Beyond Land Titling for Sustainable Management of Agricultural Land: Lessons from Ndome and Ghazi in Taita-Taveta, Kenya

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Abstract

This paper is based on a 1996-1999 case study that was done in semi-arid Ndome and Ghazi, Taita-Taveta District, in Kenya to determine the root causes of persistent erosion damage in the area. More than 10 years after land adjudication was done in these areas, more than 70% of the farmers still operate under tenure insecurity mainly due to lack of title deeds ($r = 0.94^{**}$). Contrary to conventional expectation of land development, owning of land under private property rights was motivated by the sense of belonging, wealth, power and to some degree for speculative purposes. Adoption of structural soil and water conservation measures was still well below 50%. Preference was still given to indigenous land and water management (ILWM) technologies, with adoption rates ranging from 60% to more than 90%. No evidence existed that directly linked land improvement to land titling. For sustainable land management, land titling remains a critical incentive to farmers. However it will have to be accompanied by land use policy reforms that address four main issues, thus: deliberate efforts to preserve agricultural land, equitable distribution of available land, putting as much land as possible to agricultural use, and mechanisms to enhance prevention and control of land degradation. How these objectives can be achieved within the Kenyan context is the conceptual gist of this paper.

Keywords: Land Titling, Sustainable Land Management, Policies, Kenya

1 Introduction

In this paper, sustainable land management encompasses use, care and improvement of the land resource with the deliberate aim of guaranteeing inter and intra-generation equity in terms of food security, essential land products and other services. Three main designations of land tenure are distinguished in Kenya: government (public) land tenure, customary (communal, traditional) land tenure, and private land tenure (titling) (PANDER, 1995). Since pre-independence, conservation policies in the country have regularly included a call for land titling as a prerequisite for conservation and effective land development. This has been based on the assumption that assured ownership of

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the land determines the degree and extent of tapping on the products and/or benefits from it, and hence peoples' propensity to invest capital in land improvement on a sustainable basis (JUMA and OJWANG, 1996; WACHTER, 1996; GTZ, 1998; LINIGER *et al.*, 1998). The process has been rather slow and skewed with the ASAL areas being neglected under the notion of adverse climatic conditions, economic constraints and political insignificance (DE GROST *et al.*, 1992; ONDIEGE, 1996).

State ownership and management of natural resources like land is generally justified on the assumption that it would bring about equity considerations or collective societal interests in common pool resources (MURPHREE, 1993). The contrary is more true in Kenya where government land tenure has been associated with widespread inequity in distribution of land, destruction of natural forests and catchment areas, and loss of prime land to infrastructure development (INSTITUTE OF ECONOMIC AFFAIRS, 1998). Communal land tenure tends on the other hand to be associated with ecological collapse in the absence of regulatory mechanisms regarding the resource, when scarcity drives competition and the struggle to survive among the resource users (SIDA, 1993). As an aspect of agrarian law, land titling vests legal ownership and tapping of all benefits accrued from the land to individuals and at the absolute discretion of the legal owner (OCHIENG and OMINDE, 1993). Owners and land often have no ecological links. Land is a disposable commodity, whose ownership is a sign of wealth and power and hence livelihood security.

Consequently, land titling has become a major determinant of socio-economic and political development in Kenya. With increasing land scarcity and high risks of conflicts, communal tenure is slowly but surely being replaced with private tenure. GALATY (1992) observed that already some 40% of individual group ranches in Maasai land have been sold to individuals, who in turn use such lands for speculation and collateral rather than for dry-land development. By putting a lot of emphasis on ownership, which is often ascribed based on political influence, access and use rights that would otherwise be enjoyed by many other potentially productive people are disregarded. This in part explains the widespread skewed land distribution, land idleness, landlessness, land conflicts and artificial land shortages in Kenya, which together undermine agricultural productivity, environmental conservation and overall economic development of the country (INSTITUTE OF ECONOMIC AFFAIRS, 1998). According to OKOTH-OGENDO (1998), less than 10% of large farms in Kenya are productive, while the rest remain idle, mainly for speculative purposes.

The Zimbabwe case, where 1% of farmers own nearly 50% of available agricultural land and the bulk of the fertile land (ADAMS *et al.*, 1999), is a typical current example of the long term socio-economic and political implications of inequity in land distribution. A similar situation is true for South Africa largely due to procrastinated land reforms as depicted in the following quote by Tshepo Khumbane (SPORE, 2001): "The truth is, the past of "New" South Africa is still very much alive. It has to do with people's access to land and their hopes that land is the key to breaking the poverty cycle."

The volatility and hostility of land issues in Kenya can be traced to colonial and immediate post-colonial period, when greed, tribal factors and elitism dictated ownership, access and use of land (MORTON, 1998). This trend has continued to the present making land issues extremely sensitive, and with that accessing land data generally impossible. Issues of land ownership and land use have acquired a central place in the media, public policy and political discourse in the country. Suffice is to say that land ownership remains perhaps one of the oldest problems in agricultural and political development in Kenya, with potential for serious socio-economic and political repercussions. This in part explains the lack of political will towards radical policy adjustments for the survival of the country. Current efforts though in this endeavour include the Njonjo land commission and the constitution of Kenya review commission (CKRC), which are yet to complete their tasks.

From a global perspective, inequities in ownership, access and use of natural resources particularly land for agriculturally dependent countries will serve only to promote domestic poverty. This will in turn enhance the out-migration of desperate people to "greener pasture countries". The socio-economic and political consequences of such economic and ecological refugees are starting to bite in the "favoured" recipient countries as exemplified by media reports on racial and sectarian intolerance and the growing importance of right wing political ideologies.

2 Methodology

By virtue of the study's diagnostic nature, interactive questionnaire surveys were used to solicit answers and responses from 129 households in Ndome that were randomly selected from village development committee records. For Ghazi, three topical Participatory Rural Appraisals (PRAs) covering villages regarded as most affected by the erosion damage were used to gather data from mixed groups mobilised by the village development committees. Key respondents within the community were engaged for data verification. Additional secondary data was gathered from the ministry of agriculture. Ndome and Ghazi are located in Ngolia location next to Voi town in Taita Taveta District, coast province, in Kenya.

3 Results and Discussion

More than 10 years after the process of adjudication was initiated (1984), more than 70% of farmers interviewed still felt insecure on their farms. Of the three identified causes of land tenure insecurity, lack of title deeds was significant ($r = 0.94^{**}$) and accounted for 65% relatively. The risk of losing farmland due to unavoidable ecological factors accounted for 22% of the insecurity. Though not significant, the rather high percentage was indicative of the extent of farmland loses incurred during the 1996-97 El-Nino rains. Culturally driven insecurity with $r = 0.25^{**}$ was indicative of the vulnerability of women headed households in terms of land ownership as catalysed by deep-rooted gender forces (Table 1).

Insecurity of tenure was also in part a serious disincentive to the use of fertilisers and structural conservation measures for land improvement ($r = -0.18^*$ and -0.19^*) respectively. This could be attributed to the inherent tendency of land users to invest capital, labour and time where direct benefits in the shortest time possible are guaranteed. That

Land related variable	Percentage household response	r of variables in relationship to tenure in-
	response	security
Tenure insecurity	72	1
Reasons for tenure insecurity		
No title deed	73 (65)	0.94**
Ecological disaster	25 (22)	0.13
Gender biases	14 (13)	0.25**
Soil and water conservation measures practised		
Physical structural	25 (8)	-0.19*
Grass strips	81 (25)	-0.05
Indigenous land and water management	98 (31)	0.02
Tree planting	28 (9)	-0.06
Farm Yard Manure	76 (24)	0.04
Fertiliser application	9 (3)	-0.18*
Conflicts and policy dimension		
Presence of land conflicts	72	0.126
Extent of soil and water conservation under conflicts	33	-0.097
Continuation of land use under conflicts	80	0.023
Tax Land	20	0.13
Tax idle land	58	0.22*
Tax land that lacks in necessary conservation mea- sures	70	0.03

 Table 1: Relationship between selected land variable and land tenure insecurity

**: The correlation is significant at C.I of 0.01; *: The correlation is significant at C.I of 0.05. Figures in brackets are weighted values against 100%.

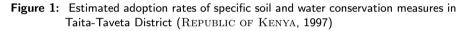
only about 20% of households were in favour of some kind of land tax as a management tool was indicative of peoples' lack of serious commitment to the land resource as a critical life-support system. With taxation only significant with respect to idle land ($r = 0.22^*$) as opposed to neglect of conservation (r = 0.03), resource use and access to its benefits comes first from a local perspective. Conservation on the other hand assumes second thoughts, as it must be prioritised against other pressing household needs.

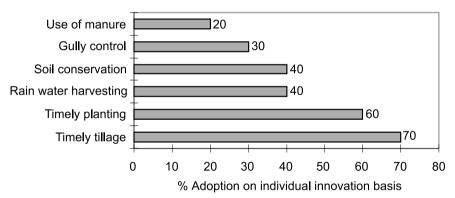
The positive correlation between tenure insecurity and land taxation however indicated that people would wish to own land but not be accountable to it in anyway. This explains why much land in Kenya is owned for speculative purposes with subsequent high levels of artificial land shortages and poverty. Therefore who should own land, how much and for what purpose are important policy issues in Kenya today.

One of the immediate effects of land titling was proliferation of land conflicts, which involved more than 70% of the households. The main cause of conflicts was the emerging

restrictions on open access tendencies on grazing fields. Although titling policy allowed land users to register as many undisputed plots as one had, only land parcels in the proximity of the homestead were used for routine cropping. The remaining scattered plots were normally left idle and lend themselves to vegetative and physical degradation through communal open-grazing practices, thus defeating the real purpose of titling. That 80% of the households continued to use disputed land, while only 33% continued with conservation measures on disputed land at the same time, signalled potentially severe degradation in the long run.

Further, contrary to conventional expectation, land titling did not attract any loans for land improvement from credit institutions. This was attributed to the inherently low quality of land and hence the uncertainty on the part of credit institutions of the farmers' abilities to payback. Land users' on the other hand lacked interest for the same due to fears of losing their land in case of default. Looked at from a location and district level, there was no direct evidence linking land titling to enhanced land improvement. Estimates of overall soil and water conservation impact in the district showed that only 10% of the farms were well conserved, 50% were partially conserved while the remaining 40% had no single conservation structures in place. Where structures existed, 90% received no routine maintenance (PRA TEAM, 1998), (Figures 1 and 2).





The apparent below average adoption of structural soil and water conservation measures was due to the high costs and labour requirements. Maintenance of structural conservation works was mainly hindered by the persistent destruction of the same to be expected during the routine off-season grazing. This explains why farmers put emphasis on indigenous land and water management (ILWM) technologies such as timely planting, timely tillage, use of manure, mixed cropping and inter-cropping. However, though cost effective, ILWM technologies alone will not be able to adjust to the increasing pressure on land and concurrent higher demand for food commensurate with growing human population.

The smallness of the relationships discussed above indicated that other factors were more important than titling alone in land management endeavours (Figure 3).

Figure 2: Relative importance of soil and water conservation practises in Ndome-Ghazi; N=129; ILWM = Indigenous land and water management. (Source: Own survey, 1998)

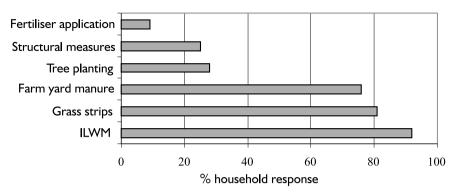
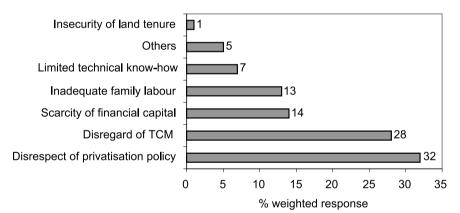


Figure 3: Relative importance of soil and water conservation practises in Ndome-Ghazi; N=129; ILWM = Indigenous land and water management. (Source: Own survey, 1998)



Key among them were:

- Widespread failure on the part of the community to respect the titling policy, with subsequent enhancement of vegetative degradation through persistent open grazing practices;
- Lack of consistent teamwork among farmers and hence inability to effectively benefit from total catchment management approaches;
- Inadequate family labour attributed to massive out-migration of men in such of off-farm jobs in urban centres; and
- Scarcity of financial capital for investment in land management attributed to high poverty levels in the community.

4 Conclusions and Recommendations

In view of the socio-economic and political development trends in Kenya, the importance of land in guaranteeing people's livelihoods, and the increasing scarcity of arable land, ownership of land under private property rights remains the single most important factor that guarantees land tenure security. Owning land for speculative purposes is however preferred to harnessing land for improved agricultural development. Since poverty, farming and land tenure are closely related in Kenya, attainment of sustainable land management will necessitate land tenure policies that would help alleviate poverty countrywide. To this end, land titling policy will have to enhance the realisation of four main objectives:

- Deliberate efforts to preserve/save available agricultural land,
- Putting as much land as possible to agricultural use,
- Deliberate efforts towards equitable re-distribution of available land, and
- Effective approaches and strategies to control degradation of agricultural land in-situ.

These broad objectives would require among others the following tenure reform policies perceived as those requiring urgent attention in Kenya, thus:

- As a rule of thumb, priority for the use of prime land should be food production, given the importance of food security in economic and ecological development of the country. Any other alternative use of such land, must be pegged on its relative contribution to the above objective,
- Regional and countrywide routine land inventories and quality monitoring systems to facilitate timeliness in degradation control,
- Establishment of legally binding ownership and sub-division ceilings to enhance equity in ownership, access and use of available land. Apart from annulling the ecological, socio-economic and political consequences of artificial land shortages, increased production possibilities would be steps towards food security and hence sustainable development of the nation.
- Regulation of rural land settlement patterns in favour of cluster-linear systems to promote catchment-based runoff management, facilitate rural infrastructure development and delivery of services, and also to preserve land for agricultural purposes,
- Mechanisms to regulate the excesses of private property rights, particularly when the profit motives undermine the common good. Controlled land transactions would for instance help protect family land from unauthorised sales by the legal owner, guarantee access to land and its products by all family members, minimise land conflicts and hence boost conservation farming,
- Establishment of conservation based criteria as determinants of the economic value of land. This would lessen the premium attached to "empty" parcels of land and hence accompanying negative effects such as land grabbing and conflicts.

- Establishment of effective taxation policies to curb the widespread tendencies of having idle land for speculative purposes.
- There is serious need for effective institutions and structures for the implementation and monitoring of such land management policies.

Although such land tenure reform policies would be certainly expensive in the shortterm, the socio-economic, political and environmental benefits in the long-term should encourage the mastering of the required political will for their implementation. As a start, all stakeholders, with the government as a central player, should be willing and ready to enter into mutually beneficial negotiations.

Zusammenfassung

Dieser Beitrag basiert auf einer Fallstudie von 1996-1999 im semi-ariden Ndome und Ghazi, Taita-Taveta Distrikt in Kenia, die das Ziel hatte, dieUrsachen der anhaltenden Erosjonsschäden in der Region zu erforschen. Mehr als 10 Jahre nach der Landzuteilung leiden noch immer 70 % der Farmer in diesem Gebiet unter Unsicherheiten hinsichtlich ihres Landbesitzes, weil die Besitzurkunden (Landtitel) fehlen. Im Gegensatz zu herkömmlichen Entwicklungserwartungen war Landbesitz unter Privateigentum motiviert durch Zugehörigkeitsgefühl, Wohlstand, Macht und einem gewissen Grad an spekulativen Absichten. Die Anwendung geeigneter Massnahmen, um Boden und Wasser zu erhalten, lag immer noch deutlich unter 50%. Bevorzugt wurden zu 60 bis mehr als 90 % ortsübliche Land- und Wassermanagement-Technologien (ILWM). Offensichtlich existiert kein direkter Zusammenhang zwischen Landtiteln und verbesserten Landmanagement-Praktiken. Für die Farmer bleiben Landtitel ein kritischer Anreiz, um das Land nachhaltig zu bewirtschaften. Dennoch sind hierfür begleitende Reformbestimmungen zur Landnutzung nötig, die vier Hauptforderungen beinhalten: zielgerichtete Anstrengungen zur Erhaltung landwirtschaftlicher Flächen; gerechte Zuteilung der verfügbaren Flächen; Ausweitung der landwirtschaftlichen Nutzung; und verbesserte Mechanismen zur Vorsorge und Kontrolle der Landdegradierung. Wie diese Ziele im kenianischen Kontext erreicht werden können ist Kern dieses Beitrags.

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References

ADAMS, M., SIBANDA, S. and TURNER, S.; Land Tenure Reform and Rural Livelihoods in Southern Africa; *Natural Resource Perspectives*; 39; 1999; Odi.

GALATY, J.; "The Land is Yours": Social and Economic Factors in the Privatisation, Sub-division and Sale of Maasai Ranches; *Nomadic Peoples*; pages 26–40; 1992.

DE GROST, P., FIELD-JUMA., A. and HALL, D.; *Taking Root. Re-Vegetation in Semiarid Kenya*; ACTS Press, Nairobi; 1992.

- GTZ; Land Tenure in Development Co-operation: Guiding Principles; Schriftenreihe der GTZ, No. 264; GTZ, Universum Verlagsanstalt, Wiesbaden; 1998.
- INSTITUTE OF ECONOMIC AFFAIRS; *Our Problems, Our Solutions: An Economic and Public Agenda for Kenya.*; Institute of Economic Affairs, Nairobi; 1998.
- JUMA, C. and OJWANG, J. B.; In Land We Trust: Environment, Private Property and Constitutional Change; Initiative Publishers, Nairobi; 1996.
- LINIGER, H., THOMAS, D. B. and HURNI, H.; WOCAT-World Overview of Conservation Approaches and Technologies - Preliminary Results from Eastern and Southern Africa; *Advances In Geoecology*; 31:1037–1046; 1998.
- MORTON, A.; *Moi: The Making of an African Statesman*; Michael O'mara Books Limited, London; 1998.
- MURPHREE, M. W.; Communities as Resource Management Institutions; Gatekeeper Series SA 36; International Institute for Environment and Development; 1993.
- OCHIENG, M. and OMINDE, S. H.; Land Tenure and its Implications for the Diffusion and Adoption of Soil Conservation Technologies in Kenya; Paper Presented in a Research Workshop at ACTS, 18-19th November, Nairobi; 1993.
- OKOTH-OGENDO; What Killed our Agriculture ?; ACTS Policy Insight; 1(1); 1998.
- ONDIEGE, P.; Land Tenure and Soil Conservation; in: *In Land We Trust: Environment, Private Property and Constitutional Change*, edited by JUMA, C. and OJWANG, J.; pages 117–142; Nairobi; 1996.
- PANDER, H.; Sahara and Sahel Observatory Programme, Natural Resource Management, Study of Land Tenure and Land Policy in Transmara District, Kenya: Situations and Conflicts; Transmara Development Programme; 1995.
- PRA TEAM; Baseline Survey Report for Ghazi FDA, Ministry of Agriculture; Taita-Taveta Agricultural Project (TTAP); 1998; pg. 10.
- REPUBLIC OF KENYA; Annual Report of Taita-Taveta District; Ministry of Agriculture; 1997; pp. 51.
- SIDA; From Soil Conservation to Land Husbandry; 1993.
- SPORE; Information for Agricultural Development in ACP Countries; No. 91, pg. 16; 2001.
- WACHTER, D.; Land Tenure and Sustainable Management of Agricultural Soils; Development and Environmental Report No. 15; Centre for Development and Environment (CDE), Berne, Switzerland; 1996.