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Community wildlife management programmes in southern Africa typically offer residents benefits such as meat, money and jobs in the hopes of improving both conservation outcomes and local welfare. This article examines this assumption on the basis of a case study in northwest Namibia. We confirm the importance of direct benefits in shaping support for and commitment to conservation. However, the study's analytical framework also opens up the 'black box' linking benefits to conservation and demonstrates that the link of benefits to attitudes and behaviours cannot be understood without taking into consideration three underlying factors: the appropriateness and equitability of benefits, the level of local control, and the broader context of peoples' values, their sense of identity and their development aspirations.

1. INTRODUCTION

If poor communities benefit from wildlife on their lands, they will be amenable to conservation. This is the central assertion of a 1990s conservation orthodoxy that sought to link conservation with development and move beyond exclusionary resource management (Agrawal & Gibson, 2001; Hulme & Murphree, 2001; Agrawal & Redford, 2006). This orthodoxy asserted that poverty – a state of relative lack of access to income, resources, and

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decision making (Sen, 1981; Ellis, 2000) – tempts people to poach, clear land, and participate in other anti-conservation behaviour. The orthodoxy then argued that if local people could access benefits such as meat, money or jobs linked to conservation, their poverty would be reduced and they would support conservation activities and stop engaging in anti-conservation behaviour.

This ‘benefits equals conservation’ idea was attractive in its simplicity. It avoided the problems of the coercive conservation efforts of the past. Yet the inherent bargain in this idea was untested. Indeed, a decade later, results are mixed. There is increased attention to the problems of community conservation programmes, and a resurging fortress conservation paradigm (Brandon et al., 1998; Terborgh, 1999; Bruner et al., 2001; Wilshusen et al., 2002; Fabricius & Koch, 2004; Larson & Ribot, 2004; Brosius et al., 2005).

Part of the problem is that the relationship between benefits and conservation behaviours and attitudes is complex and poorly understood (Emerton, 2001; Infield & Namara, 2001). Many factors complicate the relationship. To some extent, it is a ‘black box’, where the inner workings – such as types of benefits, means of distribution, or socio-economic and ecological contexts – are uncritically melded together.

This paper attempts to open up this black box by investigating a flagship case of community wildlife management – the Torra Conservancy in northwest Namibia. We take as given a number of external factors (conducive policy environments and donor interests) and certain geographic characteristics (such as relative richness in wildlife and low human population densities, both common across southern Africa), and assume – given the lack of evidence to the contrary – functioning community institutions not subject to domineering internal or external forces (cf. Mburu & Birner, 2007). Within these parameters, we propose an analytical framework for better understanding the relation of wildlife benefits to attitudes and behaviours. We show that pro-conservation attitudinal and behavioural changes arise from equitable, appropriate and locally controlled benefits in a context where community wildlife management develops peoples’ sense of identity and serves as an important driver of regional development. Success depends on addressing not just income or subsistence needs, but also on access to resources and decision-making power, as implied by the definition of poverty presented above.

2. BACKGROUND AND THEORETICAL FRAMEWORK

2.1 Roots of community wildlife management

Communities' roles in resource management in southern Africa have changed radically over the past two centuries. Before colonisation, resource use was governed by traditional authorities and regulated by social structures, low population density, taboos and low technology methods of hunting (Neumann, 1998; Fabricius & Koch, 2004). Colonial governments typically claimed control over natural resources, stripping locals of previous rights. Protected areas were established in the course of complex and dynamic historical processes, ranging from hunter advocacy of conservation, to modern environmentalism and efforts at nation building (MacKenzie, 1988; Griffiths & Robin, 1997). Protected areas excluded resident peoples or restricted their activities (Hulme & Murphree, 2001), devastating their livelihoods.

Recognition of the consequences of these policies – injustices, hostility towards conservation, high economic costs, and failures to protect wildlife – led policymakers to propose new approaches that sought to take into account local people's needs and allow them to participate in and benefit from conservation (Western & Wright, 1994; Leader-Williams & Albon, 1998; Neumann, 1998; Adams & Hulme, 2001; Fabricius & de Wet, 2002; Fabricius & Koch, 2004; Brosius et al., 2005; Mburu & Birner, 2007).

Community based natural resource management (CBNRM) is one such approach widely applied in southern Africa. Key ideas in CBNRM include the devolution of management responsibility to local people, the utilisation rather than preservation of wildlife, and an emphasis on market incentives (Western & Wright, 1994; Hulme & Murphree, 1999). Benefits and incentives are provided to communities in the hope that they will adopt conservation-friendly attitudes and behaviours. Initial attempts in Botswana and Zimbabwe offered only income and subsistence benefits. These were not always successful, as the projects were sometimes experienced as top-down coercion and communities did not gain control over the resources (Parry & Campbell, 1992; Murphree, 2005). For this reason, CBNRM projects also tend to aim to redistribute social and political power by devolving management and decision making to communities (Brosius et al., 2005).

CBNRM programmes have drawn criticism from several angles. As noted above, some conservationists bemoan loss of control and argue for a return to fortress conservation. Social scientists, on the other hand, have been quick to criticise romanticised views of ‘communities’. CBNRM projects sometimes assume that communities are more homogeneous, less subject to internal and external power conflicts, and more ‘ecologically noble’ than perhaps is warranted (Naughton-Treves, 1999; Steenkamp & Urh, 2000; Agrawal & Gibson, 2001; Ribot, 2004; Turner, 2004; Brosius et al., 2005).

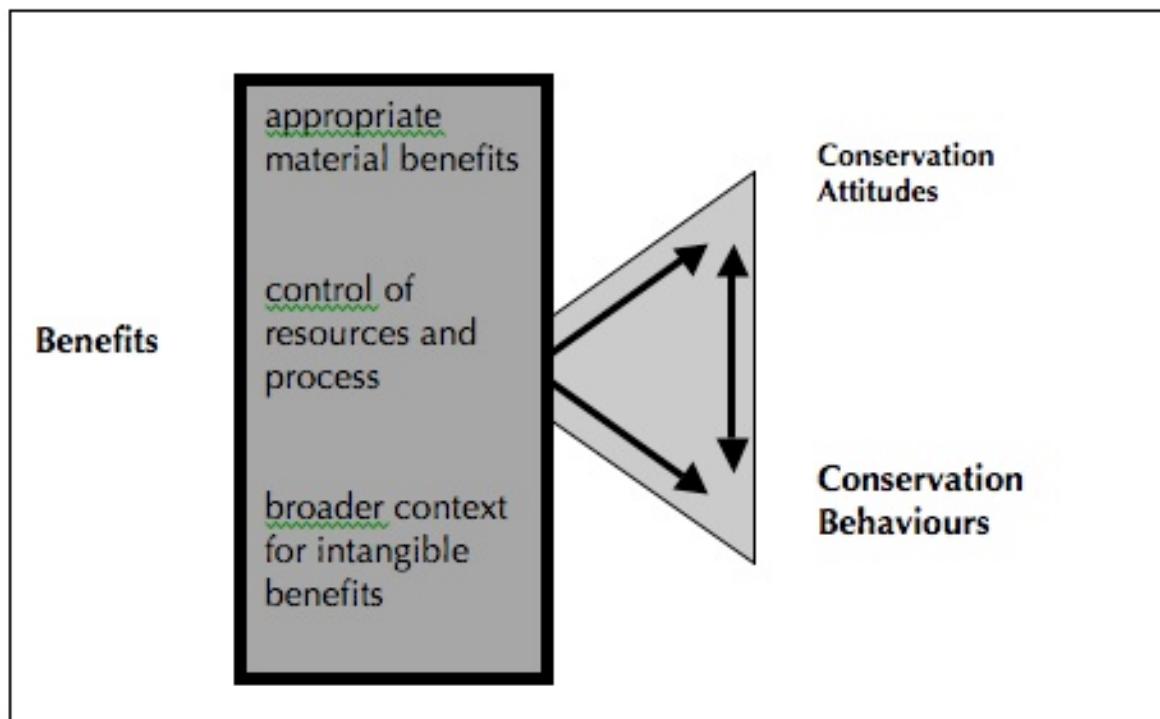
2.2 A theoretical framework

How are benefits specifically linked to conservation in CBNRM? Analyses of this question have tended to focus on three key relations, between benefits and attitudes, benefits and behaviours, and behaviours and attitudes. These can be neatly represented as a benefits-attitudes-behaviours ‘triangle’ (Figure 1). Many authors, however, also hint at a ‘black box’ of factors that complicate these kinds of rational actor conceptions – cultural factors, ‘intangibles’ (Ashley, 1998), or equity issues. While analysis of the triangle is unavoidable, it is these black box factors that condition the outcomes of community based conservation, as shown in Figure 1. Below, we investigate the various components of this analytical framework.

The first side of the triangle is the influence of benefits on attitudes. The provision of benefits is thought to improve attitudes towards conservation activities by altering the recipients’ experience of those activities (Hulme & Murphree, 2001) or by improving their economic status to the level where they have the luxury of supporting the conservation activities (Infield, 1988). Previous research in northern Botswana suggests that if benefits (such as cash and meat) do not exceed costs (such as crop damage, loss of livestock, lack of control over wildlife), then attitudes will not change (Parry & Campbell, 1992).

The relationship of benefits to behaviour, the triangle’s second side, can be analysed separately. Appropriate incentives are thought to encourage conservation behaviour. Incentives both material and social are thought to change behaviours significantly more than punitive measures (Cook & Berrenberg, 1981; Long et al., 2003; Mavenke et al., 2000). Experience, however, shows that benefits do not always lead to behaviour change. For

Figure 1. Theoretical framework for understanding the relationship of benefits to conservation in community wildlife management: the ‘triangle’ and the ‘black box’.



example, prior to the development of Zimbabwe’s community wildlife management programme CAMPFIRE, the Parks Service provided meat and income to villagers through hunting. While people were grateful for this handout, no link was made between the benefit and any active wildlife management behaviours (Jones, 1995). Similarly, the provision of benefits to hunters in Zambia, under a programme called ADMADE, neither persuaded them to conserve animals nor stopped their illegal hunting (Gibson & Marks, 1995). Communities may simply remain passive recipients of benefits and not change any behaviours (Jones, 1999a,c).

The triangle’s third side, with the arrow pointing in both directions, emphasises that links between attitudes and behaviour are not automatic. Positive attitudes towards conservation do not always lead to the desired behaviour change (Infield & Namara, 2001). Behaviours, however, may influence attitudes. In the Selous Community Conservation Programme in Tanzania, local people who actively participated in conservation supported conservation more than those who did not (Songorwa, 1999). In Ecuador, more positive attitudes were

documented among people employed in wildlife related fields than among others (Fiallo & Jacobsohn, 1994).

The three sides to the triangle do not sufficiently explain divergent outcomes in community conservation. One needs to open the black box of benefits, including the nature of benefits and their distribution, control over decisions, and the broader community context. We organise our discussion below according to these three themes (Figure 1).

First, the type of benefit and how it is distributed is important (Maveneke et al., 2000; Murphree, 2005). Benefits must be appropriate: the failure of Zambia's ADMADE programme can be partly blamed on a lack of desired benefits such as jobs or direct control over wildlife use (Gibson & Marks, 1995). Benefits must be sufficient: at Nepal's Makulu-Barun Conservation Area, the benefits provided (trail improvements, drinking water and small-scale irrigation) did not outweigh or even address the chief cost of conservation, wildlife depredation (Mehta & Heinen, 2001). Finally, benefits must be equitable: at Indonesia's Komodo National Park, resentment of inequalities between recipients broke the link between benefits and attitudes, even though most people still supported conservation (Walpole & Goodwin, 2001).

Second, benefit sharing must fit into a rubric of political participation. Benefits have a stronger effect where the community gains control over management decisions, including access to the resources in question (Newmark & Hough, 2000). For example, in Kumaon, India, the right to manage non-commercial forest uses was devolved to local elected forest councils in the 1930s. This system has survived over 70 years because real power – at least in part – was devolved to communities, leading to their increased engagement (Ribot, 2004). Similar outcomes are reported in South Africa (Infield, 1988) and Uganda (Infield & Namara, 2001), where facilitating access to wildlife garnered community support. At least one Zimbabwean community altered its behaviour following the introduction of CAMPFIRE, because actively participating in resource management meant it was able to derive meaningful benefits (Maveneke et al., 2000; Murphree 2005; but see Balint & Mashinyab, 2006).

Third, the broader community context matters (Hackel, 1999). Aspects one might label 'culture', 'history', and 'future' are particularly pertinent; we illustrate each below. People's attitudes towards wildlife are complex and elude strictly rational economic or existential analysis (Adams & Hulme, 2001; Levine & Wandesforde-Smith, 2004). Cultural norms and

beliefs can condition the potential impact of material benefits. For example, Gibson & Marks (1995) and Noss (1997) document how, in Zambia and the Central African Republic respectively, attachment to hunting blocked attempts at building CBNRM programmes. In contrast, Bishnoi farmers in Rajasthan, northern India, have a long tradition of protecting wildlife such as peafowl, nilgai, and black buck on their farming lands. They explain this behaviour by reference to religious beliefs central to their caste (Gadgil, 2002). In both cases, socio-cultural attachments outweigh the importance of material incentives.

Much community based wildlife management occurs in places with a history of dispossession or social disruption. In principle, CBNRM may redress historically rooted poverty by increasing access to livelihoods, resources, and decision-making power. This may lead not just to material dividends, but also to intangible benefits such as the creation of adaptable institutions and accountable leaders, the development of new skills, confidence and pride, and a sense of identity, ownership and control (Ashley, 1998; Long, 2002) – all of which could in turn generate support for conservation.

In some places, income from wildlife provides hope for future regional development (Emerton, 2001; Levine & Wandesforde-Smith, 2004). While trophy hunting, conservation, and ecotourism offer a narrow and perhaps fragile path for development, they may be the only option. In such places, conservation may emerge as a key rallying point. The value of living in one's home area, of maintaining local social networks, and of being able to seek income yet continue farming for livelihood security and social reasons should not be underestimated (Long, 2002).

A further component of the community context, but one we did not specifically address, is the idiosyncratic nature of community politics. Strong internal or external forces may fracture community institutions, making the politics and robustness of these institutions a potential additional variable in the devolution of control (Steenkamp & Urh, 2000; Turner, 2004; Dressler et al., 2006).

To make good sense, analyses of the relationships between benefits, attitudes and behaviours must be complemented by a deeper exploration of the nature and context of benefits (Figure 1). On the basis of such an analysis we find that the success of Torra Conservancy is hardly a simple outcome of 'benefits=conservation', but rather a case where people who have always appreciated wildlife – but not former government conservation approaches – attach much

importance to local control and to the hope associated with the community based wildlife programme.

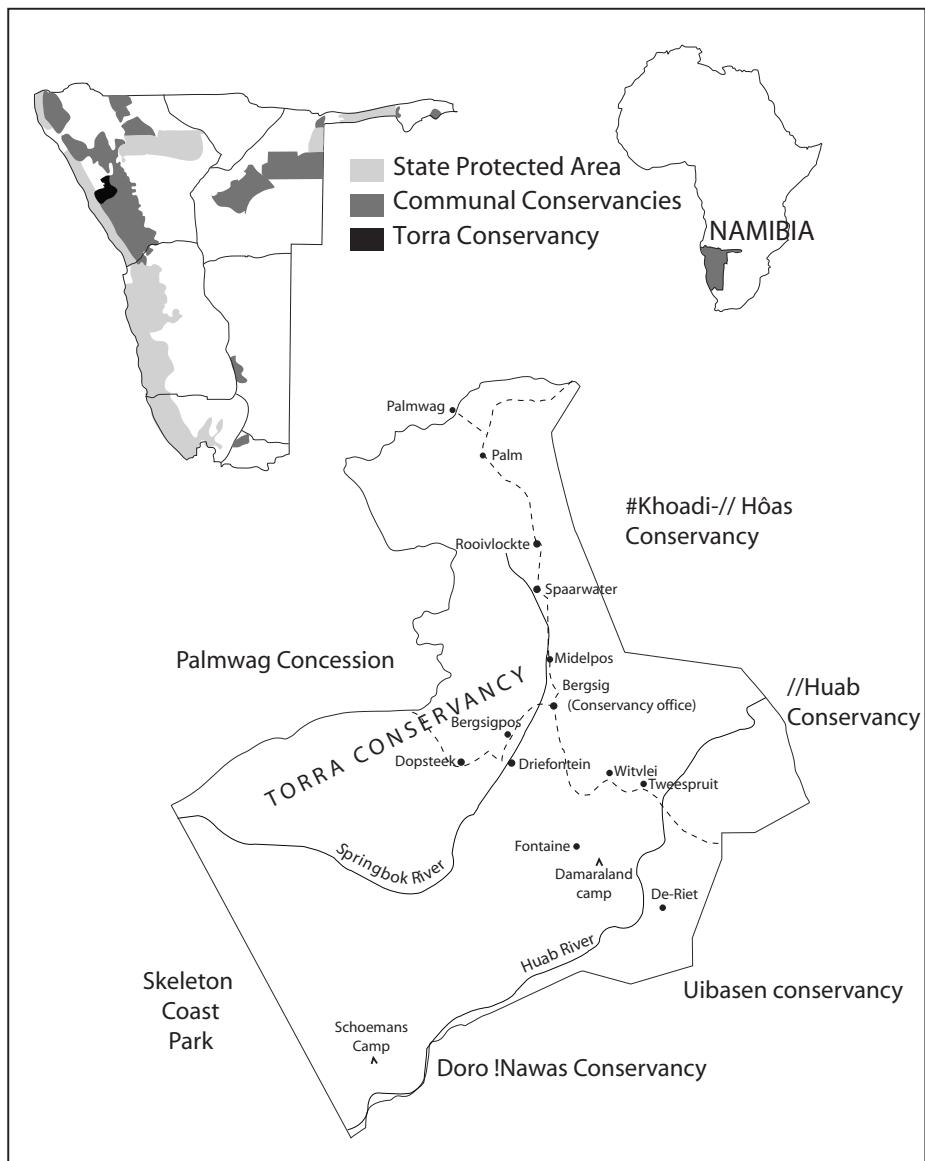
3. CASE STUDY AND METHODS

To investigate the relationship of benefits to conservation using the above analytical framework, we investigated the Torra Conservancy of Namibia. This conservancy was chosen because it has a relatively long history of benefit distribution – over eight years – which allowed us to examine attitudes and behaviours shaped by direct experience rather than by anticipation (Walpole & Goodwin, 2001). We built on previous investigations at Torra (Ashley, 1998; Long, 2002; Nott et al., 2004; see also Jones, 1995), using a theoretically informed analysis to elucidate the complex link between benefits and conservation.

3.1 The Torra Conservancy

Namibia's 1996 Nature Conservation Amendment Act provides for rights over wildlife and tourism to be given to residents of 'communal lands' (land set aside before Independence as 'homelands' for the use of 'native' populations). Within communal lands, which are technically state-owned, traditional authorities have jurisdiction over land rights, and residents have usufruct rights to farm or graze. In order to gain rights to wildlife under the 1996 Act, residents must form community-level resource management institutions called 'conservancies'. They must define membership, set physical boundaries, elect leaders, agree on a plan for benefit distribution, and adopt a formal constitution. Conservancies can then manage wildlife and regulate tourism, including setting hunting quotas or entering into profit-sharing agreements with tourism companies. Communal conservancies now encompass 38 500 km², and there are 30 additional conservancies in various stages of development (Jones, 1999a; MET, 2007).

Figure 2: Map showing Torra Conservancy, Namibia.



Torra Conservancy, gazetted in 1998, is situated in the southern Kunene region of northwestern Namibia (Figure 2). It incorporates 3522 km² of arid and semi-arid landscapes, ranging from undulating ridges bisected by dry riverbeds to rugged mountains. An abundance of wildlife subsists in this desert and savanna landscape, including black rhino, elephant, giraffe, zebra, ostrich, oryx, springbok, leopard, lion, cheetah and hyena. Rainfall is highly variable, averaging 300 mm/yr in the east and less than 10 mm/yr in the west (Mosimane, 2000; Long, 2002; Nott et al., 2004).

Torra is home to approximately 1200 people of multiple origins. Damara-Nama groups have lived in the region for many years, but were historically resettled from other parts of Namibia. The Riemvasmaakers were forcibly relocated here from South Africa during the 1970s. There are also a small number of Herero and Ovambo residents. About 450 people, or over nine tenths of Torra adults, are members of the Conservancy. Aside from employment in conservation or ecotourism, most residents are subsistence goat herders (Mosimane, 2000; Nott et al., 2004).

In its initial stages, the Conservancy was given logistical, financial and technical support by a local NGO. In 2000, however, it became the first conservancy to take over its own running costs, including salaries, vehicle maintenance and office management. The Ministry of Environment and Tourism, in conjunction with local NGOs and using local labour, undertakes wildlife surveys but the Conservancy makes decisions on hunting quotas. Torra has a well-developed management plan, and has eliminated commercial poaching. It is undoubtedly a ‘flagship conservancy’ (Long, 2002: 11; Baker, 2003; NACSO, 2004).

Since it was established, Torra has steadily increased its income from craft sales, investment interest, trophy hunting and game sales. Most revenue, however, comes from the luxury Damaraland Camp, a joint venture with a commercial tour company. The Conservancy receives 10 per cent of camp turnover, as well as employment and training. The Conservancy’s income from the camp – which averages over \$N300 000 per year – is used

for running costs and to provide community services and direct benefits to members (Long, 2002; NACSO, 2004; Wilderness Safaris Namibia, pers. comm. 2007).

3.2 Research methods

The research was carried out in 2005. Eleven interviews were conducted with relevant agencies in Windhoek. The lead author attended the Torra Conservancy Annual General Meeting (AGM) in May 2005, and conducted detailed interviews (using questionnaires with closed and open ended questions, as well as attitudinal statements) with 44 Conservancy residents in 34 households across 12 villages selected to represent a geographical cross-section. Participants were interviewed in Bergsig, Vrede/Tsaurob, Witvlei, Tweespruit, Crossing, Otjihawara, Bergsigpos, Middelpos, Palm, Palmwag location and gate, and Rooivlockte (Figure 2). Participants were invited face to face, and interviews were conducted with a local translator in Damara, Afrikaans and Otjiherero.

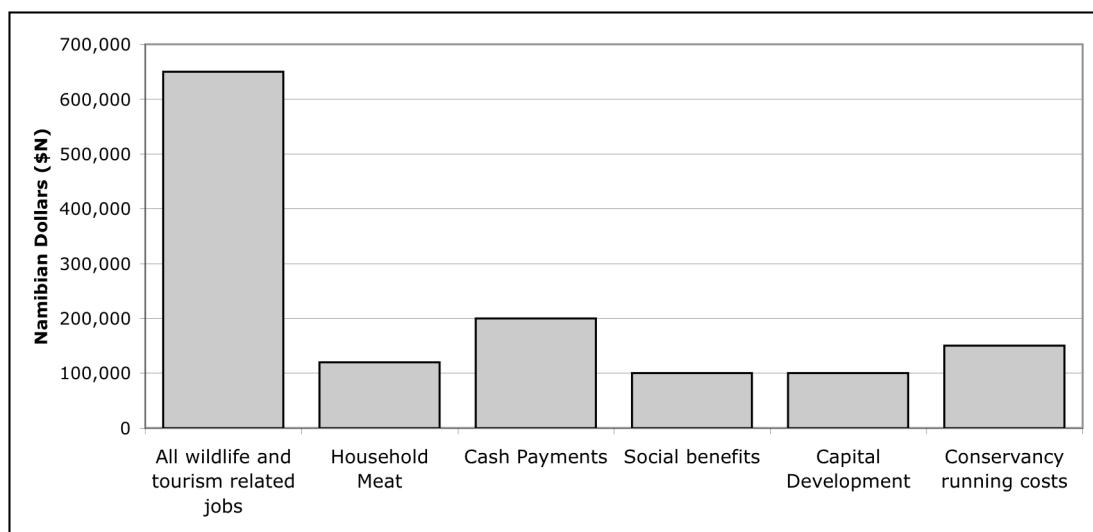
Respondents represented a diverse cross-section of residents, with ages ranging from 18 to 91, equal numbers of males and females, various levels of education, and four different ethnicities: Damara (30), Riemvasmaak (10), Herero (2), and Ovambo (2). Twenty-four of the respondents were employed – as game guards, in the Conservancy office, as guides, as a nurse, and as waiters, cleaners, bartenders and clerks at local tourist establishments. Of the rest, seven raised goats and the others remained at home. While representative in other aspects, the survey probably overrepresented people with formal employment. All respondents except one were Conservancy members, reflecting the fact that nine tenths of adult residents are members.

For this study, ‘conservation’ was defined as ‘the protection of animals’ or ‘the action of maintaining sustainable wildlife populations’, because, when asked, over three quarters of respondents defined conservation thus.

Quantitative data was analysed using SPSS. Cross-tabulations investigated relationships between benefits (number and type), conservancy membership, gender, age, formal employment, attitudes and behaviours. On the basis of chi-squared tests, no relationships reached significance. This was because of limited variation within the data (all the

respondents but one were members and received benefits). Therefore the majority of the analysis is based on descriptive statistics, qualitative interview material, and observation of the AGM. Therefore the majority of the analysis is based on descriptive statistics and qualitative interview material from our relatively small sample of people, as well as observation of the AGM. While not generalizable in a statistical sense to a broader population, the results indicate important trends and considerations likely to be relevant elsewhere.

Figure 3. Expenditures on benefits and other running costs, Torra Conservancy, 1998-2003 (NACSO 2004).

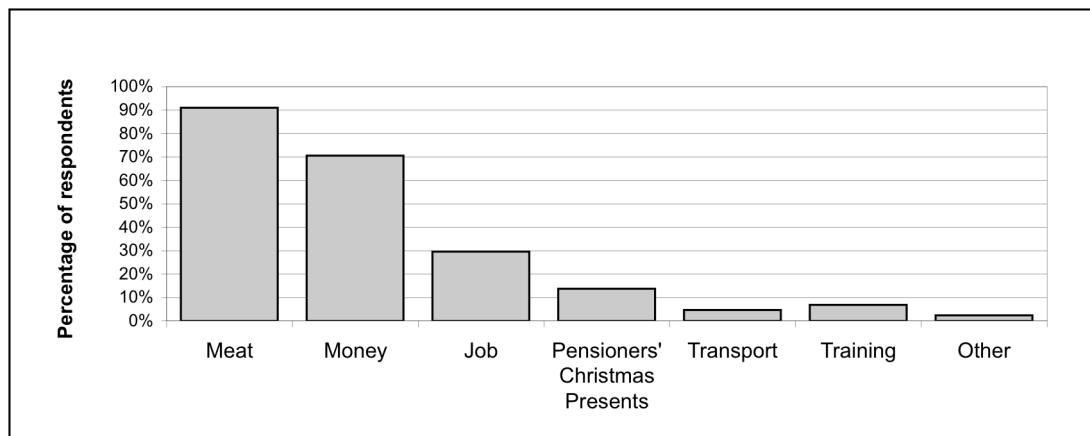


4. BENEFITS, GOVERNANCE AND PARTICIPATION IN TORRA CONSERVANCY

Torra spent approximately \$N1.2 m on providing benefits between 1998 and 2003 (Figure 3), and these levels have been maintained. Most respondents have received meat and cash, while a portion received employment or other benefits (Figure 4). Cash has been distributed once: a \$N630 dividend was paid to adult members in 2003 (Baker, 2003). This payment – about a month's wages – coincided with the beginning of the school year and its associated expenses. Meat is distributed twice annually after community hunts (residents are employed to hunt, and

to prepare and distribute meat) and occasionally following trophy hunting. A truck drives to all villages and distribution is done under everyone's watchful eyes. Each member receives a sizeable share of meat, contributing nearly a month's protein intake. Finally, elderly members have received Christmas packages including food, blankets, socks, wallets, hats, handbags and scarves.

Figure 4. Percentage of respondents receiving different kinds of direct benefits.



Other direct benefits include a stock-loss compensation scheme, funds to assist members with funerals, and superannuation for retired employees. The Conservancy has also purchased a vehicle for emergency transport of residents to medical facilities, built a vegetable garden (which was unsuccessful because of poor soils and elephant raiding), funded school renovations, and supported the running of a kindergarten (NACSO, 2004).

Employment is an additional benefit for one third of respondents. Permanent and casual jobs are offered by the Conservancy (officers, game guards, hunters). Tour companies also hire locals. Damaraland Camp directly employs about 20 residents and also enters into contracts with individuals for laundry services, vegetable production and firewood collection.

How benefits are calculated and distributed is the responsibility of the Conservancy committee, based on community input at the AGM. Committee members are elected by ballot for three-year terms. They each have a position, such as chair or secretary, or a portfolio, such

as meat distribution or predation – and meet at least quarterly (they are remunerated but it is not a full-time job). The chairperson is elected by the committee with community approval (in the past, the person with highest votes was automatically the chairperson).

The AGM is a key moment. A truck goes to all the villages to collect Conservancy members. Members are empowered to stand up and voice their concerns, and to influence the direction of community conservation. The committee reports to the community on activities, finances, and decisions made; the full membership in turn reflects on annual activities, debates and approves decisions, amends the constitution if necessary, and elects committee members (and can remove the committee through a vote of no confidence). Hidden, or informal, political dynamics no doubt complicate the functioning of these formal institutions. Such dynamics, however, were not directly assessed in this study, nor did they emerge as considerations during the interviews or during observation of the AGM.

5. LINKING BENEFITS, ATTITUDES AND BEHAVIOUR

5.1 Benefits and attitudes

Have Torra's residents – as a result of benefits – changed their attitudes towards conservation, or are they just tolerating the costs of wildlife and taking handouts when they can? Torra residents themselves clearly link benefits to attitudes. 37 out of 44 respondents stated that benefits had influenced their attitudes. Almost all (41) of the respondents agreed with the statement 'Now that I have received benefits, I support conservation because I see that it can bring me benefits like money and meat'; 35 out of 44 said they would be even more supportive of conservation if they received more benefits.

A decade ago, before CBNRM, socio-ecological surveys indicated that people in the region were committed to wildlife for cultural and aesthetic reasons, but were alienated from wildlife as a resource (Jones, 1993, 1995, 1999a). As people bore only the costs of wildlife and received no benefits (such as being allowed to hunt), people had negative attitudes towards the way conservation was implemented. In our survey, 32 of 44 of respondents said they were not supportive of conservation programmes before receiving benefits. They explained their frustration:

I had to live with wildlife and got nothing in return. (Interview #24)

When the elephants came, I saw that they destroyed everything and anything. I didn't care if someone would come and shoot them... The only good thing about wildlife was when they were in the pot. (Interview #36)

Conservation was belonging to the government and we didn't get any benefits. The only benefit was if you hid behind a tree with a bow and arrow but you were still stealing. (Interview #6)

Respondents explained that before the Conservancy they had resented the way conservation was implemented, yet that they were already concerned about resource degradation:

I was concerned about people cutting trees and poaching illegally. I thought the future generation would not see the trees and the wildlife and that worried me greatly. (Interview #8)

Even though I hunted, I believed in conservation. I saw that the hunting causes animals to die out so I stopped. (Interview #14)

Negative attitudes focused on how conservation was implemented, not the idea of conservation itself.

The 1990s move to establish conservancies (including devolution of power and distribution of benefits) demonstrably changed peoples' feelings. All respondents but one stated that they supported conservation action after they had received benefits, insisting that benefits had been very important in altering their attitudes:

I thought it [conservation] was a great idea because I can get benefits from it like money and meat. (Interview #5)

I appreciated the money. I could buy things and I felt more supportive of conservation because it gave me opportunities that I didn't have before. (Interview #20)

Now I feel good because they are protecting the animals and plants and it is good for me because I benefit, and I feel very happy. (Interview #8)

When I got meat I felt that conservation was a good thing and I thought that maybe in the future I will get more benefits like money and meat. When I got money and meat I changed my attitude because I saw that the future generation would be able to see the wildlife with their own eyes... I will support conservation even though the lion killed my donkey and the elephants ruined my garden.
(Interview #1)

Clearly, people's attitudes have changed and direct benefits have been important in this change.

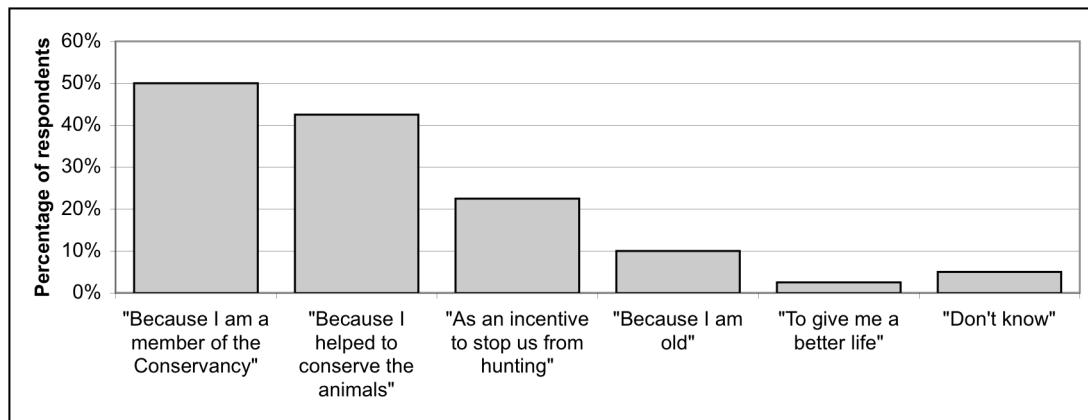
5.2 Benefits and behaviour

Have Torra's residents changed behaviours because of the advent of benefits? Two kinds of behaviour change can be tracked. The first is the stopping of anti-conservation behaviour such as poaching. Since the Conservancy was established, commercial poaching has ceased. In 2001 there were two incidents of small-scale illegal hunting. The culprits were apparently outsiders and in both cases charges were laid (Long, 2002); no additional instances have been reported.

The second kind of behaviour is participation in conservation, which all but one respondent said they did (over half said they participated 'a lot'). The principle means of participation are attending Conservancy meetings, community hunts, meat distribution, wildlife monitoring, office duties and 'giving advice'.

The link between such behaviour change and benefits is demonstrated by the answers to an open-ended question where respondents were asked why they thought they had received benefits (Figure 5). Two thirds of the respondents linked benefits to the behaviours of helping to conserve wildlife or stopping hunting:

Figure 5. Respondents' primary response to question "Why do you think you received these benefits?"



We get the benefits because we protect the wildlife and don't hunt any more.
(Interview #8)

If you don't conserve your area you will not have anything... there will be no tourists coming and no benefits coming in. (Interview #6)

[Benefits are] an encouragement to people to take more care to look after animals and let them feel responsible [for wildlife protection]. (Interview #36)

Torra residents are aware of the potential to benefit from wildlife conservation through tourism and how their behaviour can influence this.

If people link the benefits they receive to their actions on the ground, are they inspired to become more involved in conservation? Three quarters of the respondents said they would like to become more involved, and nearly all the respondents (40) linked the receipt of benefits to being more likely to participate. They listed several ways they might like to be involved: setting up facilities such as campsites, giving advice to the committee, serving as game guards, getting a job, looking after animals. Most wanted to be involved to improve their livelihood; some also wanted to be involved just to keep abreast of developments.

5.3 Behaviour and attitudes

Almost all the respondents stated that they both supported and participated in conservation. Is there a relationship between these supportive attitudes and conservation behaviours? Attending meetings, working as a game guard, or monitoring wildlife provided people with an insight into the value of conservation:

Through my involvement I have learned about conservation [and] now I'm much more interested in conservation. (Interview #32)

I have learned many things from conservation. When I worked for IRDNC [a local NGO] many people from overseas taught me a lot about plants and wildlife. It has given me an opportunity to become educated and gain employment and skills. I am happy about these opportunities and I feel really positive about conservation. (Interview #26)

People who participate may see more direct and indirect benefits than non-participants, predisposing them to more positive conservation attitudes.

6. A DEEPER LOOK AT BENEFITS

From the above, we may conclude that benefits at Torra Conservancy positively influence both attitudes and behaviours, and that participatory behaviours reinforced these attitudes. These findings, however, only scratch at the surface. Too much remains unstated or assumed: the specific types of benefits and how they are distributed and controlled, and the broader socio-economic context that makes it possible for motivational benefits to be more than just meat and money. The following sections open up this ‘black box’.

6.1 Are benefits appropriate?

Benefits need to outweigh costs, to be appropriate to peoples’ needs, and to be equitably distributed. The main costs at Torra are incurred because of predators (stock loss) and

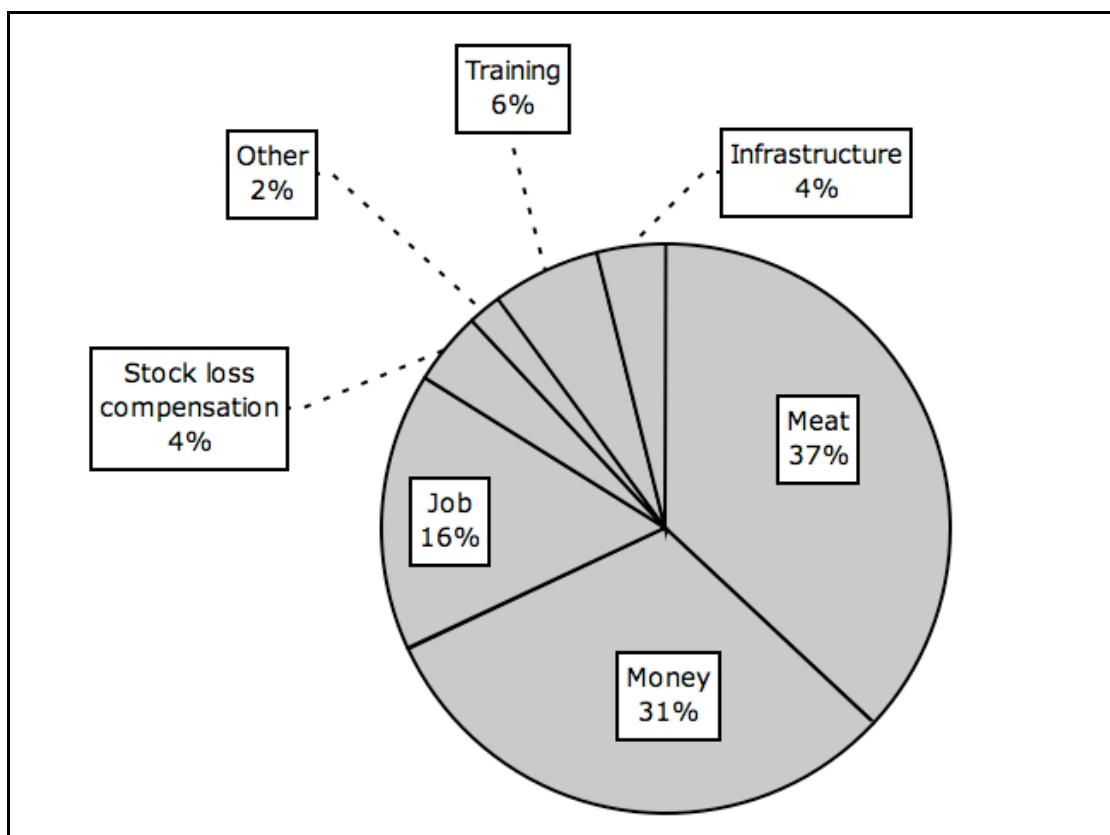
elephants (damage to water points, kraals and crops). Benefits address these costs directly, particularly the stock-loss compensation scheme:

If jackals eat my goats and the community works with me and helps me then it is ok. (Interview #32)

Compensation [for stock loss] is just as important. When you lose your animals we now get compensation. At least you get something, because if we don't [and] a poor farmer loses five of his ten goats, there is no way that person is going to understand about conserving that lion... he is going to make his plan to kill him. (Interview #44)

Torra residents identified meat, money and jobs as the most important direct benefits influencing their attitudes towards conservation (Figure 6). The frequent and regular provision of meat was particularly significant and appropriate:

Figure 6. Respondents' primary response to question "Which benefit influenced your attitude towards conservation the most?"



I'm a Damara boy, my staple food [is] meat, porridge, seeds and milk. Therefore it is interesting for me [when] someone gives me a piece of meat and drops off money also. These benefits encourage one to get a lot more involved [in conservation] because we are family people [and want to provide for our family].

(Interview #44)

Community hunts increase local food availability. Hunting and distributing meat also creates local jobs, which is appreciated, and means that stock can be kept as a safety net and sold or consumed in times of stress: '*I was very happy because I got meat and didn't have to slaughter my goat*' (Interview #35; Long, 2002). The fact that hunting can now legally take place during community hunts (as opposed to the past, when all hunting was illegal), may contribute to helping the community rebuild links to important historical cultural traditions.

The cash dividend was also important, because it was distributed individually (which meant that each member was able to decide how to spend it), and because it arrived at a key moment (the beginning of the school year).

Not only were the benefits appropriate, but also they were equitably distributed. Despite some complaints – two respondents reported being overlooked or getting smaller portions (Interviews #9 and #15) – 71 per cent of respondents agreed or strongly agreed with the statement that 'benefits from the conservancy were fair and evenly distributed'. In small, tight-knit communities like Torra, benefit distribution is very public, and people are empowered to voice their concerns in forums like the AGM.

6.2 Who has control?

When people feel that conservation is something done *by* them, not *to* them, they are empowered. This may change their attitude because they can see it as something that they have ownership over, and it helps link benefits to conservation outcomes. People are happy about having control over the Conservancy, given past animosities:

I didn't feel very good about it [conservation in the past]. We helped the Nature Conservancy but they didn't respond and give us help in return... [Now] I am so proud of conservation and what we have achieved. I'm so proud to host people

and inform them about what we've achieved and the challenges now facing us.
(Interview #35)

I have the law in my own hand to conserve wildlife. That is not what happened under Nature Conservation. Now they give it [wildlife] to the community to control. [Interviewer's question: As a result, are you more or less likely to participate in conservation?] More likely. Now I understand about conservation and conserve myself. Before the benefits I was a man of nature, but the Conservancy has taught me a lot of things and has inspired me to get more involved... Conservation is a really good idea... I am very proud of Torra Conservancy and very happy about the way we get benefits. I am so happy I want to laugh. (Interview #14)

Now that they have control of the process, the government is no longer seen as an outside imposition but as a source of help, for example when the Ministry of Environment and Tourism helps solve elephant and predator problems.

6.3 The broader community context and intangibles

The provision of appropriate, locally controlled material benefits has clearly facilitated conservation-friendly attitudinal and behavioural change. However, the role of benefits has been supported by three factors in the Torra community: (1) a culture of concern for, pride in and attachment to wildlife and landscapes, (2) the shaping of a shared identity and sense of belonging out of the disruptions of colonial and apartheid history, and (3) the hopes pinned to conservation as the sole viable driver of regional development and future livelihoods.

First, community conservation has gained so much support from people in Torra because, in part, it is built upon an existing conservation ethic (Jones, 1995, 1999a,b; Ashley, 1998). In the past, poaching occurred but people were still concerned about the disappearance of wildlife (Jones, 1999b). Our interviews reconfirm these concerns in the present, and show that people see wildlife conservation as a benefit:

Wildlife must be protected, we just gotta protect it. (Interview #14)

Wildlife is as important to me as my livestock, we must care for it. (Interview #1)

Conservation is a benefit, [the fact that] the animals are protected [is a benefit] ... [Having wildlife in the area is] very important because you can inform you kids about wildlife, and show them while you are teaching them. They don't have to hear about it on radio or TV; they can see it physically. (Interview #36)

The fact that untouched wilderness can remain is a benefit. (Interview #6)

I want the wildlife to be here so we can show the people who come from overseas. (Interview #33)

People may have spurned conservation action in the past, but this was due to its exclusive, top-down nature.

The second factor is the role of conservation in building a sense of identity, or the way a person feels different from or similar to other people (Luhrmann, 2001). A community such as Torra, marginalised by colonialism, forced removals and apartheid, and consisting of different ethnic groups living together under difficult economic conditions, could easily splinter. Through the Conservancy, however, people gained a shared sense of pride and identity:

I felt proud of our conservancy. Proud of what we had achieved. (Interview #41)

Now I am very happy [because] I realised and recognised that I was a member. I was happy that they acknowledged me. (Interview #18)

[Participating in conservation] made me feel like a member. I felt as though I belonged. (Interview #19)

Being a part of a conservancy plays a significant role in shaping people's identity (Ashley, 1998). This in turn encourages people to support goals such as establishing tourist enterprises or desisting from hunting, and thus promote the success of conservation.

The third factor is the hope pinned to conservation (and associated tourism) as the only sustainable option for regional development. The Conservancy's aridity and distance from urban markets makes other avenues of regional development unlikely (however, this has not –

to our knowledge – been formally assessed through an economic survey or market assessments). People in Torra recognise this:

In the old days I got nothing from wildlife, now I get benefits and see development in the area and I feel much more positive about conservation. (Interview #11).

I feel that conservation is a great opportunity for us, for the community... That's why we came back to farming because there are job opportunities now. (Interview #36)

Conservation is very important to me because it may give me a job in the future. (Interview #43)

Conservation, and the associated income, training, jobs, and development, emerges as an inspirational emblem in an uncertain environment (Ashley, 1998). People hope that it will allow them to provide for their families, and provide a livelihood for their children in the future:

I didn't want to give up my Tsaurob grazing land to Damaraland Camp but [a friend] said that we would benefit in the future. They explained that it would bring jobs for the community. This made me change my mind because I can't give money to the young people, but by giving my land I was able to indirectly give them job opportunities to provide them with money. That is why I gave my land, and that is why I support conservation. (Interview #2)

I felt it was a good idea to have conservation because by protecting them it will give a good plan for our small children. (Interview #28)

Intangible benefits such as hope, identity and wildlife conservation amplify the effects of material benefits in influencing peoples' commitment to conservation. They also increase the likelihood that any future removal of material benefits or advent of better economic alternatives does not endanger conservation. In support of this, all but two of the respondents said they would still support conservation even if they no longer received benefits. Thus, while material benefits may cement existing conservation ideologies, it is these contextual and intangible factors that garner local people's commitment to conservation.

7. CONCLUSION

What explains the success of community wildlife management at Torra Conservancy, recognised as a flagship in Namibia and beyond? Our research finds that wildlife benefits foster conservation-friendly attitudes and behaviours when three conditions are met: appropriate benefits, local control and a conducive context. When these ‘black box’ conditions (Figure 1) are not addressed, the relationship between benefits and conservation outcomes can founder.

First, the material benefits provided to Conservancy members are specific, equitable, appropriate and sufficient. They specifically address both the immediate costs of conservation (e.g. wildlife depredation) and wider community needs (e.g. school fees), and their distribution is largely seen as equitable. The obvious implication for planners is to aid community conservation programmes in identifying benefits that are contextually appropriate and equitably distributed. It should be noted that it is easier for benefits to be sufficient when fewer people are involved. Torra’s small population allows each individual member to benefit significantly.

Second, if management is not devolved to the community level it is less likely that benefits will be as appropriate or that people will identify as strongly with the conservation project. With devolution, people gain ownership over resources and the benefit process, and benefits become more than just a kind of ‘bribe’ for good behaviour. Devolution addresses the poverty of access to power and decision making. On the basis of this finding, conservation planners should support the momentum towards community based approaches, and seek to empower representative local institutions that are both legitimate and accountable to their members (Ribot, 2004) and that have adequate capacity and durable structures for good governance (Balint & Mashinyab, 2006).

Third, a conducive local context is crucial for supporting positive benefit-conservation relationships. The small number of Torra residents come from dispossessed backgrounds and have few economic opportunities in this marginal location, but they share a concern for wildlife. In this context, community based conservation has intangible benefits of an aesthetic, emotional and aspirational nature. Torra Conservancy reinforces local concerns for

and attachment to wildlife, helps shape a shared identity, and gives hope for regional development and improved rural livelihoods. Such intangibles can make or break community conservation programmes. Any conservation planner must thus seek to understand the broader socio-economic context of the communities they are working with. Well-crafted programmes, particularly with local control, will build upon these intangibles and lay the foundations for more sustainable, longer-lasting conservation.

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