

Commons

Southern Africa

16

CBNRM, poverty reduction and sustainable livelihoods: Developing criteria for evaluating the contribution of CBNRM to poverty reduction and alleviation in southern Africa

by Michael Taylor



CASS/PLAAS occasional paper series

No. 16

Rangeland tenure and pastoral development
in Botswana: Is there a future for community-
based management?

Michael Taylor

Rangeland tenure and pastoral development in Botswana: Is there a future for community-based management?

By Michael Taylor

Downloadable from www.cassplaas.org

First published: February 2007

Cover illustrations: Colleen Crawford Cousins

Layout: Designs for Development

Copy-editing: Roelien Theron

Printing: RNK Graphics

An output of the joint Centre for Applied Social Sciences/Programme for Land and Agrarian Studies project 'Breaking new ground: Approaches to people-centred natural resource management for development in southern Africa' (www.cassplaas.org)

Centre for Applied Social Sciences University of Zimbabwe PO Box MP 167
Mount Pleasant Harare Zimbabwe Tel: +263 4 303 306/7 Fax: +263 4 307 134
www.uz.ac.zw/units/cass/

Programme for Land and Agrarian Studies School of Government University of the
Western Cape Private Bag X17 Bellville 7535 Cape Town South Africa Tel: +27 021
959 3733 Fax: +27 021 959 3732 www.uwc.ac.za/plaas

Commons southern
Africa occasional
paper series

No.16

Rangeland tenure and pastoral development in Botswana: Is there a future for community- based management?

Michael Taylor

Centre for
Applied Social
Sciences and
Programme for
Land and
Agrarian Studies
February 2007

Contents

Acronyms	ii
Abstract	iii
1. Introduction: Current trajectories in land tenure and management in Africa	1
2. Reconceptualising CBNRM: Governance and tenure reform	4
3. A brief history of pastoral development and land tenure in Botswana	6
How effective has rangeland enclosure been?	8
4. Alternatives to the privatisation of Botswana's communal rangelands	10
The Indigenous Vegetation Project	11
5. Conclusion	13
6. References	14
Annex 1: The Indigenous Vegetation Project at a glance	17

Acronyms

CASS	Centre for Applied Social Sciences
CBNRM	Community Based Natural Resource Management
NGO	Non-governmental Organisation
PLAAS	Programme for Land and Agrarian Studies
Sardep	Sustainable Animal and Rangeland Development Programme
TGLP	Tribal Grazing Lands Policy
IVP	Indigenous Vegetation Project
NPAD	National Policy for Agricultural Development
UNDP	United Nations Development Programme
WAPP	West African Pilot Pastoralist Programme

Abstract

Botswana has a long history of attempts to 'rationalise' land tenure so as to improve livestock production, which remains a mainstay for the rural economy. This paper addresses the profound transformations in land tenure systems that have been prompted by decades of government and donor-driven programmes and policy, resulting in the shrinking of the commonage through the exclusion of extensive tracts of land and their transfer to private interests. In particular, the implementation and impacts of two policies are examined: the Tribal Grazing Lands Policy (TGLP) (1975) and the ongoing National Policy for Agricultural Development (NPAD) (1991). Both these policies envisage improved management of common rangeland resources through allocation to private interests, but have failed to achieve their objectives of improved rangeland management or increased livestock production.

The history of land and natural resource tenure in Botswana is reflective of wider trends in Africa, whereby the attrition of collectively-held natural resources under customary tenure is being accelerated by policies that favour individualised tenure. Programmes to

decentralise management of specific renewable natural resources such as wildlife have been implemented for two decades, but nonetheless have yet to gain widespread support among policy makers. However, for states unwilling to devolve authority over land even further and accord full recognition to customary rights, approaches such as those established by Community Based Natural Resource Management (CBNRM) are one route to promote sufficient recognition of collective rights to prevent further loss of commonly-held lands to private interests. Within this context, this paper also examines a recent initiative by the Ministry of Environment, Wildlife and Tourism to pilot community-based management of rangeland resources in several community grazing areas, and analyses the challenges that it faces.

Unless CBNRM approaches are able to develop beyond the largely protected and semi-protected areas in which they currently operate, and expand into the production landscapes that support the everyday livelihoods of most rural residents in Africa, CBNRM risks irrelevance to most of Africa's natural resources and its people.

1. Introduction: Current trajectories in land tenure and management in Africa

This paper situates tenure reforms in Botswana's rangelands within the wider trajectories of land tenure in Africa. Over 90% of the rural population of sub-Saharan Africa rely for their livelihoods on resources held under customary tenure, an estimated 370 million of whom are defined as 'poor' (Wily 2006:13). However, policies encouraging the commoditisation of land threaten the ability of many rural dwellers to get out of, or stay out of, poverty.

Africa's rangelands are, however, under increasing pressure from the claims of resource users. In the past, customary management systems allowed local elites such as chiefs to control extensive areas, but the fluidity of such claims over land and natural resources generally gave poorer members of society access to resources even if they did not have recognised rights. However, tenure reforms over the last century in many African countries have promoted an ever-increasing definition of clear title over land. This has facilitated the individualisation of land tenure over extensive tracts of previously commonly-held land, and it is the political and economic elite who have been able to stake such claims. The sum of these processes is that the poorest members of society who rely on access to common resources as a safety net from absolute poverty have found themselves progressively squeezed into smaller and smaller areas. The pressure of resource utilisation in such areas is increased, endangering sustainability and thus making livelihoods even more vulnerable.

The ongoing attrition of the commons, together with the concentration of basic productive resources in the hands of a small elite, is one of the primary challenges to address in creating the conditions for achieving the targets of long-term poverty reduction envisaged by the Millennium

Development Goals and many national governments. As eloquently argued by Wily (2006), there is an increasing recognition that insecurity of land tenure is essentially a political condition that can be made, and unmade, at the political level. Creative alternatives to addressing the challenges of land tenure are being sought, as evidenced by the growing literature on 'legal pluralism' as a means to accommodate tenure of both customary and western origin (see McAuslan 2005; Adams & Turner 2005).

Several African governments, including Uganda, Tanzania and Mozambique, have already taken the step of according customary land rights full legal status, providing a powerful tool to protect land rights at the collective level. A higher proportion of southern and eastern African countries have adopted programmes to promote CBNRM. These programmes have generally decentralised management rather than ownership rights over natural resources to the community level, and even then over a limited range of natural resources. However, for states unwilling to accord full recognition to customary rights, approaches such as those established by CBNRM may provide sufficient recognition of collective rights to prevent further loss of commonly-held lands by private interests.

One of the greatest challenges in considering the future of CBNRM is whether community-based approaches to the management of renewable natural resources are able to move away from the traditional and emerging sectors of wildlife, forestry and fisheries, and expand in particular into common-pool rangelands. Rangelands in Africa (grasslands, savannas and woodlands, which contain both grasses and woody plants) provide about 80% of the nutrition for Africa's livestock population

of about 184 million cattle, 372 million small ruminants (sheep and goats), and 17 million camels (Watson et al. 1997). Unless CBNRM approaches are able to develop beyond the largely protected and semi-protected areas in which they currently operate, and expand into the production landscapes that support the everyday livelihoods of most rural residents in Africa, CBNRM risks irrelevance to most of Africa's natural resources and its people.

In the field of tenure reform, Botswana gained prominence in the mid-1970s with its large-scale attempts to 'modernise' beef production through ranching. Driven by dominant paradigms of the time and funded by the World Bank, the solution to low livestock off-take and perceived high levels of degradation on the commonage was seen as privatisation. Botswana has also more recently become known for being a pioneer in CBNRM. The USAID-sponsored Natural Resources Management Programme in Botswana started in the early 1990s, following closely on the experiences of Zimbabwe's Campfire programme.

Thirty years after the initiation of cattle ranching schemes and 15 years after the launch of the CBNRM programme, the ranching of Botswana's communal rangelands continues to attract substantial government investment. CBNRM, in contrast, faces declining support among many decision makers within the Botswana government. The legitimacy of allowing local communities to control, and derive commercial benefits from, natural resources in their vicinity has been widely questioned by policy makers in Botswana over the past few years. This has in part been prompted by the disappearance of hundreds of thousands of dollars of safari hunting royalties from the bank accounts of a number of community trusts. It also reflects a rejection by some political leaders of the paradigm underpinning CBNRM and a reassertion of the belief that all natural resources are national assets and should therefore be shared at a national level. The apparent triumph of privatisation over common property management in dominant thinking in Botswana reflects to some extent the general crisis in CBNRM in the region (CASS/PLAAS 2005a, 2005b; National CBNRM Forum 2005). Nonetheless, the principles of community-based management continue to retain the support of a significant portion of non-governmental organisations (NGOs),

development partners and the technical cadre of the civil service.

Within this context, Botswana's Ministry of Environment, Wildlife and Tourism is currently collaborating with the United Nations Development Programme (UNDP) on a pilot project to develop approaches to community-based management of rangeland resources in communal rangelands. The project is known as the Indigenous Vegetation Project (IVP).¹ The main strategy of IVP is to assist rural dwellers on a village-wide level to organise themselves so as to develop and implement systems for managing rangeland resources in their area. It is intended that such systems would have their grounding in traditional forms of rangeland management, which have largely disintegrated with the advent of borehole technology and official livestock production programmes. As such, an important focus of the project is on governance, particularly building institutional structures and capacity at village level to oversee rangeland management and assisting these structures to be empowered to undertake such management through the transfer of management rights from the state to community level. It is too early to assess to what extent IVP is able to meet its aims, as the actual operation of such management systems has not yet begun. However, examining this initiative within the broader trajectories of tenure reform in Botswana's communal rangelands provides a commentary on the management options for communal rangelands, and the urgent need to demonstrate a viable alternative to privatisation.

The following section of this paper picks up on some of the key themes in researching CBNRM, particularly the manner in which CBNRM programmes can become an arena in which power, particularly the power to control land and natural resources, is negotiated and contested between rural populations and the state. It then traces the history of pastoral development in Botswana, examining to what extent rangeland enclosure has been successful, and postulating to what extent such reforms have been motivated by the potential for large-scale land speculation rather than livestock management per se. This is followed by an examination of the development of CBNRM in Botswana, leading to the current initiative of IVP, contextualised by the experiences of some of the few initiatives to develop community-based management of common rangeland elsewhere in Africa.

Endnote

- ¹ The author was a part of the team implementing the Indigenous Vegetation Project between 2002 and 2006.

2. Reconceptualising CBNRM: Governance and tenure reform

Placing CBNRM in the wider theoretical discourses of development over the past decade brings into focus a critical dynamic that is yet to receive adequate attention by commentators on CBNRM: that of the power relationships between rural dwellers, the state and other external interests, and how CBNRM can become a forum through which the rights, or lack thereof, of rural dwellers to access, use, manage or own natural resources to control their own destinies are either entrenched or challenged. Recognising these power dynamics brings to the fore questions of governance, and locates an analysis of CBNRM – as a potential vehicle for asserting such rights – within the context of wider trends in land and tenure reform in Africa.

For some, such as Vipenyu Dzingirai in his leader to the CASS/PLAAS debate on the ‘CBNRM crisis’ (CASS/PLAAS 2005b), the real crisis is that CBNRM simply legitimates a new form of domination of rural populations by the state and private commercial interests. His argument resonates with other critical scholarship on CBNRM, which has noted, for example, that the manner in which it has been implemented has been more about management of people than management of natural resources (see Twyman 1998). That this would take place to some extent is perhaps predictable, considering the propensity of states to use their resources in an attempt to increase the ‘legibility’, not only of ‘wild’ environments, but also of what may be considered ‘unpredictable’ rural populations on the periphery of state control (see Scott 1998; Sullivan & Homewood 2003).

The use of CBNRM initiatives as a vehicle for the extension of state power is one example among many of how a ‘development’ programme of this nature can – perhaps inadvertently – have a de-politicising, and thus disempowering, effect on its client populations (Ferguson 1990). Notwithstanding this, the scales of empowerment can also tip in the other direction. In inviting

engagement between rural populations and the state on issues of governance of natural resources, CBNRM initiatives can also encourage the political mobilisation of local populations and provide a forum for such newly organised entities to articulate their interests in this arena. The new community-based organisations that gain a stature and a voice may then articulate the wider interests of rural populations, including land rights. This has been documented by Taylor (2004) and Bolaane (2000), for example, for San villages in northern Botswana, which, prior to the introduction of CBNRM, had a long history of disenfranchisement and political marginalisation. In such villages CBNRM programmes provided the structures for community mobilisation and organisation to address a much broader spectrum of land rights than simply the right to benefit from wildlife revenues as initially proposed by the programme.

Processes of land capture by a privileged minority are often driven by state-led ‘reforms’, those governing agricultural development in Botswana being a prime example. Traditional management systems were generally non-exclusionary and allowed for overlapping and flexible ‘bundles’ of rights. However, as the strength of such systems has declined, most notably in southern and eastern Africa, so individuals have been able to appeal to contemporary tenure policy and law to claim exclusionary control over defined tracts of land in previously communal areas.

Land is the basic means of production in predominantly agrarian and pastoral economies, and a safety net from absolute poverty for many households. Especially in semi-arid ecosystems, rural populations tend to require access to extensive areas so as to exploit resources whose abundance may be highly variable from season to season. The progressive fragmentation of previously common rangelands into private parcels by a growing number of agrarian capitalists,

elites, state agents and multinational investors is therefore likely to have profound impacts on the ability of households to get out of, or keep out of, poverty. Diminishing access to land in Africa, obfuscated by the common characterisation of Africa as being land abundant, is a fundamental constraint to effective environmental management and poverty reduction.

Formalising common property management regimes, therefore, is one route to legitimate and formalise a form of common property ownership on the commons that may otherwise have been regarded as available for private accumulation. As such, one of the most important contributions of CBNRM may become the crucial role it can play in protecting remaining land in the commonage from further alienation by individual interests. In the absence of legal

systems that acknowledge direct community *ownership* of land, the granting of *management* rights may be sufficient recognition of the legitimacy of community control to protect such lands from allocation to outside interests. If CBNRM approaches are able to become widely established in the semi-arid production areas of Africa, it may play a significant role in protecting the poor from large-scale privatisation of previously common-pool resources.

In order to give some context to the potential role that CBNRM could play in protecting common-pool resources in rangelands, this paper now shifts focus to the specifics of tenurial reform in Botswana, illuminating the changes that have taken place from precolonial times until present, and the role that CBNRM in Botswana's rangelands could play in the future.

3. A brief history of pastoral development and land tenure in Botswana

As a large, sparsely populated, semi-arid country in the interior of the southern African subcontinent, pastoralism has long been a mainstay of the rural economy of Botswana. Before diamonds were discovered a year after independence in 1967, and began to propel one of the fastest growing economies in the world over the next two decades, beef production was seen as the only sector of Botswana's fragile economy that had potential for development. Since then, diamonds have continued to fuel economic growth, and the remoter parts of Botswana's rangelands have become the basis for a growing tourism industry. Nonetheless, livestock remains the primary source of subsistence and income for two-thirds of households (BIDPA 2002). Botswana has one of the highest ratios of livestock to people in Africa, with 1.7 million people, 2.9 million cattle, 1.7 million goats and 267 000 sheep and 400 000 donkeys (2002 Agricultural statistics, quoted in Arntzen et al. 2003).

Although nomadic pastoralism has probably been a feature of the Kalahari for at least a thousand years (Wilmsen 1989), the extent of pastoralism in the Kalahari began increasing about two centuries ago. Nomadic pastoralists, who nonetheless still relied heavily on hunting and gathering, dispersed into the Kalahari with their livestock during the short rainy season, relying on sip holes and melons for water during the dry season. Under the traditional management system, membership of a community conferred resource-use rights, including 'right of pasture' on community grazing land. There were no defined limitations on resource use, but rights and claims were regulated by the community at ward, village and tribe levels. Governance of *mahudiso* (grazing lands) and *dinaga* (hunting lands) was vested in chiefs, headmen and *balebeleedi* (overseers) at these various levels.

Non-pastoralist societies and minority tribes were excluded from the political hierarchies,

and thus did not enjoy explicit tenure rights under this system. Nonetheless, there was an element of flexibility and fluidity allowing for multiple claims within the same resource-use area (Taylor 2001, 2004). In other words, the land rights of weaker groups operated by default in areas where no other strong claims existed to the extent that these stronger claims could exclude the weaker. As such, weaker groups were able to continue to use rangeland resources in spite of having no recognised rights over them.

During the colonial period, from 1885, 4% of Botswana's land was alienated from the commonage to become freehold land, becoming exclusively owned by white settlers and companies. This was land on which indigenous inhabitants lost all rights. In addition, 23% of land was gazetted as Crown lands, whose inhabitants became tenants 'at the will of the Crown'. Those that lived on Crown lands had no tenure rights, but their presence was generally tolerated.

On the remaining communal lands, traditional rangeland systems began facing competition from the 1920s and 1930s. The colonial government set up a number of ranching blocks in the commonage to demonstrate and encourage 'modern' production methods. In addition, development agencies and wealthier cattle owners financed the sinking of wells on the margins of pans, and the drilling of boreholes to access groundwater in the hinterland, opening up the enormous forage potential of the Kalahari. This enabled larger cattle owners to sustain year-round pastoral production in single locations that were previously only open to seasonal grazing. Ownership and control of water points also granted effective ownership of the pasture within grazing distance of the water point.

The gradual definition of formal land rights, whether by freehold title, the declaration of

Crown lands, or the expansion of boreholes into the frontier of the Kalahari was a process whereby those able to best stake their claim benefited. Those who were too poor to legitimise their claim to land were excluded from gaining formal land rights. In addition, theories of modernisation became established and were to continue to permeate interventions in rangeland management by the post-independent government, whose policies would continue to favour the privatisation and fencing of communal rangelands.

Legal reforms and policies after Botswana's independence in 1966 have enabled the continued expansion of private tenure interests in communal rangelands. In part, this has been due to a deliberate shift in livestock development policy from investment in water to the rationalisation of land tenure (Peters 1994). Over 45% of Botswana's land area now has access to permanent water, compared with around 20% in 1936 (Arntzen 1998). Yet, since 1980, there has been no significant increase in the size of the national herd (Arntzen et al. 2003), which has fluctuated around a mean of three to four million in response to rainfall conditions. This indicates lack of grazing rather than lack of water as the primary limiting factor to livestock numbers.

The 'rationalisation' of land tenure in independent Botswana began in 1968 with the Tribal Land Act, which allowed for formalisation of tenure rights through land boards. These were district-level institutions responsible for land allocation, which reduced the role of traditional leaders in the process. In 1975 the World Bank-sponsored Tribal Grazing Lands Policy (TGLP) was launched which allowed for the fencing of communal lands into leasehold ranches, a process which was continued under the 1991 National Policy for Agricultural Development (NPAD). The impact of these two policies was heightened by a 1993 amendment to the Land Act, whereby the word 'tribesman' was replaced with 'citizen'. Although more ethnically neutral, this change explicitly transferred the resource rights that were enjoyed at the level of tribal affiliation to the level of citizen. It thus formally opened up the 'frontier' of unallocated communal land to any citizen, rather than restricting eligibility to those whose tribal affiliation was associated with that particular area.

The main objectives of TGLP (1975) and its successor, the NPAD (1991), were to allow

improved management to increase livestock production and reduce rangeland degradation. Large tracts of land were privatised and fenced for use by wealthy cattle owners in an attempt to relieve pressure on communal grazing land. Despite the availability of loans under the TGLP, the large down payments they required limited their uptake to the richest cattle owners (Cullis & Watson 2004). These ranch owners often retained dual grazing rights, grazing communal land during the wet season and using their ranches as dry season and drought fodder reserves (Perkins & Ringrose 1996). At the same time, the ranches occupied the land that communal pastoralists traditionally used as fodder reserves during times of drought. The exclusion of land from the commonage through ranching thus exacerbated degradation in communal areas, increasing the polarisation between rich and poor, and fuelling rural-urban migration.

Under TGLP, 342 ranches were demarcated (Mathuba 2003), most of which were 8 km x 8 km, or 64 000 ha, in extent. Over 2 million ha, or approximately 4% of Botswana's land area of 58 million ha, were allocated for ranching in this manner under TGLP in the late 1970s and 1980s. The approach of TGLP was expanded and revamped by the 1991 NPAD. In communal areas assessed as feasible for fencing, NPAD allows owners of boreholes to fence the grazing lands around their borehole (typically 3 600–6 400 ha), thereby gaining exclusive rights in a 50-year lease to all contained renewable resources. As of December 2005, 602 additional ranches had been demarcated under NPAD, enclosing an additional 2 million ha. Approximately 8% of Botswana's land area has thus been taken out of the common pool under these two programmes.

The transformations in communal land tenure systems as a result of decades of interventions have been profound. The shrinkage of the commonage through successive policies that have systematically served to exclude extensive tracts of lands and concentrate these in the hands of private interests has increased pressure on remaining communal rangelands. At the same time, rights to pasture are reckoned at the level of citizen rather than any more local level of social organisation, such as tribe. This has served to erode the strength of traditional

management systems to the extent that many communal areas are now more characteristic of open access systems. As has been noted by other observers, (see Rohde et al. in press), the 'Tragedy of the Commons' in these contexts has become a self-fulfilling prophecy, triggered by the very interventions that were introduced to overcome it.

How effective has rangeland enclosure been?

The design of TGLP in the mid-1970s represented a logical intervention driven by the then prevalent paradigms in livestock management, common property and ecological dynamics. The ranching model was equally promoted by donors through such projects as the Kenya Livestock Development Project, Kenya and Burkina Faso group ranches, Nigeria grazing reserves, and Senegal livestock development projects (Aboud et al. 2003; Lane 1998; Cotula et al. 2003). Such initiatives were based on three main assumptions (Behnke et al. 1994): that stocking rates determine vegetation characteristics; that fewer animals lead to higher output; and that communal rangelands are inevitably overstocked. Hardin's influential *Tragedy of the Commons* (1968) gave impetus to such interventions, positing that by holding land in common, individual herders have no incentive to limit the number of animals they graze on that land, and thus that eventual destruction of the resource base is inevitable unless the tenure system is changed.

Considering the continued large investment by the government in promoting rangeland enclosure, and the far-reaching economic, social and environmental consequences of doing so, there is markedly little research pointing to its effectiveness in Botswana. On the contrary, a number of environmental and social analyses of TGLP over the past two decades have showed that it has clearly not met its objectives of improving livestock production and reducing degradation (see Bekure & Dyson-Hudson 1982; White 1993; Thomas et al. 2000; Arntzen 2002). Moreover, the benefits of privatisation are concentrated in the hands of a few, while poor rural households permanently lose access to land and the resources on it that often function as a safeguard against absolute poverty (Selolwane 1995; Cullis & Watson 2004).

In an analysis of ranching, Thomas et al. (2000:327) concluded that the TGLP and

NPAD have 'reduced both environmental and societal resilience to natural environmental variability'. There have been few economic analyses of livestock production in leasehold ranches, but those that have taken into account non-marketed products have suggested that the ranches have lower outputs and higher costs than communal systems (see De Ridder & Wagenaar 1984; Arntzen 1998). Such studies also indicate that ranching has, despite its intentions, not resulted in intensified production. Using data from communal rangelands in Botswana, Arntzen (1998) argues that rangelands have been systematically undervalued, due to a focus on marketed livestock products. His analysis showed that approximately a third of the direct use value of communal rangeland comes from hunting and gathering, with non-marketed products such as milk and wild plants making a significant contribution. Abel (1997) and Perkins and Ringrose (1996) consider the traditional cattle post system to be particularly efficient, avoiding unnecessary infrastructure costs and allowing livestock to adapt their grazing behaviour to heat (for example, grazing overnight and returning for water in the morning) to minimise energy expenditure.

Technocrats in the responsible ministries are generally familiar with the bodies of scholarship that have emerged over the last two decades emphasising the strengths of indigenous common property based management systems and the dynamic nature of dryland ecosystems (see Ellis & Swift 1988). Nonetheless, the spectre of the 'Tragedy of the Commons' remains the dominant argument among policy makers for continued government investment in fragmentation and enclosure of Botswana's rangelands (see Peters 1994).

The question then arises as to what motivates the continued implementation of a policy that is justified using questionable epistemological grounds, and for which three decades of implementation have yielded little evidence for achieving its intended objectives? Perhaps to some extent the simplicity of Hardin's thesis remains more appealing to policy makers than the complexity and unpredictability of both indigenous management systems and dryland ecological dynamics, as propounded by more recent scholarship. However, many observers view the continued implementation of such

policies as providing the opportunity for the political and economic elite to engage in large-scale land speculation. This is certainly a real opportunity. The ranches are allocated on the basis of a 50-year lease to borehole owners in the ranches areas, or to applicants with a minimum number of livestock in the case of demarcated ranches that contain no pre-existing boreholes. The allocation is at no charge, but land boards levy an annual lease fee of P0.70 (\$0.14) per hectare. This amounts to a lease fee of \$560 per annum for an average-sized 4 000-ha ranch. Over the past few years it has become common to see ranch leases for sale for amounts ranging from P500 000 to P2 000 000 (\$100 000–\$400 000).

Despite being responsible for its ongoing implementation, concerns about the possible socio-economic and environmental effects of ranching are widespread among its implementers. Poteete (2003) documents that such concerns have been expressed, particularly by land-use planners, since the early stages of the policy. The fact that the policy framework of NPAD was in place for almost a decade before implementation

began in earnest in the late 1990s indicates the measure of ambivalence that has existed about its implementation. In the words of one of the officials whose land-use planning portfolio includes an oversight role for the implementation of NPAD, it is ‘one of the aspects of my job I do *ka mabogo a maleele* [trans. ‘with long arms’]’, meaning out of obligation rather than personal commitment. Although feasibility studies are undertaken for each proposed ranching area according to guidelines accompanying NPAD, there is widespread sentiment among its implementers that political pressure is exerted to approve areas for ranching, even those whose feasibility may be marginal.

Despite the ambivalence that exists among land-use planners as to the appropriateness of the ranching policy to many areas, it appears that political pressure for its implementation has been able to prevail in part because of the lack of viable alternative options to managing common rangelands. The following section explores the shape that such an alternative could take.

4. Alternatives to the privatisation of Botswana's communal rangelands

The 1980s saw a paradigm shift in conservation, with the dominant approach of fortress-style preservation beginning to give way to the more people-centred approaches of CBNRM. At the same time, a radical shift began developing in understandings of the dynamics of semi-arid ecosystems. Underpinning the creation of ranches had been an assumption of ecological 'equilibrium', in which biotic feedbacks such as livestock densities are understood as the main determinants of rangeland productivity. Management of such systems could therefore be predictably achieved by primarily controlling stocking densities. Such assumptions were challenged by proponents of the 'non-equilibrium' model. They argued that abiotic factors, in particular variable rainfall, result in highly variable primary production. Herd and pasture management should therefore be based more on the opportunism enabled by herd mobility.

This epistemological shift has given impetus to much stronger support by researchers for indigenous management systems, which often emphasised herd mobility. An appreciation of the dynamism of semi-arid ecosystems, combined with the wider shift towards 'people-centred' approaches to natural resource management, provides a strong epistemological platform for community-based rangeland management. Renewing, or reworking, and formalising quasi-traditional management systems could therefore point a way forward in protecting 'traditional' land rights and could offer a legitimate alternative to the privatisation of Africa's commons by elites – apart from the potential benefits to biodiversity and livelihoods of improved environmental management.

There are remarkably few initiatives in Africa demonstrating the viability of formalised, community-based management

systems for rangeland resources. In part, this is because such interventions would touch directly upon the resource base that many rural dwellers use on a daily basis, such as grazing, and therefore consider their own entitlement. The use of such resources would probably not easily be surrendered to community control. In contrast, wildlife has in many cases long been alienated from rural populations, and so bestowing rights to benefit on rural populations may be perceived instead as an act of benevolence by the state.

Another reason for the dearth of formalised community-based management systems may be that, particularly in southern Africa, traditional management systems, such as herd mobility and active herding, have broken down. As landscapes have become fragmented and movement of livestock tightly regulated, and as primary school enrolment has increased, livestock owners have had access to neither the labour nor the available land to move their livestock in pursuit of forage. 'Reinventing' management systems in this context therefore presents a particular challenge.

Initiatives to formalise community-based rangeland management are few and far between, and demonstrate limited success. West Africa, characterised by continuing transhuman migrations of herders with their livestock between the dry and humid zones of the Sahel, has experienced several decades of attempts to formalise range management projects. Although the earliest of these also followed the ranching model, a number of Sahelian countries have since experimented with more innovative approaches to rangeland management. Community-based approaches include granting villages the rights to manage their own territories (*gestion de terroirs villageois*), and then more recently, the elaboration of *codes rurales*, or locally-brokered land access and use agreements

recognised by the state. However, these appear to be primarily successful where they do not attempt to introduce rigid and management-intensive practices. To take one example, which was demonstrated in a donor-funded project, the West African Pilot Pastoralist Programme (WAPPP), implemented across several Sahelian countries, (Aune n.d.). Using the principles of Holistic Resource Management, the project attempted to introduce management-intensive grazing measures at the community level through sectioning a large number of areas of common grazing land into grazing camps. These operated during the project duration, but apparently were not retained by herders beyond the direct involvement of the project.

A notable attempt in southern Africa at community-based rangeland management was the ten-year Sustainable Animal and Rangeland Development Programme (Sardep). This was started in 1991 with the aim of improving livestock management in northern Namibia's communal rangelands, and lasted until 2004. The programme was implemented through the Ministry of Agriculture, Water and Rural Development (Kruger 2001). The management-intensive approach of the initiative did not fit well with traditional management systems of local populations, nor in the context of the open range (Matundu n.d.), resulting in minimal uptake by farmers in the area. Nonetheless, the project does seem to have left its mark on the responsible ministry in terms of increased institutional openness to the possibilities of community-based rangeland management options (Kruger 2001).

In a recent addition to the CASS/PLAAS *Commons Southern Africa* occasional paper series, Atkinson (2005) argues for the 'reinventing' of management systems in a municipal commonage in the Northern Cape province in South Africa. The new management systems are intended to be based on principles of traditional management that have been systematically broken down by government programmes and subsidies. Her research in the context of municipal commonage mirrors research done in Botswana, in that it deals with the rangeland areas around population centres that are subject to weak management regimes. As she points out (2005:4), such areas are 'by far the greatest developmental asset for the poor'. However, the outcomes of this initiative remain to be seen.

The Indigenous Vegetation Project

The precedent for common property management has already been set in Botswana through CBNRM programmes that are operating in over 50 participating community clusters (Arntzen et al. 2003). However, the IVP is, as yet, the only attempt to formalise community-based systems of rangeland management. The project aims to empower local communities to manage their rangelands and to develop, adapt and apply traditional and innovative common property rangeland management systems. Since the IVP pilot project is based in the Government of Botswana's Ministry of Environment, Wildlife and Tourism, it carries the intention that, if successful, common property management regimes may be more widely developed and applied as an alternative to privatisation in Botswana's rangelands.

The IVP faces several challenges, in particular, formalising community-based systems for the management of rangeland resources. Apart from the wider challenges already documented for the wider CBNRM movement (see Arntzen et al. 2003), such as a lack of community cohesiveness and a lack of management capacity, attempts to develop an integrated approach to community-based management of rangelands face the following particular challenges:

- There is no explicit policy or legislative support for devolving management of rangeland resources to community level.
- There is a perception among livestock owners that rangeland resources such as grazing are a common good, and therefore should not be regulated.
- About 50% of large cattle owners are absentee owners (McPeak & Kenneth 2005), and thus have little motivation to actively conserve local rangeland resources.
- There is a general lack of herding by pastoralists in Botswana, leading to a situation described as 'grazing management by cattle' (Oba 2005).
- Models in Africa's semi-arid rangelands of formalised systems for community-based management of communal rangelands are lacking.
- Management systems need to be introduced that allow adequate regulation by communities, without attempting to over-

structure control and planning in a manner that is alien to the conceptual models of traditional management systems (see Sullivan & Homewood 2003).

The intended approach of IVP in developing community-based systems of rangeland management is mapped out in Annex 1. Initially the project focused on stimulating discussion at the community level as to challenges faced in effectively managing commonly-held rangeland resources in the area. The decline of traditional management systems is recent enough that many of the middle-aged to elderly generation expressed strong sentiments for reinstating the community-based systems of regulation that they were familiar with when younger. Often wealthy outsiders were blamed for overexploiting local resources with little regard for the environmental consequences, through, for example, bringing large herds of livestock into the area, collecting firewood for sale, or harvesting thatching grass before the seeds had matured. As rights to use common range resources are granted at the level of citizen rather than community, community members felt powerless to curtail such practices. With the support of IVP, each participating village elected a community resource management trust, with the mandate of representing the whole community and working together with existing governance structures at village level to begin developing solutions to range management.

Concurrent with efforts at community level, the project focused on opening debate among land-use planners and policy makers about options for improved governance of common property rangelands. The intention of engaging at this level was to open the political space to recognise the legitimacy of communities to meaningfully manage and control common resources in rangelands. It became evident from such forums that senior-level bureaucrats were generally cautious about the degree of control that they were willing to allocate to communities, particularly in the absence of an established set of practices in this regard. However, many of the technical-level bureaucrats, especially those that interacted regularly at the community level, expressed strong support for the potential for such devolution.

A significant development in the process from the perspective of the participating communities occurred when legal advisors began visiting them to assist in drafting constitutions for the community trusts. After several months of consultations, the trusts were then legally registered. The legal status gained by the trusts, on behalf of a whole village (or a cluster of villages in some cases), gave the communities a sense of empowerment, not only in terms of things such as opening their own bank accounts or applying for grants, but also in achieving a sense of standing in their negotiation with the government and of legitimacy in presenting demands for access or management rights to natural resources on behalf of all members.

As debates about optimal management strategies in communal rangelands developed at community level, community members began expressing more strongly their desire to play a more active role in managing 'their' rangeland resources. This motivation was backed by a feeling of having a legitimate voice as a legally registered entity. At the time of writing, several community trusts had used project funds to commission consultants to assist them in developing 'community rangeland resource management plans'. It was envisaged that these plans would be the main point of leverage for the community trusts to motivate land authorities to grant them management rights. To what extent the land authorities will be willing to set a precedent by granting such rights to the newly formed community trusts will be demonstrated as the process unfolds, and will be a critical success factor in enabling any form of community-based rangeland management.

Adequately addressing the above constraints may be beyond the limited time frame (2003–2007) of the IVP. Nonetheless, even though developing effective community-based management systems in the current socio-political context may take several decades, an immediate task is protecting remaining communal rangelands from further encroachment. Allowing local communities as entities to gain sufficient rights to their common rangelands so as to regulate access, may secure some remaining areas of the commonage in the long term from the virtually irreversible processes of privatisation.

Conclusion

As suggested by Jones (2004) in his attempt to broaden the debate of the contribution of CBNRM to poverty reduction, at the centre of such an analysis lies an account of how people sustain their livelihoods in semi-arid areas and how these livelihoods are located within broader economic and socio-political contexts. The most enduring contribution of CBNRM is unlikely to be the short-term economic benefits that most programmes appear to realise, albeit on a limited scale. It is much more likely to be the strengthening and legitimising of claims by often marginalised communities to extensive tracts of land and its resources on a collective basis, in the face of appropriation by more powerful individuals.

Botswana provides a not-untypical example of the tenurial shifts that have been slowly impinging on Africa's rangelands. A gradual change is evident with the decline of traditional common property management systems that were flexible, overlapping and generally gave space to all resource users. A patchwork is instead emerging in previously common property areas, with either exclusive privatised management systems or open access systems with minimal management.

Privatisation of the commonage has extensive environmental, social and economic consequences, but there is little evidence that it has achieved its objectives, despite extensive investment by the state and donors over the past three decades. Moreover, new understandings in dryland ecosystem dynamics stress the tremendous opportunities and strengths of communal rangeland systems,

and the potential costs of fragmenting such systems. Nonetheless, pastoral development policy continues to follow the theoretical models that have been blamed for the failure of previous policies. Privatisation of rangelands may therefore serve little more than an opportunity for land speculation by a limited number of wealthy citizens, at the expense of poor rural dwellers who have in the past gained their livelihoods from the ability to access such common resources.

Despite the potential opportunities apparent from community-based management of rangeland resources, attempts to realise such opportunities in Botswana face particular challenges. Apart from the significant political momentum for a system of privatisation that enables extensive land speculation by the political and economic elite, there is a dearth of examples of effective community-based management systems in Africa's semi-arid rangelands that have moved beyond specific resources in protected areas to include the full spectrum of rangeland resources. Moreover, the policy environment does not encourage community-based management. At the same time, livestock-keeping practices by pastoralists have become *laissez-faire*, with minimal active management. Nonetheless, initiatives to redevelop common property regimes in the production landscapes in which most households gain their everyday livelihoods, such as IVP, may offer an opportunity to avoid the environmental, economic and social costs of continuing fragmentation of collectively-held rangelands.

6. References

- Abel, NOJ. 1997. Mis-measurement of the productivity and sustainability of African communal rangelands: A case study and some principles from Botswana. *Ecological Economics*, 23:113–134.
- Aboud, A, Mutinda, M, Odhiambo, MO, Desta, S & Coppock, DL. 2003. Kenya's pastoral development policies: The unfortunate history and hope for the future, in *Proceedings of the VIIth International Rangelands Congress, July/August 2003, Durban, South Africa* edited by N Allsopp, A Palmer, S Milton, K Kirkman, G Kerley, C Hurt and C Brown. Irene: Document Transformation Technologies:1578–1582.
- Adams, M & Turner, S. 2005. *Legal dualism and land policy in eastern and southern Africa*. Paper presented at the United Nations Development Programme (UNDP) 'Conference on land rights for African development: From knowledge to action', Nairobi, Kenya, 31 October–3 November.
- Arntzen, J. 1998. *Economic valuation of communal rangelands in Botswana: A case study*. London: International Institute for Environment and Development (IIED). (CREED working paper; no. 17.)
- Arntzen, J & Kwashi, C. 2002. The impacts of government policies on rangeland conditions and rural livelihoods in the Matsheng area. Kgalagadi North, Botswana, in *Global change and subsistence rangelands in southern Africa: Resource variability, access and use in relation to rural livelihoods and welfare projects. Proceedings of a European Union-funded workshop, 26 November–1 December 2000, Maseru, Lesotho*.
- Arntzen, JW, Tshosa, OB & Kaisara, T. 2003. *Review of institutional and legal arrangements for community-based management of rangelands in Botswana*. Report prepared for the Indigenous Vegetation Project, Ministry of Agriculture (Government of Botswana) and United Nations Development Programme (UNDP). Gaborone: Centre for Applied Research.
- Atkinson, D. 2005. *People-centred environmental management and municipal commonage in the Nama Karoo*. Harare/Cape Town: Centre for Applied Social Sciences, University of Zimbabwe/ Programme for Land and Agrarian Studies, University of the Western Cape. (Commons southern Africa occasional paper; no. 11.)
- Aune, J. n.d. *West African Pilot Pastoral Programme (WAPPP): A report to Norwegian Ministry of Foreign Affairs from a mid-term review*. Ås: Agricultural University of Norway (Noragric).
- Behnke, RH (Jr), Scoones, I & Kerven, C (eds). 1993. *Range ecology at disequilibrium: New models of natural vulnerability and pastoral adaptation in African savannas*. London: Overseas Development Institute (ODI).
- Bekure, S & Dyson-Hudson, N. 1982. *The operation and viability of the Second Livestock Development Project: Selected issues*. Gaborone: Ministry of Agriculture, Government of Botswana.
- BIDPA (Botswana Institute of Development Policy Analysis). 2002. *Review of the rural development policy*. Review commissioned by the Ministry of Finance and Development Planning, Government of Botswana.
- Bolaane, M. 2000. The common property management regime of the Khwai, Botswana: A pre-CBNRM system of governance? *Commons Southern Africa*, 2(2):8–10.
- CASS/PLAAS (Centre for Applied Social Sciences/Programme for Land and Agrarian Studies). 2005a. *Twenty years of CBNRM: What lessons have been learnt? What new perspectives are emerging?* Annual regional workshop report of the 'Breaking new ground: Approaches to people-centred natural resource management for development in southern Africa' project. Harare/Cape Town: Centre for Applied Social Sciences, University of Zimbabwe/

- Programme for Land and Agrarian Studies, University of the Western Cape.
- CASS/PLAAS (Centre for Applied Social Sciences/Programme for Land and Agrarian Studies). 2005b. The real crisis in CBNRM. [Email discussion forum moderated by the 'Breaking new ground: Approaches to people-centred natural resource management for development in southern Africa' project.] Harare/Cape Town: Centre for Applied Social Sciences, University of Zimbabwe/Programme for Land and Agrarian Studies, University of the Western Cape.
- Cotula, L, Toulmin, C & Hesse, C. 2003. *Land tenure, land reform and land administration in Africa: Lessons of experience and emerging issues*. Report prepared for the Food and Agriculture Organization (FAO) of the United Nations by the International Institute for Environment and Development (IIED) Drylands Programme, Edinburgh.
- Cullis, A & Watson, C. 2004. *Winners and losers: Privatising the commons in Botswana*. Unpublished briefing paper commissioned by the International Institute for Environment and Development (IIED) and the Resource Conflict Institute (RECONCILE).
- De Ridder, N & Wagenaar, K. 1984. A comparison between the productivity of traditional livestock systems and ranching in eastern Botswana. *ILCA Newsletter*, 3(3):5–7.
- Ellis, J & Swift, D. 1988. Stability of African pastoral ecosystems: Alternate paradigms and implications for development. *Journal of Range Management*, 41(6):450–459.
- Ferguson, J. 1990. *The anti-politics machine: Development, depoliticisation and bureaucratic state power in Lesotho*. Cambridge: Cambridge University Press.
- Hardin, G. 1968. The tragedy of the Commons. *Science*, 163:1243–1248.
- Jones, B. 2004. *CBNRM, poverty reduction and sustainable livelihoods: Developing criteria for evaluating the contribution of CBNRM to poverty reduction and alleviation*. Harare/Cape Town: Centre for Applied Social Sciences, University of Zimbabwe/Programme for Land and Agrarian Studies, University of the Western Cape. (Commons southern Africa occasional paper; no. 7.)
- Kruger, A. 2001. *Coping in a fragile environment: The SARDEP experience*. Windhoek: Ministry of Agriculture, Water and Rural Development.
- Lane, C. 1998. *Custodians of the commons: Pastoral land tenure in east and west Africa*. London: Earthscan.
- Mathuba, B. 2003. *Botswana land policy*. Paper presented at an international workshop on 'Land Policies in southern Africa', Berlin, Germany, 26–27 May.
- Matundu, O. n.d. *Self management of common pool resources among pastoral OvaHerero in semi-arid eastern Namibia*. Unpublished paper, Institute of Social Studies, The Hague.
- McAuslan, P. 2005. *Legal pluralism as a policy option: Is it desirable, is it doable?* Paper presented at the United Nations Development Programme (UNDP) 'Conference on land rights for African development: From knowledge to action', Nairobi, Kenya, 31 October–3 November.
- McPeak, J & Kenneth, R. 2005. Final report of a consultancy on 'Livestock Marketing in Mali, Kenya and Botswana' undertaken for the Indigenous Vegetation Project (IVP).
- National CBNRM Forum. (2005). *The way forward for CBNRM in Botswana*. A discussion paper of the National CBNRM Forum of Botswana. Gaborone: The World Conservation Union (IUCN).
- Peters, PE. 1994. *Dividing the commons: Politics, policy and culture in Botswana*. Charlottesville and London: University Press of Virginia.
- Oba, G. 2005. *Botswana: Targeted research and training for IVP Botswana*. Mission report submitted to the Indigenous Vegetation Project (IVP) by Prof. Gufu Oba, Norwegian University of Biosciences.
- Perkins, JM & Ringrose, SM. 1996. *Development cooperation objectives and the beef protocol, the case of Botswana: A study of livestock/wildlife/tourism degradation linkages*. Unpublished report produced for Metroeconomica Ltd.
- Peters, P. 1994. *Dividing the commons: Politics, policy and culture in Botswana*. London: University Press of Virginia.
- Poteete, A. 2003. *The adoption of participatory policy-making in Botswana and Uganda:*

- Motivated from above or below.* Unpublished paper, University of New Orleans.
- Rohde, R, Moleele, N, Mphale, M, Allsopp, N, Chanda, R, Hoffman, M, Magole, L & Young, E. 2006. Dynamics of grazing policy and practice: Environmental and social impacts in three communal areas of southern Africa. *Environmental Science and Policy*, 9:302–316.
- Scott, J. 1998. *Seeing like a state: How certain schemes to improve the human condition have failed.* London: Yale University Press.
- Selolwane, OD. 1995. *Silence of the lambs? Ineffectual NGO influence on policy on the fencing of Botswana's communal rangelands.* Unpublished paper, Centre for Continuing Education, University of Botswana.
- Sullivan, S & Homewood, K. 2003. *On non-equilibrium and nomadism: Knowledge, diversity and global modernity in drylands (and beyond...).* Warwick: Centre for the Study of Globalisation and Regionalisation, University of Warwick. (CSGR working paper; no. 122/03.)
- Taylor, M. 2001. *Life, land and power: Contesting development in northern Botswana.* Unpublished PhD thesis submitted to Department of Social Anthropology, Edinburgh University.
- Taylor, M. 2004. The past and future of San land rights in Botswana, in *Indigenous peoples' rights in southern Africa* by R Hitchcock and D Vinding. Copenhagen: International Working Group for Indigenous Affairs (IWGIA).
- Thomas, DSG, Sporton, D & Twyman, C. 2000. *Policy intervention, livelihood sustainability and the environment: The FAP.* Sheffield: Poverty Policy and Natural Resource Use in Southern Africa (PANRUSA), University of Sheffield. (PANRUSA briefing note; no. 10B.)
- Twyman, C. 1998. Rethinking community resource management: Managing resources or managing people in western Botswana? *Third World Quarterly*, 19(4):745–770.
- Watson, R, Zinyowera, M, Moss, R & Dokken, D (eds). 1997. *The regional impacts of climate change: An assessment of vulnerability.* Intergovernmental Panel on Climate Change.
- White, R. 1993. *Livestock development and pastoral production on communal rangeland in Botswana.* Gaborone: The Botswana Society.
- Wily, E. 2006. *Land rights reform and governance in Africa: How to make it work in the 21st century.* Unpublished discussion paper prepared for the United Nations Development Programme (UNDP) Oslo Governance Centre and UNDP Drylands Development Centre.
- Wilmsen, E. 1989. *A land filled with flies: A political economy of the Kalahari.* Chicago: University of Chicago Press.

Annex 1: The Indigenous Vegetation Project at a glance

Step	Key principles	Key tasks
<p>STEP ONE: Awareness raising and building of community-based management institutions</p>	<ol style="list-style-type: none"> 1. Close collaboration with existing governance structures 2. Centrality of representative community-based institutions to the process 	<ol style="list-style-type: none"> 1. Define main stakeholders 2. Select participating communities 3. Raise awareness in selected communities 4. Raise awareness among stakeholders in government, NGOs and other agencies 5. Elect representative community-based committees to oversee development of project 6. Train committees to understand their functions
<p>STEP TWO: Development of community action plans defining environmental challenges and proposing solutions</p>	<ol style="list-style-type: none"> 1. Visible benefits from micro-projects are an incentive for involvement in wider management programme 2. Programme development needs to follow community priorities as far as possible 3. Community contribution in kind to all projects 	<ol style="list-style-type: none"> 1. Hold community-level workshops to determine environmental challenges and opportunities 2. Develop micro-projects to address environmental challenges and opportunities 3. Obtain agreements on implementation procedures for micro-projects 4. Implement micro-projects 5. Monitor implementation and adapt as necessary
<p>STEP THREE: Development of management plans for rangeland resources</p>	<ol style="list-style-type: none"> 1. Decentralisation of management to lowest appropriate level 2. Spatial extent of management follows extent of resource use by community 3. Integrated rather than sectoral resource management 	<ol style="list-style-type: none"> 1. Document traditional management systems and current context 2. Identify boundaries of resource management for each community 3. Build capacity and train community members on relevant aspects and principles of resource management 4. Map rangeland resources and their uses 5. Develop a plan to manage the various resources for sustainable utilisation 6. Develop by-laws and regulations covering rangeland resource use 7. Ensure legal registration of a community trust for each village/cluster of villages 8. Apply to land board for use rights to resources within area covered by management plan
<p>STEP FOUR: Implementation of active management systems</p>	<ol style="list-style-type: none"> 1. Management systems community-controlled, facilitated by external support agencies 2. Emphasis on active management, including rehabilitation where necessary 3. Management based on sustainable use, rather than protectionism wherever possible 	<ol style="list-style-type: none"> 1. Gain support from all relevant stakeholders for management systems 2. Address conflict carefully as it arises 3. Implement rehabilitation initiatives where necessary 4. Monitor successes and failures in management systems, and adapt as necessary 5. Continue capacity building of community members and support institutions

STEP FIVE: Engagement with policy and government institutions to promote an enabling environment	1. Community-based management of rangeland resources cannot become established and thrive without institutionalised support for devolution of management rights to community level	1. Promote understanding and gain support of policy makers 2. Work in close partnership with supporting institutions that can continue a supportive role beyond the project cycle 3. Identify existing policy supporting devolution of rangeland resource management 4. Identify policy gaps 5. Promote appropriate policy reform (long term)
---	---	---

