

COMMUNITY LAND GOVERNANCE REFORMS AND COMMUNITY LAND GOVERNANCE EFFECTIVENESS IN NORTHERN KENYA'S ARID AND SEMI-ARID LANDS

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ABSTRACT

Community land governance is central to livelihood security, social cohesion and sustainable natural-resource management in Kenya's arid and semi-arid lands (ASALs), where pastoral production depends on collective access to extensive grazing landscapes, water resources, migration corridors and drought refugia. Historically, Kenya's land policy largely privileged individualized and formalized tenure, creating institutional tensions with customary systems of communal land management. The Constitution of Kenya 2010 represented a significant policy transformation by recognizing community land as a distinct category of land and establishing principles of equitable access, security of land rights, transparent administration and sustainable management. This study examined the relationship between community land governance reforms and community land governance effectiveness in Northern Kenya's ASALs. The study employed a cross-sectional survey dataset of 384 respondents for illustrative quantitative analysis. Six dimensions of community land governance reforms are examined: recognition of customary land rights, participatory land decision-making, institutional accountability, community land-use planning, conflict-resolution mechanisms and community participation in natural-resource management. The results indicate positive and statistically significant relationships between all six reform dimensions and governance effectiveness. Participatory land decision-making recorded the strongest standardized effect, followed by institutional accountability and recognition of customary land rights. The model explains approximately 61% of variation in community land governance effectiveness. The study argues that effective community land governance requires more than formal legal recognition; it depends on institutional arrangements that combine customary legitimacy, inclusive participation, accountability, adaptive land-use planning and community involvement in natural-resource management. The study contributes to land-governance scholarship by conceptualizing governance effectiveness as a multidimensional outcome of reform rather than equating reform with land titling alone.

Keywords: Community Land, Land Governance, Land Reforms, Customary Tenure, Natural-Resource Management, Land-Use Planning, Governance Effectiveness.

INTRODUCTION

Land remains one of the most important productive, ecological, cultural and political resources in Kenya. Its importance is particularly pronounced in the arid and semi-arid lands (ASALs), which occupy a large proportion of the country's territory and support populations whose livelihoods are heavily dependent on pastoralism, agro-pastoralism, wildlife, water resources and other common-pool natural resources. In these environments, land is not merely a fixed economic asset. It constitutes an interconnected landscape through which households, livestock and natural resources move seasonally in response to rainfall, forage availability, water availability and drought conditions.

The governance of land in such environments presents a challenge to conventional property-rights approaches based primarily on fixed boundaries, individualized ownership and exclusive access. Pastoral production requires mobility and flexible access to grazing areas, dry-season reserves, water points and migration corridors. Consequently, the effectiveness of land governance depends not only on the legal status of land but also on the institutional arrangements governing access, use, exclusion, dispute resolution and collective decision-making.

Prior to the constitutional reforms of the early 2010s, Kenya's land governance framework had historically placed considerable emphasis on individualized and formalized tenure. This approach was increasingly questioned in pastoral areas because customary institutions had long regulated access to common grazing and other resources. Studies undertaken before 2013 showed that attempts to formalize or privatize pastoral land could generate both economic and social consequences, including land fragmentation, changes in mobility, inequality and altered community institutions (Lesorogol, 2003, 2005, 2008; Thornton et al., 2006).

The 2010 Constitution introduced an important shift. Article 60 established principles of land management requiring equitable access, security of land rights, sustainable management, transparent and cost-effective administration, and conservation of ecologically sensitive areas. Article 63 recognized community land as a distinct category and included land held, managed or used by communities, including community forests, grazing areas, ancestral lands and traditionally occupied lands. Unregistered community land was to be held in trust by county governments on behalf of the relevant communities (Constitution of Kenya, 2010).

The constitutional transformation was particularly significant for pastoral communities because it created an opportunity to move away from the historical assumption that individualized tenure was necessarily the most appropriate mechanism for securing land rights. Odote (2013) argued that the constitutional recognition of communal land rights offered a new opportunity for pastoral communities but cautioned that constitutional recognition alone would not be sufficient without appropriate institutional arrangements. Musembi and Kameri-Mbote (2013) similarly

demonstrated the complexity of transforming community property rights within a context where customary institutions, statutory law, individual interests and collective interests interact.

The period around 2013 therefore represents an important analytical moment. The Constitution had created a new normative framework, but the detailed statutory framework for community land had not yet been enacted. Previous empirical studies provide strong justification for examining community land governance as a multidimensional phenomenon. Research in Kajiado showed that group-ranch subdivision and land fragmentation could affect household livestock holdings and livelihood strategies (Thornton et al., 2006). Research among Samburu communities demonstrated that privatization was associated with institutional transformation and changes in wealth and livelihood strategies (Lesorogol, 2003, 2005, 2008). Studies of pastoral land administration in northern Kenya showed that conventional cadastral systems did not adequately accommodate seasonal pastoral mobility (Lengoiboni et al., 2010; Lengoiboni, 2011). Research into key resource areas in Kenyan rangelands further demonstrated the ecological and social importance of areas traditionally reserved for dry-season grazing (Ngugi & Conant, 2008).

These findings raise a broader question: to what extent can community land governance reforms improve the effectiveness of community land governance in Northern Kenya's ASALs? The present study addresses this question by integrating insights from land-tenure, institutional, pastoralism and natural-resource governance literature. It proposes that effective community land governance depends on six interrelated dimensions: recognition of customary land rights, participatory decision-making, institutional accountability, community land-use planning, conflict-resolution mechanisms and community participation in natural-resource management.

HISTORICAL AND POLICY CONTEXT

Colonial and post-independence land governance

Kenya's land governance history has been characterized by the interaction between customary tenure and formal statutory systems. In pastoral areas, customary institutions traditionally regulated access to grazing resources, water points and other communal resources. However, colonial and postcolonial land administration increasingly introduced formal property systems that emphasized fixed boundaries and individualized or group-based registration.

The tension between these approaches became particularly visible in pastoral regions. The introduction of group ranches represented an attempt to provide formal recognition to collective ownership while simultaneously incorporating pastoral areas into a statutory land administration framework. Over time, however, some group ranches were subdivided into individual holdings, raising questions concerning the compatibility of individualized property rights with pastoral mobility and common-resource management.

Lesorogol's work among Samburu pastoralists illustrates the complexity of this transition. Her research showed that communal institutions were not static or inherently inefficient; rather, they changed in response to internal inequalities, changing livelihood opportunities and external policy pressures (Lesorogol, 2003, 2005, 2008). The evidence challenges simplistic assumptions that

privatization automatically improves land productivity or household welfare.

The National Land Policy

The National Land Policy adopted in 2009 was an important precursor to the constitutional reforms. It sought to address historical land injustices, insecurity of tenure, land degradation, institutional weaknesses and inequitable access to land. The policy recognized the need for more appropriate treatment of community land and customary interests.

The policy environment therefore created a foundation for the constitutional transformation that followed in 2010.

The Constitution of Kenya 2010

The Constitution represented the most important land-governance reform relevant to the study period. Article 60 established principles requiring land to be held, used and managed in an equitable, efficient, productive and sustainable manner. It further emphasized security of land rights, sustainable and productive management of land resources, transparent and cost-effective administration, sound conservation and protection of ecologically sensitive areas (Constitution of Kenya, 2010).

Article 63 formally recognized community land. The provision is particularly relevant to ASALs because it includes grazing areas and land traditionally occupied by communities. The constitutional recognition of community land consequently changed the legal discourse from one in which customary tenure was frequently regarded as a transitional form requiring formalization into one in which community rights could be constitutionally recognized. However, legal recognition does not automatically produce effective governance. There must be institutions capable of implementing rights, facilitating participation, resolving conflicts, managing resources and ensuring accountability.

Statement of the Problem

Northern Kenya's ASALs continue to experience complex land-governance challenges arising from competing land uses, pastoral mobility, natural-resource scarcity, land fragmentation, changing livelihoods and conflicts over access to resources. Before the 2010 constitutional reforms, the formal land system had limited capacity to accommodate the dynamic nature of pastoral land use. Lengoiboni et al. (2010), studying the Samburu-Laikipia-Isiolo-Meru landscape, found significant mismatches between formal land administration arrangements and pastoral land-use requirements. Their research emphasized that seasonal livestock migration requires access to landscapes that cannot easily be accommodated through rigid cadastral arrangements. Similarly, Lengoiboni (2011) demonstrated the importance of seasonal land rights for pastoralists in Northern Kenya, arguing that migration corridors and dry-season grazing areas required institutional recognition to secure pastoral access.

Empirical evidence also suggests that land privatization can have complex and sometimes unintended effects. Lesorogol (2005) examined the economic and normative consequences of pastoral land privatization in Kenya, while her longitudinal research using household surveys conducted in 2000 and 2005 found relatively few significant differences in wealth and income

between privatized and communal communities, despite differences in livelihood strategies and cultivation (Lesorogol, 2008). Thornton et al. (2006) similarly modelled the effects of group-ranch subdivision in Kajiado and found that changes from communal to individual landholding could affect livestock production and household food security.

Ecological evidence further demonstrates that certain rangeland areas are disproportionately important during drought. Ngugi and Conant (2008) identified key resource areas in Kenyan rangelands through field surveys involving pastoralists, ranchers, researchers and government officials. Their findings showed that such areas had distinct ecological and social characteristics and were important for maintaining forage availability during difficult periods.

Despite these studies, much of the literature examined individual dimensions of pastoral land governance—privatization, mobility, ecological resources or tenure security. There was limited quantitative integration of the institutional dimensions through which community land governance reforms could affect governance effectiveness. This study therefore addresses a research gap by developing and empirically illustrating a multidimensional framework linking community land governance reforms to community land governance effectiveness.

Study Objective

The general objective was to examine the effect of community land governance reforms on community land governance effectiveness in Northern Kenya's ASALs.

The specific objectives were to:

- i. Determine the effect of recognition of customary land rights on community land governance effectiveness;
- ii. Examine the effect of participatory land decision-making on community land governance effectiveness;
- iii. Determine the effect of institutional accountability on community land governance effectiveness;
- iv. Assess the effect of community land-use planning on community land governance effectiveness;
- v. Examine the effect of community-based conflict-resolution mechanisms on community land governance effectiveness; and
- vi. Determine the effect of community participation in natural-resource management on community land governance effectiveness.

THEORETICAL FOUNDATION

Common-pool Resource Theory

The study is primarily anchored in common-pool resource theory, particularly the institutional perspective associated with Ostrom (1990). Common-pool resources are characterized by difficulty of exclusion and the possibility that individual use may reduce the availability of resources for others.

Pastoral rangelands provide a useful example. Grazing areas can be accessed collectively, but unregulated use may create competition, degradation or conflict. Effective institutions can establish rules regarding membership, access, monitoring, sanctions and conflict resolution. The central implication of the theory is that communal ownership does not necessarily imply open access. Communities can create institutional arrangements that regulate resource use and protect collective interests. This perspective is particularly relevant to Northern Kenya because customary pastoral institutions historically established rules concerning grazing, water access, mobility and resource sharing.

Institutional Theory

Institutional theory complements common-pool resource theory by emphasizing the role of formal and informal rules, organizations and norms in shaping behaviour. Community land governance exists at the intersection of: constitutional rules; statutory institutions; county government structures; customary institutions; community organizations; and household-level interests. Effective governance therefore depends on institutional compatibility. Where formal rules conflict with locally legitimate customary institutions, implementation may be weak.

Empirical Review

Lesorogol's research represents one of the most important empirical contributions to understanding land-tenure transformation among Kenyan pastoralists. Her 2003 study of Samburu pastoralists examined institutional transformation associated with land privatization and found that inequalities and competing interests contributed to changes in land institutions. The study demonstrated that institutional transformation was shaped by both internal social dynamics and external political-economic pressures (Lesorogol, 2003).

Lesorogol's 2005 study further examined privatization and found that the transition from communal to private tenure generated economic and normative changes. Rather than producing uniformly positive outcomes, privatization affected social relations and access arrangements in complex ways. Her longitudinal study published in 2008 compared a privatized Samburu community with a community retaining communal land management using household surveys from 2000 and 2005. The study found relatively few significant differences in wealth and income between the two areas but found differences in livelihood strategies, including greater importance of cultivation in the privatized community (Lesorogol, 2008).

Thornton et al. (2006) modelled the impacts of group-ranch subdivision on agro-pastoral households in Kajiado. Their study addressed the transition from communal to individual landholdings and examined implications for livestock numbers and food security. The research showed why land fragmentation is particularly significant for pastoral production, which depends on extensive access to rangelands. The study supports the proposition that land reforms must be assessed against the production systems and ecological characteristics of the communities concerned.

Ngugi and Conant (2008) examined key resource areas across Kenyan rangelands using field

surveys, local knowledge, spatial mapping and ecological data. Their study included Turkana, Marsabit and Wajir among the areas examined. They found that key resource areas were socially and ecologically distinctive and that their availability and accessibility were influenced by land-use change, security and ecological conditions. Their findings are directly relevant to community land governance because effective governance requires recognition of spatially differentiated resource functions. A grazing area that appears marginal during wet seasons may become critical during drought.

Lengoiboni et al. (2010) investigated whether existing land administration systems adequately accommodated pastoral land use in the Samburu-Laikipia-Isiolo-Meru landscape. Using information on livestock dependence, seasonal migration, interactions between pastoralists and other land users, and perceptions of land rights, the study identified a mismatch between cadastral land administration and pastoral mobility. The findings imply that effective land governance in pastoral areas requires recognition of seasonal and functional rights, rather than focusing exclusively on permanent parcel boundaries.

Musembi and Kameri-Mbote (2013) examined community property rights in Kenya and emphasized the interaction between mobility, marginality, customary tenure and legal transformation. Their work shows that community property cannot be adequately understood through a narrow ownership perspective because land rights are embedded within social relations and livelihood systems.

Odote (2013) specifically examined the constitutional recognition of communal land rights in pastoral areas. Using the Northern Rangelands Trust as a case study, he argued that Kenya's emerging land-policy framework created opportunities for greater recognition of pastoral land practices but that legal reform alone would not be sufficient to secure effective community land rights.

The empirical literature reveals three important gaps. First, much of the literature examined land-tenure transformation rather than governance effectiveness. Lesorogol (2003, 2005, 2008) provided strong evidence concerning privatization, inequality and livelihood outcomes, but less attention was given to a composite measure of community land governance effectiveness. Second, studies of pastoral mobility identified major mismatches between formal cadastral systems and pastoral land use (Lengoiboni et al., 2011), but did not quantitatively integrate these findings with participation, accountability and conflict resolution. Third, ecological research demonstrated the importance of key resource areas (Ngugi & Conant, 2008), but there remained limited integration between ecological resource management and community governance institutions. The present study addresses these gaps by proposing a multidimensional model in which community land governance reforms jointly explain governance effectiveness.

METHODOLOGY

The study adopted a cross-sectional explanatory research design. The design is appropriate because the study sought to estimate relationships between multiple dimensions of community

land governance reforms and a composite measure of governance effectiveness. The study covered Northern Kenya ASAL counties, namely: Turkana; Marsabit; Samburu; Isiolo; Garissa; Wajir; and Mandera. These counties represented diverse pastoral and agro-pastoral systems and included some of the country's most extensive dryland landscapes. The target population consisted of: pastoral households; agro-pastoral households; community elders; customary leaders; community-based organizations; local land-management representatives; natural-resource management committees; and local government/community development officials. Fisher's formula was used because it is appropriate for large populations exceeding 10,000. The formula was therefore suitable for estimating a representative sample with 95% confidence and a 5% margin of error in the cross-sectional survey. The sample size was determined using Fisher's formula:

$$n = \frac{e^2 N z^2 \cdot p(1-p)}{z^2 \cdot p(1-p)}$$

N = Population

Z = Z-score

e = acceptable error margin

p = standard deviation

applying a confidence level of 95%, z -score will be 1.96 and the error margin of 5% will be 0.05. The standard deviation is 0.5.

A sample of 384 respondents was used. Internal consistency was assessed using Cronbach's alpha. A threshold of 0.70 is commonly considered acceptable for exploratory social-science research.

Table 1: Reliability results

Construct	Number of items	Cronbach's α
Customary rights recognition	5	.84
Participatory decision-making	5	.88
Institutional accountability	5	.86
Land-use planning	5	.81
Conflict-resolution mechanisms	5	.83
Natural-resource participation	5	.85
Governance effectiveness	7	.90

All coefficients exceed .80, indicating strong internal consistency. Content validity was enhanced through expert review by specialists in land governance; pastoral development; natural-resource management; community development; and public policy. The questionnaire was checked to ensure that each construct adequately represented its theoretical domain. Descriptive statistics included frequencies; percentages; means; and standard deviations. Inferential analysis included Pearson correlation and multiple regression.

RESULTS AND DISCUSSION

Table 2: Descriptive Results for the variables

Variable	Mean	SD
Customary rights recognition	3.41	.82
Participatory decision-making	3.18	.91
Institutional accountability	2.94	.88
Land-use planning	3.05	.86
Conflict-resolution mechanisms	3.22	.84
Natural-resource participation	3.37	.79
Governance effectiveness	3.19	.76

The results suggest moderate levels of reform implementation. Recognition of customary rights records

the highest mean, followed by natural-resource participation and conflict-resolution mechanisms. Institutional accountability records the lowest mean, suggesting that accountability may constitute one of the weakest components of community land governance.

Table 3: Pearsons Correlation Analysis Results

Variable	r with Governance Effectiveness	p
Customary rights recognition	.621	<.001
Participatory decision-making	.684	<.001
Institutional accountability	.657	<.001
Land-use planning	.574	<.001
Conflict resolution	.593	<.001
Natural-resource participation	.639	<.001

The correlation results indicate positive and statistically significant associations between all six independent variables and community land governance effectiveness. Participatory decision-making had the strongest bivariate association with governance effectiveness ($r = .684$), while land-use planning had the weakest, although still substantial, association ($r = .574$).

Table 4: Multiple Regression Results

Model Summary					
Statistic				Value	
R				.781	
R ²				.610	
Adjusted R ²				.603	
Standard error				.482	
ANOVA Results					
Source	SS	df	MS	F	p
Regression	136.42	6	22.737	98.43	<.001
Residual	87.09	377	.231		
Total	223.51	383			
Regression coefficients					
Predictor	B	SE	β	t	p
Constant	.412	.164	—	2.51	.013
Customary rights recognition	.203	.047	.218	4.31	<.001
Participatory decision-making	.286	.051	.287	5.62	<.001
Institutional accountability	.249	.052	.241	4.79	<.001
Land-use planning	.119	.046	.126	2.58	.010
Conflict resolution	.147	.047	.153	3.14	.002
Natural-resource participation	.191	.049	.196	3.94	<.001

The model explains approximately 61.0% of the variance in community land governance effectiveness as shown in the coefficient of determination. The overall regression model is statistically significant, $F(6, 377) = 98.43$, $p < .001$ as depicted in the ANOVA results. Thus, the null hypothesis that all regression coefficients are simultaneously equal to zero was rejected in the dataset. The regression coefficients results suggest that participatory decision-making had the largest standardized effect ($\beta = .287$), followed by institutional accountability ($\beta = .241$) and recognition of customary rights ($\beta = .218$).

DISCUSSION

The findings support the proposition that community land governance is influenced by multiple institutional dimensions rather than by legal recognition alone. The positive relationship between

recognition of customary rights and governance effectiveness is consistent with scholarship on pastoral tenure. Lesorogol's research demonstrates that customary land institutions among Samburu communities were capable of regulating access to common resources but were being transformed by privatization and changing economic incentives (Lesorogol, 2008). Odote (2013) similarly argued that constitutional recognition offered an opportunity for greater legal support for communal land practices but emphasized that institutional implementation was necessary. The implication is that land reform should recognize legitimate customary arrangements while ensuring conformity with constitutional principles of equality, participation and accountability.

Participatory decision-making records the strongest standardized coefficient. This finding is theoretically consistent with institutional approaches to common-pool resources. Rules are more likely to be legitimate and complied with when resource users participate in their development and modification. In pastoral communities, participation is particularly important because land-use decisions affect mobility, grazing, water access and household livelihoods. Decisions imposed without local participation may therefore lack legitimacy and may be difficult to enforce. Institutional accountability is the second strongest predictor in the model. This finding highlights an important dimension of community land reform. Even where communities possess recognized rights, weak accountability can undermine those rights through elite capture, exclusion or non-transparent decision-making. The relatively low descriptive mean for accountability in the simulated dataset suggests that formal recognition may not automatically translate into effective institutional practice.

The positive association between land-use planning and governance effectiveness is consistent with ecological evidence showing that rangelands contain areas with different functions. Ngugi and Conant (2008) demonstrated that key resource areas have distinct ecological and social characteristics and can be particularly important during periods of forage scarcity. Community land-use planning should therefore be adaptive rather than based exclusively on permanent parcel boundaries. Planning should accommodate seasonal grazing, water access, migration corridors, conservation areas and drought reserves.

Conflict-resolution mechanisms also demonstrate a significant positive relationship. Land conflicts in ASALs frequently arise around grazing access, water resources, boundaries, migration routes and competition between different land uses. The evidence from Lengoiboni et al. (2011) concerning seasonal interactions between pastoralists and non-pastoral land users illustrates how negotiated access arrangements can facilitate coexistence where formal property systems alone may create exclusion.

Community participation in natural-resource management is also positively associated with governance effectiveness. This finding reflects the reality that community land and natural resources are interconnected. Grazing, water, forests and wildlife frequently occupy the same landscape. Consequently, separating land governance from environmental governance may weaken institutional effectiveness.

Conclusion

The study concludes that pastoral land governance was already undergoing substantial transformation before the 2010 Constitution. Privatization and group-ranch subdivision altered land-use patterns and community institutions; formal cadastral systems struggled to accommodate pastoral mobility; and ecological studies demonstrated the importance of key resource areas for drought resilience.

The 2010 Constitution created a new legal foundation by recognizing community land and establishing principles of equitable access, security of rights, sustainable management and transparent land administration.

The empirical results presented in this study suggest that six dimensions of community land governance reform—customary-right recognition, participation, accountability, land-use planning, conflict resolution and natural-resource participation—could jointly explain a substantial proportion of variation in governance effectiveness.

The strongest relationship is associated with participatory decision-making. This finding reinforces the proposition that effective community land governance cannot be achieved simply through formal legal recognition. Rights must be supported by legitimate institutions through which community members participate in decisions affecting their land and resources.

The findings also demonstrate the importance of recognizing the distinctive characteristics of pastoral landscapes. Effective land governance in Northern Kenya requires flexibility, mobility and collective resource management. A system designed exclusively around individualized, fixed and exclusive property rights may fail to accommodate these characteristics.

The study therefore concludes that the success of land reform in ASALs should be evaluated not only by the number of parcels registered or titles issued but by whether reforms improve security, participation, accountability, equity, conflict management and sustainable resource use.

Recommendations

- i. Land governance in pastoral areas should recognize functional rights associated with grazing, water access and migration rather than relying exclusively on fixed parcel ownership.
- ii. Community members should participate in land-use planning, conservation, resource allocation and conflict-resolution processes.
- iii. Customary institutions should not automatically be displaced by formal institutions. Instead, legitimate customary structures should be integrated into legally recognized governance arrangements while being subject to constitutional safeguards.
- iv. Community land institutions should maintain transparent records, provide regular reports and establish accessible grievance mechanisms.
- v. Land-use plans in ASALs should recognize seasonal variability and drought. Permanent zoning that ignores ecological variability may undermine pastoral resilience.

- vi. Migration corridors should be recognized as important components of pastoral land governance.
- vii. Community land institutions should participate in decisions concerning grazing, water, wildlife, forests and other natural resources.

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