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LETTER

Whereto with institutions and governance challenges in African wildlife conservation?

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**Abstract**

African wildlife conservation has been transformed, shifting from a traditional, state-managed government approach to a broader governance approach with a wide range of actors designing and implementing wildlife policy. The most widely popularized approach has been that of community-managed nature conservancies. The knowledge of how institutions function in relation to humans and their use of the environment is critical to the design and implementation of effective conservation. This paper seeks to review the institutional and governance challenges faced in wildlife conservation in southern and eastern Africa. We discuss two different sets of challenges related to the shift in conservation practices: the practical implementation of wildlife governance, and the capacity of current governance structures to capture and distribute economic benefits from wildlife. To some extent, the issues raised by the new policies must be resolved through theoretical and empirical research addressed at wildlife conservation per se. However, many of these issues apply more broadly to a wide range of policy arenas and countries where similar policy shifts have taken place.

1. Introduction

This paper seeks to review the institutional and governance challenges faced in African wildlife conservation. *Institutions* refer to the (implicit or explicit) rules, norms, and strategies adopted by individuals operating within and across organizations (Ostrom 1999) while *governance* refers to 'processes of interaction and decision-making among the actors involved in a collective problem that lead to the creation, reinforcement, or reproduction of social norms and institutions' (Hufty 2011). Public management and administration have changed dramatically in many countries in recent decades, and 'governance' (in contrast to the traditional 'government' model of public administration) has become an established theoretical concept for describing this shift (see e.g. Rhodes 1996, Pierre and Peters 2000, Richards and Smith 2002, Kjaer 2004, Nyhlén 2011, Arnouts *et al* 2012, and Nyhlén 2013 for discussions and applications in various countries; see e.g. Olsson *et al* 2004, Plummer and FitzGibbon 2004, Carlsson

and Berkes 2005, Parkins and Mitchell 2005, Reed 2008, Plummer *et al* 2012, Lundmark *et al* 2014 and Sandström *et al* 2015 for applications to natural resource management). Notably, the shift from traditional government to the broader forms of governance has included an increased heterogeneity in the range of actors involved in formulating and implementing policy, linked to the increased (real or perceived) complexities of public management, and of the societal processes that are being managed.

Traditionally, African wildlife conservation was carried out by state agencies in clearly demarcated state-owned protected areas. Wildlife elsewhere was nominally protected by legislation, which was, however, often poorly enforced, and the tradeoffs and conflicts between wildlife and rural livelihoods were often ignored. This 'fortress' model of conservation became increasingly problematic as agricultural activity intensified outside the protected areas (Hulme and Murphree 2001); wildlife dispersal areas and migration routes were converted into other land uses (see e.g. Nyangena and Stage 2010, who study encroachment of

a dispersal area in Kenya, or Msoffe *et al* 2011, who study losses of migration routes in Tanzania), and it became increasingly clear that policies for wildlife management were needed for land outside the state protected areas as well. Private game farms had already demonstrated that wildlife management could be made profitable for individual land owners (see e.g. Behr and Groenewald 1990, Barnes and de Jager 1996, and Van Kooten *et al* 1997, who analyze game farm profitability in South Africa, Namibia, and Kenya, respectively), and conservation policies from the 1980s onward tried to ensure that benefits from wildlife would be more broadly shared among affected rural populations. A popular approach was that of community-managed nature conservancies, which were set up throughout southern and eastern Africa, and which are the focus of this paper; other approaches have included benefit-sharing arrangements, where revenue or employment in state protected areas were earmarked for local residents (see e.g. Adams and Infield 2003 or Mukanjari *et al* 2013, who study gorilla tourism). Thus, a wider range of local actors has become involved in wildlife management. At the same time, the involvement of foreign donors and foreign NGOs in the sector has shifted from primarily lobbying (or working with) government wildlife institutions in host countries, to working directly with a wide range of local stakeholders as well as carrying out own projects and activities. The institutional setup, and the interactions of the different institutions involved, have become far more complex as a result.

This shift from traditional government to governance approaches in wildlife management is reminiscent of that seen in many other countries and policy areas; the issues being managed are now perceived as more complex than they were historically, and less suited to management by a unitary set of government actors, and the response has been to broaden both the range of actors involved in formulating and implementing wildlife policies (to include local communities and NGOs), and the goals of wildlife policy (to include community development and rural income generation). However, this policy shift has also brought with it new challenges.

2. Institutional challenges in wildlife governance

While the international shift from government to governance has generally been seen as positive, analysts studying the new governance modes have also identified problems. Involving a broader range of actors (NGOs, community organizations, private companies with an interest in the sector, and so on) in the formulation and implementation of policies can improve the quality and legitimacy of those policies. However, the more deliberative framework for decision-making associated with this shift in governance

also makes it less clear where decisions are actually made and by whom, reducing the transparency of decision-making and the accountability of individual actors in the decision structure (Bäckstrand 2006, Sørensen and Torfing 2009). If the devolution and increased openness remain mostly on paper, as has sometimes been the case (Jentoft 2000, Lubell 2004, Sørensen and Torfing 2005, 2009), ordinary citizens may even lose influence, and may then see the new policies as even less legitimate than the old ones. Another potential problem is that even when stakeholders do wield more influence, lack of knowledge, time or resources may constrain them from using that influence (Pomeroy *et al* 2001). More generally, governance entails shifting decision-making to a broader range of stakeholders, all facing different incentives that need to be aligned for the system to work (*ibid.*). Finally, while power may move from central governments, it may move to new, emergent elites rather than to ordinary stakeholders (Etzioni-Halevy 1993, Bodin and Crona 2008). These issues have been identified in many arenas where this governance shift has taken place, and deserve attention in the context of wildlife conservation as well.

The changes in wildlife management are premised on institutional reforms that decentralize authority to local actors. However, the lack of downward accountability has been a major barrier to community wildlife conservation. The immense value of wildlife encourages central actors to retain *de facto* control even after *de jure* decentralization. The Zambia Wildlife Authority, for instance, gets about half of its revenues from hunting concessions on community lands and, in turn, grants a share of those revenues to local communities. For the central actors, maintaining control over valuable wildlife on communal lands permits the construction of patronage networks and thus the reinforcement of their privileged positions (Child and Dalal-Clayton 2004, Nelson and Agrawal 2008, Lubilo and Child 2010). In Mozambique, ambiguous wildlife legislation has been used to constrain local influence over wildlife resources (Nelson and Agrawal 2008).

African conservation is affected by many different governance structures and institutions, often with several leaders with distinct goals or constituencies but all operating with overlapping sets of stakeholders. Though some are supposed to specialize in specific activities, they tend to acquire broader agendas, and do not necessarily have the same priorities. There is also a power dynamic which plays out as different structures seek to establish supremacy over a particular activity. Stakeholders tend to push activities through those structures where they exert maximum influence: politically well-connected stakeholders attempt to push their agendas through political structures while those with influence in the traditional structures attempt to push their agendas there (see Hasler 1999 for experiences from Zimbabwe, or Gibson 1999 for experiences from several African countries). The potential

disharmony between the structures is likely to reduce the effectiveness of conservation at the local level.

Communities that have not traditionally worked with wildlife conservation now find themselves doing so. Ecological considerations require that, in addition to setting aside land for habitats, dispersal areas and migration corridors, communities now need to engage in proactive wildlife management to maintain sustainable wildlife stocks. Economic considerations require that communities now need to understand market demand and to supply live game, wildlife trophies, game drives and game viewing in order to achieve sustainable livelihoods from conservation. Thus, the modern approach adds extra layers of responsibilities to community governance systems.

This calls for more capacity building for inexperienced communities. At the same time, state agencies largely still determine wildlife harvest quotas for communities (see Fischer *et al* 2011 for analysis of the Zimbabwean case). If local communities lack the capacity to negotiate, or lack access to the financial and biological information needed for these negotiations, their scope to benefit from community conservation will be limited (Nelson and Agrawal 2008).

Generous funding from external authorities can, paradoxically, undercut local institutions' capabilities to sustain themselves over time; the connection between provided effort and appropriated benefits risks being lost (Ostrom 1995). Ideally, external aid should reflect additional demand for conservation by outsiders, over and above locally determined levels, and funds should be channeled directly to the managing communities so that they can respond to this incentive. In practice, however, the ad hoc decisions determining many foreign funding flows have often led the structures set up to manage the new wildlife policies to focus on securing continued foreign funding rather than on generating revenue locally (Gibson 1999 discusses this problem for Zambia, Zimbabwe, and Kenya, and Rihoy and Maguranyanga 2010, for Botswana). This gives external actors huge influence over what happens at the local level, thereby reducing local engagement (Ostrom 1995).

In the case of Zimbabwe's iconic CAMPFIRE program (Patel 1998), donor funds may have stifled the formation of traditional institutions, which could have reduced the costs of running the program and thereby increased the long-term financial benefits to communities. Murombedzi (1997) finds that 'external aid seems to have negative implications for the ability of CAMPFIRE to facilitate local community participation in decision-making'. External aid led to top-heavy management structures aimed at managing wildlife, carrying out problem animal control and other crop protection measures, and entering into joint ventures with safari operators, at the expense of the basic tenet of CAMPFIRE—namely, local communities'

participation in management of the resource (Muchapondwa 2002).

On the other hand, donor funds helped CAMPFIRE get started without the many problems that poor funding could have caused (Murombedzi 1997), supporting community development, applied research, regional communication, project management and project evaluation which would otherwise have been paid from CAMPFIRE revenues, thereby reducing disbursements to communities and negatively affecting stewardship practice.

For Namibia, Humavindu and Stage (2015) similarly find that donor support made establishing new conservancies far easier—and, in most cases, made possible even their establishment itself. However, they also find that many of these conservancies still lack the capacity to generate sufficient revenue to pay their own operating expenditure, putting their long-term survival in doubt.

3. Capture and distribution of economic benefits from wildlife governance

One rationale for the intense interest from donors and NGOs in community wildlife conservation is the benefits that well-functioning wildlife conservation can generate for the international community; knowing that wildlife species are being preserved, whether for their own sake or for the benefit of future generations, creates a valuable sense of well-being for people (see e.g. Freeman 2003). The international community attaches huge importance to the continued survival of African wildlife species and habitats, linked largely to these sets of values (see e.g. Vredin 1997). However, the benefits from such values primarily accrue to citizens of the richer countries rather than to those of Africa. Benefits generated by these values mainly contribute to well-being in the host countries through voluntary contributions to conservation NGOs (which are subject to free-riding and unlikely to capture the full value perceived by all beneficiaries) and through support from donor agencies (which are paid through taxes, avoiding intra-country free-riding, but which are subject to free-riding incentives at the international level). Thus, although both payment types can be important sources of revenue for host countries, they are unlikely to reflect the full value that citizens in rich countries attach to the continued survival of African wildlife (Ostrom 1995). The net difference is, essentially, a benefit which Africa provides for free to citizens of richer countries, and the revenue which does accrue to the host countries may not necessarily be enough to finance the needed conservation (see e.g. Mukanjari *et al* 2013 for Rwanda and Uganda, Dikgang and Muchapondwa 2014 for South Africa, and Humavindu and Stage 2015 for Namibia).

The main source of wildlife revenue which African wildlife governance *can* affect is that from international tourism. Wildlife tourists are typically a small subset of the total set of beneficiaries in rich countries, but are willing to pay well for their tourism experiences, and taxes and tariffs could be tailored to collect the largest possible share of tourists' willingness to pay (see e.g. Bird 1992 or Alpizar 2006 for theoretical analysis, Ågren *et al* 2003, who discuss revenue maximization from Namibian national park tourism, Andersson *et al* 2005 and Mukanjari *et al* 2013, who do the same for gorilla tourism, and Dikgang and Muchapondwa 2014, who do the same for tourism in the Kgalagadi area). However, without the implementation of structures to realize this potential willingness to pay, it will remain a free benefit to the tourists or be captured by (often foreign) tour operators and travel agencies. This also means that conservancies that are valuable for conservation (in that they preserve key habitats for rare species or serve as dispersal areas or migration corridors for other conservation areas) may still be unprofitable from the perspective of the communities managing them (see Lapeyre 2010 and Humavindu and Stage 2015 for related studies in Namibia).

Wildlife conservancies can nonetheless increase the overall economic benefits to a country from wildlife conservation; tourism is boosted both because they improve overall conservation, but also because having a wider range of actors in the conservation sector creates greater scope to tailor activities to different tourist groups (see e.g. Humavindu and Barnes 2003 or Novelli and Humavindu 2005 for studies of niche tourism in Namibia). Overall economic benefits per tourist to the host economy can, potentially, be greater for community conservancy tourism than for other forms of wildlife tourism (see e.g. Samuelsson and Stage 2007, who compare Namibian conservancies with private wildlife farms). However, even for those economic benefits from the tourists which are captured locally, the distribution is context-specific (see e.g. Bandyopadhyay *et al* 2009, who find that whether Namibian community conservancies are pro-poor or not depends on their exact location; Richardson *et al* 2012, who find that Zambian households close to wildlife conservancies experience high benefits but also high costs from the wildlife, and that institutions managing wildlife conflicts are key for the net outcome; and Blake 2008 and Muchapondwa and Stage 2013, who find for several African countries that tourism is less pro-poor than many other economic activities).

Communities have been incentivized to manage wildlife through the generation of financial benefits from activities such as wildlife sales, trophy hunting, and sales of game drives and game viewing, which require interaction with external tourists. These communities' previous experience with market transactions has typically been in the realm of privately

produced agricultural commodities which generate private benefits. Agricultural activities are different from wildlife management in that individual investment and return can easily be worked out, and market transactions can be handled by the individual farmer. With community conservation, on the other hand, it is not meaningful to have investments or market transactions at the individual level (Muchapondwa and Sterner 2012 discuss the differences in local decision-making between agriculture and wildlife management in Zimbabwe); instead, communities have had to develop new institutions and governance systems in order to manage the new market interactions that wildlife conservation has opened up.

This has meant a steep learning curve for many communities (WWF SARPO 2000 and Muchapondwa 2002 both identify this as a key issue for Zimbabwe) and has often led to safari operators making huge profits at the expense of communities (Muchapondwa 2002 finds this for Zimbabwe; Lapeyre 2009 finds similar results for Namibia). Contractual benefits have often been based on profit-sharing, and safari operators have overstated their costs, exploiting communities' inexperience with financial reporting. There has also been a need for external support to finance the necessary additional effort that communities could not provide themselves (Ostrom 1995, Murobedzi 1997, Muchapondwa 2002).

Traditionally, communities focused on their own interests when interacting with natural resources, within the confines of their own priorities, needs, and scarcities. However, the modern approach is heavily driven by legislation and regulations implemented by state agencies (Venter *et al* 2008), often creating frictions between agencies and communities. For example, communities in Zimbabwe have complained that their hunting quotas are consistently lower than expected (Hasler 1999); the wildlife agency often used inaccurate population and growth rate estimates (WWF SARPO 2000), did not consider how many animals the communities wanted in their areas, and aimed its setting of quotas at the annual sustainable off-take for the trophy hunting industry (Murobedzi 1992), which is generally lower than that for non-selective hunting (Muchapondwa 2002). When communities view their returns from conservation as unfair they may reduce conservation efforts, and in order to meet overall targets the state agency might then need to compensate for non-performance elsewhere by raising local targets even further. Incentive mechanisms are lacking in many cases where communities are asked to provide public goods beyond their jurisdictions (Muchapondwa *et al* 2008, Dikgang and Muchapondwa 2014); this includes conservation values accruing to the rest of the world, as discussed earlier, but also ecosystem services to other parts of the region where the community conservancy is located.

The conservation benefits to communities have mostly been invested in social infrastructure such as

clinics, bridges, or schools. This has been necessitated by the communities' need for such infrastructure but also by the view that these revenues would have little impact if distributed as cash dividends; at the same time, however, members of local communities frequently prefer to receive at least some cash payments as well. Child *et al* (1997) describe how Chikwarakwara village in Zimbabwe spent four days democratically deciding to use their revenues not only on school infrastructure and setting up a village mill but also on household dividends. Hasler (1999) notes a case where provincial and local governments in Matabeleland favoured local development projects, pressuring communities to vote against household dividends. There are opportunities for free-riding when incentives are directed at the community rather than households or individuals. Thus, the provision of incentives at the household/individual level remains a challenge in African community conservation (Muchapondwa 2002, Mukanjari *et al* 2013).

Communities have lacked the knowledge consistent with more modern approaches to conservation and, as a result, the better educated local elite have often played a more prominent role in conservation and subsequently withdrawn a disproportionate share of benefits (e.g., Grossman and Holden 2009 identify this as a problem for many South African conservancies). Elite capture has frequently been tolerated by governments, donors and NGOs because of the unique capacity they have offered to the modern conservation process (Hasler 1999 discusses this for marginalized communities in Zimbabwe; Thondhlana *et al* 2011, for Khomani San communities). However, Collomb *et al* 2010 argue that the resulting lack of accountability has surfaced as a major hindrance to conservation.

A key strength of community-based conservation is a critical mass of widely distributed individuals who pool effort and provide monitoring at significantly lower costs than external enforcers would incur (Fischer *et al* 2011 discusses this for Zimbabwe), but this breaks down if elite capture reduces overall community engagement.

The levels of elite capture differ across communities (Thondhlana and Muchapondwa 2014 discuss this for different Khomani San communities). The degree of elitism which can be tolerated in a specific context is an open-ended, empirical question. However, better information sharing seems to reduce elite capture without losing the advantages of keeping elites on board. Most often, information on financial, operational and administrative matters and natural resources (e.g., hunting quotas) is crucial—but lacking—as it is not given on a frequent and transparent basis (Hasler 1999 and Thondhlana *et al* 2011 find this for community conservancies in Zimbabwe and benefit sharing schemes in Botswana and South Africa, respectively).

Even when benefits accrue to a wider range of actors than the local elite, the heterogeneity of the communities involved may pose important issues for the overall distributional patterns and for how the incentives thus generated help shape people's conservation behavior (the Khomani San communities studied by Thondhlana and Muchapondwa 2014 are an extreme example of this, but the problem is more widespread). This is not unique to community wildlife management, but the fact that conservancies typically cover large tracts of land with many different alternative uses means that the heterogeneity may become especially important here. Some areas may not have a homogeneous society that can participate in conservation but, rather, a collection of societies (Muchapondwa *et al* 2014). For example, the Khomani San in the Kgalagadi area of South Africa were brought together in a united group in order to make up the required number for land restitution claims. However, they are united only by their ancestors' experience of being hunters and gatherers in the Kalahari and by their subsequent dispossession and marginalization (Chennells 2001, 2009). Post resettlement, intra-community conflicts over land continue (Ellis 2010, Thondhlana *et al* 2011), with some more interested in livestock farming than in wildlife management. These intra- and inter-community conflicts draw attention to the different values and meanings attached to land and the difficulties of creating community solidarity and viable conservation strategies in areas with massive unemployment, rural poverty and different cultural orientations (Thondhlana *et al* 2011). Indeed, Thondhlana and Muchapondwa (2014) point to issues of heterogeneity in resource access even among indigenous communities previously thought to be homogeneous. These should be key considerations for conservation interventions.

The issue of land tenure is important for sound conservation. Frequently, there are no uniform land tenure arrangements across communities, which can cause conflict among communities—especially if conservation does not have the full support of the communities involved (Murombedzi 2010, Thondhlana *et al* 2011). In some cases, commons such as grazing areas and buffer zones have been individualized over time, but may need to be used jointly again (see e.g. Kristjanson *et al* 2002 and Nyangena and Stage 2010, who discuss how the dispersal area of the Nairobi National Park has been transformed from jointly owned community land to individual plots).

4. The way forward

African wildlife conservation has shifted from traditional, state-managed government approaches to broader governance approaches with many different actors and institutions involved in designing and implementing policies. Biologically this has been a

success, with wildlife numbers increasing in those countries that have seen the greatest shift towards the modern approaches and with greater areas of habitat becoming protected (Bulte and Horan 2003).

From an institutional and economic perspective, however, many key issues remain unaddressed. That more actors have become involved in wildlife policy makes wildlife policy more demanding in terms of the sheer numbers of people who need to become well-versed in conservation issues and in terms of skills gaps that still need to be addressed. If these issues are not successfully addressed they risk creating a new set of entrenched elites, managing wildlife policy even less transparently than before. Research is needed on whether there are tradeoffs or synergies between efficient management of the new conservation institutions on the one hand, and transparency and accountability on the other hand, and how context-specific this is. Capacity building is clearly needed to more effectively bring marginalized communities and community members into decision making, but additional research is also needed to identify what the key capacity needs actually are.

The possibility that the new wildlife policies *may* capture a larger share of the global benefits from wildlife protection is no guarantee of their actually doing so. The distribution of benefits from African wildlife conservation between rich and poor countries and the distribution of benefits within the host countries are key challenges for the long-term sustainability of the policies; these, too, are issues that remain to be satisfactorily addressed. Additional research is needed to identify how the current unpredictable, donor-dependent funding structure can be replaced by predictable revenue flows that are linked to actual conservation outcomes, and how these revenue flows can be used to ensure that all the various actors involved in conservation decisions face incentives that will promote conservation goals. Much research has been conducted on the overall benefits from the new conservation strategies, but the distribution of these benefits and the costs associated with conservation warrant far more exploration.

Thus, at least to some extent, the institutional and economic issues raised by the new governance policies must be resolved through theoretical and empirical research addressed at African wildlife conservation per se. However, it should be noted that although sector-specific research remains important, several of these issues apply more broadly to a wide range of policy arenas and countries where similar policy shifts have taken place. The dual risks of elite capture and stakeholder disengagement are key in wildlife conservation, because the skills gaps are so great; distributional issues are also key, because the differences in income between the involved agents are so great. However, less extreme versions of the same problems also apply to many of the other new forms of governance. Thus, although these problems may be more pronounced

with African wildlife conservation, similar issues have been seen—and researched—elsewhere, and there is scope for fruitful interaction in future between these different strands of research.

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