

Evaluating governance processes in the sharing of revenues from wildlife tourism and hunting in Ethiopia

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SUMMARY

Sharing of benefits from nature conservation is widely regarded as a way to enhance local residents' support for protected areas. While in past years, the effectiveness of such approaches has been investigated in detail, governance processes underpinning benefit sharing have received less attention. This study examines the legislation and implementation practice of a revenue sharing scheme in southern Ethiopia, an area that is currently undergoing substantial social and environmental changes that threaten livelihoods and ecosystems. Based on qualitative data from interviews, group discussions and workshops, four main areas of shortcomings in the current legislation and implementation practice were identified: information provision; imbalanced roles and responsibilities; compromised accountability; and the lack of connection between revenue and wildlife tourism in the minds of the recipients. While some of these factors fostered misunderstandings and misuse of the monies, others meant that even where revenue was disbursed it was not connected with wildlife conservation, and thus did not have the intended effect. A comparison between these factors and those in the literature on the evaluation of comanagement arrangements revealed substantial overlap. Revenue sharing may be regarded as part of the comanagement of wildlife areas, but to be successful the management of these areas needs to be shared, and not just the financial benefits.

Keywords: adaptive, benefit sharing, comanagement, Ethiopia, governance, protected areas, wildlife

INTRODUCTION

Over the last decades, nature conservation has been moving from a 'fortress' approach to one that builds on the rationale

that people living in or adjacent to the natural areas to be protected have to benefit from their conservation to be supportive (Adams & Hulme 2001; Benjaminsen & Svarstad 2010). This move towards the involvement of local communities in conservation has now influenced the design of numerous conservation projects and been crystallized in institutions from the local to the global level, including the Convention on Biological Diversity (Morgera & Tsoumani 2010). A large literature comments on and evaluates such 'community conservation' (Hulme & Murphree 2001) in general, and the success of benefit sharing schemes in particular. Some studies use modelling to predict conditions of success (Skonhoft 1998; Skonhoft & Solstad 1998; Winkler 2011) or review the literature (Dickman *et al.* 2011; Nkhata *et al.* 2012), while others use empirical data. Most empirical studies examine impacts of revenue sharing on attitudes, behaviour or ecological variables (Infield 1988; Fiallo & Jacobson 1995; Gillingham & Lee 1999; Fisher *et al.* 2005; Sekhar 2003; Groom & Harris 2008).

While a critical examination of the effectiveness of benefit sharing is undoubtedly essential, such studies can usually provide only limited insights into the actual processes of revenue generation and distribution and their governance, and thus contribute little to an improved understanding of the factors that cause success or failure of such schemes. We understand 'governance' here as the entire body of societal mechanisms that steer people's behaviour, including formal and informal institutions (namely rules; North 1990). Only a handful of studies have so far explicitly addressed the governance of revenue sharing (for example Lewis & Alpert 1997; Adams & Infield 2003; Manyindo & Makumbi 2005). Archabald and Naughton-Treves (2001) discussed broader political factors, such as changes in national policies, that influenced the success of a tourism revenue-sharing scheme in Uganda. Mabugu and Mugoya (2001) have explored a number of revenue sharing arrangements for Wildlife Management Areas in Tanzania. However, to our knowledge, no conceptual framework has yet been developed that organizes these insights or helps to systematically assess the governance factors that contribute to the success or failure of such approaches. By contrast, such frameworks do exist for comanagement arrangements, that is, a specific form of 'community conservation' that usually entails an element of revenue sharing.

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Revenue sharing and comanagement

While sharing of benefits from conservation is certainly a key component of community conservation, such approaches usually address conservation action in a more comprehensive fashion, and include not only the distribution of the benefits derived from a resource, but also its management. We focus here on comanagement as a specific form of community conservation as it pays special attention to the interplay between communities, private (for example companies) and governmental actors (Carlsson & Berkes 2005), and is thus of particular relevance for the investigation of revenue-sharing arrangements. Comanagement can be defined as an approach ‘in which two or more social actors negotiate, define and guarantee amongst themselves a fair sharing of the management functions, entitlements and responsibilities for a given territory, area or set of natural resources’ (Borrini-Feyerabend *et al.* 2000, p. 1). The first applications of comanagement in Africa that involved revenue sharing from trophy hunting were implemented in the 1980s (Getz *et al.* 1999; Frost & Bond 2008). More recently, the need of comanagement to be adaptable to changing conditions and to explicitly incorporate learning has been emphasized (Folke *et al.* 2002).

Generally, sharing of benefits is seen as one of the central elements of comanagement (Borrini-Feyerabend *et al.* 2000; IUCN-WCPA [International Union for Conservation of Nature– World Commission on Protected Areas] 2008; Benjaminsen & Svarstad 2010), and conversely, comanagement is classed by some as a specific type of revenue sharing (Nkhata *et al.* 2012). It could also be argued that, as part of comanagement, the process of benefit sharing itself should be comanaged; that is, power and responsibilities in this process should be shared among actors. Indeed, as in our study, many cases exist where the management of the benefits resulting from the resource is collaborative, but not the management of the resource itself. We suggest that even where revenue sharing schemes do not entail comanagement of the natural resources in question, their governance can be meaningfully assessed against criteria of good practice in comanagement.

Several such evaluation frameworks exist (Dietz *et al.* 2003; Olsson *et al.* 2004; Van Hal 2006; Plummer & Armitage 2007), and there are recurrent components within these frameworks (Table 1). While some authors discuss each component in detail (Olsson *et al.* 2004; Van Hal 2006), others (Plummer & Armitage 2007) are more cursory in their descriptions. Key factors deemed as essential for functioning comanagement include well-developed communication mechanisms between the different actors, as well as provisions for monitoring, feedback and learning (Table 1). All authors concur that availability of resources is a key factor for successful comanagement, but while Olsson *et al.* (2004) emphasized the need for financial means, Dietz *et al.* (2003) focused on technological and physical infrastructure, and Van Hal’s (2006) framework encompassed all of these. All authors

stressed the importance of adequate access to information. Scope for learning and adaptation was mentioned by most of the authors (Table 1), but only Olsson *et al.* (2004) specifically pointed to the need for monitoring of the resource, ideally carried out by the resource users themselves. Van Hal (2006) and Plummer and Armitage (2007) addressed the importance of adequate representation of all relevant actors and clarity in roles and responsibilities, although only Dietz *et al.* (2003) mentioned the need for effective enforcement of rules.

Ostrom’s (2000) design principles for sustainable self-organized resource regimes incorporate similar factors; however, these design principles focus on collective action by resource users as opposed to comanagement, which also involves governmental actors, and are thus less relevant to the present context.

Our study set out to examine the governance of revenue sharing in Southern Nations, Nationalities and Peoples Regional State (hereafter Southern Nations), one of the nine regions that together form the Federal Democratic Republic of Ethiopia. While federal legislation provides a broad framework for the sharing of revenues from wildlife-related tourism to local communities, revenues are usually held by regional governments and disbursed to communities only in an ad hoc and irregular fashion if at all, whereby regional actors maintain full decision-making power. Plans to devolve this power and to create transparent rules and regulations for revenue sharing exist in several regions; however, only the government of Southern Nations has so far developed and implemented such a scheme, and is thus the first in Ethiopia to trial such approaches. Well developed community-based approaches to the conservation of non-wildlife resources, such as forests and grasslands, also exist elsewhere in the country (for example Ashenafi & Leader-Williams 2005), usually institutionalized as community conservation areas or participatory forest management programmes. Due to wildlife mobility, wildlife management poses additional challenges, as population changes are difficult to monitor and causally explain. We focus here on governance of wildlife resources where there is a significant role of the (regional) government.

Regional legislation for revenue sharing from tourism, hunting and other wildlife uses was passed in 2007. So far, it has only been implemented in the area that because of its cultural and biological diversity currently attracts most visitors, namely Debub (i.e. south) Omo. While Debub Omo has a national park, two controlled hunting areas and two wildlife reserves, the main interest of foreign tourists is to experience its cultures, such as the Mursi and Hamar. Most tourist trips are organized by tour operators. Both cultural and nature-related tourism are regulated by the same regional government body albeit by two separate departments, and both sectors are included in the same legislation. However, to date, revenue sharing is implemented only for income derived from wildlife tourism and hunting.

Rather than assessing impacts of revenue sharing on wildlife or residents’ attitudes and behaviour, an approach that would be premature given the brief period in which the scheme

Table 1 Recurring key components of evaluation frameworks for (adaptive) comanagement, and degree to which evaluation criteria were met in the revenue-sharing scheme of Debub Omo.

<i>Component (Source)</i>	<i>Explanation/definitions according to literature</i>	<i>Criteria met by Debub Omo revenue sharing scheme?</i>
Enabling conditions	Support from political leaders and other actors in power (Van Hal 2006) Enabling legislation (Olsson <i>et al.</i> 2004)	Regional Bureau of Culture and Tourism (protected areas department) driving the process; regional council vaguely supportive; revenue sharing institutionalized through legislation
Availability of resources	Sufficient financial resources, skills and capacity-building, infrastructure (Olsson <i>et al.</i> 2004; Van Hal 2006; also Dietz <i>et al.</i> 2003)	To date, revenue limited but some resources provided by the region through regular annual budget (Section 'Money flows'). More resources for communication and monitoring needed (Sections 'Communication', 'Upward accountability'). Office at district level still to be established (Section 'Upward accountability').
Representation of actors	All relevant interests represented, including across scales (Van Hal 2006; Plummer & Armitage 2007)	Criterion met <i>de jure</i> . <i>De facto</i> communities strongly underrepresented (Section 'Roles')
Roles and responsibilities	Clear understanding and acceptance of actors' roles and responsibilities (Van Hal 2006; Plummer & Armitage 2007)	Roles of communities, zone and cultural department of regional Bureau of Culture and Tourism unclear (Sections 'Roles', 'Upward accountability')
Information flows and communication	Adequate information flows between actors (Van Hal 2006; Olsson <i>et al.</i> 2004; Plummer & Armitage 2007) Sufficient information available (Dietz <i>et al.</i> 2003; Olsson <i>et al.</i> 2004)	Downward information flows existent but insufficient (Section 'Communication'). Upward information flows (accountability, monitoring) not sufficiently specified and insufficient (Section 'Upward accountability')
Adaptability and feedback loops	Monitoring in place (Olsson <i>et al.</i> 2004). Opportunities for adaptation, social learning and conflict management (Olsson <i>et al.</i> 2004; Dietz <i>et al.</i> 2003; Plummer & Armitage 2007)	Monitoring limited and inconsequential. No provisions for communities to give feedback to region or conflict management (Section 'Upward accountability'). Some adaptability built in through regular revision of legislation. The present research provided opportunity for social learning and adaptation
Enforcement of rules	Rule compliance induced through formal or informal means (Dietz <i>et al.</i> 2003)	Insufficient (Section 'Upward accountability')

has been active, we aim here to identify local conditions and regional institutions (such as legislation) that shape the success or failure of the revenue sharing scheme. In particular, we address the question how revenue sharing is governed both *de jure* and *de facto*, and identify the shortcomings of current legislation and implementation practice.

To do so, we investigate governance processes in a grounded fashion, structuring our analysis according to categories that emerge from the data. We then compare these categories to those included in frameworks for the evaluation of comanagement arrangements.

METHODS

Study area

Debub Omo is one of the 14 zones that make up the Southern Nations in southern Ethiopia (Admasu *et al.* 2010). The zone consists of six districts (*woredas*) which are divided into 70 communities (*kebeles*), and borders Kenya to the south and South Sudan to the west (Fig. 1). Debub Omo has an overall

human population of *c.* 560 000 (CSA [Central Statistical Authority] 2007) in 14 different ethnic groups, with an average population density of 24 inhabitants per km².

The area can largely be characterized as semi-arid to arid, ranging in altitude from 360 to 3300 m above sea level. In the lower eastern parts of the zone, where the protected areas contributing to the revenue-sharing scheme can be found, livelihoods are mainly agropastoral, with a strong cultural emphasis on the pastoral element; livestock husbandry, especially of cattle, is culturally extremely significant (Gebre Michael *et al.* 2005).

The zone's protected areas, such as Mago National Park and Murulle Controlled Hunting Area, consist mainly of savannah habitats and are managed by the regional government's Bureau of Culture and Tourism. The protected areas are property of the state, not inhabited by humans, and, according to formal rules, consumptive land uses (such as grazing, hunting or crop cultivation) are not allowed except within controlled hunting areas, where hunting companies obtain the concession to conduct trophy hunting according to quotas set by the federal government. In practice, members of communities

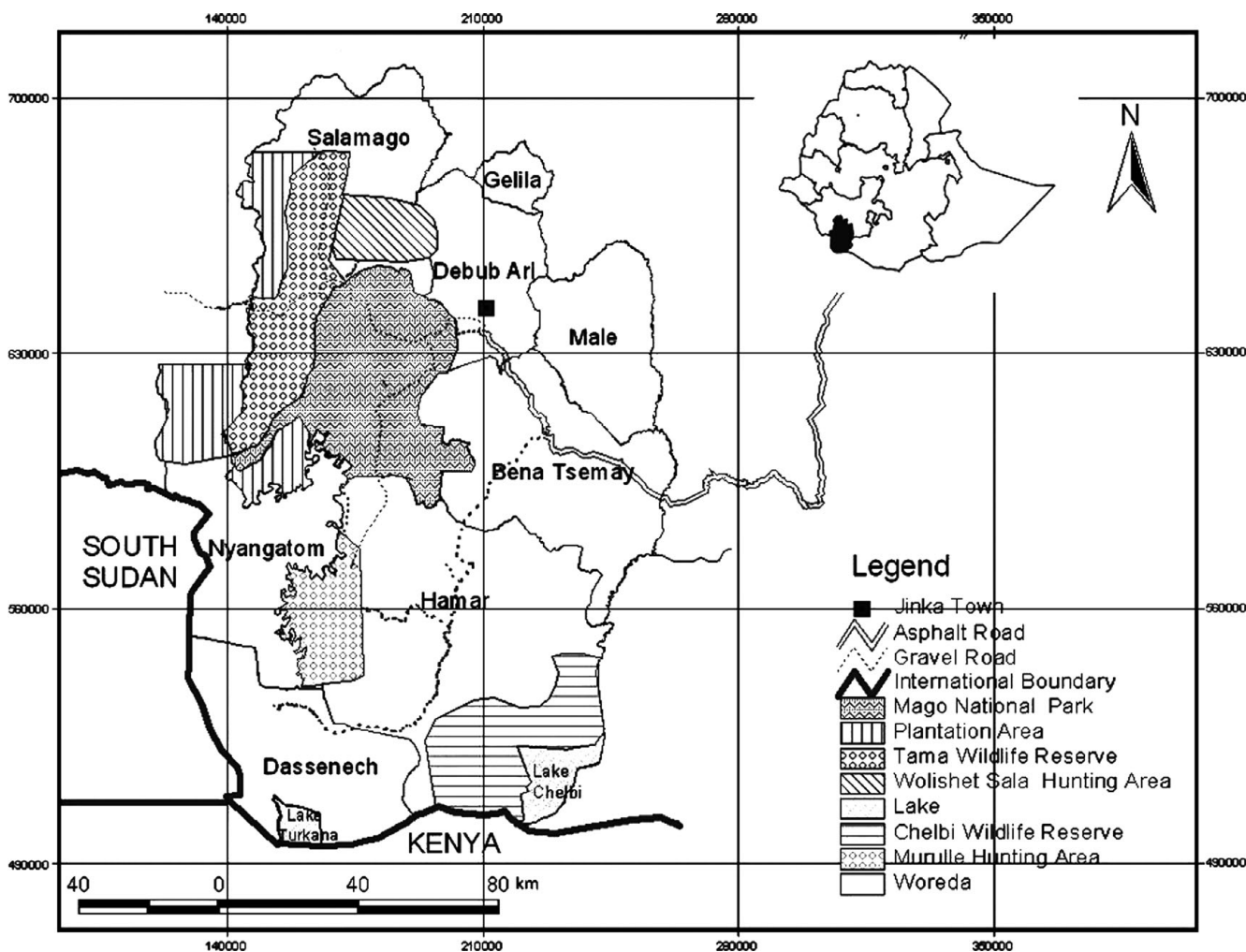


Figure 1 Map of Debub Omo zone, showing districts (*woredas*) and protected areas.

living close to protected areas use these for dry season grazing and hunting (Tadie & Fischer 2013), which has led to conflicts between these local resource users, district governments, concessionaires and protected area staff.

The Debub Omo revenue-sharing scheme

In 2002, the regional government decided to feed revenues from wildlife directly back into conservation and community development activities. In November 2007, these efforts led to the passing of new legislation that stipulates how income from protected areas (including hunting) and other tourist attractions is to be distributed to local communities and protected areas, with the explicit aim to incentivize improvements in wildlife conservation and the tourism sector. According to this regulation (and the accompanying directive), revenue from visitor fees, hunting and filming licences is to be disbursed to all stakeholders (Table 2).

Income from three protected areas, plus filming fees, has contributed to the scheme since its inception (Table 2). While the use of one of the sites, Wolishet Sala Controlled

Hunting Area, was temporarily discontinued in 2009 due to low wildlife abundance, the scheme was planned to be extended in the near future to include other conservation areas and also sites of cultural interest in Southern Nations that attract sufficient income, for example the Arba Minch crocodile ranch. Inclusion and exclusion of protected areas from the scheme depended on the income that they generated, as it was felt that transaction costs for areas with very few visitors were too high.

Districts adjacent to both the national park and the controlled hunting area received shares of revenues from both protected areas (Table 2). The actual sums disbursed to districts and communities depended on the number of communities bordering the protected area. The money disbursed was additional to the regular budget; protected areas received their annual budget as usual from the regional government, as the revenue retained would not have covered their overall budget needs. The exact sums to be distributed were announced by the regional government at the end of each year. Based on this information, all actors (in practice however only zone and districts) had to submit project proposals to

Table 2 Overview of revenue obtained and disbursed in Debub Omo since inception of the scheme. Allocation of shares depended on the type of PA (compare shares for controlled hunting areas and Mago National Park). Filming/photography took place in a variety of sites, in the present cases mainly outside the PAs. Actual sums disbursed to communities and districts depended on the number of communities and districts adjacent to the PA. CHA = controlled hunting area; PA = protected area. Wolishet Sala was closed as a CHA from 2009 onward. The value of the Ethiopian Birr (ETB) varied between € 1 = 11 ETB (2006) and € 1 = 23.7 ETB (2011) (see URL <http://ec.europa.eu/budget/>).

<i>PA</i>	<i>Murulle CHA</i>	<i>Mago National Park</i>	<i>Wolishet Sala CHA</i>	<i>Filming and photography</i>
Shares disbursed (according to regulation)	35% national parks in region 30% communities 10% districts 10% zone 10% region 5% CHA (<i>de facto</i> not disbursed)	35% national parks in region 30% communities 15% districts 10% zone 10% region	as Murulle	35% for the development of the area 45% communities 15% districts 5% zone 10% region
Number of districts bordering PA	3 (Hamar, Nyangatom, Dassenech)	5 (Hamar, Nyangatom, Bena Tsemay, Debub Ari, Salamago)	1 (Salamago)	1 (Hamar)
Number of communities bordering PA	10 (5 Hamar, 4 Nyangatom, 1 Dassenech)	12 (1 Hamar, 2 Bena Tsemay, 5 Debub Ari, 4 Salamago)	4 (Salamago)	2 (Hamar)
Annual income = revenue shared (ETB yr ⁻¹)				
2006/07	505 500	492 718	89 000	–
2007/08	824 000	949 882	127 000	–
2008/09	605 951	810 445	114 862	23 878
2009/10	934 021	796 225	–	178 378
2010/11	968 055	1 108 445	–	278 378

apply for the release of the funds. Districts acted here as representatives of the communities and applied for projects on their behalf, while protected areas received their shares automatically.

Between 2007 and 2011, a total of 8.81 million Ethiopian Birr (*c.* € 400 000) were distributed by the scheme. While the current scope of the scheme is small, the approach is seen as a model by other regions in Ethiopia that are presently considering adopting similar procedures.

Data collection and analysis

We collected qualitative data using several methods (Table 3). We aimed to examine processes rather than outcomes, and gain in-depth understanding of those issues that participants perceived as most relevant for the governance of the revenue sharing scheme. Most insights presented here are drawn from a set of semi-structured interviews and a two-day workshop specifically focused on the process of revenue sharing in Debub Omo, which involved not only staff from the different governmental bodies, but also community members such as elders.

Our selection of interview, workshop and focus group participants aimed to capture diversity (rather than consensus) of views and experiences. We thus contacted potential interviewees from an array of backgrounds as wide as possible, as long as these had (or were supposed to have had) some

involvement in the revenue sharing scheme. For the scoping interviews (Table 3), we selected those members of the regional Bureau of Culture and Tourism who had been involved in the design of the legislation, and members of other regional bureaus, who had been part of the committee that passed the regulation.

Semi-structured interviews were then held with the head of the Bureau of Culture and Tourism at the zone level, those district officials administering the revenue scheme, the administrators of communities supposed to have received shares so far, one additional elder per community (usually suggested by the administrator), and protected area (PA) managers both from those PAs that financially contributed to the scheme and those that, so far, only received shares from revenues collected elsewhere. The first workshop consisted of representatives from the same offices as contacted in the interviews, as well as two to three members of each community supposed to have received shares (contacted through the district offices). The second workshop included PA managers and additional members of the regional Bureau of Culture and Tourism who were not involved in the previous interviews and the workshop, and was intended to develop concrete and specific approaches to address the shortcomings of the scheme identified in the previous workshop. Participants were selected by the regional bureau.

As well as providing the data for analysis, the research process served as a basis for the regional government's

Table 3 Overview of methods and data sources. PA = protected area; SNNPRS = Southern Nations, Nationalities and Peoples' Regional State; YTW = Yitbarek Tibebe Welde-semaet; DT = Degu Tadie.

<i>Date</i>	<i>Method</i>	<i>Focus</i>	<i>Participants</i>	<i>Organized/ hosted by</i>	<i>Number of participants</i>
<i>Main dataset</i>					
October 2010	Document analysis	Legislative texts	–		–
November 2010	Scoping (unstructured) interviews	Identification of research questions	Members of regional administration and policymakers	YTW	7
December 2010	Semi-structured interviews	Understanding the process of revenue sharing on paper and in practice, identification of problem areas	Representatives of zone, district and community administration, community members, PA managers	YTW	26
March 2011	Workshop (in the capital town of Debub Omo zone, near Mago and Murulle PAs)	Identification of problems of the scheme and underlying causes	Representatives of communities (including interested individuals, elders and formal administrators), regional, zone and district administration, NGOs, private sector, PA managers	Frankfurt Zoological Society and SNNPRS–Bureau of Culture and Tourism	51
July 2011	Workshop (near regional capital)	Identification of approaches to address current shortcomings through revision of the legislation, etc.	Representatives of regional administration, PA managers	Frankfurt Zoological Society and SNNPRS–Bureau of Culture and Tourism	22
<i>Complementary data</i>					
February and November 2011	Two sequential workshops (in Addis Ababa)	Experience sharing on revenue sharing in Ethiopia and elsewhere	Members of federal and several regional bodies, professional hunters, NGOs, development cooperation	Frankfurt Zoological Society	12
Early 2010	Four separate focus group discussions (in Addis Ababa)	Among other topics: revenue sharing from conservation and hunting in Ethiopia in general	Members of Professional Hunters' Association, governmental and non-governmental conservation organizations	DT	39

endeavour to revise and improve legislation and practice of revenue sharing. Other data, for example from workshops and group discussions at national level, complemented our information base.

Roles were distributed as follows: Yitbarek T.W. conducted all interviews, Yitbarek T.W., D. Tadie and A. Fischer ran the workshops, D. Tadie carried out the focus group discussions, G. Timer provided access to documents and background information, Yitbarek T.W. and D. Tadie recorded, transcribed and translated recorded information into English, and Yitbarek T.W. and A. Fischer carried out data analysis and write-up.

We employed a grounded and iterative-inductive approach to gather and analyse our data (O'Reilly 2005). We began with a broad research question, and allowed our study to develop its focus over time, rather than rigidly sticking to preconceived hypotheses. Preliminary analyses were conducted after each step of data collection. Throughout several rounds of iterative

coding, we found that the issues brought up in interviews and workshops fell into four broad categories: (1) roles and responsibilities of the different actors are imbalanced and diverge in theory and practice, (2) information flows and communication are insufficient, (3) accountability is compromised, and (4) the disbursement of the funds does not foster conservation. Rather than constitute strictly defined, mutually exclusive categories, we used these four categories to organize the wealth of observations and views expressed in our interviews and workshops in a meaningful way. The thematic cluster 'roles and responsibilities' included references to the legislative endowment and actual empowerment of different actors to play an active part in the revenue sharing scheme. While observations categorized as 'communication' related mainly to communication from higher governmental levels to the lower levels and communities on the nature and conditions of the scheme, the category 'accountability' subsumed data on information flows from the lower levels, such as financial and

Table 4 Roles and responsibilities within the revenue-sharing scheme, comparing legislation and practical implementation. PA = protected area, CHA = Controlled Hunting Area, BCT = Bureau of Culture and Tourism. Legislation includes Southern Nations, Nationalities and People's Regional State Payment Regulation for visiting tourist attractions No. 65/2000 (November 2007) and Tourist attraction sites revenue collection and sharing utilisation implementation directive (July 2008).

<i>Actor</i>	<i>Roles and responsibilities: legislation</i>	<i>Roles and responsibilities: in practice</i>
Region - BCT	Develops and revises regulation, directive and implementation guidelines in collaboration with other administrative levels Collects revenue in separate account Distributes revenue Monitors and evaluates Establishes (elected) community committees that explore designation of new tourist attractions and administer community shares	Done, but other actors hardly involved (zone and PAs are only informed, not consulted); guidelines are not yet developed Done Distributes largely according to regulation, but the 5% share for CHA was not disbursed Reads reports and proposals, but does not impose sanctions Committees have not been established yet (instead, district handles community shares)
Zone - BCT	Can administer non-conservation tourist attractions (e.g. historic sites) Manages own share Role in administration and monitoring of district and community shares unclear	Administers only one cultural site that does not participate in scheme Done, but used mostly for travel to PAs and districts No activities apart from ad hoc monitoring of projects (no sanctions)
District	Manages own and community shares separately Implements own and community projects (until community committees are established) Reports to zone and region	Shares often combined Funds not necessarily used for the projects applied for Reports often do not reflect reality
Communities	Plan use of their funds in collaboration with district	Are not given the opportunity to develop plans for use of shares
PAs	Can develop own (cultural) tourist attractions Use share according to development plans set up together with zone Involve communities in PA planning and management activities	Not done yet – no committees formed yet (see above) Funds are transferred together with annual operational budget, no specific plans developed No joint planning, only limited employment in management activities

technical reporting from communities, to districts and higher governmental levels. 'Disbursement of revenue' encompassed comments on the nature of money flows and their implications in the context of the scheme. Each of these categories was defined using the data, namely the observations and views expressed by our study participants (rather than theoretical considerations). In the last step of the analysis, we compared these factors to those identified in the literature on comanagement (Table 1) and related subjects.

RESULTS

Roles and responsibilities

The participants generally expressed appreciation for the scheme and its potential. They valued the opportunity to provide feedback through the interviews and workshops with a view to improving the scheme. Two main areas of concern emerged from the interviews and workshops in relation to the actors' different roles and responsibilities in the revenue-sharing scheme: theory and practice diverged, and responsibilities and thus power were unequally distributed.

Discrepancies between roles and responsibilities *de jure* and *de facto* were seen by many participants as early problems of

this scheme (Table 4). Issues such as community committees (as demanded by the directive) not having yet been established were often pointed out as areas for future improvement. Legislative texts provided ample scope for an extension of the scheme beyond regionally managed conservation areas to include cultural sites managed by the zone or communities, but despite the promising potential revenue from cultural tourism, hardly any such options had been used to date. Some aspects, such as the degree to which legislation and guidelines were to be developed in collaboration between regional and other actors, were left relatively vague in the legislative texts. This led to a wide array of interpretations, even among the staff of the regional Bureau of Culture and Tourism.

Interviews and workshops suggested that regional and district authorities were the most influential actors in the current implementation of the scheme (Table 5). As an active role and greater responsibilities in revenue sharing were generally associated with greater influence on how the money was used, a stronger role was seen to encompass greater power. While the legislative texts foresaw a strong role for communities to collaborate with the districts in the allocation of the funds, communities in practice had little or no say (Table 5). This was due to a number of factors. Communities had no institutional capability to administer

Table 5 Weight of the *de facto* role of actors in different components of the revenue-sharing scheme, as identified through semi-structured interviews and a workshop with participants from all levels. Qualitative information translated into approximate weights (from none to high) by the authors (Yitbarek T.W. and A. Fischer). PA = protected area.

<i>Component of scheme</i>	<i>Region</i>	<i>Zone</i>	<i>District</i>	<i>Community</i>	<i>PA</i>
Design of legislation	High	Low	None	None	Low
PA management planning	High	Low	Med	Low	High
Revenue collection	High	None	None	None	High
Revenue allocation	High	Low	High	None	Low
Monitoring	High	Low	None	None	None

their own budget; they were not formally registered as community-based organizations (CBOs), in Ethiopia a legal precondition to receive and handle funds. Obstacles to formal registration of CBOs included, for example, lack of knowledge and capacity in setting up and managing such an organization. This required the district offices to manage funds on the communities' behalf, and effectively allowed districts to take charge of their communities' shares, and to involve or exclude community actors as they saw fit. Committees of community representatives that could give communities a stronger voice (and as CBOs also administer their own funds) had not yet been established (Table 4), and districts were accountable to neither zone nor region, leaving them free rein over the identification of beneficiary communities and the disbursed revenue. In addition, the zone's role was not clearly defined, which resulted in it scarcely playing any active role in the scheme (Table 5).

Money flows: disbursement of the revenue

While the collection of the revenue went as planned through a separate account held by the region, two major points of critique with regard to revenue distribution were repeatedly raised in our conversations.

First, the overall amount of revenue available was considered as very limited. In most districts, communities would receive funds only on a rotational basis, as the amount disbursed per year would otherwise be too little to allow any meaningful use. Similarly, as the district's share was seen as too small, it was often combined with the communities' share, and then either used in the district town (for example to build a small museum for tourists) or for small projects at the community level. However, to avoid entering any debate with communities about the appropriate use of the shares, three districts had, in some years, simply included the community share in their own administrative budget without consultation, and not funded any specific projects. By contrast, the example of Debub Ari district, which had used its shares to construct and furnish a school, was seen as positive. Much of the discussion at the workshops consequently revolved around options to increase the revenue from protected areas.

Second, interviewees and workshop participants, including both government staff and community members, were critical of the fact that neither disbursement nor use of the revenue

was explicitly related to conservation activities. This critique had two sides. On the one hand, it was repeatedly emphasized in workshops and focus group discussions that recipients had to be able to associate the revenue clearly to its source (namely wildlife-related tourism) in order for it to have the intended incentivizing effects. Study participants saw the objectives of the scheme not only as helping to manage protected areas collaboratively (outbreak group at workshop in zonal capital) and reducing negative impacts of local communities on protected areas (district administrator), but also as communicating the value of wildlife more widely at a political level. However, for most communities, the reason for the scheme-funded activities of the district (such as the provision of a maize-grinding mill) was entirely unclear. Even protected area managers were unaware of the amount of revenue they received. Shares of the revenue were distributed both to those protected areas that contributed their income to the scheme (namely Mago) and those that did not (namely other regionally managed national parks in Southern Nations). As these funds were transferred together with their annual operational budget, their provenance remained obscure, and thus did not have any motivational effects on protected area managers.

On the other hand, not only the receipt of the funds, but also their use was required to be conservation-related. However, informants from the regional government indicated that project proposals from districts and zones were not reviewed with regard to their conservation relevance. Participants from zone and district levels consequently reported that funds were being used for generic administrative purposes (such as office equipment) or road construction.

Information flows: communication between actors

While interview and workshop participants largely concurred that the revenue-sharing scheme was, in principle, to be welcomed, most of the community representatives only became aware of the scheme as a result of the workshop and interviews. Information flows and communication between actors were thus identified as one of the main areas for future improvement. In particular, while communication between the regional Bureau of Culture and Tourism and protected area managers was seen as sufficiently frequent, the

(that is, upward information flows on the spending of the revenue) were here portrayed as a necessary precondition for an enforcement of the appropriate implementation of the revenue-sharing scheme, but it was also observed that even where this information existed, legislation did not enable higher level bodies to take action, that is, effective enforcement was not possible.

This lack of capacity to enforce agreements under the revenue-sharing scheme was largely due to the position of the district office. As this office was not answerable to the Bureau of Culture and Tourism at the zone or regional level, but part of a completely separate (namely political) reporting line, regional actors were not in a position to hold the district office accountable. Consequently, one of the key suggestions voiced at our workshops was for the creation of a district office that would report directly to the Bureau of Culture and Tourism.

The reason why, to date, revenue from cultural tourism had not been included in the scheme was also related to accountability reasons. As the Bureau of Culture and Tourism had two departments, one chiefly responsible for protected areas and the other for cultural affairs, but legislative texts were ambiguous about the exact role of the department of cultural affairs, the scheme had simply not been implemented with regard to the (substantial) revenue from cultural tourism.

However, one aspect that was largely evaluated as positive was the inclusion of the fee structure in the regulation, detailing, for example, entrance fees and licences for photography. While this had the disadvantage that fees had to be passed by a regional parliamentary act and could thus not easily be adapted to reflect inflation or changing market conditions, it ensured transparency and helped to avoid corruption.

DISCUSSION

In Debub Omo, the main factors that seemed to hamper the success of the revenue-sharing scheme were connected to (1) the distribution of roles and responsibilities, (2) the practice of revenue disbursement and availability of resources, (3) communication and information, and (4) upward accountability. These factors strongly resonate with those recurrently proposed in the literature as key elements of successful comanagement arrangements, and most of our findings can be mapped against these criteria (Table 1). The idea of accountability seemed to be much more strongly and explicitly mentioned in our conversations than in frameworks for comanagement, where aspects of accountability are touched upon under various headings, but do not appear to be given major space. In the literature on related topics, such as decentralization and local governance, upward accountability (the aspect of accountability that was emphasized in our data) is understood as the ‘institutionalized practice of account giving’ by lower- to higher-level governmental bodies (World Bank 2009, p. 6) or as higher level counter power to lower level activities (Agrawal & Ribot 1999). However,

the decentralization literature tends to focus on downward accountability to the constituency, as it is assumed that ‘decentralization typically implies some reduction in the accountability of sub-national governments to the central government’ (namely upward accountability; Smoke 2003, p. 11). As a counterweight, downward accountability thus has to be increased (Smoke 2003). By contrast, our participants seemed to argue that, in the context of revenue sharing, in spite of the concession of power and money to the district level, upward accountability should be strengthened rather than reduced. In their view, effective mechanisms for reporting and monitoring of revenue spending were an essential first step to achieve this accountability.

By comparison, the availability of funds to manage the scheme (Table 1) was not often mentioned in our conversations, but plays a relatively important role in comanagement frameworks. While participants were critical that not enough effort had been spent on communication between the regional bureau and other actors, financial and staff implications of a more thorough approach to communication were hardly addressed. The fact that limited resources were invested in awareness raising and empowerment of communities ultimately seemed to cause a fallback to a classical hierarchical approach to the management of the revenue from conservation, which kept the power in the hands of governmental actors.

In comparison to previous research on revenue sharing (Gibson & Marks 1995, Archabald & Naughton-Treves 2001), our study participants also gave relatively little attention to distributional issues and the selection of target communities. This might have been due to the general frustration and lack of wider awareness among community members, and the fact that the scheme had only been introduced relatively recently. On the positive side, thus far the Debub Omo scheme did not have to struggle with the funding cuts and institutional volatility that Archabald and Naughton-Treves (2001) reported for several East African countries, where governmental agencies kept larger shares than initially agreed for themselves to plug their own income gaps. The approach chosen in Southern Nations allowed the scheme to retain its revenue over and above the bureau’s regular annual budget, rather than replacing its budget by its revenue and thus making the scheme vulnerable to changes in tourist numbers and inflation. This advantage notwithstanding, a major shortcoming of the current scheme in Debub Omo lay in its limited income base.

Conversely, one criterion that is not mentioned in existing frameworks for comanagement (because in standard comanagement approaches, management of the natural resource and revenue sharing are usually inherently linked), but that our participants saw as crucial for meaningful revenue sharing from wildlife-related tourism, was the awareness of the connection between the revenue and its source, in order to incentivize behaviours that promoted wildlife and conservation. We conclude that institutional setups such as that in Debub Omo, which strictly separate wildlife

management and distribution of the resulting benefits, require extra efforts to make the links between behaviours, resource and revenue explicit to all participants in the scheme.

However, the Debub Omo case also raises a question about the degree to which a scheme that concentrates only on the sharing of revenues, and excludes the comanagement of the natural resources, is likely to be successful at all. While neither the regulation nor the directive specified this explicitly, there was an implicit expectation that communities who received benefits from wildlife-related tourism would, at least in the longer run, not poach or use protected areas for livestock grazing. However, these activities are currently common practice in Debub Omo (Tadie and Fischer 2013), illegal hunting being largely undertaken by members of local communities (Lowassa *et al.* 2012) without connection to wider (urban) markets; the disbursement of revenue to particular communities, although in principle a promising tool, is completely decoupled from their behaviour and thus ineffective. Clearly communicated links between resource use and revenue obtained seem an essential precondition if the sharing of revenue is to act as an incentive.

In addition, annual revenue is not only dependent on the attractiveness of a site, but also on a multitude of other factors outwith the control of local residents (such as economic and political crises; Archabald & Naughton-Treves 2001). Even if the source of the funds was more clearly communicated to the recipients and communities had more power over the use of their funds, the feedback between personal resource-use behaviour and the revenue obtained would thus be tenuous at best.

The focus on revenue (as opposed to joint wildlife management more generally) also gives rise to concerns, expressed by several of our focus group participants, about a potential crowding out of other non-monetary motivations for wildlife conservation, which could stem from the growing awareness that current resource-use practices lead to the depletion of wildlife and pasture, and hence to the disappearance of these vital resources (Tadie and Fischer 2013). Direct incentives (such as payments) for pro-conservation behaviours have often proved ineffective once they are withdrawn (Hellin & Schrader 2003), making conservation dependent on the continued provision of direct benefits, rather than building on more intrinsic behavioural change. We may thus speculate over the degree to which the Debub Omo scheme can be seen as a step towards 'community conservation', or if it can be better understood as an extension of the traditional idea of 'fortress' conservation which essentially attempts to retain power in the hands of the government (or conservation actors) by paying local residents so that they forsake their claims (Benjaminsen & Svarstad 2010). At present, we note that protected areas in South Omo do not follow the fortress conservation approach, but are, based on implicit consent by the district government, used extensively by local residents for grazing at the end of the dry season, while in practice, illegal hunting in the protected areas cannot be prevented by government and park staff.

However, comanagement is a process rather than a state (Carlsson & Berkes 2005). Our research process contributed to the development of ideas for the upcoming revision of the legislation and implementation practice, and the adaptive capacity of the scheme (Folke *et al.* 2002) may enable the incorporation of currently neglected elements of comanagement fostering a joint approach to the management of wildlife and protected areas.

More importantly, similar schemes might be used to increase the weight of conservation interests in political decision-making. Currently, protected areas in Southern Nations and in Ethiopia more generally, as elsewhere across the globe, appear to be under high political pressure. Large-scale agriculture, often conducted by foreign investors, is given priority over nature conservation because of its seemingly high economic benefits. In some places, parts of previously protected areas are thus leased out for agricultural plantations. A revenue-sharing scheme like the one in Debub Omo can be (and has been) used to substantiate the argument that wildlife areas can also contribute to development objectives. However, as some of our focus group participants cautioned, monetary benefits from conservation are likely to always be small compared to the profit made by agricultural enterprises. A focus solely on revenue from hunting and other wildlife tourism might thus not stand up against other economic interests. However, taking into account not only monetary benefits, but also other ecosystem services provided by protected areas might tip the balance in favour of conservation.

CONCLUSIONS

With its focus on the governance of revenue sharing, this study addressed a gap in the literature and identified governance elements that need to be considered to make benefit-sharing work. Our analysis also provides a more nuanced picture of the relationships between comanagement and revenue sharing than that offered by Nkhata *et al.* (2012).

In the Introduction, we argued that benefit sharing could be considered both as an important part of comanagement and subject to the principles of comanagement, even where only the revenue but not the natural resource itself is being comanaged. Indeed, our analysis suggests that the governance of revenue sharing can be meaningfully evaluated against frameworks proposed for the assessment of comanagement arrangements more generally. Such frameworks could (and possibly should) thus be used more regularly as an instrument to diagnose needs for improvement in the governance of revenue sharing. It also implies that the shortcomings identified in the current version of the Debub Omo scheme are by no means unique, rather they reflect common challenges wherever resources are to be managed in a collaborative way (Prager *et al.* 2012). By analysing the Debub Omo scheme against this backdrop, we raise the question whether revenue sharing can ever be an effective instrument for sustainable conservation if power over the management of the natural

resource is not shared. However, the real political relevance of the Dehub Omo scheme may lie in its potential to make the economic benefits of wildlife visible and tangible.

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