integrated rural development projects, which were less coercive, more service-oriented, and had a nodding appreciation for local perspectives. However, this approach continued an implicit sedentarization agenda. It gave way to natural resource management projects that addressed land degradation. However, the blueprint approach persisted, and land-use “guidelines” were discussed with land-users only after their creation. Nevertheless, there were attempts to modify institutional structures for natural resource management. Legally registered pastoral associations were created and given the responsibility of managing (but not owning) a defined land area. But because the new institutions had undefined relationships to customary ones, ineffectiveness or further breakdown of customary institutions resulted.

Development assistance projects then pursued natural resource management at a more localized scale, and were strongly influenced by common property theory. Such projects were partially successful in building local-level institutions for natural resource management, but they have been critiqued for overlooking informal local institutions and ignoring differences between the interests of leaders and non-leaders. The approach also ignored mobile pastoralists, or saw them in a secondary, receptive position. The focus on the village (or groups of villages) seemed spatially

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myopic, and the promotion of exclusionary mechanisms in land-tenure systems evidenced under-appreciation of the variability of resource endowment in dryland areas. In the 1990s, community-based natural resource management projects attempted to allocate common-property tenure to local institutions and facilitate more participatory forms of development, though very few included mobile pastoralists. Mobility was still seen as a problem to be eliminated, not a trump card to be strengthened.

## RECOMMENDED REMEDIES

Livestock need to be seen as an integral part of conservation and development in Africa, since transhumance may even be a necessary precondition to sustainable development in arid lands. Mobile pastoralism is not a “backward” means of livelihood – our laws, policies and procedures should be considered as backward since they do not recognize the ecological and economic value of mobile pastoralism. A clearer understanding of common property regimes and a holistic analytical framework for pastoral development activities are also required—to build capacity, develop and strengthen rules and regulations for common property management, manage key sites, and develop socioeconomic safety nets and drought-contingency measures.

The fundamental design principles related to managing institutions for mobility are nested property rights, fluid boundaries, inclusivity, flexibility, reciprocity, negotiation, and priority of use. This means that the pitfall of most projects must be avoided: rigidly and arbitrarily defining the boundaries of a community and then ignoring the participation by surrounding people. Instead, what is needed are definitions that classify people into an agreed-upon set of sociogeographical communities. A nested hierarchy of sociogeographical units—reflecting the nested nature of communal property—would ensure that a series of institutional structures are in place to accommodate the needs of mobility. Exclusive and inclusive land tenure can then be assigned accordingly. Reform that increases the security of transhumant claims to land is also needed, along with serious consideration for livestock mobility, common property management, and the roles more informal institutions have played in providing controllable but flexible resource access in arid rangelands.

However, resource holders need to retain authority to grant temporary use rights to secondary and tertiary users. Flexibility can be maintained by the legal recognition and development of appropriate legal language. This entails developing local administrative and judicial institutions to manage common property that recognize temporary rights of usage, establish—through local dialogue and participation—the principles and guidelines for judging claims, create the means and procedures for enforcing rules, and develop appropriate conflict-resolution mechanisms that fill gaps left by disintegrating customary systems and inappropriate western systems.

In recent years, there has been strong momentum toward “co-management,” or systems of common-property regimes that combine government decentralization with community participation. Though the approach is far better suited than any other to mobile pastoralism, it needs to deal with large-scale management of contiguous land. Management of livestock mobility also requires multiple institutions working at multiple spatial scales, authorities, and functions. To modify or create the institutional structure for a legitimate, locally controllable transhumance, the function—not just the structure—of new institutions must be addressed.

## RESEARCH TOPICS TO PURSUE

The research community can assist pastoral advocacy groups in Africa by investigating

- how transhumants monitor variability of primary productivity and track resources and how mobility contributes to sustainability
- the true cost of plowing rangelands and adequate compensation for herders whose land is expropriated
- the nature and functions of informal institutions for common-property management
- nested hierarchy of institutions for common-property regimes, degrees of inclusivity and exclusivity, priority of use, overlapping claims, and buffer zones, multiple-use mapping, and how multiple claims, rights, and entitlements over resources—both spatial and temporal—can be translated into substantive and procedural laws adapted to the local level
- how traditional and modern conflict-management mechanisms function, perceived gaps, conflict prevention, and conflict resolution
- how modern services, such as education, health, credit, legal aid, telecommunications, insurance, etc. can be effectively made available to mobile pastoralists

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Further reading:

- M. Niamir-Fuller, ed. 1999. *Managing mobility in African rangelands: The legitimization of transhumance*. London: Intermediate Technology Publications.
- I. Scoones, ed. 1994. *Living with Uncertainty: New directions in pastoral development in Africa*. London: Intermediate Technology Publications.
- S. Vetter, ed. 2004. *Rangelands at equilibrium and non-equilibrium: Recent developments in the debate around rangeland ecology and management*. Cape Town: Programme for Land and Agrarian Studies, University of the Western Cape.
- UNDP. 2003. *Pastoralism and mobility in the drylands*. The Global Drylands Imperative, Second Challenge Paper series. ([www.undp.org/drylands/docs/cpapers](http://www.undp.org/drylands/docs/cpapers))

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