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Presenter Information

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Comparative analysis of CBRM cases in Kenya, Ethiopia and Tunisia

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Abstract

In various countries, development and conservation organizations and national policymakers have been experimenting with ways of applying the community-based natural resource management approach to the unique social and biophysical characteristics of pastoralist rangeland settings, with mixed results. We carried out comparative case study research on community-based rangeland management (CBRM) in a variety of settings in Ethiopia, Kenya and Tunisia with the objective of identifying what kinds of strategies and methods work in which social and ecological contexts. We used an “options by context” approach guided by a research protocol that includes key variables and descriptors for characterizing the implementing organization’s approach to CBRM and important contextual factors that may vary from place to place and affect the implementation and success of the approach. The commonalities among our cases include: i) community governance and management structures for rangeland management; ii) the geographic rangeland unit which those structures are managing, and iii) a development agent that is supporting the community. We found that differences among the cases in the challenges faced and their degree of success depended at least as much on certain aspects of social and biophysical context as it did on the exact nature of the approach being implemented by the development agent. For example, the extent to which there are effective natural or social borders that provide the rangeland community with some degree of separation from neighbours is crucial; without such landscape features, the design principle of clearly defined rights to a clearly defined piece of land belonging to a clearly defined community is difficult to implement in any straightforward way. In some pastoral rangeland contexts, conventional community-based approaches need substantial modification to be effective in contexts with the highest levels of spatio-temporal variability, mobility and openness of the landscape.

Introduction

Commons scholarship has been one of the intellectual foundations of CBNRM (Turner 2004). The first of the well-known Ostrom design principles—the need for clearly defined resource and social group boundaries (Ostrom 1990)—has shaped CBNRM intervention strategies. CBNRM approaches in pastoral rangelands, as in other kinds of systems, have been guided by some of the principles of mainstream commons scholarship, tending to emphasize clear borders, exclusionary access rules, and the need to overcome free riding (Undargaa 2017). Perhaps for this reason, CBNRM has had mixed success in pastoralist settings (Reid et al. 2014).

The question of what social and ecological conditions in pastoral rangelands are conducive to which kinds of natural resource management approaches and which kinds of property regimes has yet to be thoroughly explored in the literature, but some insights have begun to emerge. One social-ecological characteristic affecting what kinds of resource governance regimes and natural resource management approaches might be effective in a given context is the extent to which the community of users is spatially circumscribed by some combination of other land uses and land tenure types, major political boundaries, and physical landscape features. In a comparative analysis that coded thirty African pastoralist societies as having some variation of either open property or common property regimes, Moritz et al. (2019) found that pastoral communities situated in more open landscapes were more likely to have open property regimes, and more circumscribed communities were more likely to have some type of common property system. Through a comparative analysis of five case studies, this

paper explores the influence of these kinds of contextual factors on the implementation and success of CBNRM interventions with pastoral communities.

Methods

The cases were conceived such that each case represented an instance of community-based rangeland management, which we defined as having three main elements: a set of community governance and management structures through which community members could participate in decision-making for the resource, the geographic rangeland unit that those structures are managing, and a development agent that is supporting the community. Because our research was concerned with governance design, we treat the characteristics of community governance as part of the approach being studied. The cases were selected to capture some of the diversity in pastoral communities, and to involve different sets of external development agents (see Table 1).

Guided by our objective of identifying aspects of social-ecological context that significantly affect the implementation and success of CBNRM in pastoral rangelands, we analysed the cases using an “options by context” strategy, following a common protocol that outlines key characteristics and variables for describing the option (the particular community-based rangeland management approach that has been implemented), the context (social, economic, political and biophysical), and aspects of implementation, outcomes, and impact (Robinson et al., 2018). For the Shompole-Olkiramatian, Chenini, Naniga Dera, and Dirre cases, key informant interview and focus group discussion guides were developed based on the protocol mentioned above (see Table 2). The Il’Ngwesi case study was based primarily on a review of earlier research, including field research based on an earlier draft of the same protocol (Moiko 2015). Since then, we returned to the area several times through other research projects and were able to acquire the remaining information to complete the protocol for that case. The cases also variously used methods such as review of documentation and transect walks. The Naniga Dera case also involved a household questionnaire survey in the Bale region, with 40 respondents in Naniga Dera.

Table 1: Summary of cases and methods

Method	Shompole-Olkiramatian	Il’Ngwesi ¹	Chenini	Naniga Dera	Dirre
Location	Kajiado County, southern Kenya	Laikipia County, north-central Kenya	Tataouine governorate, southern Tunisia	Bale Zone, Oromia Region, Ethiopia	Borana Zone, Oromia Region, Ethiopia
Key informant interviews	9	12	10	4	14
Focus group discussions	12	3	2	2	11

Findings

All five of the cases were based on a territorial approach that involved one or more external agents providing support to a pastoralist community by helping to build local institutional capacity for management of natural resources over a specified territory. In the Naniga Dera case, a community organization—the Rangeland Management Cooperative—was created; in the other cases, local governance arrangements already existed when the community-based rangeland management interventions began. In all five cases, however, the external agent(s) implemented activities to build governance capacity, in some cases helping the community to revise the organizational structure, and supported technical rangeland management interventions that were undertaken either by, or in consultation with, the community governance organizations. Whereas the approaches used by the development organizations were broadly similar, differences in the challenges faced, outcomes, and the broader social-ecological context were more obvious. While the ability of community-based

¹ The number of key informant interviews and focus group discussions for Il’Ngwesi refers to the initial study by Moiko (2015). Information that case also drew on other primary research (e.g. Ontiri and Robinson 2016 and Robinson et al. 2017).

rangeland management to produce positive environmental outcomes was evident in these cases, so too was the challenge of maintaining rangeland management plans and rules when outsiders would bring their herds into the area. In fact, success in rangeland management itself attracted this problem.

The social-ecological context for the Shompole-Olkiramatian case is characterized by the relative ethnic homogeneity of the larger landscape within which it is set, which helps to limit conflict, and the relatively secure land tenure. This is also the most circumscribed of our five cases: if the two group ranches are considered together as a unit, they are partly insulated from the wider landscape by an escarpment, the Magadi salt flats, and an international boundary. The successful management of grass bank reserves does attract other herders into the area, leading to disputes, but the geography of these two group ranches limits this problem.

The broader social-ecological context for Chenini is characterized by an intermediate level of both social heterogeneity and circumscription: the wider landscape has two ethnic groups, and Chenini is partly circumscribed by mountains on one side but being quite open on the other side. As with the two Kenyan cases, the success of the approach attracted the intrusion of some neighbouring pastoralists. However, the Tunisian Union of Agriculture and Fishing, of which community members are a part, plays an important role in intercommunity dialogue and dispute resolution. By virtue of being a representative civil society organization while also having strong connections with and support from government, the union has high level of legitimacy, and intercommunity disagreements over grazing are almost always resolved without major conflicts.

For the Naniga Dera case, cooperatives were established at kebele level (the lowest administrative level in Ethiopia). The community is set within the Bale Mountains ecoregion, in which some families have people living at locations at different altitudes with herds of livestock being moved seasonally between highland and lowland areas, and herders from different kebeles traditionally moving their herds to each other's areas at certain times of the year. Because the approach taken by the project was geographically-limited by administrative boundaries (kebeles), rather than a broader landscape approach that included the full territory used by herders, the establishment of kebele level rules and regulations upset traditional reciprocal arrangements between Naniga Dera and neighbouring communities. Relations between Naniga Dera and neighbouring communities started breaking down.

For the Dirre case, the wider landscape where it is situated, while biophysically heterogeneous, ethnically is quite homogeneous, being dominated by ethnic Borana pastoralists throughout. While Borana customary institutions on which the approach is based are still influential, collective land and resource management rights are susceptible to being overruled, ignored and contested because of lack of state recognition. Unclear allocation of governance powers among different centres of authority has hampered decision-making.

The challenge of excluding herders from other places or getting them to follow local grazing rules was most critical for Il'Ngwesi, where the difficulty of exclusion and of implementation and enforcement of collective property rights escalated to the point of violent conflict, despite the formal security of tenure that the group ranch status provides. A key feature of the context for this case is that the larger landscape is a vast heterogeneous rangeland landscape that is home to multiple pastoralist ethnic groups. Some other pastoralist groups in the area have a history of long-distance migration to access resources throughout the area when conditions require. With the droughts of 2015 and 2017, large numbers of livestock were trekked into Il'Ngwesi and other parts of Laikipia County. There was violent conflict and loss of lives, and reserved grass banks were decimated. This resulted in much of the benefits of the community's rangeland management efforts going to others, which has somewhat dampened the enthusiasm of community members for these rangeland management activities.

Discussion and Conclusion

Previous scholarship on pastoralism has given less attention to more local social and physical landscape characteristics. Although the relative circumscription of the landscape was not included among the contextual characteristics in our case study protocol, it emerged as particularly important

shaping what kinds of governance and management arrangements are possible. Shompole-Olkiramatian is the most circumscribed of our five cases and is also the case for which conventional principles of CBNRM have been implemented with the fewest difficulties. Although they have been quite successful in their rangeland management and have not experienced difficulties related to mobility, conflict and resource sharing to the same extent as some of the other cases, their success derives not only from the details of the approach that was implemented but also from their particular context. In contrast, the other cases all exist within larger and less circumscribed landscapes. These findings echo recent literature suggesting that circumscription of the pastoral territory is a key factor contributing to the emergence of common property systems rather than open property regimes (Moritz et al. 2019). A conventional CBNRM approach in which the central premise of the strategy is to have clearly defined communities each managing their own clearly defined territory will tend to be more effective in a setting like that of Shompole and Olkiramatian where the physical and political landscape reinforces communities' external boundaries than it will be in larger, more open rangeland landscapes. What these cases do suggest, however, is that interventions are needed at multiple levels. Local level decision-making must be nested within processes of negotiation, joint-planning or shared rules at the scale of the larger landscape.

Two key challenges cut across our five cases, with one or both of the challenges being faced in some measure by every one of the local community rangeland management organizations. The first challenge arose from the organization's relationship horizontally to communities and herders from elsewhere in the larger landscape, and the second from its relationship vertically to government. These challenges were reduced where the community's territory was circumscribed by some combination of physical landscape features, other land uses, and major political borders in a way that restricts migration of herds, confirming conclusions reached by Moritz and co-authors (2019). Without such landscape features, the design principle of clearly defined rights to a clearly defined piece of land belonging to a clearly defined community is difficult to implement in any straightforward way. In pastoral rangeland contexts where with the spatio-temporal variability, mobility and the openness of the landscapes are greatest, conventional community-based approaches need substantial modification to be effective. We conclude that where such barriers are lacking, initiatives to support participatory rangeland management by pastoralist communities must explicitly involve negotiation, planning and management at multiple levels.

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