Community-Based Rangeland Management in East Africa: NRM, Land Tenure and Land Use Planning Dimensions

Doctoral Field Research Fellowship—Possible Case Studies/Study Sites

ILRI has ongoing projects and partnerships around rangeland management at a number of sites in Ethiopia, Kenya, and Tanzania each of which involves elements of research, stakeholder engagement, and development interventions. The primary site(s) for this PhD dissertation research will be at one or more of these locations, the exact choice of which will be negotiated between ILRI, the successful candidate and his/her thesis committee at a later date.

Here follows brief information on some of the possible sites/case studies.

Possible Case Study/Research Site #1 – Transformation in West Pokot, Kenya

In the late 1980s Vi Agroforestry, a Swedish-Kenyan NGO, introduced enclosures and agroforestry for land rehabilitation and increased productivity in Chepareria Division in West Pokot. Adoption was initially slow, but after some successful demonstrations and intensive extension the methodologies were widely adopted and adapted by local farmers/cattle owners. This coincided with land tenure changes, i.e. more individualized land user rights. Today, enclosures dominate the landscape in Chepareria. In the neighboring Division of Kongelai the Vi Agroforestry initiative came in later, with less intensity and shorter duration. Much of the development seen in Chepareria is largely unseen in Kongelai. Enclosure of land for the protection and management of pasture (with individual land tenure) in the semi-arid areas of West Pokot could be one driver of other socio-economic development. Enclosed areas are apparently more productive and less degraded than adjacent common/communal land use.

There have been dramatic changes in land use (as indicated by increase in vegetation cover and decrease in land degradation), in livestock management (more enclosures for regulated grazing, introduction of improved breeds), in livelihoods, and in development of infrastructure in Chepareria during the last three decades. The apparent transformation has not, however, been scientifically verified, documented or analyzed. Whether, and what ways, changes in land tenure have been causes, or effects, of this transformation, is not well understood.

ILRI is part of a large, interdisciplinary, multi-institution research effort in this area. The PhD Student investigating land tenure, land use planning and rangeland management issues here would have the benefit of linking her or his research to the other research that will be taking place. There are also potential linkages and a possible audience for the research in connection with the Government of Kenya's current efforts toward developing guidelines for spatial planning at county and inter-county levels, as well as in connection with legislation for Community Land.

Possible Case Study/Research Site #2 – Livestock Route Planning in Tanzania

Mobility has long served as a central strategy for pastoralists in adapting to climate variability. It makes possible the sustainable use of these disequilibrium dryland ecosystems reducing vulnerability to risks. However, land use changes, modern administrative and political boundaries, and the policies that shape and limit migration, including transboundary migration, restrict the abilities of pastoralists to pursue effective responses to interannual climate variability and close off potential important adaptive responses. Integrated land use planning that incorporates cross-border resource sharing is rarely considered. Furthermore, resource pressure and lack of clear governance practices of mobile pastoralism contributes to conflicts and social instability. Formalization of property rights excludes overlapping interests because it creates exclusive forms of ownership of resources, obstructing pastoral movement and essentially depriving them of access rights. The pastoralist practice of repeatedly renegotiating temporary and flexible access rights to resources is becoming more problematic in a landscape that is progressively being surveyed, demarcated, allocated and as a result, fragmented.

On the other hand, in East Africa there is increasing recognition of the need to better protect livestock routes, both for access to resources and for trading purposes. This work is most advanced in Tanzania. Tanzania has already invested in the development of stock routes and their servicing, with many having night camps, holding grounds and dipping facilities. Primary and secondary markets are also relatively well developed. While transportation of animals between primary and secondary markets is increasingly done by road or rail (at significant expense resulting in low exports), stock routes are still used for the majority of movements. However, while national legislation protects livestock routes, this has had limited and variable application.

ILRI is involved with government and other stakeholders in Tanzania in a set of activities to improve livestock-based livelihoods, development and growth through mapping, servicing and protecting livestock routes. ILRI has been working with the national Tanzania Livestock Research Institute (TALRI) to produce a map of primary routes across the country, as a starting point for more detailed lower levels of mapping, servicing and protection. A series of national-level consultative meetings have been held with government and other relevant stakeholders to identify and map the major or primary livestock routes across Tanzania and their status and the national level map of primary livestock routes is nearing completion.

At the local level there are questions around, for example:

- how livestock routes and their planning will relate to District and Village land use plans;
- the kinds of governance structures that can most effectively and justly address the challenges of multi-level planning and governance of livestock corridors;
- how the existence of different tenure types constrain or facilitate protection of livestock corridors; and
- how frameworks planning and protection of livestock routes might be informed by systems-based methods and approaches.

Possible Case Study/Research Site #3 – CBNRM for resilience in northern Kenya

In Marsabit, Isiolo, Turkana, Garissa and Wajir counties of Kenya, USAID is funding a project called "Improving Resilience and Economic Growth in Kenya's Arid Lands— Improving Resilience" (REGAL-IR). The NRM component of this project aims to relieve pressure and reduce stress on the environment, REGAL-IR's approach is to link protection and restoration of the environment with conflict management and mitigation thereby reducing risks to future shocks.

To achieve this objective REGAL-IR aims to strengthen existing community governance structures and community based landscape plans. Activities that will strengthen community governance structures include those that revive and strengthen CBNRM/customary institutions, encourage an all-inclusive decision making processes, strengthen traditional NRM regulatory and enforcement mechanisms building networks between CBNRM/ Customary institutions within the landscape and coordination with NRM stakeholders at ward and county levels. A particular emphasis is placed on landscape approaches.

Interventions for improved land use plans are elaboration of participatory NRM guidelines, development of community based landscape status and visions maps providing technical and infrastructural support in water management, land restoration and rangeland management to reduce vulnerabilities to droughts and improving livelihoods.

Important research questions which this case highlights include, for example:

- how rangeland/landscape planning that emphasizes working with traditional institutions relates the formal practices of county, inter-county and national land use planning now being introduced in Kenya;
- how all of these planning processes consider key contested resource areas such as Mt. Marsabit; and
- how the existence of different tenure types constrain or facilitate NRM at larger scales.

There are potential linkages and a possible audience for the research in connection with the Government of Kenya's current efforts toward developing guidelines for spatial planning at county and inter-county levels, as well as in connection with legislation for Community Land.

Possible Case Study/Research Site #4 – Group Ranches in a Heterogeneous Landscape in Laikipia, Kenya

Group Ranches in Kenya are widely considered to have been in many cases failures based on a governance model ill-adapted to systems of pastoralist production. While the group ranch designation in theory provides residents with durable and unrestricted collective use rights and control over land management decisions, some group ranches facilitated rather than prevented land fragmentation as their lands were divvied up among their members, sometimes inequitably. Many suffered from poor governance and elite capture. In Laikipia County, however, some group ranches seem to have transcended such challenges and emerged as strong community institutions.

One of these group ranches, for instance, is Il Ngwesi, which has an area of approximately 200 km², with 550 resident Maasai families (~3000 total population), as well as significant dry season influx of Samburu, Turkana, and Somali pastoralists from outlying areas. However, Il Ngwesi group ranch, with the support of organizations such as Laikipia Wildlife Forum and Natural Capital East Africa, adopted a system of planned grazing that improved rangeland quality markedly. Successful improvement in rangeland health further stimulated genuine community interest in long-term planning for land management.

However, key challenges, exist in the relationships between group ranches and neighbouring jurisdictions across larger landscapes. The rangelands of Laikipia County include private wildlife ranches catering largely to wildlife tourists and hunters, government lands (especially Forest Reserves under Kenya Forest Service, which provide limited local use rights), and collective management regimes including both areas of open grazing and group ranches. Since the colonial period, when many of the private ranches were established and forest reserves were gazetted, movements of pastoralists in Laikipia have been restricted, constraining their ability to sustain their livelihoods and to manage lands with seasonal movements as under historical management regimes. Moreover, the benefits of management at group ranch level can often be captured by pastoralists from other locations. Seasonal movements of pastoralists from drylands in neighboring Isiolo and Samburu Counties not uncommonly lead to punctuated conflicts over grazing and water resources. Intermediary forums and platforms are attempting to address some of these challenges, but much work remains to be done.

Now, with devolution entailed in Kenya's current constitution, questions have arisen whether new approaches to land use planning will facilitate or undermine local (group ranch) level efforts at planning and management.

Important research questions which this case highlights include, for example:

- the kinds of coordination and governance structures that can most effectively and justly address the challenges of multi-level planning;
- approaches to allocating resource rights which overcomes "the paradox of pastoral land tenure", both providing strong resource rights for local access and management while still allowing for flexible access to resources over larger areas; and
- how the existence and interaction of different tenure types constrain or facilitate rangeland management across the larger landscape.

Possible Case Study/Research Site #5 – Piloting Community Land Registration in the Pastoral Rangelands of Southern Ethiopia

In the Borena Zone of southern Ethiopia, a growing human population has combined with bush encroachment and other forms of land degradation to increase competition for pasture resources. Land grabbing and the emergence of private enclosures have become a growing concern. In the past few years, a set of concerted efforts have been made to strengthen rangeland management, each with varying degrees of involvement of and reliance on traditional Borana institutions. For instance, in some areas, deliberate decisions and steps have been taken, with strong involvement of customary institutions, to change settlement patterns as a way of ensuring that clearly demarcated rainy season and dry season pastures can be used appropriately. Another example is the Pastoralist Areas Resilience Improvement through Market Expansion (PRIME) project which goes one step further, working to strengthen and reform customary institutions to ensure they are capable of dealing with more diverse sets of problems, issues and stakeholders, and that they are working effectively within the formal government system. It is supported by community land use planning and by identification and support to rangeland rehabilitation priorities as set by the customary institutions. How government policies around pastoralist settlement support or constrain such endeavors is another dimension that bears investigation.

The customary Borana institutions and the formal administrative and political structures of the Ethiopian state relate to each other in complex and shifting ways, in some ways existing in parallel, and in some ways overlapping and interacting.

Ultimately, the efforts toward rangeland may not rest on a firm foundation unless there are also changes in land tenure in order to secure communal rangelands. A new project under the Land Administration to Nurture Development (LAND) program is set to begin piloting communal land registration. The project involves multiple stakeholders including the Zonal Pastoral Advisory Committee, the Oromia Pastoral Development Association, and others.

Given the complex and multi-level nature of pastoralist land use and rangeland management, devising a land registration system that both secures land and yet still allows enough flexibility is by no means a straightforward task. A research project focused on this endeavor might seek to document the approach being used in this pilot project, its successes and challenges. Important research questions which this case highlights include, for example:

- how frameworks for community land registration might be informed by systemsbased methods and approaches;
- the characteristics of a land registration framework that can most effectively and justly address the challenges of multi-level planning;
- approaches to securing communal rangeland tenure which overcomes "the paradox of pastoral land tenure", both providing strong resource rights for local access and management while still allowing for flexible access to resources over larger areas; and
- how the existence and interaction of different tenure types might constrain or facilitate rangeland management across the larger landscape.