

# Transfrontier conservation areas: Integrating biodiversity and poverty alleviation in Southern Africa

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## Abstract

*Sub-Saharan Africa continues to face the daunting challenge of alleviating poverty due to slow economic growth. In southern Africa, most countries are adopting policies that promote the integration of biodiversity conservation and rural development to contribute to rural poverty alleviation. Numerous approaches have been undertaken in this endeavour, including Transfrontier Parks (TFPs) and Transfrontier Conservation Areas (TFCAs). This paper discusses some of the limitations of the TFPs. In conclusion I posit that unlike TFPs, which are state controlled and managed, TFCAs, which promote multi-land use and multi-stakeholder participation are attainable and have a higher probability of sustaining biodiversity conservation and contributing to the alleviation of rural poverty, if: (i) areas of high biodiversity conservation within communal areas can be identified, zoned and leveraged to biodiversity conservation and managed in partnership between the communities and the private sector; (ii) local communities can secure legal rights to their customary land being devoted to biodiversity conservation and use such pieces of land as collateral in negotiating partnerships with the private sector in developing conservation-based enterprises; (iii) functional community natural resource governance institutions can be established and empowered to represent their constituencies in securing fair equity from profits made from sustainable use of the conserved biodiversity assets and tourism businesses; (iv) concerted effort can be invested in developing and implementing family planning and fertility reduction strategies that would slow down human population growth to levels that can be sustained by the available natural resources; and (v) if sustainable financing mechanisms can be developed, and the governance of protected areas occurring in the TFCAs can be broadened to include other stakeholders.*

*Keywords:* Biodiversity conservation; Transfrontier conservation areas, Poverty alleviation.

**Disclaimer:** The views expressed in this paper are entirely those of the author, and do not necessarily represent those of the organization he works for.

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## 1. Introduction

Poverty in all its manifestations (including denial of opportunities and choices most basic to human development to lead a healthy and creative life and enjoy a decent standard of living, freedom, dignity, self-esteem and the respect of others) is pervasive in sub-Saharan Africa. UNEP (2003) estimated that at least 313 million people earn less than US\$1 per day, and that this number may increase by 9% by the year 2015, contrary to the United Nations Millennium Development Goals' proposition that the proportion be halved during the same period. The anticipated increase in poverty is due to the economic under-performance of most sub-Saharan countries — a

situation which can be attributed to a number of interrelated factors. Notable among these are: the recurrence of natural episodic events (drought and floods), which lead to famine, malnourishment and under-performance of the human capital, especially in rural areas; armed conflicts in some countries (e.g., Angola, Democratic Republic of Congo, Somalia and Sudan), which besides killing innocent people, contribute to the destruction and loss of the valuable economic assets (forests, and wildlife); and external factors, such as the competition that results from the liberalization of international trade due to globalization and increases in agricultural subsidies in developed countries (Anon, 2005) which basically paralyse African agricultural economies.

Faced with this challenge, and in order to achieve the Millennium Development Goals (MDGs), sub-Saharan countries are adopting various multi-sectoral policies and strategies aimed at alleviating poverty. One such approach

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is the integration of biodiversity conservation and rural development. This approach is not entirely new; attempts that have been made in southern Africa to foster natural resource management as a platform for sustaining both biodiversity conservation and contributing to rural livelihoods include: (i) establishment of various types of state-controlled protected areas and private nature conservancies; and (ii) community-based natural resource management (CBNRM) programmes. The latter have been widely adopted by governments in southern Africa as a means of promoting sustainable land use, biodiversity conservation, rural development and harmony between the states and the rural communities, who have traditionally been branded as poachers or degraders of the environment.

In this paper the term 'protected area' denotes an area of land and/or sea especially dedicated to protection and maintenance of biological diversity and of natural and associated resources and managed through legal, or other effective measures (IUCN, 1994). CBNRM entails the management of natural resources under a broad rubric encompassing a wide range of resource management programmes that share a recognition of the participation of those people who live near, or interconnected with natural resources (Lyons, 2000). It is also defined as a broad spectrum of new management arrangements and benefits-sharing partnerships for the involvement by people who are not agents of the state, but who, by virtue of collective location and activities are critically placed to enhance the present and future status of natural resources, and their own well being (Metcalf, 1994). The approach is community based because the communities managing the resources have, or are supposed to have, the legal rights, the local institutions and the economic incentives to take substantial responsibility for sustained management and use of these resources.

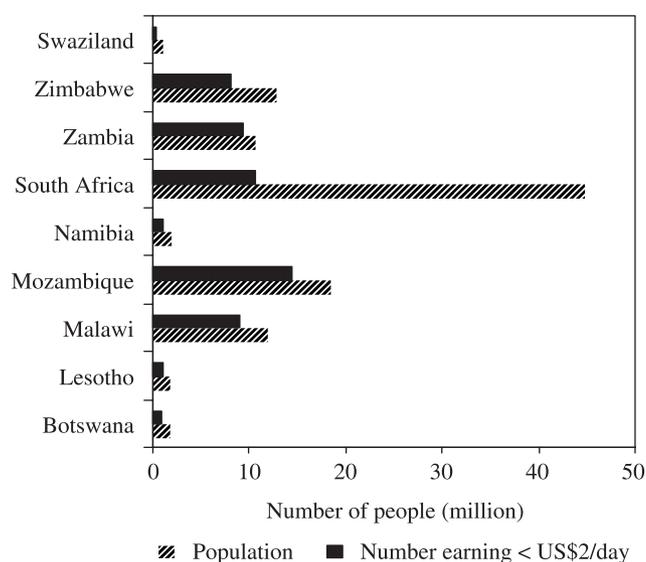
The performance of both protected areas and CBNRM with respect to maintaining the integrity of ecosystems, conservation of biodiversity and sustaining rural livelihoods is increasingly being scrutinized by non-governmental organizations, and natural and social scientists. Irrespective of the under-performance of both protected areas (Cumming, 2004; Child, 2004), and CBNRM programmes (Josserand, 2001; Barrett *et al.*, 2001; Songorwa, 1999; Murphree, 2002), a new and more complex conservation paradigm of espousing transboundary ecosystem management — the Transfrontier Conservation Area (TFCA) concept — is being widely promoted in southern Africa. A TFCA can be defined as a part or components of a larger ecoregion that straddles the border between two or more countries, encompassing one or more protected areas as well as multiple-resource areas for the use of communities and private landholders, managed for sustainable use of natural resources (Singh, 1998). The concept recognises that borders are political rather than ecological, and aims to ensure that key ecological processes continue to function where borders have divided ecosystems,

river basins and/or wildlife migration corridors. Although this concept is not new, it has theoretical appeal in southern Africa because it integrates ecosystem conservation and socio-economic development at the transboundary landscape scale.

The main ecological reasons for establishing TFCAs are to: (i) protect internationally shared ecosystems, such as watersheds and biodiversity assets; (ii) increase the area available for wildlife and plant populations thereby reducing the extinction risk due to stochastic events; and (iii) re-establish seasonal migration routes. Besides ecological reasons, the TFCA concept is being accepted as a means of increasing economic opportunities, decreasing cultural isolation, as well as fostering cooperation in a bilateral and regional framework (Singh, 1998). TFCAs in essence, embrace, in a complementary manner, all types of conservation models being practised in southern Africa (conventional state protected areas, private conservancies, and CBNRM). The TFCA concept has appeal because it encourages the formation of alliances between different stakeholders (governments, the private sector, local communities, and non-governmental organizations) as a means of developing consensus and enabling the available finite skills and resources to be maximized in promoting sustainable land use, biodiversity conservation and alleviating poverty in rural areas. The commitment by the Southern African Development Community (SADC) to establish TFCAs has been formalized in its regional Treaties, such as those on Wildlife Conservation and Law Enforcement, and Shared Water Resources and Tourism, and has been accepted by the New Partnership for African Development (NEPAD) as a tool for promoting conservation of shared biodiversity and promoting tourism development for the benefit of rural development.

However, although the impetus and political will to establish TFCAs is high, there are fundamental disparities among the promoters (NGOs and donors) and implementers (governments) of TFCAs in their perception of the concept, and in the policies that relate to wildlife management in general and local community participation in the TFCAs' development process in particular. The promoters of the TFCA concept believe it is a strategic spatial development programme aimed at consolidating biodiversity assets, integrating management procedures and thereby expanding opportunities for both conservation and rural development.

Its implementers on the other hand have wrongly perceived the concept as an expansion of protected areas at a cross-border scale (i.e., Transfrontier Parks), managed by the state at the expense of rural communities' interests. Through their emphasis on state ownership and control, Transfrontier Parks are no different in principle from other national parks, where local communities are usually marginalized into buffer zones, and peripheral economic activities such as menial jobs as cooks, labourers, or guards. It is not known why governments have preferred TFPs to TFCAs. However, the preference for TFPs which



**Figure 1.** Population and number of people earning less than US\$2/day in southern Africa (graph based on data provided by UNDP, 2004). Data on Angola were not available.

are solely governed by the state has far-reaching consequences that may seriously impede the integration of biodiversity conservation and rural development in southern Africa.

This paper discusses some of the major challenges that impede the development of Transfrontier Parks (TFPs) in southern Africa, and proposes the adoption of TFCAs as an alternative for contributing to sustainable biodiversity conservation and tangibly alleviating rural poverty.

## 2. Major challenges in developing Transfrontier Parks in southern Africa

In a typical top-down approach, government officials have dominated the process leading to the establishment of the TFPs. Currently there are at least four officially established TFPs; the Kgalagadi between Botswana and South Africa; the Maloti-Drakensburg between Lesotho and South Africa; the Great Limpopo shared by Mozambique, South Africa, and Zimbabwe; and the Nyika between Malawi and Zambia. These TFPs are being developed on the principles of a Category II protected area, which according to IUCN (1994), is an area designated to: (a) protect ecosystems integrity, (b) exclude exploitation, or inimical occupation for the purposes of designation of the area, and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities. Stakeholders, i.e., individuals or groups with a direct interest in the resources within the TFPs, such as local communities and the private sector have largely been ignored in the process of establishing the TFPs, and are not represented on their development and management boards; consequently, overt and latent conflicts characterize the development of TFPs, thereby imposing a

major obstacle for achieving their conservation and rural poverty alleviation objectives. Many of these challenges have been discussed by Duffy (2006); Hughes (2002); Munthali and Soto (2002); Hutton *et al.* (2006); Wolmer (2003). The more critical among these challenges are looked at below.

### 2.1. Communities' perception of protected areas

Establishment of protected areas, such as parks has, in many past instances, been associated with rural communities being forced off their land, or being deprived of access to land. The term “park” by itself evokes different reactions from different people. There are widespread suspicions among communities that new or expanded national parks will limit agricultural and grazing land and become a playground of the rich to the detriment of local needs (de Villiers, 1999). These fears are valid because in developing the TFPs, their advocates (the states) prefer seeing communities relocated to areas outside the TFPs — a pursuit that is generating anger and outrage among the rural communities. As cautioned by Cernea (1997), a number of risk scenarios would ensue if local communities were forcibly displaced from their ancestral land (Table 1).

An example of the most controversial community eviction is that recommended for the Great Limpopo Transfrontier Park (GLTFP), where at least 2,500 resident Shangaan people are being encouraged to relocate from the Limpopo National Park (a constituent of the GLTFP) in order to create extra space for wildlife and make the park more attractive for private investment. Eviction of the park's residents would contradict the Mozambican government's own land law, which states that, local communities:

- (i) individually, or collectively are entitled to have rights for the use and enjoyment of the land, as long as they have occupied such land for ten or more years;
- (ii) are entitled to use land without any period limitation, or payment of fees, and take part in:
  - management of natural resources;
  - allocation of the right to use and enjoy the land;
  - identification and definition of the boundaries of the land they occupy; and
  - solving land use conflicts.

Furthermore, it would be inhumane for the Mozambican government to contemplate forcibly evicting local communities that had previously been displaced by the civil wars of the 1970's and 1980's for the sake of expanding wildlife habitat.

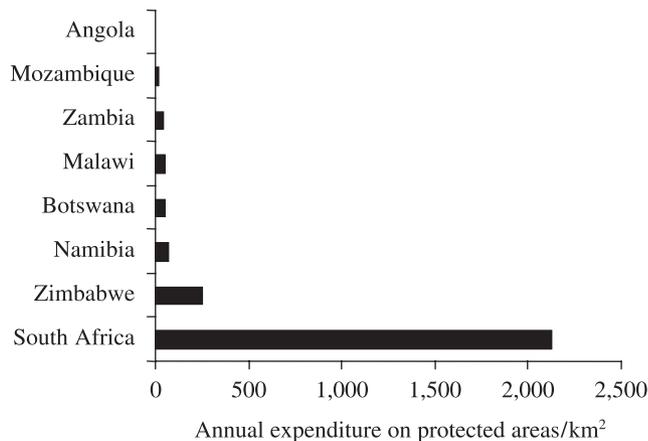
### 2.2. Ineffective protected areas management

Most governments in southern Africa are failing to sustain effective management of their protected area systems principally due to insufficient funding (Fig. 2). Insufficient

**Table 1. Risk scenarios associated with eviction of communities from the TFPs (adapted from Cernea, 1997)**

Risk scenario	Consequences
Landlessness	Removal of the main foundation on which people build productive systems, and livelihoods. Main form of de-capitalization and pauperization of the people who are displaced, because both natural and man-made capital is lost.
Homelessness	Loss of housing and shelter may be only temporary for many people, but for some it remains a chronic condition. Loss of a group's cultural space and identity, or cultural impoverishment.
Marginalization	Loss of economic power and slide down towards lesser socio-economic positions: middle income farm-households become small landholders; small shopkeepers and craftspeople lose business and fall below poverty thresholds, etc.
Increased morbidity and mortality	Increased vulnerability to illness, which tends to be associated with increased stress, psychological traumas, and the outbreak of parasitic and vector-borne diseases. Serious decreases in health levels may result from unsafe water supply.
Food insecurity	Diminished self-sufficiency in food supply, thereby increasing the risk of chronic food insecurity, i.e., calorie-protein intake levels below the minimum necessary for normal growth and work.
Loss of access to common property	Poor farmers, particularly those without assets, suffer a loss of access to the common property goods belonging to communities (e.g., loss of access to forests, water bodies, grazing lands, etc.). This represents a form of income loss and livelihood deterioration that is typically and usually uncompensated when communities are being displaced.
Social disintegration	Dismantling of community structures and social organization, the dispersion of informal and formal networks, local associations, etc. is a massive loss of social capital. Such disintegration undermines livelihoods in ways uncounted and unrecognised by planners, and is among the most pervasive causes of enduring disempowerment and impoverishment.

Source: Cernea (1997).



**Figure 2.** Expenditure in US\$/km<sup>2</sup> in state protected areas in southern Africa.  
Source: Lindberg, 2001; Cumming, 2004.

funding is caused by a number of factors. These include human population explosions (which inevitably increase the demand for social services impelling governments to increase financial investments in these services), poor fiscal policies that can be attributed to financial under-investment in protected areas' management. In situations of high demand for scarce financial resources, protected area agencies compete for funding with pressing demands from other sectors, such as education, housing, health, defence and agriculture. McNeely (1994) has discussed reasons for protected areas' inability to attract government funding. Inadequate funding of protected areas has negative implications on a number of management inputs (infrastructure,

personnel and equipment); management processes (law enforcement, ecological and socioeconomic research, etc) and on monitoring management outputs against the protected areas' objectives, and management inputs. With inadequate funding, most state protected areas agencies are unable to employ sufficient numbers of qualified staff and fail to provide the requisite infrastructure and equipment that can capably fulfil the management requirements of protected areas. This has led to situations where protected areas have personnel capacities that are below threshold to fulfil their mandates (e.g., law enforcement), leading to the decline in populations of some wildlife species (Cumming, 2004). The threshold operational budgets to undertake effective law enforcement for African protected areas is estimated at between US\$200–230/km<sup>2</sup> (Lindberg, 2001). This threshold is at least met by South Africa and Zimbabwe, where protected areas are managed by parastatal agencies, which function like private companies within government.

With disparities in capacities to finance and manage state-controlled protected areas among the southern African countries (Cumming, 2004), it is doubtful if TFPs would be effectively developed and managed to sustain biodiversity conservation and fulfil an additional mandate of contributing to poverty alleviation. At an individual country and protected areas' level some of the approaches that have been attempted to address human socioeconomic needs include: resource harvesting from protected areas; revenue sharing between protected areas and local communities; border/buffer zone development; private sector management — with a focus on expanding local employment opportunities; and co-management of protected

areas (usually between government, and local communities). None of these approaches seems to have tangibly contributed to rural livelihood security, although co-management programmes have shown better potential (e.g., between the Makuleke community and SANParks in South Africa; Malawi's Lengwe national park and its neighbouring communities, and Mozambique's Niassa game reserve and its resident communities) — requiring further evaluation and development.

Since experience to date shows that most governments lack capacity to effectively manage protected areas, the same problem would frustrate the effective development and management of TFPs; hence a better alternative would be the TFCA model which is discussed below.

### 3. Transfrontier Conservation Area (TFCA) Model

The TFCA model addresses issues of inadequate capacity within the states' protected areas agencies by consolidating multi-stakeholder skills and resources in promoting effective biodiversity conservation and poverty alleviation. Such a coalition is long overdue in southern Africa where over the past two and a half decades approaches to biodiversity conservation have progressively evolved from a focus on state protected areas to the development of complementary models, notably the development of Private Conservancies, and CBNRM. These models have however generally progressed independently at an individual country level. The TFCA concept's vision is to integrate these models at national and cross-border landscape scale as a means of promoting connectivity and complementary approaches to sustainable land use and biodiversity conservation. In addition, the four types of governance that were identified during the 2003 World Parks Congress, namely: (i) government protected areas; (ii) co-managed protected areas; (iii) private protected areas; and (iv) community conserved areas, would be acquiescent with the TFCA model.

Moreover, the TFCA concept in the southern African context aims to convert vast communal lands, which are marginal for conventional agriculture to effective biodiversity conservation and tourism development — as a complementary economic development model in agriculturally marginal areas. This would be achieved through securing and consolidating community rights over their customary land and other natural resources, particularly forests and wildlife.

Under a TFCA model, the potential for biodiversity conservation to contribute to poverty alleviation would be realised if the following were done.

#### 3.1. Within communal areas

##### 3.1.1. Securing communal marginal lands and allocating them to biodiversity conservation

Secure land tenure is the basis upon which communities can meaningfully participate in biodiversity conservation

programmes. This need is being recognised throughout southern Africa, where land issues and their relation to poverty have stimulated high-profile debate, more particularly in response to the scramble for land in the context of privatization and a search for foreign investment (Palmer, 1997). Land held under various forms of communal tenure has come under serious threat. Consequently, debate on land reform and provision of secure land tenure systems to the often-disenfranchised local communities has been given centre stage by the governments, donors, civil society and NGOs. Most countries in southern Africa have over the past twelve years enacted new land laws, which accommodate the new political, economic and social context and guarantee access and secure tenure to land by their people, including local communities.

The process of legally securing communal areas should be coordinated and facilitated by NGOs. NGOs could mobilize stakeholder participation (local governments and private land owners) in delineating customary land, allowing communities to reach consensus on the boundary of what they perceive to be their land. This could coincide for instance, with the lineage territory over which communities have jurisdiction over land and other natural resources, such as forests, water, wildlife and pasture. By using the extant land laws of the countries involved in the development of TFCAs, each community occurring within the TFCAs should be given legal rights over land and the attendant natural resources (forests, water, pasture and wildlife). Since not all community-owned land would be suitable for biodiversity conservation, NGOs should also assist communities in identifying and zoning land that has high biodiversity value and enterprise development potential. A number of approaches have been developed for identifying sites for biodiversity conservation, such as the Rapid Biodiversity Assessment (Abate, 2002), Site Conservation Planning (AWF, 2005; TNC, 2000), and Use of Biodiversity Surrogates (Williams *et al.*, 2002). Any of these, or similar objective approaches can be used to identify sites of high biodiversity value within the community-owned lands.

##### 3.1.2. Economic valuation of communal lands being allocated to biodiversity conservation

In addition to identifying sites of high biodiversity significance within communal areas, it is crucial to identify the most economically and environmentally viable land use options. The main focus for economic analysis and evaluation (e.g., Barnes, 1998) would include:

- agro-pastoralism, which is the most prevalent form of land use in most rural areas — based on small-scale, risk-averse, low input livestock husbandry;
- subsistence agriculture, characterized by low-input, low-yielding crop production, based on cereals (maize, millet and sorghum) and pulses (beans and peas), often restricted around wetlands and areas with some fertile soils, such as the riverine areas;

- subsistence utilization of wildlife and non-timber forest products; and
- the potential for commercial wildlife production on community-owned land — including wildlife viewing tourism, game ranching, safari hunting and similar commercial ventures.

To determine the optimality for biodiversity conservation in rural marginal areas, the following equation could be used (e.g., Pearce, 1996):

$$BC_{OP} = [B_C - C_C - (B_A - C_A)] > 0; \text{ where:}$$

$BC_{OP}$  = biodiversity conservation option

$B_C$  = benefits of biodiversity conservation

$C_C$  = direct costs of conservation  
(e.g., surveillance, monitoring, etc)

$B_A$  = benefits of alternative land use  
(e.g., pastoralism, subsistence agriculture, etc)

$C_A$  = costs of alternative land uses  
(pastoralism, agriculture, etc)

Although some difficulties may be encountered in fully quantifying the benefits of biodiversity conservation, economists have developed a variety of techniques for valuing biodiversity. These include market-based and revealed preference and stated preference techniques (Department of Environment and Heritage, 2005).

Assessing the economics of various land uses is particularly essential in southern Africa, where despite numerous policy reforms little has been done to determine optimal land use options. Blanket adoption of agriculture and livestock husbandry, even in marginal areas, has led to a vicious cycle of poverty and land degradation.

According to Ashley *et al.* (1994) and Barnes (1998), commercial wildlife production and use contribute much needed cash, and are complementary to other household coping strategies such as livestock husbandry and crop production in the semi-arid areas of southern Africa. Barnes (1998) further adds that commercial wildlife utilization has high economic efficiency in areas close to, or in areas where wildlife conservation is being practiced. Therefore by assisting communities in identifying areas of high biodiversity conservation value, and zoning these areas for commercial wildlife production and utilization, the potential for communities to generate revenue over and above their normal subsistence and household earnings would be enhanced. This would be further enhanced by establishing biodiversity corridors to link various conservation areas at a TFCA landscape scale, and formalizing partnerships in the management of the shared biodiversity assets and joint promotion of their sustainable use.

### 3.1.3. *Establishing community collective natural resources governance institutions*

One of the most vital elements to sustaining the integrity of the land secured and leveraged to biodiversity conservation is the establishment of local governance institutions in the form of a Community Property Association, Associação (as is the case in Mozambique) or a Community Trust, which represent the community's interests in:

- consolidating their rights to land and biodiversity assets;
- negotiating partnership arrangements with private investors in the management of land, natural resources and tourism development; and
- promoting collectiveness in harnessing equitable sharing of benefits from natural resource management and use on customary lands.

These local institutions need capacity building to ensure that they secure continued access to benefits, which in turn would provide a strong incentive for sustainable resource management, and delivery of a wide range of environmental services.

### 3.1.4. *Development of functional community-private partnerships*

Rural poor communities require functional and legally binding community-private partnerships to tangibly benefit from biodiversity conservation. The communities could use their land and forest and wildlife resources as collateral in negotiating fair equity in the profits made from commercial forest and wildlife utilization ventures. The main driving force for community-private partnerships stems from the fact that some communities may have valuable tourism assets, such as wildlife and/or wilderness aesthetic appeal, but they do not have the resources to set up profitable enterprises on their own.

Community-private partnerships are formalized by contractual agreement between the community (usually represented by a Community Development Forum, Associação, or Trust), and the private investor. Examples include agreements where the private investor extracts specific natural resources, such as timber, fish, or promotes safari hunting, or builds a lodge for tourism purposes on a time-bound lease. Some private investors have exploited these partnerships by using them to obtain loans using community land as collateral, leaving the communities with large debts, e.g., Phumulani lodge in South Africa (Spenceley, 2003). In other cases the communities only benefit as labourers or the benefits received by the community are significantly below the opportunity cost of committing their land to biodiversity conservation and tourism development. This has led to a widely-held perception that CBNRM in southern Africa has only benefited the private sector. NGOs should proactively monitor compliance with contractual agreements under community-private partnerships and build relevant capacity for communities to fairly benefit from such partnerships.

The success of a TFCA partnership requires that:

- the states proactively provide a policy and legal enabling environment for communities to use their customary land as collateral in securing partnerships with the state and/or private investors in biodiversity conservation programmes and enterprise development;
- the private sector brings in the requisite environmental friendly investment capital, and contributes to the biodiversity management inputs and processes;
- the communities guarantee commitment of their land to biodiversity conservation, contribute to the management inputs and processes through provision of human capital and indigenous knowledge of the local resources; and
- the NGOs contribute to local institutional capacity building, conflict resolution in natural resource use — ensuring equitable sharing of benefits between the communities and private investors from biodiversity conservation; and contribute to management inputs through fundraising and investments in the management processes of community conservancies and monitoring their performance against their management objectives, inputs and outputs (e.g., biodiversity threat abatement, and contribution to sustainable rural livelihoods).

Ecotourism offers the highest hope for rural communities living in agriculturally marginal areas, and its prominence becomes even larger as agriculture production drops due to increasing natural episodic events (drought and floods), declining soil fertility, increases in the production costs and imposition of international trade liberalization due to globalization and provision of agricultural subsidies in developed countries. Tourism is considered the world's largest industry, with annual revenue of about US\$500 bn that is expected to double by 2010 (WTO, 2005). Africa's current contribution to the global tourism industry is a meagre 4.4% (WTO, 2005) showing that a concerted effort is required to improve its global share in this booming industry. Besides providing a legal and investment enabling environment, governments should endeavour to develop tourism supportive infrastructure, such as access road networks to rural tourism attractions, provide clean water for use by tourists and local communities, and invest in advertizing areas of high ecotourism attraction.

Additionally, the capacity of local communities to tap into the tourism industry could be enhanced at the TFCA level if governments, donors and NGOs:

- provide soft loans to communities so that they can build on and complement existing livelihood strategies through small enterprise development. Development of small and medium enterprises (SME), that are locally owned would provide competitive and complementary goods and services, that would reduce leakage of economic benefits out of communal areas;

- create mutually beneficial business linkages between the formal and informal sector, and ensure micro-enterprises and emerging entrepreneurs are promoted in local tourism marketing initiatives;
- build capacity among community members in business management, marketing skills and understanding of tourist expectations;
- facilitate local community access to the tourism markets;
- ensure the maintenance of natural and cultural assets; and
- demonstrate the comparative economic advantage of wildlife in and around the TFCAs as a tool for poverty reduction; and to minimize negative social impacts.

### *3.1.5. Slowing down human population growth*

The southern African population is estimated at 303.6 million (UNEP, 2003), and with an annual growth rate of 3%, it is expected to double by 2025. Increased human population has a direct impact on biodiversity conservation and poverty through: (a) increased demand for land for settlement and agricultural needs, leading to encroachment and reduction in wildlife habitat, a situation that is already very common in Malawi (Munthali and Mkanda, 2002); and (b) increased demand for protected wildlife resources to meet livelihood needs (both subsistence and commercial), which threatens wildlife's long-term survival. Overall increases in population pose a serious challenge for countries to halve the proportion of people living in abject poverty by 2015 as expected by the United Nations MDGs. Therefore, it is important to inform people about family planning and acceptable methods of reducing human population growth to levels that can be sustained by the available natural resources, and be meaningfully engaged in sustainable natural-resource-based business ventures.

## *3.2. In protected areas occurring within TFCAs*

### *3.2.1. Develop sustainable financing mechanisms*

Numerous recommendations have been proposed (see Conservation Finance Alliance, 2000) on how to sustainably finance protected areas. These propositions need critical examination and testing at either individual country and/or regional level.

### *3.2.2. Improve protected areas' governance*

Protected areas' governance is primarily about the sharing of power that affects protected areas' management and their stakeholders. Governance can be considered at the level of a broad conservation network, and/or at an individual protected area level, covering a broad range of issues, from policy to practice, and from investments to impacts. Governance has influence on the achievement of protected areas' objectives (management effectiveness), determines the sharing of relevant costs and benefits (management equity), and affects generation and sustenance of community, political and financial support (Borrini-Feyerabend, 2005). Reforming protected areas' governance may have far-reaching

positive implications in sustaining biodiversity conservation in southern Africa, and would be consistent with the attention protected areas' governance was given during the 2003 World Parks Congress and the Convention on Biological Diversity's (CBD's) 2004 Programme of Work on Protected Areas. The scope of governance has broadened the spectrum of constituents recognised as legitimate protected areas managers; broadened the perspective on what can be included as part of the national protected area systems; and introduced principles and values affecting what is perceived as possible and desirable for protected areas governance (Borrini-Feyerabend, 2005). In the context of southern Africa, the following governance systems have potential and should be further developed and perfected:

- Transforming state-controlled protected areas into parastatal agencies. This merits of this system include retention of revenues earned by the protected areas for resource management which is an incentive to raise additional funds. Additionally, the more autonomous and entrepreneurial approach to operations makes parastatal agencies more successful and better financed than government agencies. So far South Africa, Zimbabwe and Zambia have adopted this system of governance in southern Africa.
- Privatization of state protected areas. Although currently being tested in Malawi, Mozambique and South Africa, experience from Namibia, South Africa and Zimbabwe, where large tracts of land is under private wildlife conservancies, show that privately-owned conservancies perform better in terms of sustaining biodiversity conservation and commerce than state-controlled protected areas (Bond, 2004; de la Harpe, 2004). The performance of the privatized state-protected areas should be objectively evaluated and lessons disseminated widely for other countries to consider adopting the approach.
- Co-management of state protected areas. The current strides in developing functional co-management of protected areas need to be perfected to the level that they can be self-sustaining. This can be achieved if roles, responsibilities, costs and benefits of co-management are clearly understood by all stakeholders (primarily the governments' protected areas agencies, the affected local communities and the private sector investing in tourism development in and around protected areas). While the state and private sector have capital to bring into the co-management arrangement (land, wildlife, funds, etc), local communities often have nothing to contribute (except supplying cheap labour), hence where co-management of protected areas has been attempted (e.g., Malawi and Mozambique), communities have been the underdog — seeking cash handouts and low-wage employment. These benefits have not been sufficient to offset illegal off-take of the protected wildlife; hence co-management has generally not achieved its intended objectives. However since almost all protected areas in southern African have a history of community displacement when they were established, communities could contribute to the co-management regimes through the consolidation of their rights to the land they owned before they were evicted when the protected areas were established. This could involve re-zoning protected areas into territorial land units, i.e., the areas from which a particular community was evicted when the reserve or park was gazetted, or extended, and giving land usufruct rights to the evicted communities. These land units would however remain under conservation, but communities would use such land as capital contribution to the co-management arrangements. In so doing, the communities' status in the co-management framework would be greatly enhanced because they would be able to:
  - Directly negotiate with the state protected areas' agencies on terms of how they would like to participate in wildlife management and benefit from it;
  - Use their land as collateral in negotiating a joint venture business partnership with the state and/or private sector, especially in tourism development and marketing, and this would substantially enhance their revenue earning capacity from protected areas beyond employment as labourers, and dependence on meagre cash handouts from the state protected areas' agencies; and
  - Guarantee a seat on the management board of the protected areas; and hence guarantee participation in protected areas' key management decisions.

#### **4. Conclusion: Can TFCAs meaningfully contribute to poverty alleviation?**

In concluding this paper I revisit the question of whether TFCAs can meaningfully contribute to sustainable biodiversity conservation and alleviate rural poverty. The author of this paper concludes that TFCAs can contribute to both biodiversity conservation and poverty alleviation, as long as the recommendations above are implemented. This is the most difficult part. Experience so far shows that most governments fail to implement their own policies, including policies that promote community integration in biodiversity conservation and tourism development. This is also the case in land reform; many southern African countries have developed land reform legislations that have been poorly implemented by the governments, hence besides a few anecdotal cases (e.g., in South Africa and Namibia), rural poor communities have not benefited from land reform policies and legislation.

Additionally, political stability and provision of requisite infrastructure in rural landscapes are paramount requirements to effectively tap into the growing tourism industry. Most governments have tended to focus their infrastructural development efforts in urban areas, consequently constraining the potential for tourism development and opportunities for the rural people to participate and earn a living from tourism development and marketing.

On the other hand, there is an implicit assumption that tourism growth continues to be the engine for economic growth, and that southern African countries would seriously benefit from developing and marketing rural attractions to make them competitive in the global-tourism market. Failure to do so would render markets of the “products”, i.e., wildlife, non-existent, and consequently, the rate of return to conservation would fail to compete with the competitive rate of return to alternative land uses, such as unsustainable agriculture and livestock husbandry, hence accelerating environmental and land degradation in marginal areas.

Another challenge in southern Africa is the disconnection between the governments’ policy development processes and the scholarly debate on the links between biodiversity conservation and poverty alleviation. Mechanisms to bridge this gap as well as means and capacity for evaluating all biodiversity conservation programmes should be developed to ensure that they meet their primary objectives of maintaining ecosystems’ integrity, biodiversity conservation and tangibly contributing to the alleviation of poverty.

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