

INTRODUCTION

This paper is one of three concept papers commissioned by IUCN-ROSA, with support from the Ford Foundation, to help clarify understanding of trans-boundary natural resource management (TBNRM) in southern Africa. This paper focuses specifically on: a) a description of specific initiative in the region; b) an evaluation of the success of the initiative in improving management and conservation of resources; and c) an evaluation of the success of the initiative in benefiting local communities and other stakeholders. The policy and legal frameworks for TBNRM are not discussed as they are dealt with in a separate concept paper.

CHARACTERISATION OF EXISTING TBNRM INITIATIVES IN THE REGION

TBNRM has been defined as (Griffin *et al.* 1999):

“Any process of co-operation across boundaries that facilitates or improves the management of natural resources (to the benefit of all parties in the area concerned)”

For the purpose of this initiative, IUCN-ROSA has confined the definition of boundaries to international boundaries.

This is a broad definition and covers a number of activities and initiatives including attempts to link protected areas in neighbouring countries, projects to promote economic development such as Spatial Development Initiatives that cross international borders, and the informal arrangements that occur between communities in border areas.

These different activities vary widely in scope. Some focus on biodiversity conservation, some on sustainable use of natural resources by local communities, while others focus on large scale private sector investment. Some involve two countries, others apply to multiple countries. Many of these initiatives overlap in their scope or jurisdiction. In order to better understand TBNRM, its impacts or potential impacts, it is necessary to try to reach some definition of the different types of TBNRM activity that are taking place. The key variables which help define and distinguish particular TBNRM initiatives are:

- **Dominant Objectives:** what is the dominant objective driving the initiative? Is it biodiversity conservation, the expansion of protected areas, economic development, sustainable natural resource management, community benefit and empowerment? Is there more than one objective? If so is one more dominant than the other(s)?
- **Proponents:** Whose objectives and agenda are being promoted? Is it large international or national conservation NGOs, governments (central or district), the private sector, donors, large development banks, or is it a mixture? If so, whose agenda dominates?
- **Land Tenure and Ownership:** TBNRM initiatives can incorporate all forms of land tenure including state-owned protected areas, freehold land, and communal land. However, land tenure issues affect the relative power of local communities



in negotiations around TBNRM. Particularly where communal land is state owned or communities have no clearly recognised title, it is easy for governments to allocate this land for other purposes, such as private sector tourism development, or game reserves, ignoring existing customary use and title. Often proper compensation is not made to communities who lose land to large agricultural or ecotourism schemes.

- **Implementation Arrangements (who controls the initiative):** The organisational and implementational arrangements largely determine who controls the TBNRM process. For example, if the main decision-making body for a TBNRM initiative is a steering committee made up of government officials and international NGOs, then these will be the controlling interests.
- **Beneficiaries:** Benefits can be received at different levels and in different ways. For example, large-scale economic development approaches rely largely on a trickle down effect for reaching individual households. Other approaches directly target local communities. Benefits might be in different forms such as income from jobs and craft sales or improved range and agricultural management.

Using these variables, a rough typology of TBNRM initiatives has been developed and is summarised in Table 1 and described below. This typology is proposed as a guide to help provide a common understanding of various terms used to describe TBNRM activities. It should be noted, however, that such typologies have their limitations. Within individual initiatives there are often multiple agendas and approaches, and initiatives might in fact display the characteristics of more than one type. Despite these qualifications, the typology approach is useful for analysing the nature of a particular initiative. Table 2 summarises some of the key features of individual TFCA and TBNRM initiatives. Table 3 shows the number of each type of initiative with which each country in the region is involved.

Trans Frontier Conservation Areas (TFCAs)

This is used to describe an initiative in which the dominant objective is biodiversity conservation linked to protected areas. The agenda for TFCAs is usually that of state conservation agencies and large national or international NGOs. TFCAs focus mainly on expanding protected areas within one country by linking them to a protected area or areas in one or more neighbouring countries. In some cases, other land use types and land held under other forms of tenure are included in the TFCA concept where they intervene between protected areas or their inhabitants are deemed as threats to the protected areas.

The TFCA processes are largely driven and controlled by state conservation agencies often with considerable input from the Peace Parks Foundation. As part of its programme of support to TFCAs the foundation has established the Peace Parks Development Programme (PPDP), in order to ensure that local communities gain economic benefits from the development of TFCAs. The PPDP was established in February 1999. According to the Peace Parks Foundation newsletter (Peace Parks 1999:4), the PPDP “helps to design, develop, budget, raise money for and implement projects that strengthen the linkage between the conservation of biodiversity and the standard of living of individuals and communities”.



Primary agreements about establishing TFCAs are made and decision-making bodies established between governments and between conservation authorities. Other stakeholders such as local communities are sometimes consulted and their support is sought for the TFCA approach.

Transboundary Natural Resource Management Areas (TBNRMAs)

USAID uses the following definition of a Transboundary Natural Resources Management Area (USAID 2000):

“A transboundary natural resources management area is a relatively large area, which straddles a frontier between two or more countries and covers a large-scale natural system (ecosystem). The area requires a process of cooperation across boundaries to maximise conservation and sustainable natural resources management to the benefit of the stakeholders.”

According to USAID, a TBNRMA can encompass a variety of land tenure arrangements, and may include protected areas, or parks, communal areas, privately owned areas, state lands and/or international river basins.

This appears to be an appropriately broad definition, but some further characteristics of TBNRMAs can also be identified. Generally the dominant objective is sustainable natural resource management for improved and sustainable livelihoods. The agenda might be shared between different stakeholders such as conservation NGOs, governments, rural communities, and other local stakeholders, although the activities are likely to be initiated by donors, governments and NGOs. In some cases these same organisations are likely to control the process, but some TBNRMAs will have a large degree of stakeholder involvement. A range of benefits might flow to various stakeholders from a TBNRMA initiative, but a significant portion of benefits are targeted at local communities through increased employment, increased sales of crafts, development of small and medium enterprises and improved land and natural resource management.

TBNRMA approaches have begun to be developed for a number of reasons. Partly they are being spawned because large donors such as USAID are starting to withdraw from individual countries within the region, but want to maintain a regional presence. USAID is keen for example, to consolidate its investment in CBNRM activities in various countries through working at the regional level in a TBNRM context. In cases such as the ZIMOZA project described below, TBNRMA approaches have developed out of the need to sustainably manage resources shared and used by neighbouring local communities in adjoining countries. TBNRM is to some extent seen as an extension of CBNRM in border areas.

Informal Transboundary Resource Use

Informal transboundary resource use takes many different forms. It might be where people from neighbouring countries are sharing the same resources such as the wetlands that lie between Namibia and Botswana along the Chobe River. Often in such cases, the inhabitants of both countries are related and from the same ethnic group. In such situations the resource users might share similar management techniques, particularly where traditional forms of resource use are more prevalent.



In some circumstances informal transboundary resource use might take the form of illegal use of resources in another country (i.e. illegal border crossing) or of poaching of wildlife, tree felling etc., in a protected area in a neighbouring country. Individuals and households benefit from informal transboundary resource use and in some cases resources might be extracted for commercial purposes with the main financial benefit going to middlemen and business operators.

Spatial Development Initiatives (SDIs)

SDIs are aimed mainly at increasing economic development across large areas including in some cases across national boundaries. They focus on promoting investment and infrastructure development. The agenda is largely that of national and local governments, development banks and the private sector. These bodies essentially control the process. SDIs cover all forms of land tenure and the transnational initiatives often encompass TFCAs. The primary beneficiaries are the private sector, but clearly if the expected amount of investment is achieved, there is scope for considerable job creation and a number of spin-off opportunities.

A Community Public Private Partnerships (CPPPs) programme has been linked to the SDI approach and aims to bring activities closer to community level. According to the SDI website, the programme involves concerns over rights of access, resource management, and “best practice” around resource and product development, in order to create employment and support sustainable livelihoods.

The objectives of the CPPPs are to:

- Promote sustainable growth and resource use
- Empower local communities through effective local partnerships and downstream opportunities

The approach promotes the following types of partnership:

- Ownership (joint ventures; equity/share schemes; concession contracts)
- Management
- Outsourcing (service/supply-operations and maintenance)

According to the SDI website, by March 2000 the CPPPs programme had established an Investment Project Preparation Fund to assist communities with the preparation of commercial investment projects on communal and state land. The Fund is an initiative of the South African Department of Trade and Industry and the Development Bank of South Africa. It will target tourism, agriculture and forestry. The programme has also developed eco-tourism investment guidelines to promote tourism investment, and collaborated with the SADC Natural Resources Management Programme (NRMP). The programme planned to pilot CPPPs in eco-tourism including the subsidisation of interest rates for community equity in viable projects.

Some attempts are being made to specifically link CPPPs with community-based natural resource management (CBNRM) approaches within the SADC region as a result of a series of workshops convened by IUCN-ROSA, South Africa's Department of Environmental Affairs and Tourism, and other partners such as the SADC Natural



Resource Management Programme (Resource Africa, August 2000). It was proposed that there be an official acknowledgement of the cross-cutting nature of CBNRM and therefore promotion of engagement with existing processes in CBNRM as a way of moving the CPPPs approach forward.

Development Corridors

Development corridors are to a large extent a sub-set of SDIs and exhibit the same characteristics but with a greater focus on promoting development along lines of existing transport and communications infrastructure that link countries.

TRANSFRONTIER CONSERVATION AREAS (TFCAs)

In this section, we give some history on the evolution of TFCAs and then review details of specific TFCA initiatives. In practice, two sub groups of TFCA could be identified. One group (the first four initiatives discussed in this section) incorporates those initiatives that are based on linking protected areas, but which also include land under other forms of tenure and use (such as communal or freehold land) in a greater TFCA area. Land under other forms of tenure and use is usually included where the protected areas are not contiguous and it is necessary to incorporate other land in order to link the protected areas. In some cases, the additional land might be included in order to form a narrow corridor between protected areas that can allow the migration of wildlife between them. The second group (the latter three initiatives discussed in this section) incorporates TFCAs that include adjacent protected areas only.

History of TFCAs in the Region

For Mozambique, South Africa and Zimbabwe, the TFCA concept has evolved over a long period, dating as far back as 1938, when a Portuguese ecologist, Gomes de Sousa proposed that the Mozambican colonial administration negotiate with the neighboring states to establish Transfrontier Parks. Subsequent to this proposal, many ecologists and naturalists re-iterated the need for establishing Transfrontier Parks. However, it was only after the Mozambique Peace Accord of 1992 that the Council of Ministers of Mozambique recommended that the feasibility of establishing some pilot Transfrontier Conservation Areas be undertaken (DNFFB 1999).

The Global Environment Facility (GEF), through the World Bank, provided funds for the feasibility studies which examined the ecological, social, economic, and political feasibility of the initiative. These studies were finalized in 1996, with a recommendation that three pilot TFCA's (*Gaza-Kruger-Gonarezhou, Lubombo and Chimanimani*), be established.

The broad objectives for the establishment of the TFCAs are to (DNFFB 1999):

- Foster trans-national collaboration and co-operation among Mozambique, South Africa, Swaziland and Zimbabwe in implementing ecosystem management through the establishment, development and management of the pilot TFCAs;



- Promote alliances in the management of biological natural resources by encouraging operational, economic and other partnerships among government, private sector, local communities and NGOs;
- Develop frameworks and strategies whereby local communities can participate in, and tangibly benefit from, the management and sustainable use of natural resources that occur within TFCAs; and
- Promote trans-border eco-tourism development as a means for fostering regional socio-economic development

The organisational framework for the establishment, development and management of the proposed TFCAs is structured as follows (Ibid):

- The Ministerial TFCA Committee

This committee is composed of Ministers responsible for the forestry and wildlife sectors. It is responsible for overall policy guidance in the development of TFCAs and is chaired by the Minister of the Co-ordinating country (co-ordination responsibility is assigned on a rotational basis). The committee meets once a year or more depending on the urgency of the issues tabled for action. Decisions of the committee are taken by consensus and are binding.

- The International TFCA Technical Committee (ITC)

The ITC is made up of senior representatives of the implementing agencies and/or their principal Ministries from Mozambique, South Africa, Swaziland and Zimbabwe. It is responsible for interpreting the national vision and policies into a set of guidelines; approving area-specific action plans for development and management of TFCAs; harmonising the aims of participating countries with respect to the establishment, development and management of TFCAs; and monitoring the implementation process. The committee meets at least twice a year and its decisions are by consensus.

- The TFCA Co-ordination Unit

The co-ordination unit is composed of staff appointed by the co-ordinating country. It is responsible for liaising with other participating countries in the preparation of area specific action plans; co-ordinating the development of TFCAs; ensuring that there is effective communication among the participating countries in the process of establishing, developing and managing TFCAs; preparing reports on key resolutions and directives emanating from the Technical and Ministerial Committees; facilitating the convening of various International Committee meetings; liaising with all parties in identifying activities that would require funding and identifying sources for funds; and establishing a database on the development of TFCAs.

- The area specific working groups - one each for *Gazaland, Chimanimani and Lubombo*



Area specific working groups are composed of representatives of the conservation areas forming part of the TFCAs. They are responsible for collaborating with all stakeholders in the preparation of resource management plans; implementing area specific action/management plans; liaising and collaborating with other regional initiatives such as the Lubombo Spatial Development Initiative and the Maputo Development Corridor; promoting socio-economic development through sustainable use of renewable natural resources and eco-tourism; and providing feedback/progress reports to the International Technical Committee. Procedures and other matters related to each of these working groups are guided by the ITC.



The main activity components of the proposal are (GEF 1997):

- **Institutional Strengthening**

This includes strengthening the institutional capacities of DNFFB and SPFFB through training of their staff, provision of technical advisory services and logistical support in relation to all TFCA project sites.

- **Habitat and Wildlife Management**

This involves identification, zoning and demarcation of existing or proposed protected areas including the areas of Chimanimani, Banhine, Zinave, Maputo Game Reserve, Futi Corridor and Coutada 16. It also includes development of long-term management plans for proposed and existing protected areas, including surveys, ecological and social studies, monitoring and appraisals. Infrastructure development will include rehabilitation of roads, tracks and water supply points; fencing in existing and proposed protected areas; and provision of camp facilities and staff housing. Other activities include: Improved law enforcement network; resolution of conflicts between wildlife and local communities; and international collaboration with bordering conservation areas, leading to eventual integration.

- **Community Management of Natural Resources**

Intensive consultation with local communities is planned using participatory rural appraisal techniques to develop options for natural resources management. Another aim is improved community land tenure security through provisional demarcation of community areas and building on existing work in the area by existing NGOs. Local community institutions for natural resources management will be strengthened through training and regional exchange visits.

Lubombo TFCA

a) Rationale and Objectives

The main objectives for the establishment of the Lubombo TFCA are biodiversity conservation and tourism development. The TFCA will link the Tembe Elephant Park in Kwazulu/Natal in South Africa with the Maputo Elephant Reserve in Mozambique through the protection of the proposed Futi Corridor. After discussions between conservation agencies in South Africa and Swaziland in mid 1999, the area was

expanded to include Swaziland's Hlane National Park and Mlawula and Ndzinda nature reserves, as well as most of the Maputaland centre of plant diversity. The TFCA is viewed as particularly important for elephant conservation as it will help protect the only indigenous elephant populations on the coastal plains of southern Mozambique and South Africa (Peace Parks 2000a). An important aspect will be the conservation of sand forests along the coast which are limited in their extent. According to the Peace Parks Foundation (Ibid:3): "The proposed TFCA is one of the most striking areas of biodiversity in the world. It contains an exceptionally high number of species of fauna and flora, and is a zone of sharp transition, representing the southernmost extent of many of the Southern African species. It also contains many endemics spread over the whole taxonomic spectrum. The proposed TFCA is the core of the Maputaland centre of endemism, which was recently recognised as the only centre of plant diversity in Mozambique".

The project aims specifically to conserve biodiversity and cultural heritage in conjunction with increasing the living standards of the local population. The project is based on the principle of integrated conservation and development. Conservation of biodiversity shall be ensured by reconciling the management of protected areas with the social and economic needs of the local people (DNFFB, 1999).

b) Organisational and Implementation Arrangements

Discussions on transboundary cooperation over conservation have been taking place between South Africa, Mozambique and Swaziland since 1990, and an agreement establishing the Lubombo TFCA was signed in early 2001.

Apart from the state-owned protected areas, the TFCA will cover communal land in South Africa and Mozambique and it was originally planned to include a large private concession awarded to an American entrepreneur, James Blanchard, in Mozambique. Blanchard's company, Blanchard-Mozambique Enterprises (BME) had made a commitment to make more than US\$ 800 million available for a variety of enterprises. However, the Blanchard Concession was recently cancelled by the Mozambican Government. The TFCA is one of the projects identified by the Lubombo Spatial Development Initiative set up in 1997 by the Trilateral Ministerial Committee to promote transborder and national development projects. The GEF allocation of US\$5 million for TFCA development in Mozambique will cover Mozambican components of the TFCA. The Peace Parks Foundation has also committed funding for management of the Maputo Elephant Reserve and is supporting the development of a conservancy in Swaziland.

c) Activities

Current activities are focusing on further negotiations between the three governments.

d) Social Impacts

The TFCA covers communal land in South Africa and Mozambique and some private ranchland in Swaziland. About 8 000 people live between the Maputo River and the coast in Mozambique. According to the Peace Parks Foundation (Ibid: 4): "An important component of the development of the TFCA, which needs further attention, is the whole process of community consultation and involvement. Although a number of



workshops have been held to inform local communities of progress, a great deal more needs to be done." IUCN and HELVETAS are two organisations providing support to build capacity at community level.

e) Ecological Impacts

If agreement is reached between the three governments on the management of the TFCA, then there is potential for conservation of biodiversity to be improved through cooperation and joint planning across borders.

f) Economic Evaluation

The proposed TFCA already has a number of tourism developments and there is potential for further development, particularly within the context of the Lubombo SDI. However, many of the current tourism undertakings are not necessarily framed within the context of the TFCA. They are mostly private or state owned initiatives developing throughout the region to take advantage of opportunities offered by the prevailing circumstances. The SDI should bring improved infrastructure including roads, which should help facilitate economic development.

Gaza/Kruger/Gonarezhou (GKG) TFCA

a) Rationale and Objectives

The GKG TFCA area includes parts of south western Mozambique, north eastern South Africa and south eastern Zimbabwe, with an area of approximately 99 800 square kilometres. The Save River and the Zinave National Park bound the Mozambican section in the north. In the west the area is bounded by the international boundary with South Africa and Zimbabwe. It includes the Coutada 16 hunting concession region, which adjoins Kruger National Park. Banhine and Zinave National Parks, the Mapulanguene Ecotourism Development Area, as well as extensive communal areas moderately to sparsely populated by subsistence inhabitants are part of the system. The area in Mozambique covers approximately 66 987 km².

The South African section comprises the Kruger National Park (including Makuleke Region) and adjoining Provincial and Private Game Reserves along its western boundary, with a possibility of including the Madimbo Corridor state land along the Limpopo River as far as Beit Bridge area. This area, excluding the Madimbo Corridor, covers some 22 147 square kilometres.

In Zimbabwe, the area comprises the Gonarezhou National Park, Commercial Wildlife Conservancies along the western border of this Park, the community-managed areas in Sengwe Communal Lands stretching up to the Limpopo River, as well as a strip of land extending westwards along the Limpopo River close to Beit Bridge. This area covers approximately 10 645km².

Within the broader GKG TFCA will be a core "Transfrontier Park" made up of Kruger, Gonarezhou and Coutadha 16.



The GKG TFCA is being established to conserve biodiversity and promote ecotourism. According to the Peace Parks Foundation, traditional migration routes for elephant and buffalo will be re-established across national borders “eliminating the need for controversial culling and translocation programmes” (Peace Parks 2000b: 1). The TFCA aims to link Mozambique’s Gaza (Coutadha 16), Banhine, and Zinave National Parks with South Africa’s Kruger National Park and the Gonarezhou National Park in Zimbabwe.

The desired future state for the GKG TFCA would be a jointly managed natural unit that enables easy flow into Mozambique and Zimbabwe of those tourists already entering the Kruger National Park. The extended eco-tourism area would have a greater range of opportunities and attractions for tourists and have greater capacity to accommodate them. There should therefore be border posts linking the Kruger Park directly with Mozambique and preferably also further south down the length of the Kruger Park. There should also be a road and border post allowing direct access between the Kruger Park and south eastern Zimbabwe, across the Limpopo River. In terms of tourism attractions, the area also offers the possibilities of linking inland conservation areas such as the KNP, Banhine and Zinave National Parks with the only marine park of note in Mozambique - the Bazaruto archipelago or paradise islands.

The broad objectives for the establishment of the GKG Transfrontier Park are to (Braack 2000):

- Foster transnational collaboration and co-operation between Mozambique, South Africa and Zimbabwe in implementing ecosystem management, through the establishment, development and management of the GKG Transfrontier Park
- Promote alliances in the management of biological natural resources by encouraging social, economic and other partnerships among the parties, private sector, local communities and NGOs
- Enhance ecosystem integrity and natural ecological processes by harmonising environmental management procedures across international boundaries and striving to remove artificial barriers impeding the natural movement of animals
- Develop frameworks and strategies whereby local communities can participate in, and tangibly benefit from, the management and sustainable use of natural resources that occur within the Transfrontier Park
- Facilitate the establishment and maintenance of a sub-regional economic base by way of appropriate development frameworks, strategies and work plans
- Develop trans-border ecotourism as a means for fostering regional socio-economic development

b) Organisational and Implementation Arrangements

Discussions between South Africa and Mozambique have been taking place since 1990 regarding cross-border conservation cooperation. A Transfrontier Committee was established in 1997 involving representatives from the conservation agencies from the two countries. There have also been discussions between South African National Parks, the Peace Parks Foundation and Zimbabwean conservation authorities. In October 1999, and May, 2000 joint meetings were held between the Ministers responsible for the environment and wildlife from all three countries. A technical



committee and working group has been set up with South Africa designated as co-ordinator for the first two years. A Trilateral Agreement was signed in November 2000 and the Transfrontier Park is expected to be launched in November 2001 (see the introduction to this section above for details of the various decision making bodies). The Global Environment Facility (GEF) Trust Fund has granted US\$5 million to Mozambique for the "Transfrontier Conservation Areas Pilot and Institutional Strengthening Project".

The original proposals for developing the TFCA envisaged linking large areas of land in Mozambique with the Kruger Park as well as with Gonarezhou in Zimbabwe. This would have meant involving a variety of stakeholders including freehold farmers and communal area residents. It would have incorporated land held under very different forms of tenure and different forms of land-use ranging from state-owned formal protected areas to communal land under subsistence agriculture. It has now been decided by the conservation agencies of the three countries to focus on the development of a core Transfrontier Park linking Kruger in South Africa and Coutadha 16 in Mozambique (L.E.O Braack *pers. comm.*) Negotiations are taking place with Zimbabwe over a narrow corridor of land along the international border to link Gonarezhou with Kruger. District authorities have given their approval to the corridor. It is likely this will be fenced. Once progress has been made on linking the protected areas, more attention will be given to developing the broader TFCA concept and trying to incorporate land outside the protected areas into a buffer zone area for the core Transfrontier park.

c) Activities

At an operational level, attempts will be made to harmonise management practices within the Transfrontier Park such as developing a joint strategy to combat wildlife disease, harmonising legislation and standardising law enforcement. Training needs to support enterprise development will be identified. Now that the Trilateral Agreement has been signed, the dropping of the fence between Kruger and Mozambique can be initiated if conditions are appropriate.

d) Social Impacts

According to the Peace Parks Foundation, in Mozambique, there is increasing human encroachment into the TFCA, ongoing poaching and deforestation for fuel wood collection and charcoal production. "Existing settlements will be incorporated into the TFCA, and no attempt will be made to force people to relocate to other areas. Rather, every effort will be made to develop outreach programmes to offer people opportunities to work with conservation and/or tourism development activities" (Peace Parks 2000c:4).

However, it is not clear what will happen to the people living in Coutadha 16 (about 7 800 live along the Limpopo River in or immediately adjacent to Coutadha 16). If the plan to fence the Coutadha on its eastern border goes ahead and the area is upgraded to national park status, then it is unlikely that inhabitants will be allowed to stay in this area.



The Peace Parks Foundation has allocated about US\$100 000 for a community-based conservation and eco-tourism project adjacent to Zinave National Park in Mozambique. In South Africa the Makuleke community have been awarded land inside the Kruger National Park as part of a successful land claim and are benefiting from tourism activities within their part of the park. IUCN and the Endangered Wildlife Trust are working with local communities as part of the TFCA project.

With the focus shifting in the short term from the broad TFCA approach to concentrating on a Transfrontier Park, the potential for direct community economic benefit is likely to be reduced. However, there could still be spin-offs from increased tourism to the areas surrounding the parks.

The Conceptual Plan for the GKG Transfrontier Park (Braack 2000) envisages the TFCA promoting closer links between local communities, whose cultures and traditional land areas have been divided by international borders. The possibility is mentioned of introducing policies that would allow the resumption (or legalisation) of cross border movement of tribal groups divided by international boundaries.

The Draft Strategy and Action Plan for the GKG Transfrontier Park (Anon. 2000) envisages the formation of a Stakeholder Liaison Forum in order to involve a variety of stakeholders including local communities in the process. The Conceptual Plan for the Park envisages community participation taking place through the promotion of Community-based Natural Resource Management (CBNRM) in the areas between and surrounding the core protected areas. It envisages using lessons learned in CBNRM from SADC-region programmes such as CAMPFIRE (Zimbabwe), ADMARE (ZAMBIA) and LIFE (Namibia).

e) Ecological Impacts

The GKG Transfrontier Park has enormous potential to contribute to the conservation of large southern African mammals simply by re-opening old migration routes through the linking of protected areas across national borders. However, the numbers of large mammals in the Mozambican protected areas have been severely depleted and re-stocking will be required. The conservation success of the broader TFCA concept will depend to a large extent on whether the approach is accepted by communal and freehold farmers within the TFCA. Even with the development of the core Transfrontier Park, attempts will have to be made to deal with conflicts on the park borders. Otherwise encroachment on unfenced protected areas and poaching are likely to continue.

f) Economic Evaluation

According to the Peace Parks Foundation, the GKG TFCA has the potential to become one of Africa's premier ecotourism destinations. There is already well-developed tourism infrastructure in and around the Kruger National Park. Although there are few facilities in Gonarezhou, there is considerable private investment in tourism infrastructure on land neighbouring the park. Tourism facilities are very limited and considerable investment is required before tourism will make a significant economic contribution in the Mozambican portion of the TFCA.



Chimanimani TFCA

a) Rationale and Objectives

The Chimanimani TFCA links the proposed Nakaedu Biosphere Reserve (PNBR) on the eastern escarpment of the foothills of the Chimanimani Mountain Range in Manica Province of Mozambique with the Chimanimani National Park in Zimbabwe. Early and late stone-age archaeological artifacts, in the form of caves and rock paintings suggested that there has been continuous human presence in some parts of the proposed Chimanimani TFCA (DNFFB 1999).

The overall area of the Chimanimani TFCA is about 2056 square kilometres comprising 1740 square kilometres on the Mozambique side and about 316 square kilometres on the Zimbabwe side. The unique environment of the Chimanimani area supports unusual species of flora and fauna which are endemic to the area because of the special combination of altitude, soils, rainfall patterns and fires. One thousand vascular plants have so far been recorded of which 45 are endemic to the area. Six major vegetation types can be distinguished namely: semi-deciduous Miombo woodland; low altitude moist ever-green forest; dry mountain forests; montane grassland; *sclerophyllorus* afromontane scrub; and rocky vegetation types (*Aloe & Euphorbia* spp. including some endemics such as *Vellozia argente*). Little is known about the species diversity of animals and levels of endemism, but among large mammals, charismatic species such as elephant, buffalo, eland, sable and leopard occur in the area. Other animal groups recorded include 160 bird species including the critically endangered blue sparrow, 49 fish species, 35 amphibian species including 2 endemics (*Bufo vertebralis*), 34 snake species and one crocodile species (Ibid 1999).

The objectives for PNBR in Mozambique are as follows:

- To improve the living standards of the people of PNBR through sustainable use of natural resources;
- To conserve and realise the spiritual, biological, economic and aesthetic values of PNBR;
- To achieve the above while taking advantage of the opportunities offered by the location of PNBR on the international border between Mozambique and Zimbabwe.

b) Organisational and Implementation Arrangements

Although there have been some discussions between Mozambique and Zimbabwe over the development of the TFCA, the activities so far have taken place in Mozambique, through the DNFB and a local NGO called Organizacao Rural de Ajuda Mutua (ORAM). Agreement has been reached between key stakeholders, including communities, NGOs and government, that the most appropriate legal status for the Mozambique component of the Chimanimani Trans-Frontier Conservation Area, (CTFCA), is the new land category of Historical-Cultural Use Zone, supported by international recognition of the area as a Biosphere Reserve. A consultant was hired to draft a management plan primarily for the proposed Nakaedo Biosphere Reserve, (PNBR), nested within the institutional structure of the CTFCA. This management plan,



following extensive discussions with the principal stakeholders, sets out a design for a Historical-Cultural Zone and Biosphere Reserve to be co-managed by the resident communities, government and the private sector, with initial assistance by NGOs and donors (Bell 2000). The aim is for resident communities increasingly to play the lead role, with government withdrawing to the role of facilitator and supervisor. The role of the private sector will be defined by detailed contractual agreements approved by the communities and entered through competitive tender. The role of the private sector is also expected to diminish as rural communities extend their capacities. A number of community committees have been established. These committees are usually selected by the traditional leadership, and consist of 10 members. They appear to have weak terms of reference (Schafer *pers. comm.*).

Currently, the CTFC and PNBR involve at least seven levels of organisation: the individual household, the resource user group, the community at *sabukhu* (headman) level, the community at *mambo* (Chief) level, the PNBR level, the Mozambique national level and the international, TFCA, level.

The management plan proposes an institutional structure that will provide the “informal” community levels of organisation with a *legal persona* that will allow linkages with the “formal” levels of organisation at PNBR, national and international levels. The plan envisages using the structure of a *Commercial Society* in which title over land and natural resources can be vested.

The management plan makes provision for a PNBR Co-ordinating Committee to be formed, with representation of the commercial societies, the national, provincial and district level government agencies and NGOs, the donors and the private sector. The principal purpose of the Co-ordinating Committee will be to review the status of land and resource use in the area, to review progress of activities and projects, and to approve plans and budgets for the next year’s work plan. It will also identify issues to be taken up with external institutions, including other government departments and with the Zimbabwe Government through the Chimanimani Transfrontier Technical Sub-committee. The PNBR Co-ordinating Committee will administer a PNBR Development Fund.

c) Activities

Under the Chimanimani TFCA initiative, management of ecosystems encompasses conservation, utilisation and control activities aiming at maintaining the potential of wildlife resources; utilisation to derive sustainable economic benefits for local communities; and implementation of control mechanisms to reduce detrimental effects on wildlife (DNFFB 1999). IUCN, WWF and ORAM are working to build community capacity as part of the TFCA project.

d) Social Impacts

The TFCA has made a start in providing benefits to local communities through employment in building TFCA camps, roads and other infrastructure, and the development of income generation projects such as beekeeping and mushrooming. Little profit has been realised yet from the income generation activities because of marketing problems. A grinding mill has been donated to one community and local



residents are expected to benefit from the development of tourism in the area. The management plan proposes to transfer legal tenure over land and resources to resident communities, to give them the right of veto over alienation of land and resources. It also aims to encourage households to generate cash earnings from sustainable use of off-farm natural resources and to use part of the cash to buy staple foods.

Researchers who have worked in the Chimanimani area conclude that overall the TFCA process has been “top down” with NGOs and State agencies attempting to “sell” the idea to communities, but with some genuine attempts at involvement taking place within the process (Singh *pers. comm.*; Schafer *pers. comm.*). Some communities are reported to believe that the TFCA will result in a loss of power and control over land and settlement and an increase in state control. Singh believes the objectives of the TFCA are “nebulous” and appear to be focused on community-based conservation. If this is the case, he questions the need for a TFCA to achieve this objective.

e) Ecological Impacts

The PNB management plan identifies two main threats to the environment (Bell 2000):

- The potential alienation of land and resources from the resident communities through lease or concessions to other stakeholders, particularly the private sector. This would marginalise the communities and force them into unsustainable land use practices, while exposing indigenous habitats to elimination by commercial farming or plantation.
- Expansion of subsistence farming, which is not only highly destructive of the biological and aesthetic values of the area, but also provides very limited economic options to its practitioners.

It is hoped that by providing legal tenure over land and resources to local communities sustainable land use practices will be encouraged, and indigenous habitats can be saved from destruction by commercial farming or the establishment of plantations. It is also hoped that the generation of increased cash income will reduce the need for extensive felling and burning of woodlands for subsistence farming.

f) Economic Evaluation

The economic contribution of the TFCA in Mozambique will depend upon the extent to which tourism development takes place and upon the extent to which off-farm income generation is successfully promoted. On the Zimbabwe side of the TFCA, tourism infrastructure already exists, but tourist numbers are currently low due to the current political instability in Zimbabwe.

Maloti/Drakensberg Project

a) Rationale and Objectives

Described by the Peace Parks Foundation (Peace Parks Foundation 2000c) as a Transfrontier Conservation Area (TFCA), the Maloti/Drakensberg initiative does not conform to the usual TFCA profile. It incorporates a number of protected areas,



particularly in South Africa, but also a considerable area of communal grazing land both in South Africa and Lesotho. Furthermore, a well-developed project funded by the GEF is being implemented that looks at many of the key issues concerning natural resource management in the area. The project appears to go beyond protected area outreach and associated attempts to “protect protected areas” from the encroachment and deprivations of neighbours. The project addresses the conservation problems of the Maloti-Drakensberg Mountains, a 300 km-long alpine and montane zone along the border between Lesotho and South Africa. These mountains have globally significant biodiversity with unique habitats with high degrees of endemism, and the greatest gallery of rock art in the world (Stewart *pers comm.*).

The main objective of the GEF Maloti-Drakensberg project is to conserve the globally significant biodiversity of the area through a regional approach to conservation and development. The secondary objective is to contribute to community development through income generation from nature-based tourism by capacity building for sustainable utilisation of the natural and cultural heritage of the project area.

b) Organisational and Implementation Arrangements

Discussions on transboundary cooperation over conservation between South Africa and Lesotho have taken place over a number of years. Discussions at various levels culminated in the signing of a formal Memorandum of Understanding in September 1998 by the Lesotho Government and the KwaZulu Natal Nature Conservation Board. A wider MOU which includes the South African central government was under consideration in early 2000.

A bilateral Steering Committee has been established to guide implementation. The GEF funding will support the establishment of national Project Coordinating Committees, coordination offices in South Africa and Lesotho, joint technical working groups and a variety of other coordination and communication activities.

c) Activities

Current activities are focusing on further negotiations between the two conservation agencies involved in order to draft and sign an agreement.

d) Social Impacts

The project aims to build on the community conservation programmes of the KwaZulu Natal Nature Conservation Service (KZNCS). The Service has a policy of park neighbour relations that aims to develop joint participation in conservation programmes and shared responsibility between the Service and the communities living adjacent to protected areas. The KwaZulu Natal Nature Conservation Management Act makes specific provision for the establishment of local boards for protected areas giving communities a statutory role in protected area management (World Bank 2000). In addition a community trust has been established, to which all visitors making use of protected areas in KwaZulu Natal contribute through a tourist levy. The local boards are expected to help determine how the accumulated funds will be allocated equitably.

In Lesotho the project will build on the country's experience of creating Range Management Areas with associated Grazing Associations in order to limit overgrazing



and create alternative sources of livelihood through nature-based tourism. The establishment of community conservation forums at local level will also be supported (Ibid).

The project expects local communities to benefit from increased involvement in the management of protected areas and other conservation decision-making through participation in local boards and community conservation forums. The project will provide institutional capacity building support to these bodies. The project aims to enhance land use through improved range management that will increase productivity.

The project expects communities to benefit economically from the following:

- Benefit transfer schemes to ensure that part of increased tourism revenue will reach local communities
- Increased employment (e.g., as guides, drivers, craft makers, etc.) through nature-based tourism development
- Increased trade for those indirectly supplying the tourism industry with goods and equipment
- Training and opportunities for community entrepreneurs to become involved in developing small businesses related to biodiversity conservation such as ecotourism facilities and services, eradication of alien species, etc.
- Investigation of involvement of communities as direct shareholders in new tourism developments

e) Ecological Impacts

The project aims to improve conservation of biodiversity and the broader Maloti/Drakensberg ecosystem through support to protected areas and improved conservation and range management outside protected areas. In South Africa, the project will focus on developing an alien invading plant control programme. This will include the employment and capacity building of local communities and the development of entrepreneurial opportunities using the materials that result from the clearing. The project will also support the rehabilitation and maintenance of management roads, paths and tracks in protected areas in order to minimise damage from soil erosion. In some areas, fire management regimes will be developed, training provided to game rangers and management of large herbivores improved. In Lesotho considerable support will be given to developing the Sehlabathebe National Park, including provision of infrastructure, staffing, training and support for park management.

Outside protected areas, the focus will be on improved range management as described in, d) above. The project will work in specific pilot areas.

f) Economic Evaluation

The project has the potential to provide significant economic benefits to the area within the proposed TFCA through tourism development and improved range management.



Kgalagadi Transfrontier Park (KTP)

a) Rationale and Objectives

The KTP has been established to provide better conservation and management of the south western Kalahari ecosystem that straddles Botswana and South Africa. The TFCA has been in *de facto* existence since 1948 through a verbal agreement between South Africa and Botswana concerning the management of the Kalahari Gemsbok Park (South Africa) and the adjoining Gemsbok National Park (Botswana). The main objective is ecosystem conservation and preservation of the large mammals of the south west Kalahari. Community benefit is not a main object of the KTP. However, the Bilateral Agreement establishing the KTP does state that each country will provide its own tourism facilities and infrastructure, giving particular attention to developing and involving neighbouring communities (Peace Parks Foundation 2000d).

The Management Plan for the park agreed in 1997 lists the following joint conservation objectives of the two park authorities (NPB and DWNP 1997):

1. To preserve the diversity of organisms indigenous to the southern Kalahari as functional elements of the ecosystem, with predators receiving priority
2. To maintain in particular those ecological processes which characterise the Kalahari ecosystem, including
 - The large scale, rainfall induced fluctuations in the vegetation
 - The migratory and nomadic movements of large herbivores
 - Predator/prey interactions
 - Occasional widespread fires
3. To provide facilities and opportunities for research and monitoring to further understanding of the physical and biological processes of the Kalahari ecosystem
4. To mitigate the less desirable impacts of existing and potential land-use conflicts between the Kgalagadi Transfrontier park and neighbouring communities
5. To provide educational and interpretative programmes for visitors aimed at fostering a better understanding and appreciation of the Kalahari ecosystem
6. To realise economic returns from tourism associated with the Kgalagadi Transfrontier Park, while safeguarding its ecological integrity and pristine wilderness quality

b) Organisational and Implementation Arrangements

A Bilateral Agreement giving effect to the KTP was signed in April 1999 between the Botswana Department of Wildlife and National Parks (DWNP) and South African National Parks (SANP). This agreement established the first formally recognised TFCA in Southern Africa. The KTP was officially launched on May 12, 2000. Discussions on joint management of the two parks took place for some time before the Bilateral Agreement was signed. In 1992 representatives from both countries set up a Transfrontier Management Committee, which formalised the 1948 verbal agreement. The conservation agencies of both countries began seeking approval from their governments of the KTP in 1996. A joint management plan was developed and approved in 1997. The plan provides a basis for co-operative tourism ventures and proposes



the sharing of entrance fees equally between both countries. A Record of Agreement has been prepared which covers the day to day working of the conservation agencies and park wardens.

c) Activities

Most activities centre on conservation management of the KTP. The park authorities have commissioned a consultancy that will further develop sections of the management plan on tourism development and community involvement.

d) Social Impacts

The Khomani San people have been given six farms to the south of the KTP in settlement of a land claim. In addition they and the Mier community have each been given 25 000 ha in the Park, and the plan is for the two communities to form a Contractual Park with South African National Parks. The negotiation process for the Contractual Park is taking some time as the San are still working on various options to negotiate with South African National Parks. The only stipulations are that the land given to the communities may not be used for farming or mining, or contain permanent settlements (African Wildlife 2000). The Khomani San also have the right to conduct religious and cultural activities (such as gathering medicinal plants and visiting ancestral graves) in the South African section of the park (Ibid).

In the meantime, however, SANP have called for private sector bids to operate a concession in the area adjacent to the proposed Contractual Park, which has caused much displeasure amongst the San who were exploring a similar option. Furthermore the San, although theoretically 'landowners in the Park, are unhappy because they were never consulted about the TFCA with Botswana. Although there is some potential for involvement and benefit, the San are being treated as very junior partners by SANP and have yet to realise any benefits (D. Grossman *pers comm.*).

The Botswana government is reported to be against similar involvement of San people in the Botswana portion of the KTP. However, the joint management plan emphasises the land use conflicts between the KTP and neighbouring communities in Botswana and "the need to increase awareness among local communities of the importance of the park" (NPB & DWNP 1997). The management plan did not analyse the community issues on the land neighbouring the South African portion of the park.

The management plan does contain an eight-point strategy for addressing park/neighbour issues (Ibid):

1. To stimulate community wildlife use in Wildlife Management Areas (WMAs) in Botswana through promoting sales of wildlife products in park shops and restaurants
2. To stimulate local development projects by employing local labour for firebreak clearing in the WMAs
3. To stimulate community wildlife education aimed at ensuring that local communities understand the role that wildlife can play in maintaining and



- improving living standards
- 4. To incorporate cooperation with NGOs and extension officers dealing with community projects on a day to day basis
- 5. To establish two Community Wildlife Conservation Centres, one in the northern Kgalagadi District and one in Southern Kgalagadi District for the storage of trophies, wildlife products, craft making and biltong preparation
- 6. To employ a cadre of non-commissioned officers from local communities in order to improve the relationship between the park and surrounding communities
- 7. In order to increase awareness that the park authorities are dealing with problem animals there should be sufficient resources allocated to problem animal control and alternative approaches to control should be investigated
- 8. To update economic research regarding game ranching and game farming in areas around the park, to seek to lift possible veterinary restrictions on the marketing of wildlife products across the border and to carry out market survey to determine feasibility

e) Ecological Impacts

The Bilateral Agreement signed in 1999 has formalised the previous informal joint management agreements between the two parks agencies. In general the establishment of the KTP is likely to improve the management of the south west Kalahari ecosystem through the provision of greater cooperation and integrated planning. Although there are disparities between the capacity of the relatively well-funded South African National Parks agency and the DWNP in Botswana, there is little need for extensive management intervention given the size of the joint protected area and the nature of the arid ecosystem. The main management concerns are maintaining fences on the South African side bordering farming areas, appropriate provision of water for wildlife, and tourist management.

f) Economic Evaluation

Increased tourism development in and around the park is likely to have spin-offs for local residents. The Peace Parks Newsletter reported in 1999 (Peace Parks 1999) that roads would be improved within and around the park and this would improve access to other parks such as the Central Kalahari to the north in Botswana. New access routes to the KTP will also be available for visitors from South Africa. It is possible that tourism opportunities will increase for community trusts that have gained wildlife quotas and tourism concessions in WMAs adjoining the KTP.

Richtersveld/Ai-Ais TFCA

a) Rationale and Objectives

The main objective for the establishment of the Richtersveld/Ai-Ais TFCA is biodiversity conservation. The area will combine the Richtersveld National Park in South Africa and the Ai-Ais Hot Springs Game Park in Namibia (including the Fish River Canyon). The Richtersveld lies in one of the most diverse parts of the species-rich succulent Karoo biome which extends across the Orange River into Namibia. This



is one of the most species-rich arid zones in the world and is particularly noted for its herpetofauna. (Peace Parks 2000e). Tourism development is a secondary objective, but this aspect will remain limited because of the arid and fragile nature of the area and its remoteness.

b) Organisational and Implementation Arrangements

Discussions on transboundary cooperation over conservation have been taking place between the SANP and the Namibian Ministry of Environment and Tourism (MET). As yet there is no formal agreement or joint management plan. The Namibian Minister of Environment and Tourism was expected to contact his counterpart in South Africa during November 2000 to begin negotiations on the establishment of the TFCA. SANP has appointed a co-ordinator to drive the process from its side, while the MET is also considering appointing a TFCA co-ordinator.

The Richtersveld National Park differs from all other South African National Parks in that the land is owned by people living within the park. The SANP manages the park in terms of a 30-year lease contract with the Nama inhabitants and pays a rental for the use of the land as a conservation area. The residents have a perpetual right to graze livestock in the park and have five members on a joint management plan committee. The original contract proposed by the former South African National Parks Board was considerably less favourable to the residents. It would have lasted for 99 years, allowed no community involvement in the management structure, would have phased out livestock and the income would have gone to local government (Archer *et al.* 1994). The community had to go to court to prevent the government pushing through the original contract.

None of the documentation on the proposed TFCA available to the authors mentions the role of the inhabitants of the Richtersveld National Park in the negotiations on the establishment of the TFCA. The negotiations seem to be led by the SANP. It is not clear whether the park management body, which includes community representatives, will also be involved.

On the Namibian side, a number of squatters have moved into the Ai-Ais Game Park. One is a commercial farmer with substantial lucerne fields under irrigation from the Orange River, while most are mainly subsistence farmers with herds of small stock, or fishermen catching fish for sale in mining towns. Firewood collectors are causing considerable damage to riverine vegetation along the Orange. Access to the park is largely uncontrolled as the MET have no permanent staff apart from in the Fish River Canyon area.

c) Activities

Current activities are focusing on further negotiations between the two conservation agencies involved in order to draft and sign an agreement.

d) Social Impacts

The residents of the Richtersveld National Park benefit substantially from the lease of their land by SANP. The linkage of the park to the adjoining Namibian protected area might help increase tourism to a limited extent, providing additional economic



opportunities to residents. However, the potential for increasing tourist numbers is limited by the fragile environment. Overall, the establishment of the TFCA is unlikely to have a large impact on residents. Nevertheless, given the contractual nature of the Richtersveld National Park, the residents should be involved in the negotiations around the TFCA. On the Namibian side, the few park residents are considered illegal by the Namibian authorities and are likely to be moved from the park.

e) Ecological Impacts

The establishment of a TFCA might not necessarily improve conservation of the biodiversity of the area. On the Namibian side, the MET requires increased capacity to manage the Ai-Ais Game Park and to control access to the area.

f) Economic Evaluation

The proposed TFCA is unlikely to bring major economic benefits to the area. There is potential for limited tourism development, particularly on the Namibian side, and the main beneficiaries are likely to be the government and private sector.

Gariep TFCA

a) Rationale and Objectives

The main objective for the establishment of the Gariep TFCA is to conserve unspoilt areas of Orange River Nama Karoo vegetation along the Orange River between Namibia and South Africa. According to the Peace Parks Foundation (PPF) the thickets along the river are ideal habitat for restocking black rhino (Peace Parks Foundation 2000f). Inland on the South African side are relatively untransformed areas of typical "Namaqualand Broken Veld with a large forest of *Aloe Dichotoma* comprising an estimated 30 000 trees.

b) Organisational and Implementation Arrangements

The Peace Parks Foundation and the SANP have previously proposed the development of the TFCA and the PPF funded a feasibility study of the proposed TFCA which was completed in 1998. Land on both sides of the Orange River is freehold farmland without formal conservation status. In part of the proposed TFCA irrigated grape production has started. Essentially this TFCA remains at the concept stage and the land would need to be bought in order to establish protected areas.

TBNRMA INITIATIVES

Zimbabwe/Mozambique/Zambia Transboundary Natural Resources Management Area (ZIMOZA)

a) Rationale and Objectives

The ZIMOZA initiative aims to facilitate dialogue among relevant stakeholders on how to effectively manage transboundary natural resources in the Zumbu district of Mozambique, the Luangwa district of Zambia and the Guruve District of Zimbabwe.

The three districts meet upstream of the Cahora Bassa Dam on the Zambezi River. The boundaries of the initiative have yet to be finally determined. The rationale for the initiative is as follows (Mbizvo and Guveya 1999):

- To maintain the distribution of the range of ecosystems which does not recognise administrative or international borders
- To facilitate joint management and policy formulation for TBNRM
- To allow open discussions on the national strategic interests of each country involved
- To allow coordinated conflict management among the countries
- To allow communities across borders to realise common values from natural resources

b) Organisational and Implementation Arrangements

The initiative is being facilitated by IUCN-ROSA through its Networking and Capacity Building (NETCAB) project. It was started in response to an invitation from the Zimbabwean Deputy Minister of Mines, Environment and Tourism to initiate dialogue between the governments of Mozambique, Zambia and Zimbabwe to discuss transboundary resource management in the three districts mentioned in a) above (the addition of a fourth district, in Mozambique, is being considered). The ZIMOZA initiative takes its inspiration and political commitment from the context of regional integration within SADC (Mbizvo 2000).

The initiative began with a workshop in August 1999 to bring together key stakeholders, mainly at national level, to:

- Develop a transborder natural resources management vision
- Reach consensus on key transborder natural resources issues to be addressed by the initiative
- Make recommendations towards the development of a Transborder Framework Agreement for the three participating governments
- Develop an Action Plan for follow up after the workshop

The workshop used an interactive process of group discussions to develop consensus on the key issues, problems and possible solutions for TBNRM issues in the three districts. The workshop resulted in the formation of a Steering Committee for the initiative made up of government officials and the executive officers of the district councils of each district.

A second workshop was held at the Kanyemba Safari Lodge in Zimbabwe in November 1999. This workshop was aimed more at participants from the district, rather than the national, level. It aimed to (Guveya 1999):

- Bring together representatives from the participating districts of the three countries
- Discuss at district level the issues for better TBNRM
- Develop a district level action plan for TBNRM
- Discuss the TBNRM initiative vision



The meeting identified natural resources and different tribal groups in the three districts, issues to be considered in the TBNRM initiative and detailed problems and suggested solutions. It also identified existing involvement of local communities in small-scale enterprises and existing capacity building initiatives in the districts.

Among the main results of the workshop were:

- IUCN to assist in mobilising communities (one ward in each country) to raise awareness on the TBNRM initiative through community workshops
- A decision that committees should be formed by the districts at district level and smaller committees at village level comprising members from the three countries
- It was time to start thinking of cooperation at district level
- There was a need to identify areas of coordination and common policy formulation for improved transboundary natural resource management
- There was a need to compile a list of community agreements to assist in drafting an overall agreement for the three countries
- A task force should be set up to draft a TBNRM Agreement for the three countries
- The current Steering Committee should develop a strategic plan after the signing of a Memorandum of Understanding among the three countries
- Communities should be trained in the Systems Assessment Methodology for monitoring the impact of human activities on the environment and human well-being

A third workshop was held in Harare in April, 2000 in order to facilitate information sharing between NGOs and partners working in the three target areas, raise awareness on issues concerning TBNRM in the three districts, explore synergies and possibilities for cooperation, and explore the way forward. The workshop discussed the proposed ZIMOZA Agreement and agreed that the mandate was in place to help the communities to implement it. It was concluded that: "Most existing TBNRM projects have come from central governments, but the push for ZIMOZA came from the local level through local government. Central Government must take the lead in providing a policy platform but local authorities need to be empowered to enter into TBNRM agreements" (Mbizvo 2000:29).

The draft Memorandum of Understanding (MOU) makes provision for three committees to drive the ZIMOZA process. These are (ZIMOZA undated):

- The Ministerial Committee

This committee would consist of the Ministers responsible for Environment, Forestry, Wildlife, Tourism, Trade and Industry, Immigration and Local Government from the three countries. It would be responsible for overall policy formulation and guidance as well as the coordination of the management, conservation and development of the Trans-border Natural Resources Management Area.



- The Technical Committee

This committee would consist of the directors or other senior officials of the Ministries or Departments of Environment, Forestry, Wildlife, Tourism, Trade and Industry, Immigration and Local Government from the three countries. It would also include three representatives from the Local Area Committee (see below). The committee would be responsible for coordination and harmonisation of the conservation and development of the TBNRMA and recommending policy and legislative changes and harmonisation to the Ministerial Committee. It would also promote effective communication among the parties, approve area-specific Action Plans for the development and management of the TBNRMA, and monitor the implementation process.

- Local Area Committee

This committee would consist of one representative from each local authority, all traditional authorities and one representative from each community-based organisation. It would identify and recommend to the Technical Committee for funding environment and natural resources projects and programmes. The committee would also identify potential environment and natural resources conflicts and recommend consensual cross-border solutions. It would design and implement area-specific projects, identify and recommend to the Technical Committee possible areas for policy and legislative harmonisation, and promote and facilitate joint cross-border projects and programmes that support trans-boundary natural resources management.

The draft MOU also makes provision for the establishment of a Trans-boundary Natural Resources Management Fund of which the members of the Technical Committee would be the trustees. The Technical Committee is responsible for approving funding proposals submitted by community-based organisations.

c) Activities

Apart from the three workshops, a draft ZIMOZA Agreement has been developed. District level Steering Committee members have been tasked with getting community input on the draft agreement. It is also proposed to seek funding to take the process further down to local, rather than district level. IUCN will facilitate the development of a ZIMOZA TBNRM management plan using a collaborative process in which border communities will be major stakeholders (*Mbizvo pers. comm.*).

d) Social Impacts

The social impacts of the ZIMOZA TBNRM initiative will depend upon the extent to which the initiative succeeds in moving from the district level down to village level, and upon the nature of the activities identified for implementation. Provision is made for community involvement in decision-making through representation on the Technical Committee of traditional leaders and CBOs.

e) Ecological Impacts

It is too early to examine any ecological impacts. These will need to be measured over time, and will depend upon specific project activities.



f) Economic Evaluation

An economic evaluation can only be made once the project has implemented specific activities.

Four Corners TBNRMA

a) Rationale and Objectives

USAID Regional Centre for Southern Africa (RCSA) has developed a TBNRM project covering the Okavango Delta and Chobe areas of Botswana, the eastern Caprivi in Namibia, the Mosi-Oa-Tunya and Kafue National Parks and surrounding areas in Zambia and the Hwange and Zambezi national Parks and surrounding areas in Zimbabwe. This geographical focus coincides largely with that of the OUZIT SDI described below. The project fits the mandate of USAID RCSA which is to develop and support regional initiatives within SADC. The project has been developed to meet the RCSA Regional Natural Resources Strategic Objective, which is "Increased Cooperation in the Management of Shared Natural Resources". One of the intermediate results under this Strategic Objective is "Viable practices for sustainable management of Shared Natural Resources adopted" and one of the means of achieving this for RCSA is "Approaches to TBNRMAs developed". USAID emphasises in its approach to the Four Corners Project that it does not intend to "create" a transboundary area but wants to build on existing activities and further develop a process that has already begun (USAID 2000).

b) Organisational and Implementation Arrangements

Implementation has not started yet. USAID requested concept papers from specific US Conservation NGOs. The original intention of USAID was that the project would be implemented by the African Wildlife Foundation (AWF) Southern African Office located in Harare, Zimbabwe. AWF would cooperate with the two other US organisations that were invited to submit concept outlines, World Wildlife Fund US in partnership with Namibian NGOs, and Conservation International in Botswana. USAID has been criticised in some quarters for developing the framework of the project without sufficient regional consultation, and for having a pre-conceived idea as to how, and by whom the project would be administered.

Following a number of discussions among stakeholders a modified institutional approach is likely to be adopted. There are now plans to set up a steering committee among stakeholders from each country which would give the policy direction for the project and take major decisions about the activities to be initiated, and how funds would be expended. AWF would administer the funds and provide secretariat support to the steering committee. The involvement of the other two US organisations would depend upon their integration into national partnerships in Namibia and Botswana. A number of working groups would be established with stakeholder organisations from each country to explore areas of activity such as natural resource management, community-based activities, enterprise development, and policy issues.



c) Activities

Activities will depend to some extent upon the *modus operandi* developed between the three organisations. Options include a major focus on private sector tourism development or a greater focus on existing community-based natural resource management (CBNRM) activities and capacity building in the various countries.

USAID has established a set of illustrative programme activities that includes (ibid):

- Support to a range of stakeholders to develop their capacity to create an enabling environment for transboundary cooperation through policy development and reform
- Identification, assessment, regional packaging and promotion of tourism and/or other natural resources-based products or services as a sustainable development option for the TBNRMA

d) Social, Ecological and Economic Impacts

The Four Corners project has the potential to deliver significant social, ecological and economic impacts, depending upon how it is implemented. A primary focus on private sector tourism development will create employment and have some other economic spin offs, but will not necessarily create direct links between economic development and sustainable resource use for the inhabitants of the area.

Every River Has Its People: Promoting Co-Management of the Okavango River Basin

a) Rationale and Objectives

The “Every River” project is a co-ordinated set of activities over a two-year period aimed at promoting the sustainable co-management of the Okavango River Basin through facilitating effective stakeholder participation in basin planning and management processes (Rothert 2000).

The objectives of the project are:

- 1) To *increase the capacity* of Okavango riparian communities and other stakeholders to participate in co-management of the Okavango;
- 2) To *create mechanisms* by which communities and other stakeholders may participate in sustainable management of the Okavango River Basin.

The end results of the project will be a co-ordinated and effective regional coalition of NGOs, communities and other Okavango stakeholders, better links between government and stakeholders, and a regional model for a participatory process associated with the management of a shared river basin.

b) Organisational and Implementation Arrangements

The project, funded by SIDA, is being implemented by a number of NGOs in Namibia and Botswana, and it is hoped to extend the project to Angola. Project partners



include the Kalahari Conservation Society (Botswana), IUCN-Botswana, International Rivers Network (US), Namibian Nature Foundation, Integrated Rural Development and Nature Conservation (Namibia), Desert Research Foundation of Namibia and the Rossing Foundation (Namibia). The Kalahari Conservation Society is the overall project manager, and the Namibia Nature Foundation manages project activities and finances in Namibia.

c) Activities

Partly in response to perceived threats to the Okavango basin, the three basin states (Angola, Botswana and Namibia) have signed a joint agreement forming the Permanent Okavango River Basin Commission (OKACOM). The OKACOM agreement provides for an integrated basin-wide management plan to be developed with the involvement of all relevant stakeholders. The Every River project activities are focusing on increasing the capacity of local communities to be involved in the basin-wide decision-making processes such as the management plan.

The activities are being carried out in three phases:

Phase One: Information exchange – “survey”.

The objective of this phase is to exchange information and understanding between Okavango riparian communities and project staff, i.e., “co-learning”. The project will be introduced to communities and will gather information about community-resource relationships. This will lay the groundwork for the entire project, meaning both the capacity building and participation objectives. This will be accomplished through a “socio-ecological survey”, conducted in collaboration with riparian community representatives. In this phase links will be established with organisations conducting ongoing work with communities in the Okavango while institutions at the local, regional and basin wide levels are identified in order to assess the gaps and needs in facilitating community participation.

Phase Two: Analysis of information, development of educational materials and approach.

Based on the information gathered and lessons learned in Phase One, activities aimed at the capacity building objective will involve the development and testing of educational and training approaches and materials. Materials will likely include booklets, maps, models, parliamentary updates, posters, and possibly radio programs and local theatre performances. To the extent possible, the project will use common materials and techniques across the basin in the implementation of this project. Activities aimed at the participation objective will focus on developing and exploring possible participation mechanisms with communities, OKACOM and government institutions, and through research into other basin management processes.

Phase Three: Capacity building/training and participation mechanism initiation.

Using the materials and approach developed in Phase Two, this phase will involve conducting the education and training necessary to increase the capacity of communities and other target groups. This phase will also provide necessary information and training to community forum members while initiating formal links



and participation mechanisms for communities in natural resources management processes and decision-making processes, e.g. Namibia's Water Act revision, OKACOM and Ramsar planning for the Okavango Delta.

d) Social Impacts

So far the project has focused on survey work to discover how people use resources within the Okavango River Basin, their attitudes to conservation and their perception of environmental problems. The next phases of the project will provide more focus on linking communities to local, national and regional decision making fora and on activities based on sustainable use of natural resources.

e) Ecological Impacts

Although the project is not working directly to improve management and conservation of resources, it is hoped that increased community involvement in decision making fora will lead to better management at a basin-wide level. It is also hoped that local level sustainable use activities in follow-on phases of the project will lead to better management in specific areas of the basin.

f) Economic Evaluation

The project does not focus specifically on income-generating activities, but if sustainable use activities are promoted in follow-on phases of the project there could be some benefit to local economies, and to a lesser extent the national economies.

Limpopo/Shashe TFCA

a) Rationale and Objectives

The main objectives for the establishment of the Limpopo/Shashe (formerly Dongola/Limpopo Valley) TFCA are biodiversity conservation and tourism development. The TFCA will link land in Botswana, Zimbabwe and South Africa centred on the confluence of the Limpopo and Shashe Rivers. While the area supports a number of Red Data Book animal and plant species, it is not known as a centre of endemism or as a biodiversity "hotspot". The proposed TFCA includes the Mapungubwe historical and cultural site. Although biodiversity conservation is given as a primary objective of the TFCA, it has been categorised in this paper as a transboundary natural resource management area (TBNRMA) because there is no specific attempt to link protected areas in neighbouring countries. It can be categorised rather as an attempt to develop more formalised institutional links between contiguous areas of land under the same land use (wildlife and tourism), but under different tenure regimes and administered by different types of institutions.

b) Organisational and Implementation Arrangements

The proposed TBNRMA incorporates a variety of land tenure and land uses, including land owned by the state, SANP and private landowners in South Africa, privately owned game and cattle farms in Botswana and a mixture of communal lands, privately



owned livestock and game farms and a state owned hunting block in Zimbabwe (Peace Parks 2000g). An agreement that paved the way for the proclamation of a national park in South Africa near the confluence of the Limpopo and Shashe Rivers was signed in 1995 between the relevant authorities in South Africa. The state-owned Tuli Circle hunting block was gazetted in Zimbabwe in 1963.

The Peace Parks Foundation has been involved in working with South African National Parks and with private landowners to establish an agreed South African position on land ownership issues related to the proposed TBNRMA. In August 1997, the Foundation assisted the SANP with the purchase of a farm adjacent to the Limpopo River for incorporation in the TBNRMA. According to the Foundation, most of the private land owners on the Botswana side have indicated their willingness to participate in the TBNRMA, and the Botswana Department of Wildlife and National Parks is supporting the project. The SANP has had preliminary discussions on the implementation of the TBNRMA with its counterparts from the two neighbouring countries. As yet, no formal agreements have been concluded and no joint development plan exists. The Peace Parks Foundation has appointed a co-ordinator for the TBNRMA to work with the various stakeholders. A first meeting between stakeholders from all three countries took place in September 2000. It was agreed at this meeting that the next step should be the finalisation of a memorandum of understanding (MOU) between the three countries (Peace Parks 2001). The aim was to have the MOU signed during the first quarter of 2001.

It is planned to establish a trilateral ministerial committee to oversee the process, consisting of five members from each country drawn from national technical committees. All stakeholders will be represented on the national technical committees (Ibid).

c) Activities

Current activities are focused on developing consensus among the various landowners about the operation of the proposed TBNRMA, mechanisms for coordination between the different stakeholders, and the development of a trilateral MOU. A process to develop an integrated tourism plan for the area has also been started. A proposal is being developed for Mapungubwe to be declared a World Heritage site.

d) Social Impacts

If the projected tourism developments take place (see below), there could be considerable job creation for local people. It is likely however, that most of the tourism developments will be in the hands of traditional participants in the industry (mostly white safari and lodge operators) and the government conservation agencies.

e) Ecological Impacts

If the TBNRMA is established, the Peace Parks Foundation believes the area has the potential to become an important sanctuary for wild dog, elephant and 16 other Red Data Book species.



f) Economic Evaluation

According to the Peace Parks Foundation, the proposed TFCA has the potential to become a major new tourist destination. Existing tourist facilities restricted to a number of privately run lodges in Botswana, attracting about 20 000 visitors a year. It is estimated that the proposed national park on the South African side could attract 30 000 additional visitors per year. In all three countries there is potential for private sector investment in tourism development.

Zambezi Basin Wetlands Conservation and Resource Utilisation Project

a) Rationale and Objectives

The primary aim of the project is the effective management and sustainable use of the Zambezi Basin's natural resources, based on the recognition that the basin plays a key role in the development of the SADC region. Among the diverse sub-ecosystems within the Zambezi basin, wetlands and their related natural resources represent some of the most productive ecosystems. At the same time the basin provides most of the region's electrical power and supports the livelihoods of about 20 million people (Hiscock *et al* 1996). Problems identified within the basin include land degradation; poor watershed management; construction of dams; sewage and industrial pollution; draining of wetlands; water extraction; and general infrastructural development.

The goal and objectives of the programme are as follows (Ibid):

Goal: To conserve the wetlands ecosystems and associated natural resources of the Zambezi River Basin

Main Objective: To develop and promote an integrated ecosystems perspective for the conservation and sustainable utilisation of the Zambezi basin's wetlands and associated natural resources

Specific Objectives:

- To improve and expand public awareness of the ecosystem concept and the need for an integrated approach in drainage basin management
- To articulate the true value and importance of the functions, products and attributes of wetlands ecosystems at the local, national and regional levels
- To improve institutional capacity in environmental economic valuation and impact assessment
- To communicate effectively the true value of wetlands to the region's people and decision-makers
- To investigate, develop and establish community-based integrated wetlands conservation and wise use approaches and techniques
- To help local wetland communities to realise their potential in wetlands management and wise use, and to assist these communities to participate fully in the conservation of the base of their own livelihoods



b) Organisational and Implementation Arrangements

The project's first phase (1996-2000) was managed by IUCN-ROSA in Harare with the Zambezi Delta sub-project being managed by IUCN Mozambique and the Barotse Flood Plain sub-project being managed by IUCN Zambia. The Botswana IUCN office provided advice and direction for activities relating to the Botswana component of the Chobe-Caprivi sub-project. The project worked with a number of government departments and NGOs in each country. IUCN is seeking funding for a further phase of the project.

c) Activities

The project carried out a number of activities aimed at increasing knowledge about the wetlands ecosystems associated with the basin. These included hydrological surveys, resource inventories, biodiversity inventories, ecosystem assessments, and economic valuation of resources. Another set of activities focused on building community resource management institutions and supporting local community development.

d) Social Impacts

By the end of the project, throughout the basin, the project had contributed to new and improved infrastructure for health services, schools, wells, canals and roads. At least 25 community-based institutions had been established, including pilot area committees, natural resources management committees, income generation clubs, and women's groups. A number of income generation projects were promoted including craft production; fish processing; sale of agricultural products and guinea fowl eggs; use of boats for commercial transport including tourism; sale of grass previously unavailable because of uncontrolled fire; and grocery sales by women.

e) Ecological Impacts

At the end of the project there was increased knowledge about the functioning and value of wetlands within the basin; improved wetlands resource management practices including soil and water conservation in at least 55 communities; closure of fishing during the breeding season; regulation of fish net mesh size; planting of trees; establishment of riparian buffer zones; and removal of aquatic weeds (Hiscock 1999).

f) Economic Evaluation

The infrastructure construction provided short term inputs into local economies and the income generating activities should provide ongoing inputs if they continue to operate.

Lake Malawi/Nyasa Transfrontier Natural Resource Management Area

a) Rationale and Objectives

The main objectives for the establishment of the Lake Malawi/Nyasa Transfrontier Natural Resource Management Area are a mixture of conservation and rural development goals. The proposed TBNRMA would stretch from Lake Malawi/Nyasa to



the Indian Ocean, spanning an area of over 100 000 sq km across Malawi, Tanzania and Mozambique. It includes protected areas in all three countries: in Malawi, the Lake Malawi and Liwonde National Parks; in Tanzania, the Selous Game Reserve (a World Heritage Site); and in Mozambique, the Lago Niassa Game Reserve (Wahome 2000). The TBNRMA includes areas of scenic beauty, an array of culturally diverse communities, and a large number of species of conservation significance. Lake Malawi is home to an estimated 1000 species of fish belonging to 11 different families including more than 400 species of cichlid, many of which are endemic.



The overall goal of the TBNRMA is:

To attain socio-economic development through conservation and sustainable use of biological and other resources of the Lake Malawi/Nyasa/Niassa/ Basin and its adjacent areas.

The specific objectives are to:

- Promote effective action to reduce the threats to biodiversity throughout the project area
- Enhance regional cooperation in the development of Trans Frontier Conservation Areas
- Harmonise the management of the Lake Basin and its adjacent areas
- Promote sustainable land use practices linked to biodiversity conservation
- Promote eco-tourism
- Foster adaptive management of the natural and cultural resources in the lake Basin
- Alleviate poverty and improve the quality of life in the Lake Basin and adjacent areas
- Harmonise the Mtarwa Development Corridor with the TBNRMA
- Co-ordinate efforts to combat illegal off-take and trade in biological resources
- Preserve and manage historical monuments and cultural sites/features
- Build capacity to facilitate the establishment and development of TFCAs and to sustain the protected areas they contain into the next century

b) Organisational and Implementation Arrangements

The proposed TBNRMA incorporates a variety of land tenure and land uses, including protected areas, game reserves, and state-owned communal land. A trilateral meeting was held in May 1999 attended by representatives of the three governments, donor agencies, development organisations and NGOs. The Peace Parks Foundation offered to provide funds for a facilitator for the project as well as the first phase of a consultative process. A number of consultative workshops were held and an Interim Steering Committee was appointed which represents the governments of the three countries.

c) Activities

Current activities are focused on gaining agreement on a Memorandum of Understanding (MOU) between the three governments and gaining the support of all relevant key role players.

d) Social Impacts

The people in the Lake Basin live in abject poverty (Wahome 2000) and the primary beneficiaries of the project are the riparian rural communities. Community leaders, CBOs and NGOs have been involved in the consultative process.

e) Ecological Impacts

If the TBNRMA is established, it could have a significant effect on biodiversity conservation. However, it includes heavily populated areas where there is high pressure on natural resources. Some opportunities may exist for promoting sustainable management of resources (e.g. fish in Lake Malawi, wildlife adjacent to Selous), but it is difficult to see how a large impact can be achieved where population densities are very high and huge changes in vegetation (largely deforestation) have already taken place.

f) Economic Evaluation

As yet, there are no major plans for major tourism development within the proposed TBNRMA and the main attempts at bringing economic improvement would appear to be of a more long term nature through promoting sustainable management of existing resources. Increased economic development could be brought through the links between the TBNRMA and the Mtwara Development Corridor.

Benguela Current Large Marine Ecosystem Programme (BCLMEP)

a) Rationale and Objectives

The BCLMEP has been established between the governments of Angola, Namibia and South Africa to manage the common fisheries of the Benguela Current ecosystem. It is somewhat different to the other initiatives reviewed in this paper. It has been included in this review because it largely matches the definition of Trans Boundary Natural Resources Management Areas provided at the beginning of this paper. It straddles the frontiers of three countries, covers a large ecosystem and requires a process of co-operation across boundaries to maximise conservation and sustainable management of natural resources. However, a major difference between the BCLMEP and other initiatives is that there is no clearly stated objective of direct economic benefit to specific local communities or other beneficiaries. The major focus of the programme is the management of the Benguela Current system in order to ensure that sufficient stocks of commercially harvested fish will still be available. Economic and social benefits will come indirectly through the harvesting of fish resources.

According to the BCLMEP strategic action plan (UNDP 1999) the colonial and political past of the three countries involved have resulted in fragmented management of the ecosystem; an absence of coordinated planning; poor legal frameworks; a lack of



enforcement and implementation of existing legislation; insufficient public involvement; unbalanced regional capacity development; and inadequate financial resources. These factors combined with a complex ecosystem which has a highly variable environment have resulted in declines of fish stocks; unsustainable harvesting practices; uncertainty regarding ecosystem status and yields; increasing pollution; habitat destruction and alteration; loss of biotic integrity; threats to biodiversity; harmful algal blooms; and inadequate capacity to monitor and assess ecosystems. The aim of the BCLMEP is to halt the changing state of the system and where possible, to reverse the process through co-operative regional action to manage the ecosystem on an integrated and sustainable basis (Ibid. 1999).



b) Organisational and Implementation Arrangements

An Interim Benguela Current Commission was established between the three countries to strengthen regional cooperation and to implement the Strategic Action Programme. The commission is supported by a programme Coordinating Unit and several advisory groups.

c) Activities

Current activities are focused on:

- Promoting sustainable management and utilisation of living marine resources
- Management of mining and drilling activities
- Assessment of environmental variability, ecosystem impacts and improvement of predictability
- Pollution management
- Maintenance of ecosystem health and protection of biodiversity
- Capacity strengthening

d) Social Impacts

The initiative will benefit local communities and other stakeholders such as the artisanal and large scale fishing industries to the extent that it can ensure the continued supply of harvestable fish resources in adequate quantities for commercial harvesting.

e) Ecological Impacts

Although the programme has a focus on maintaining ecosystem health and biodiversity, the fish stocks and other resources are likely to come under continued pressure from commercial interests. In Namibia, for example, the government is committed to attaining a recovery of fish stocks but due to pressure from the fishing industry sets quotas that environmentalists believe are above sustainable levels. The Namibian fishing industry also annually exerts pressure for the culling of seals believing that Cape fur seals consume sufficient numbers of fish to reduce the available stocks.

f) Economic Evaluation

As with d) above, the extent to which economic benefits will be achieved will depend upon the programme's success in ensuring adequate fish stocks for commercial harvest.

INFORMAL TRANS BOUNDARY RESOURCE USE

It would be impossible to describe all the various forms of informal cross-border natural resource use, but this section provides a few examples that highlight key issues and challenges. Griffin *et al.* (1999) make the point that much informal use of natural resources occurs in areas along boundaries between countries and has done so for many decades. They provide a number of examples of economic trade links based on locally harvested natural resources where supply and demand situations are unequal on opposite sides of the border:

- Production of palm wine in the Futi Corridor in southern Mozambique and its sale in South Africa
- Fuel wood being harvested illegally in Kruger National Park in South Africa and being used in Gaza in neighbouring Mozambique
- Fuel wood being moved from land east of lake Malawi/Niassa in Mozambique to Malawi islands on the east side of the lake and from forest areas in Mozambique to the east of Mount Mulanje in Malawi

They also cite the example of a project to promote bee keeping by local people living on the boundary of Malawi's Nyika National Park. The project failed in part because people living across the border in Zambia were not allowed to participate and stole the honey. Another example from the border with Zambia and Malawi is conflict between Malawi's Kasungu National Park and neighbouring communities in Zambia (Malawi Dept. of National Parks and Wildlife. Undated). People encroach into the park from Zambia and there is conflict between Zambians and wildlife that leave the park and raid crops, kill livestock and injure or kill humans.

Along the various parts of border areas between Mozambique and the neighbouring countries the flux of goods and people is a common fact. Communities share common cultural, linguistic and ethnic realities confirming how artificial the country borders are.

Some other examples of informal TBNRM activities include:

The Kapenta trade between Mozambique, Zimbabwe and Zambia

Kapenta is a common fish making up part of the diet of most rural communities along the Zambezi basin in Zimbabwe, Zambia and Mozambique. With the advent of the Cahora Bassa dam, the Kapenta fishing industry grew significantly in Mozambique. Considering that the market value of this particular type of fish is higher in the hinterland as compared to the coastal zones of Mozambique, trade is diverted to Zimbabwe and Zambia. Besides the conventional industrial fishery companies involved in the business, it is observed that local communities undertake informal trade of such products often in a barter approach. Provisional studies conducted to assess the magnitude of trade reveal that significant volumes of fish are informally traded into the neighbouring countries from Cahora Bassa.



The firewood supply from Niassa province to the tobacco industry in Malawi

Malawi is known for the significant pressure being imposed on its forest resources, given the prevailing population growth rates and resource use practices. The Malawian Tobacco industry is also known for significant consumption of firewood. A common resource trade practice that is observed in Niassa province is related to the supply of firewood by local Mozambican communities to the Malawian Tobacco industry. This situation is stimulated in part by the local need for Malawian currency, to facilitate access to industrial goods available in Malawi. Most of the rural villagers in Niassa province can easily purchase bicycles for example, within the closed Malawian shops on the other side of the border. Within the Mozambique side such trade systems (provision of industrial goods to the rural areas) simply do not exist.

These examples point to circumstances where there is a need to deal with transboundary issues at a local level, focusing on the needs and problems of local resource users and the conflicts between residents and neighbouring protected areas in another country. Other cross-border problems can involve bureaucratic impediments to legal trade based on natural resource use. In the ZIMOZA project area (see Section 6 above) Mozambicans complain that when they take dried fish for sale through the border post in Zimbabwe the fish are confiscated because officials say they are infected with cholera (Guveya 1999). The officials allow Zambian dried fish through the border, yet the Mozambican fishermen say it is all being caught from the same river. Mozambicans also complain that Zimbabweans sometimes take the Mozambicans to Zimbabwe to sell cotton, but at the border the Mozambicans are arrested for illegally trading and the cotton is confiscated (Ibid). In these circumstances, transboundary initiatives can assist local economies by facilitating open trade across boundaries.

SPATIAL DEVELOPMENT INITIATIVES (SDIs)

Spatial Development Initiatives (SDIs) have been established as an approach of governments within southern Africa to help promote economic development. Most SDIs are located within South Africa, several link South Africa with neighbouring countries, while others under the auspices of SADC link countries within the SADC region. According to information supplied on the SDI website, these initiatives aim to “unlock inherent economic potential in specific southern African locations by enhancing their attractiveness to investment. The SDIs aim to facilitate the creation of viable new jobs, as potential investment opportunities, identified through the process, are taken up by the private sector”. In order to facilitate investment, SDI development includes establishing joint action plans between government and other players to remove constraints to investment, through addressing infrastructure needs, providing supporting regulatory and institutional frameworks to support investment, and maximising the ability of local people to benefit from new economic activity.



Okavango Upper Zambezi Tourism Initiative (OUZIT)

a) Rationale and Objectives

The Okavango Upper Zambezi Tourism Initiative aims at developing a tourism destination which encompasses five countries, Angola, Namibia, Botswana, Zambia and Zimbabwe in the wetlands associated with the Okavango and Zambezi River systems (potentially including coastal Mozambique). The concept aims at developing the necessary infrastructure, facilities and human resources. According to a Namibian MET report on OUZIT, tourism and conservation related activities remain the best land use options for local economic development in the region. A pre-feasibility study for OUZIT has been conducted by the Development Bank of Southern Africa (DBSA).

According to the SDI website (SDI 2001a) the specific objectives are to:

- Support local economic growth and social upliftment through tourism development
- Promote the area as an internationally significant multiple destination location for wildlife, eco- and adventure tourism
- Broaden the base for capitalising on the existing well-developed and known tourist destinations and facilities by linking them to new tourist destinations in the area
- Link the OUZIT area with other tourist destinations and conservation areas in south, central and east Africa, thereby creating a network of tourist destinations and contributing towards integrated economic development and conservation management of the sub-continent

b) Organisational and Implementation Arrangements

No information was available on the organisational and implementation arrangements

c) Activities

The following project activities are envisaged:

- Policy coordination and capacity building
- Rationalising/improving air services
- Transboundary conservation and wildlife management strategies
- Regional security arrangements based on protecting and maintaining the economic integrity of the OUZIT area's conservation and wildlife assets
- Other economic development strategies involving both communities in proximity to targeted tourism development nodes and/or sectoral linkages between tourism and the broader economy

The United States Agency for International Development (USAID) is funding a transboundary natural resources management programme (Four Corners) that will cover the OUZIT area except for coastal Mozambique (this programme is covered in detail earlier in this paper). It is unclear how the two processes will interact.



d) Social Impacts

If the planned tourism developments take place, local communities and the private sector stand to benefit considerably. Community benefit will be optimised if the initiative focuses on community-based tourism activities or fosters links between communities and the private sector.

e) Ecological Impacts

The initiative plans to promote “environmentally sustainable bankable investments in tourism” (SDI 2001a). In order to ensure that these investments are in fact sustainable, appropriate environmental assessments will need to be carried out.

f) Economic Evaluation

Potentially the initiative could make a significant impact on local and national economies. However, tourism in a large part of the OUZIT area is currently in decline because of the security situation along the Namibian/Angolan border and because of political instability in Zimbabwe.

Limpopo Spatial Development Initiative

a) Rationale and Objectives

This SDI covers parts of South Africa, Zimbabwe and Mozambique and includes the proposed Gaza/Kruger/Gonarezhou (GKG) TFCA (see section 3). According to the SDI website, the objectives are to:

- Position one of the world’s premier eco-tourism destinations, saddled across 5 countries covering an area of 260 000 square kilometres
- Create jobs, infrastructure and skills development in remote areas

b) Organisational and Implementation Arrangements

No information was available on organisational and implementation arrangements.

c) Activities

Key projects will focus on agricultural development (especially irrigation along the Limpopo in Mozambique), mining and mineral processing, tourism (especially GKG TFCA) and flood emergency relief.

d) Social Impacts

Benefits to local communities will depend upon the extent to which specific activities (especially training and capacity building) are targeted at communities and to which links between communities and the private sector are promoted.

e) Ecological Impacts

The planned infrastructure, mining and agricultural developments could negatively impact the environment and will require appropriate environmental assessments.



f) Economic Evaluation

Preliminary project scanning suggests investments of approximately US\$1 billion that could generate 35 000 jobs and contribute US\$2 million to the area's GDP in 10 years (SDI 2001b).

Gariep Spatial Development Initiative

a) Rationale and Objectives

This SDI covers an area based on the lower Orange River which includes parts of South Africa and Namibia. The main objective is identification and scoping of investment projects based on natural resources of the area. This SDI includes the proposed Richtersveld/Ai-Ais TFCA and the Gariep TFCA, both between South Africa and Namibia as well as the Kgalagadi TFCA between South Africa and Botswana (see section 3). It also includes the Orange River Mouth, which has been designated a Ramsar site.

b) Organisational and Implementation Arrangements

Information on the organisational and implementation arrangements was not available.

c) Activities

Investment projects include tourism, mariculture on the Namaqualand coast, infrastructure development, agriculture, mining and mineral processing and game farming.

d) Social Impacts

If the planned infrastructure and industrial developments take place, there could be considerable job creation and increased urbanisation around growth points.

e) Ecological Impacts

Environmental assessments will need to be carried out for the infrastructure and industrial developments.

f) Economic Evaluation

Key projects referred to on the SDI web site (SDI 2001c) run into several billion US dollars.

Lubombo Spatial Development Initiative

a) Rationale and Objectives

This initiative covers part of South Africa, Swaziland and Mozambique and includes the proposed Lubombo TFCA (see section 3.) The SDI focuses on improving infrastructure such as roads, movement of tourists and goods between countries, malaria control, and on packaging of investment projects.



The sub-tropical plains and coastal areas surrounding the Lubombo Mountains between South Africa, Mozambique and Swaziland are characterised by unique natural and cultural resources potential. Despite the abundance of existing resources this part of the sub-continent is marked by extreme poverty and negligence exacerbated by prior politics and regional destabilisation. Considering the new regional geo-political set up after the termination of the apartheid regime in South Africa, new opportunities are being opened for local and international investors to materialise the non used potential of this particular sub-region. Opportunities do exist to provide a contribution for employment generation, economic development and improved livelihood of local communities. Similar to other regional programmes being implemented under the SADC initiative the Lubombos Spatial Development Initiative aims at (SDI 1995):



- Promoting economic growth through maximising utilisation of existing potential, maximising engagement of the private sector, and establishing an attractive environment for investment in the region
- Maximising the creation of job opportunities through the establishment of new competitive industries
- Expanding the framework for property rights within the regional economy
- Ensuring cooperation within all governmental levels among the three participating countries on the Lubombo SDI to speed up the implementation process

b) Organisational and Implementation Arrangements

The Lubombo Spatial Development Initiative has three levels of organisational arrangement:

- The Trilateral Ministerial Commission (the highest decision power body)
- The technical trilateral Team - composed by two representatives of each country)
- The Inter-departmental commission at a country level (created at a country level to coordinate the national activities from the various government departments involved in the initiative)

Although reference is made to account for wider stakeholder consultation for the implementation of the initiative, the organisational set up is strongly driven by the government authorities and private sector of the participating countries.

c) Activities

Major activities being planned include:

- Construction of an extension of the South African N2 into Mozambique up to Maputo
- Ensure effective trans-border movement between the countries to facilitate easy access
- Support the development of basic infrastructure such as water supply systems, telephone and electricity supply systems
- Establishment of protocols and cooperation agreements to ensure adequate involvement of all levels of governance between the three countries in development decisions

- Conflict resolution over land tenure issues and implementation of mechanisms that ensure access to land for investors
- Implementation of programmes to ensure increased capacity of government officers and new business people to participate in the activities associated with the initiative
- Project development in the field of tourism industry (Machangulo Peninsula and the Maputo Elephant Reserve, Ponta do Ouro-Kosi Bay, Mlawula-Hlane, Lavumisa-Pongola, the Lubombos Blue-train project) intermixed with agricultural development.

d) Social Impacts

The Lubombos Spatial Development Initiative is still in its early stage of conceptualisation and implementation. So far most of the activities were devoted to the establishment of the trilateral agreement on the initiative and setting up the required institutional arrangements, as well as the implementation of base-line studies that will guide the content of the initiative.

From the philosophy of the initiative most of the social impacts will be related to the possible creation of significant job opportunities for local communities and the development of basic infrastructures such as roads, water and electricity supply systems. The integration of private business investment will provide opportunities for increased productivity in resource use with subsequent impact on the improved household income generation. However, depending on the procedures to be taken with respect to land resources allocation for private investment, there is potential risk of communities being marginalised or ending up with reduced access to resources for their livelihood. Signals of such resource-based conflicts have been noticed with the experience of the failed Blanchard concession.

e) Ecological Impacts

The area under consideration is of significant biodiversity importance. Proposed development initiatives may have detrimental effects over the environment. The magnitude of such impact will be determined by the mechanisms to be adopted in implementing proposed projects. Within the three participating countries existing legal instruments create provision for effective environmental impact assessment prior to project implementation. Under the existing regulatory instruments it is observed that all projects need to have an Environmental Compliance Certificate. The degree of their environmental sustainability will depend on the rigour of the EIAs as well as on the degree of incorporation of the EIA recommendations during implementation.

f) Economic Evaluation

The initiative has the potential to boost economic growth in the region and to facilitate regional economic integration among participating countries. An element of equity in benefits sharing needs to be taken into account both among the participating countries and between the various stakeholders at regional and national levels. There is a perception that the SDI process is strongly driven by the South African agenda. Being the most advanced country in terms of resources and technical expertise South Africa might take advantage of its strength in the region to capture more benefits compared to other participating countries.



DEVELOPMENT CORRIDORS

Development corridors are closely linked to SDIs but are essentially linear developments established along lines of transport and communication that link two or more countries. Activities focus on upgrading existing transport infrastructure and improving investment opportunities in areas linked to the lines of transport.

Maputo Development Corridor

a) Rationale and Objectives

This corridor runs from Witbank in South Africa through to Maputo in Mozambique and forms part of the Coast to Coast initiative described below. A Maputo Corridor Company has been established as a cooperative venture between South Africa and Mozambique. A main feature of the corridor is a toll road between Witbank and Maputo. A number of tourism development projects have been identified within the corridor including development within the Gaza component of the Gaza/Kruger/Gonarezhou TFCA. Other tourism developments include various community-based conservation projects in Mpumalanga Province of South Africa and eco-tourism facilities that will provide additional employment. The corridor also focuses on industrial development.

The Maputo Development Corridor (MDC) is viewed as one of the most ambitious and exciting development initiatives undertaken within the Southern African region. It results from the substantial geo-political changes currently under way in Southern Africa with the end of the apartheid regime. These changes have facilitated growing co-operation through true partnerships. At a meeting in Maputo in August 1995, the respective Ministers of Transport of Mozambique and South Africa agreed to set in motion a process to re-establish the development axis between Johannesburg (South Africa's industrial heartland) and the city and port of Maputo. The initiative was driven by the vision to rehabilitate the core infrastructure in the corridor (notably road, rail, port and border post) through public/private partnerships thereby re-establishing key linkages and opening up inherent under utilised economic development opportunities. Common to both countries is the importance of the initiative to their respective reconstruction and development programmes (specifically to achieving GDP and employment growth targets, increasing local and foreign fixed investment, and improving exports). Underlying this vision was the desire to see this initiative contributing to other key policy areas, notably regional economic integration, international competitiveness and a broadening of the ownership base in the economy of the corridor (SDI 2001d). Its four basic objectives were outlined as follows (Ibid.):

Objective One: To rehabilitate the core infrastructure along the corridor (road, rail, port, dredging of port and border posts) with minimum impact to the fiscus.

Objective Two: To maximise investment in both the inherent potential of the corridor area and in the added opportunities which the infrastructure rehabilitation will create.



Objective Three: To ensure that the development impact of this investment is maximised, particularly to disadvantaged communities.

Objective Four: To ensure sustainability by developing policy, strategies and frameworks that encompasses a holistic, participatory and integrated approach to development.

b) Organisational and Implementation Arrangements

To support the initiative and manage the key policy shifts as suggested by the stated vision, the political leadership put in place strong, well mandated and well resourced trans-national structures at the inter-departmental co-ordination and technical levels, in addition to themselves assuming the roles of political champions and thereby proactively taking on the attendant risks. Subsequently, the governments of Mozambique and South Africa have agreed on the formation of the Maputo Corridor Company - a facilitating entity representing both public and private sector interests.

c) Activities

Major activities being implemented can be summarized as follows (Ibid.):

With respect to Objective One key infrastructure projects are:

- Witbank to Maputo toll road. Concessioned for 30 years to Trans African Concessions. Project value US\$400m. Financial closure December 1997, with construction having commenced in March 1998. Recognised internationally for the well-structured contract and for the speed of delivery.
- Rehabilitation of the Port of Maputo. Preferred bidder (Merseyside Docks and Harbour Co.) now identified to establish joint venture (public/private sector) company to manage, operate and maintain port and dredging. Value US\$85m.
- Rehabilitation of the railway network of Maputo. Preferred bidders (Spoornet on Ressano Garcia Line and Consortia 2000 on Goba/Chicualacuala lines and marshalling yards) identified to establish joint venture (public/private sector) company to manage, operate and maintain southern Mozambique rail network. Value US\$70m.
- Ressano Garcia/Komatipoort Border Post. Bilateral agreement drawn up and signed, to develop a single facility/one-stop border post. Project value US\$33 million. Preliminary design completed. Three year construction programme planned. Parties currently considering the possibility of concessioning the border post.
- As a direct result of private sector investment decisions in the corridor, three additional infrastructure projects are now being dimensioned. These are:
 - Mepanda – Uncua hydro-electricity on the Zambezi River to supply major cities in Mozambique. Value US\$200m.
 - Establishment of joint venture company to construct 2 x 400kv lines to supply industrial, urban and rural energy needs. Value US\$105m.
 - Cellular telephone network in southern Mozambique. Value US\$10m. Project complete.



With respect to Objective Two key sector investments are:

- Mozal Aluminium Smelter Plant in Maputo. Valued at US\$1,3bn. Project designed to produce 245 000 tons of primary aluminium per annum. Estimated to double the current foreign exchange earnings of the Mozambique economy. Project approved and under construction.
- Phosphate rock expansion and defluorinated phosphate rock project. Demonstration project in operation. Main project value US\$150m. Location South Africa.
- Maputo Iron and Steel Plant. Project involves magnetite from South Africa, and natural gas (to convert magnetite) from Pande in Mozambique. Environmental impact assessments looking at conveyance of magnetite, location of plant, and industrial processes. Project value US\$2bn.
- Various petro-chemical projects either commissioned, under construction, in design, in planning or in pre-feasibility, which will substantially add to the petro-chemical cluster in the Highveld Ridge area of Mpumalanga and substantially increase the range of upstream and downstream opportunities. Total value US\$800m.
- Agriculture. Completion of four irrigation schemes in the Nkomati area of Mpumalanga. Settlement of approximately 300 small farmers in new sugar cane development.
- Tourism. Completion of three casino developments in South Africa. Project value US\$170m.
- Tourism. Packaging of six tourism projects in South Africa, with a view to putting out Request for Proposals in early 1998. Value in excess of US\$12m. Community empowerment models being applied vigorously and with success (with respect to both equity and entrepreneurial opportunities).
- Tourism. Transfrontier Parks. Various demonstration projects being undertaken in various border areas (e.g. Makuleke project)
- In addition to new hard investments, the port of Maputo is increasingly enabling the movement of imports and exports for Mozambique, South Africa, Swaziland, Zimbabwe and Botswana. Some of this movement is redirected and some is new, adding significantly to foreign exchange earnings through export. Amongst the increasing exports are coal, ferro-alloys, sugar, citrus and timber.

With respect to Objective Three the range of initiatives include:

- In all concessions involving state assets or in which the state has a role, contracts contain a defined minimum proportion (value) of contract to be given to emerging contractors/emerging business.
- Cluster processes have been initiated in the key clusters in the corridor, (Sugar, Petro-chemical, Tourism, Steel, Agro-processing) in which core firms network into wider suppliers, contractors, communities etc. Similar processes elsewhere in the world have had a substantial impact in stimulating the sector, creating employment and building small enterprise.
- Targeted interventions to support Small, Medium and Micro-Enterprises (SMME's). Examples include proposals to establish a regional (corridor) equity fund to assist emerging small business.
- A very vibrant policy research programme looking to promote equity empowerment and general SMME development.



With respect to Objective Four the range of institutionally based processes to ensure sustainability include:

- A substantial support programme now in place in the corridor. The programme is run through interdepartmental structures at provincial government level, and includes:
 - A Strategic Environmental Management Plan.
 - A Local Economic Development programme aimed at supporting local government in maximising corridor opportunities.
 - A SMME programme designed to support small and emerging entrepreneurs.
 - A Tourism study to develop strategic direction and identify projects.
 - An agricultural study to develop strategic direction and identify projects.
 - An operations room to coordinate information and to facilitate strategic and spatial development frameworks.
 - A communications strategy including media, radio, community theatre and a photographic exhibition.
 - A community based, interactive tracking system – producing quantitative and qualitative information flows from communities.
- Initiation of the process to form the Maputo Corridor Company (MCC). It is intended that MCC be a facilitating entity representing public and private sector interests.
- Launching of a three year technical support programme by the MCC which comprises policy research in key areas, demonstration projects in key sectors, training at community and government levels, and initiatives aimed at building small business (cluster processes).

d) Social Impacts

Under the project's intended objectives, reference is made to the adoption of integrated and participatory approaches to development. This is aimed at meeting the needs of local communities within the project area. From the development observed so far, more still needs to be seen in terms of the beneficial social impacts that the project is creating for local communities. It is not yet possible to measure the extent of these benefits. There is some degree of job creation within the construction works, however, questions can be raised regarding to which communities the jobs go (from the project site or further afield). The impacts in terms of maximising the use of local expertise and resources within the participating countries have on several occasions been debated in the media in Mozambique. Questions have been asked as to why Mozambican cement was not used during the construction works of the Mozal Aluminium Smelter instead of importing it from South Africa. Questions were raised regarding the employment policy adopted within this factory in terms of the utilisation of Mozambican nationals. Questions have been raised with respect to the level of consultation undertaken to incorporate the perspectives of the different stakeholders at regional and national levels for example in relation to the final approved route that passes across the densely populated city of Matola.



e) Ecological Impacts

The nature of the proposed project has a high potential for generating detrimental ecological impacts depending on the mitigation measures to be adopted on the basis of conducted EIA studies. A controversial debate over the ecological implications of the aluminium smelter associated with the project was an issue of tremendous discussion in the media and public sectors in Mozambique. Issues related to sources of water required for the industry as well as the pre-treatment and final disposal of produced effluents were some of the crucial ones.

f) Economic Evaluation

There is a continual process of project identification and preparation in the MDC. There are currently 180 projects under consideration, in all economic sectors, with a total value of US\$7bn and potential to create an estimated 35 000 permanent new jobs. Potential contributions to foreign exchange earnings are also substantial. Of the above, approximately US\$4bn has now been committed, with the creation of 12 000 jobs. Beyond these very tangible/visible impacts, the MDC has also had a strong bridge-building function, stimulating new bi-lateral agreements, restoring trust, and addressing trade imbalances. The MDC is also playing a significant role in the regional economic integration debate by demonstrating through projects the nuts and bolts of integration. Finally, in its short life, the MDC has already had a profound impact in key policy areas in South Africa, Mozambique and the broader region.

Beira Corridor SDI

a) Rationale and Objectives

Although Southern African countries attribute high importance to the establishment of a regional industrial strategy, establishing such a strategy has proved difficult because of a lack of consensus on a framework. In the absence of a regional industrial strategy, therefore, a number of countries have begun to focus on micro-industrial initiatives linked to development programs focussing on a specific region. The Beira Development Corridor (BDC) is one such program being launched by Zimbabwe, Mozambique, and South Africa. The objective of this project is to unleash the enormous economic development potential of the BDC in a sustainable way by concentrating limited state resources in a specified corridor area. The idea is to move away from policies of import substitution and self sufficiency to resource-based development anchored on international competitiveness. In the particular case of Zimbabwe, the aim is also to reduce transport costs to enhance the competitiveness of its export-oriented industries. Ultimately the initiative intends to promote infrastructure development priorities and opportunities along the BDC and to ensure that such investments are structured to equitably distribute future economic benefits. Adequate identification of projects with the potential to help realise the socio-economic potential of the Corridor is within the list of priority goals. Instead of merely being a transport link, the corridor is envisaged to become a business development artery, a tribute to the success of the business lobby (SDI 2001e).

b) Organisational and Implementation Arrangements

Formal acknowledgement of a new and wider role for the Beira Corridor is being given with the forthcoming closure of the private sector-lobbying group, the Beira Corridor Group (BCG). An agreement has now been signed between the two countries, setting up the Beira Development Corridor Business Council to promote investment. Although membership will largely come from Mozambique and Zimbabwe, it is hoped that companies from Malawi, Botswana and Zambia will join.

c) Activities

It is anticipated that the basic infrastructure in place rebuilt by the Mozambicans and the donor community will help to promote development in the corridor and attract new investment. This can be done by the private sector without the BCG playing middleman. Since its establishment the BCG has been the catalyst for total expenditure of R2 billion on overhauling the port and the transport links. The basic aim is to establish a normal business relationship between governments and the private sector, as evidenced by the formation of the Beira Development Corridor. Mozambique and Zimbabwe are continuing the drive to develop private enterprise along the transport link between Beira and Zimbabwe, similar to the Maputo corridor.

d) Social Impacts

Social impacts specifically related to the initiative are yet to be seen. It should be mentioned that the road rehabilitation effort undertaken so far provides a much easier flow of goods and transport services to communities along the system. Road rehabilitation has improved the condition of certain sections of the corridor particularly during the rainy season. However, in terms of the much broader scope of a development corridor, very little can be said in terms of spin-offs on job creation or other forms of industrial or agricultural development along the corridor.

e) Ecological Impacts

Any economic development initiative of this dimension has the potential to generate detrimental effects to the environment. The magnitude of development investment so far has not yet negatively impacted on the environment in a significant manner.

f) Economic evaluation of the success or failure of the initiative in benefiting national and regional economies

Potential exists for economic growth of local, national and regional economies. Given the reduced level of infrastructure investment those benefits are still to be seen.

Coast to Coast Spatial Development Initiative

a) Rationale and Objectives

The Trans Africa Coast to Coast SDI is aimed at promoting regional integration, economic growth, employment creation, mobilisation of private sector investment, and local economic empowerment of adjacent communities in and between the



participating countries (Mozambique, Swaziland, South Africa, Botswana and Namibia) (SDI 2001f). Essentially the initiative aims to develop a transport and development corridor across the continent.

b) Organisational and Implementation Arrangements

The initiative is still in the early stages of conceptualisation and broad agreement is required between the participating countries. In principle approval to proceed has been obtained from the relevant South African line ministries.

c) Activities

The proposed coast to coast highway (from Maputo on the Indian Ocean to Walvis Bay on the Atlantic) is a tourism project intended to generate regional collaboration in tourism development and to capitalize on the diverse cultural heritage between the two coasts. It is also intended to facilitate and support greater economic and infrastructural integration within southern Africa. The SDI website notes that one of the specific challenges of the initiative will be to ensure that local communities are empowered in the tourism development process.

d) Social Impacts

The involvement and benefit of local communities will depend on the extent to which they are indeed “empowered” in the tourism development process or remain marginalised due to private sector domination.

e) Ecological Impacts

Environmental assessments are required to determine the impact of the infrastructure and other developments.

f) Economic Evaluation

The initiative has the potential to stimulate considerable economic growth and employment creation.

LESSONS FOR TBNRM FROM OTHER EXPERIENCES

All of the transboundary natural resource management initiatives reviewed aim in some way to benefit local communities. The project documents all refer to economic benefits and most refer to some form of community empowerment. Many also point to the problems involved in engaging local communities in TBNRM. However, there is a wide body of experience that has developed in the field of protected area management and community-based natural resource management (CBNRM) that can assist TBNRM projects in finding the right mechanisms for involving communities and enabling them to benefit. Many of these lessons are derived from approaches that have worked, but others have come from approaches that did not work or from gaps and constraints identified in protected area outreach and CBNRM projects and activities. TBNRM is viewed by many proponents as an evolution of CBNRM in border areas, yet there are problems encountered by CBNRM approaches that have yet to be addressed.



Lessons from Protected Area Management

Over the past two decades a major focus of park management theory and practice has been the need of conservation agencies to gain the support of the people living in or next to protected areas (referred to here as “resident peoples”). A number of different approaches have been developed to promote a better acceptance of land under formal conservation status. These approaches and their associated problems are discussed below.

The beneficiary approach

The ‘beneficiary’ approach as it has been called (Wells and Brandon 1992), rests on the assumption that if the protected area benefits its resident peoples, especially by increasing their standard of living, they will a) develop positive attitudes towards the park and b) desist from activities which threaten the park. Direct or tangible benefits from protected areas can include:

- Revenue sharing (e.g. from entry fees, accommodation fees, trophy hunting and other park activities)
- Access to resources (e.g. reeds, fish, game, thatching grass, fuelwood, palm leaves, grazing, etc.)
- Employment
- Tourism enterprise opportunities in or outside park (campsites, lodges, joint ventures with state or private sector, traditional village, craft sales, firewood sales, provision of vegetables and other foodstuffs, etc.)
- Social services (e.g. roads, clinics, water provision etc. - free or at a nominal charge for use)

This approach is often accompanied by attempts at educating resident peoples about the benefits and importance of the park. A number of problems have also been identified with this approach. For example, there is little point in a protected area sharing benefits if there is no clear link between the benefits and improved conservation of the park and its resources. Wells and Brandon (1992: 31) point out that “very careful thought must be given to the anticipated linkages between the social and economic benefits for people living *outside* protected area boundaries and the needed behavioural responses to reduce pressure on resources *inside* the boundaries”. Often it is difficult to make these linkages. It can be argued, for example that the provision of social services by the park authorities for resident peoples is in any case a government function and therefore unlikely to be an incentive for changed behaviour. Access to park-generated benefits might not be sufficient to reduce demand for resources within the park. According to Hannah (1992: 55) “Project development benefits may help compensate individuals and communities for lost access to reserve resources, but do not remove the motive for exploitation. There is no absolute level of development beyond which desire for further wealth or well-being disappears”.

Some protected areas share revenue with neighbours, but income generated by many protected areas is insufficient to make an impact on the livelihoods of resident people. Furthermore, the income is likely to be required for park management activities and the protected area will be unable to afford to share the income it generates.



The beneficiary approach has been criticised for involving resident peoples in what has been called 'passive participation' (IIED 1994, Wells and Brandon 1992). In this scenario, resident peoples have very little input into decision-making and control and are more-or-less passive recipients of benefits from the protected area, perhaps providing information to outside experts and 'rubber stamping' decisions made by protected area authorities. Critics argue that 'passive participation' is insufficient to generate adequate support for protected areas. This is because these approaches usually seek the support of local communities for ideas and activities which have been initiated by outsiders and do not adequately take into account the needs, aspirations and perceptions of the recipient communities (IIED 1994, Brown and Wyckoff-Baird 1992, West and Brechin 1991). The one-way, message-oriented education campaigns which often accompany the beneficiary approach are rarely successful in changing people's attitudes and behaviour (Brown and Wyckoff-Baird 1992).

Finally, it is often not clear whether resident people are receiving *net* benefits from schemes to provide benefits from protected areas. Economic analysis is required to establish whether the benefits outweigh the costs, and whether this is perceived as such by the local people (IIED, 1994).

Compensation and Substitution

This approach goes beyond the beneficiary approach by recognising that where resident peoples have been removed from their land or denied access to resources, they should be compensated. Conservation authorities provide them with alternative economic activities, access to alternative resources and/or improved local resource management. Compensation is usually provided in the form of cash, services or employment. Under substitution schemes various alternative resource management methods have been introduced to areas outside protected areas. These include promotion of new crop varieties and cultivation methods, erosion control and soil conservation measures, energy-saving devices, irrigation farming, etc. (IIED 1994).

Although compensation and substitution approaches appear to be relatively simple, there are a number of problems associated with their implementation. Wells and Brandon (1992: 30) suggest that difficult questions that require answers are "*who* should benefit, by *how much*, and for *how long*". There are problems with the sustainability of compensation approaches that are built on the provision of donor funding. When the funding runs out the compensation stops and "Communities are left confused and embittered and, having no alternative sources of livelihood, revert to illegal utilisation of the wildlife resource." (IIED 1994: 21).

Often compensation is provided without a good understanding of whether it will fully cover the opportunity cost to the community of foregoing access to or use of a resource, and without a good understanding of whether the compensation serves a purpose in a community's livelihood which is similar to the activity foregone. For compensation to act as an incentive for communities to change their behaviour towards a protected area, it "must at least be equal to what communities are willing to accept in exchange for foregoing the use of a resource" (IIED 1994: 22-23).

New approaches to dealing with the issue of compensation have emerged in South Africa as the new government tries to deal with land claims of people removed from

their land under the former *apartheid* policy. Some of these claims are being made in regard to land from which people were removed to make way for the establishment of protected areas. The land claims of the Makuleke community in the Kruger National Park and of the San in the former Kalahari Gemsbok Park are the most prominent examples.

Buffer zones

The buffer zone approach aims to develop zones of compatible land use adjacent to the protected area, in order to reduce conflicts with neighbours and remove the 'hard edge' boundary between land used for wildlife protection and land used for crops or livestock. Typically a protected area would have a core area of protection in which the primary objective would be biodiversity conservation. This core area would be surrounded by a buffer zone which would be used for development activities which would involve local communities (Wells and Brandon 1993). Within the buffer zone there would be a restriction, however, on certain activities such as growing crops or establishment of settlements. Since the development of the buffer zone concept, a number of different definitions of and approaches to buffer zones have been established. Generally the main motivation for buffer zone creation has been the "protection" of a protected area by hoping to change the attitudes and behaviour of resident peoples through using the buffer zone as a means of generating benefits and reducing conflicts between incompatible land uses.

Despite the popularity of the buffer zone concept, there is consensus in the literature that in practice, the approach is difficult to implement and has not been very successful (Brown and Wyckoff-Baird 1992, Hales 1989, IIED 1994, Wells and Brandon 1993). A number of reasons are given by the same authors for the lack of success in implementing buffer zones and these are summarised below:

- Several authors point to the fact that buffer zones are often created outside the existing boundaries of protected areas. This means that resident peoples are expected to give up some degree of access to land and resources to which previously they had unrestricted access. This begs the question: Why should local people be willing to do this?
- There is little evidence to support the supposition that limited benefits available from a buffer zone will change the behaviour of resident peoples so that pressure on the park is reduced.
- Some authors question whether it is possible to monitor and measure 'sustainable use' within a buffer zone and if possible, is it practical, given the scarcity of human and financial resources in most protected area authorities?
- A common constraint identified is that most protected area agencies lack the authority and jurisdiction to establish and enforce a buffer zone, particularly outside the boundaries of the protected area. Even where buffer zones have been proposed inside parks, the conservation authority has often lacked the legal mechanisms for establishing such zones. Most proposals for buffer zones have therefore remained on paper and have not been implemented.
- Another problem is that little attention has been paid to the promotion of development activities within buffer zones, and benefits to resident peoples have often never materialised.
- Some authors believe that buffer zones have not succeeded in their objectives often because they have been imposed from above and resident peoples have not participated in the planning of the buffer zone.



Support zones and the ‘engine of growth’ approach

As a result of the growing recognition of the limitations of buffer zones, conservationists have begun to rethink and revise the buffer zone approach. New ideas include the establishment of ‘Support Zones’ around protected areas instead of buffer zones.

The support zone concept takes a much more positive approach to protecting the protected area than the conventional buffer zone approach. Support zones are not intended to restrict protected area neighbours from certain activities outside the protected area as with many buffer zones. The support zone is an area adjacent to the protected area in which the protected area authorities try to create a set of circumstances which are favourable to the continued existence of the protected area. Within support zones, the protected area authority tries to promote compatible forms of land use, assists local people with problem animal control, looks for ways to promote enterprise opportunities linked to the protected area, assists local people in the management of land and natural resources, and provides environmental education as a service to the community. The protected area authority also liaises closely with community leaders and institutions to develop good communications and a spirit of partnership (Schuerholz 1996).

Within support zones, protected area authorities can pay particular attention to using parks and game reserves as nodes of local economic growth and development. Support can be given to the establishment of wildlife and tourism based industries outside the protected area and local businesses can be given contracts to carry out construction work inside the park. Management plans need to give consideration to how tourism developments inside the protected area might preclude opportunities that could be made available to communities outside the area.

An important pre-requisite for the successful implementation of support zones is a recognition that the land and resources belong to the people living on the land and their rights and development needs (including the use of land for crops and livestock) must be respected.

Participatory approaches

Following the emergence of ‘participation’ as a new paradigm in rural development, conservationists keen to link conservation and development have also embraced the bottom up approach and recognised the need for resident peoples to be involved in the planning and implementation of projects which affect them. However, many commentators conclude that participation often remains at the level of rhetoric and is very seldom really achieved in the implementation of either conservation or development projects, or activities which link the two (Brown and Wyckoff-Baird 1992, IIED 1994, Wells and Brandon 1992, West and Brechin 1991). This is often because there is not a common understanding amongst either development workers or conservationists of the concept of ‘participation.’ There are many different interpretations of the concept which range from situations where outsiders consult local people but make all decisions (passive participation) to situations where local people have a large degree of control and involvement in decision-making (active participation). The beneficiary approach described above would be a good example of ‘passive participation’. Co-management approaches where resident peoples have



a significant level of involvement in protected area policy, planning, and decision-making, are examples of active participation.

Lessons from CBNRM

The importance of proprietorship

One of the main problems identified in CBNRM has been the lack of secure community tenure over land and resources. Even where progress has been made in giving strong resource rights to communities (e.g. with wildlife conservancies in Namibia), the lack of strong property rights over land can undermine efforts to manage grazing lands and water points sustainably. To a large extent, open access situations allow people to move livestock on to grazing land that others are trying to save for emergency pasture or are using as part of a wildlife production system. Migration into the Zambezi valley has been problematic for several potentially successful CAMPFIRE areas in Zimbabwe because residents have not been able to assert their own rights to the land.

The lack of strong communal property rights over land has a number of implications for TBNRM activities, which are in any case often driven by powerful interests such as the state, international NGOs, development banks and the private sector. When communal land is targeted to be part of a TFCA, governments can over ride community interests in terms of designating the land for conservation, allocating it to the private sector, or restricting certain activities in the interests of conservation (Cousins 2000). Extreme examples are the former Blanchard and other concessions in Mozambique where communal land has been incorporated into large tourism and wildlife schemes for private sector development. Without strong land rights, communities have little bargaining power with the vested interests that would see communal land converted to state and/or private conservation and tourism uses.

The need for strong communal land rights, and the need for devolution of authority and responsibility to communities to manage their own land and resources are strongly emphasised by Griffin *et al.* (1999). The CPPPs programme under the SDI approach talks of communities becoming equal partners with other stakeholders. This can only happen if sufficient attention is given to issues of land and resource rights and tenure.

Community organisation and representation

CBNRM has provided a number of lessons regarding community organisation and representation. Clearly it is advantageous for communities to have some representative body that can deal with outsiders, negotiate with other stakeholders, conclude contracts with the private sector, etc. However, CBNRM experience has shown that it is often difficult and time consuming to develop such representative community institutions. In many respects it could be argued that such institutions already exist in the form of traditional authorities. However, there are several reasons why traditional authorities are thought to be inadequate. In some countries they have been incorporated by former colonial governments in repressive regimes and such governments have made their own appointments of traditional leaders. This has led to a decline in respect for traditional authorities which has been exacerbated by the removal of many of their powers by central governments. Modern development theory



places great emphasis on issues of gender and other forms of equity, and communities are encouraged by NGOs and development organisations to form committees with representation from all interest groups within the community.

In these circumstances, many CBNRM and rural development projects quickly encourage communities to form “representative” committees which are then expected to take decisions on behalf of everyone. Yet it takes time for any new organisation to develop legitimacy within the community. Partly this legitimacy is built upon what the new institution can deliver, but it is also built upon the extent to which the community committee becomes accountable to the people it is supposed to represent. This also requires time and possibly careful facilitation from outside organisations. When outsiders promote the establishment of community committees, it is likely that those elected will represent the dominant interest groups within a community. This tendency also needs to be recognised by those promoting the development of new community institutions. Experience also shows that the smaller the community and the more ethnically homogenous, the better the likelihood of success. Small groups of people can meet more easily to make decisions and peer pressure can help in ensuring that people adhere to decisions or rule making (Murphree 1993, Ostrom 1990).

TBNRM approaches that depend upon establishing community committees need to take these issues into account and should not expect to instantly create a community body that is able to immediately take decisions on behalf of everyone.

Communities are not homogenous

It is perhaps ironic that the big conservation NGOs such as Peace Parks Foundation, the development banks, and governments driving SDIs and other large development projects are all using the word “community” just as many in CBNRM are beginning to question the use of the concept. To some extent CBNRM approaches have taken an uncritical perspective of the concept of “community” viewing it as comprising a harmonious group of people nearly always acting in the group interest. There has in the past been a failure to recognise that within communities there can be many different groups often with competing interests. There has been an assumption that because land is held communally, there will be a relatively uniform approach to decision-making about land use, distribution of benefits, etc. However, experience has shown that communities are made up of rich, poor, livestock owners, non-livestock owners, young, old, males and females, all with different interests and perspectives. Decision making takes place in an arena of conflict between these different interest groups (Cousins 2000).

The realisation of the need to disaggregate the concept of “community” does not necessarily mean that the notion of community is no longer useful. Clearly there are certain reasons why people have a sense of “community”: they share the same language and culture, they live in the same place, recognise the same headman or chief, etc. And these shared attributes, norms and traditions do provide a foundation for co-operation. However, both CBNRM and TBNRM approaches need to be more rigorous in their understanding of the concept of community and in their use of the



term in project documents.

The TBNRM literature reviewed is full of blanket references to the “community”. In some cases the term is used to refer to actors at the district or local government level, while in others it seems to refer to all the inhabitants of a fairly large geographic area. There are many references to community projects, particularly with regard to tourism development. It would appear that to some extent these blanket references to the “community” are masking real and important differences between various interest groups within communities and between different levels of political organisation.

A “community” focus is not always appropriate

Modern development theory and practice (on which many CBNRM and TBNRM approaches are based) strongly emphasises the need for “community” participation, “community” benefit and “community” empowerment. In the context of CBNRM and TBNRM, which both echo these prescriptions, we need to step back and ask some fundamental questions. When targeting project interventions, whether it be establishing “community” committees or promoting benefits from tourism, we need to ask whether a “community” (i.e., group) focus is appropriate. A good example is the promotion of tourism at community level. The literature is full of enthusiasm for community-based tourism, but in reality, tourism is not an activity that is well suited to being community-based in the sense of group benefit and group management. Committees are hopeless at running businesses and a tourism enterprise such as a community campsite is never going to earn enough money to have an impact on the “community”. When businesses are viewed as “community projects” they are most likely to fail, because the income is dissipated amongst a large number of beneficiaries and is not re-invested in the business.

However, if the campsite is run as a business by an individual who keeps the profit, is able to take decisions and risks, there is more likelihood of success. There can still be benefits to the “community” in this scenario. Some individuals can be employed and perhaps others can sell crafts to the tourists visiting the campsite. One of the lessons from income generation projects in rural development programmes is that group projects do not work well and the focus should be at the individual or household level.

So where does this leave CBNRM and TBNRM in terms of a community focus? There are in fact appropriate circumstances when the group needs to be taken into account. In the scenario above of the campsite run by an individual there are important impacts that the campsite is likely to have on the group. Firstly the campsite is on communal land which means that its appropriation by an individual has opportunity costs to other members of the community who have always had access to the land for grazing, firewood, medicinal plants etc. The tourists who visit the campsite will traverse communal land where people are living and there could be several negative impacts socially and environmentally. This is the appropriate area in which the group needs to be considered. In the same way that it might be expected for an outsider to pay compensation for the use of communal land, so should the individual community member running a campsite on communal land. Just because the individual is a member of a “community” does not make an individually run business a “community” project. It should be recognised for what it is: a business run by an



individual who will pocket the profits of the enterprise. However, individuals should pay a fee or levy to whatever community institution is appropriate (traditional authority, community development committee, community trust, conservancy etc.) in recognition of the collective rights that are diminished by the individual's activities.

A number of appropriate roles for community institutions in tourism activities can be identified:

- Representing the community in government planning activities (zoning, deciding on appropriate forms of tourism, carrying capacity, formation of TFCAs etc.)
- Entering into joint ventures with the private sector for large-scale tourism activities such as lodge development (indeed, the private sector requires a legally constituted body with which to negotiate and sign contracts)
- Equitable distribution of benefits from joint ventures
- Negotiating with NGOs and donors for appropriate development assistance
- Developing plans and activities that can guide development assistance and government and NGO service provision (instead of outsiders driving the process)

Communities and the private sector

Many of the TBNRM initiatives envisage linking the skills, experience and capital of the private sector with the tourism opportunities on communal land. A number of lessons can be drawn from CBNRM experience that can guide relationships between the private sector and local communities. An analysis of joint ventures between the private sector and communities in several southern African countries led to the conclusion that there are a number of key principles that enable tourism joint ventures to work in different contexts (Ashley and Jones forthcoming):

- Particularly where joint ventures are being developed on communal land, the existence of strong community institutions with legal rights over land and resources is important. Legal rights strengthen the community's negotiating hand, but their market power also depends on the market value of their assets.
- A problem facing communities is lack of information on market values. Communities with legal rights over valuable assets can still be weak in negotiation compared to the private sector, which has more capital, knowledge and expertise. Outside facilitation helps to redress the imbalance of power that comes from a lack of experience and understanding of the industry by rural communities. Facilitation can help both sides to develop a greater understanding of each other's needs, fears and aspirations.
- The role of individuals, whether a community member with drive and initiative, or an investor willing to see the community perspective, is important.
- National policy and legislation should play an enabling role.

Where a combination of these factors is present, there is an opportunity for successful joint ventures to be developed. Success can be defined as a joint venture that is sustainable, and generates more benefits than costs for both parties, according to *their* perception. Experience shows that benefits are not just profits for the investor and cash income for the community, but cover a range of commercial and livelihood concerns. This last point is particularly important when considered against one of the dominant themes in TBNRM – the drive to promote community benefit from



tourism. It is crucial to recognise that communities do not see financial benefit as the sole criterion for deciding whether to engage in a joint venture or in choosing a particular joint venture partner. In the enthusiasm for promoting community benefits, space should be given for the community itself to define these benefits and to negotiate accordingly.

SUMMARY OF FINDINGS

Community Involvement in TBNRM Decision-Making

Apart from informal TBNRM activities and some TBNRMA approaches, TBNRM seems to be driven largely by the agendas of international and national NGOs, governments, development banks and the private sector. All formal TBNRM approaches include community involvement and benefit among their stated aims. However, there appear to be major concerns as to whether the powerful outside interests will dominate the TBNRM process, diluting and diminishing real community benefit and marginalising communities in terms of decision making. In nearly all of the initiatives reviewed, decision making takes place between governments and between national conservation agencies. Communities and other stakeholders are to be “consulted” about plans that have already been made at higher levels. Rarely are communities represented in any of the forums where decisions are taken.

The involvement of communities in decision making is one of the main challenges for TBNRM initiatives in southern Africa. By nature, TBNRM requires high level agreements between governments and conservation agencies in order for cooperation to take place across international boundaries. However, it should be possible to ensure that the agreements that reach the desks of high level officials are based on plans that are made jointly by key stakeholders instead of only conservation agencies and other national level players. Within the initiatives reviewed there are some examples of how this might be achieved.

The community level Commercial Societies planned in the Nakaedu Biosphere Reserve (PNBR) in Mozambique will provide the foundation for community involvement in managing the protected area. The Societies will be represented on the coordinating committee for the reserve and the coordinating committee will work with the structures created to promote the TFCA concept with neighbouring Zimbabwe. This institutional arrangement will enable community representatives to have a say not only in management of the protected area, but also in decision making concerning the TFCA. The local boards giving neighbouring communities a statutory involvement in decision making concerning protected areas in KwaZulu/Natal are another example of the type of institutional arrangement that can provide a voice for local communities. In both cases, the key is that communities are recognised as having a legitimate and institutionalised role in decision making concerning the protected area that will be part of a TFCA initiative. In the Nakaedu case, the legitimacy of communities as important stakeholders will be increased if the proposals to give the commercial societies title over land and natural resources are implemented.

More thought needs to be given to the mechanisms that can be used to involve communities in the TBNRM decision-making processes. Projects need to include clear steps that enable communities to design their own development vision and



scenarios and then feed these into specific district and national level planning meetings that are aimed at building consensus, trust and understanding between different stakeholders with different agendas. More effort should be put into helping local communities understand the broader environmental and economic contexts in which they are located so that they are better placed to negotiate with governments and the private sector.

Almost ten years on, the words of Brown and Wyckoff-Baird (1992: 15) are just as relevant: "Perhaps the most important lesson learned in development over the last 20 years is that the failure to equitably involve projected beneficiaries as partners of all phases of project implementation from design through evaluation has consistently led to disappointing results... Token participation cannot suffice in the design process. Instead, participation includes all relevant stakeholder groups in a way that enables each to perceive a stake in, and the ability to impact, the process. In addition, the process needs to enable target beneficiaries to themselves initiate the flow of information and decision-making."

"Big Picture" Economic Development versus Community Focus

To some extent there is a polarisation of thinking between those who advocate small-scale incremental approaches linked to existing CBNRM activities and those advocating a "big picture" approach that focuses on a more macro economic development issues and a strong private sector emphasis. The SDIs represent the one end of the scale of TBNRM activities where it is argued that it is necessary to put in place the necessary conditions for economic growth before local communities will be able to derive any significant benefit. It is argued that in promoting economic development linked to tourism and wildlife, it is necessary to ensure that the necessary infrastructure such as roads and facilities are in place, so that tourism flows can be secured and the necessary links to wildlife and protected areas are made.

SDIs are therefore largely driven by governments, development banks and the private sector and decision-making takes place at levels far removed from local communities. This is not a problem if attempts to promote development take into account community use of and entitlement to land and resources. The approach of the Mozambican Government to promoting investment in tourism, seems to have been to give away large chunks of land to private investors regardless of claims to that land by local people and their existing uses of that land. A key issue is that because communities lack secure tenure over their land (which is often owned by the State), and do not have access to information and their own investment opportunities, they lack power in determining how land will be used. The arguments in favour of private sector-led economic development assume that such development is beneficial at community level. However it fails to take into account the power imbalance between government and private sector on the one hand and communities on the other. This power imbalance means that while some local people may benefit from employment and small-scale business opportunities, many others may suffer through loss of access to land and resources. Although the SDI approach is supported by the CPPPs programme, this programme does not appear to deal with the real imbalances of power that exist between local communities and outside interests.

Many of the same issues are relevant when considering the protected area-based TFCA approaches. Led by organisations such as the Peace Parks Foundation, national



governments and protected area managers, there is again the danger of community interests being marginalised. One possible interpretation of the TFCA movement is that it represents a resurgence of the protectionist expansionism of the conservationists that to some extent had been curbed by the new discourse around community-based conservation and political realities in post colonial Africa.

To some extent the TBNRMA approaches reviewed appear to provide a better balance in terms of power relations, agendas and likely benefit to local communities. While still driven largely by outside organisations they appear to take a more holistic approach to natural resource management, incorporating in some cases support to protected areas and improved management of communal lands, and in other cases, focusing almost entirely on communal land issues. Within TBNRMAs there are likely to be many informal uses of natural resources across borders which provide entry points for addressing a range of problems and issues.

The apparent dichotomy between “big picture”, private sector and state-based economic development that will benefit everyone, and incremental small-scale development based on community empowerment is probably false. Clearly economic development at local level depends upon a number of more macro level conditions that include good infrastructure, good transport routes, ease of movement across borders for tourists, national and regional marketing strategies, and security. The private sector and the state have a central role to play in development at this level and scale. TBNRM initiatives need to address such issues if they are to be successful.

However, at the same time efforts need to be strengthened to ensure that the imbalance of power between local communities and outside interests is addressed. Providing strong and secure property rights over land and resources remains the crucial priority in this regard. But other measures include strengthening community level institutions, improving their understanding of resource values, strengthening their ability to negotiate with the private sector, and strengthening their capacity to take part in district and central government planning and decision-making fora. Recognition also needs to be given to the role of households and individuals in enterprise development and natural resource management. A balance needs to be found between community rights and interests and individual rights and interests, particularly in the development of tourism.

Lessons from Protected Area Outreach and CBNRM

Protected area outreach and CBNRM are able to provide a number of lessons for TBNRM approaches. Past experience has shown the weakness of simply trying to “bribe” the locals to accept the government’s game park through benefit sharing and compensation and substitution schemes. Buffer zones have often meant reduced access to land and resources for park neighbours. Yet these are the approaches being incorporated into most protected area-based TBNRM initiatives. There is a need for those driving the initiatives (governments and protected area managers) to move far more towards approaches based on a high level of community participation, co-management arrangements and protected area support zones.



Some lessons from CBNRM point to the need for fundamental changes in the enabling policy and legal environment for TBNRM such as strong property rights over land and resources for local communities. Others at the implementation level point to the need to be more precise in the use of the community concept, and to be clear about when a group approach is appropriate and when activities should be focused at the individual or household level. There are also practical lessons to be learnt about linking communities and the private sector in joint ventures and the need to approach tourism enterprises as businesses rather than “community projects”.



Tourism is not a “Panacea” for Development

The focus on tourism development is a major feature of all the formal TBNRM approaches and there are clearly high expectations of the benefits that tourism can bring throughout the economy. There is plenty of rhetoric in the literature about the tourist attractions of various TFCAs and the huge numbers of tourists expected to visit them. A note of caution should be made, however, about the potential of tourism to contribute to economic development. A number of factors can lead to sudden declines in tourism either locally or worldwide. Security is one of the main factors, and local conflicts or even wars further afield can severely reduce the number of people traveling as tourists.

Some of the rhetoric around tourism seems to be linked to conservationist agendas that view subsistence land use on communal land as inefficient and by definition harmful to the environment. There seems to be a perception that tourism and wildlife should to a large extent replace current subsistence land uses because they are more efficient and environmentally friendly. This, however, ignores the fact that access to land and subsistence agriculture play an important role in providing a social safety net for the poor and marginalised. It also ignores the importance of diversified forms of livelihood in uncertain economic and environmental conditions. It is unrealistic to expect rural communities to give up tried and tested means of making a living for something new and as yet unproven, and which they might have little direct control over.

Impact on the Resource Base

In most cases it is too early to determine impact of TBNRM initiatives on the resource base, although some long term cooperative initiatives such as the Kgalgadi seem to point to potential for success. There is a need for effective EIAs to determine the possible impact of the infrastructure and industrial development planned under SDIs and transport corridors.

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Personal Communication

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TABLE 1. ROUGH TYPOLOGY OF TBNRM INITIATIVES

Type of initiative	Dominant objective	Proponents	Land tenure and Ownership	Implementation arrangements (who controls)	Beneficiaries
Trans Frontier Conservation Area	Biodiversity conservation, linked to protected areas	Donors, Conservationists, e.g Peace parks Foundation, Protected Area authorities/govts.	Protected areas and surrounding/ intervening communal (often state-owned) and freehold land	Protected Area authorities/govts. Communities/other stakeholders are consulted but not involved in decision-making	Protected areas, conservationists, spin-offs to local communities
Trans boundary natural resource management area	Sustainable use of natural resources for improved livelihoods	Donors, Conservation NGOs/ local communities/ freehold farmers/district govt.	Variable, often including Communal and/or Freehold	Conservation agencies/district govt./communities/ Landholders	District govt./local communities
Informal transboundary resource use	Household livelihood support/commercial sale	Local households/ individuals/businessmen	All land tenure types (includes poaching of resources from protected areas)	Individuals, businessmen (middlemen)	Individuals, households, businessmen
Spatial Development Initiatives	Increased economic development	Govt./Development Banks/Private Sector	All land tenure types	Govt./Development Banks/Private Sector	Private Sector with trickle down effects to communities
Development Corridors	Increased economic development	Govt./Development Banks/Private Sector	All land tenure types	Govt./Development Banks/Private Sector	Private Sector with trickle down effects to communities

Initiative	Countries involved	Total land area (sq.km.)	Land area by country (sq.km.)	Land use and tenure	Controlling organisations
Lubombo TFCA	Mozambique South Africa Swaziland	4200	Mozambique: 2 722 South Africa: 1 092 Swaziland 336	State-owned protected areas (Mozambique & SA) Communal land (Moz. & SA) Private ranchland (Swaziland)	Governments and protected area authorities
Gaza/Kruger/ Gonarezhou TFCA	Mozambique South Africa Zimbabwe	99 800	Mozambique: 66 987 South Africa: 22 147 Zimbabwe: 10 645	State-owned protected areas (SA, Zimbabwe, Moz) Private ranchland (Zimbabwe) Private Game Reserves (SA) Communal land (Zimbabwe, Moz).	Governments and protected area authorities
Chimanimani TFCA	Mozambique Zimbabwe	2056	Mozambique: 1 740 South Africa: 316	State-owned protected areas (Moz., Zimbabwe) Communal land (Moz)	Governments and protected area authorities
Maloti- Drakensberg TFCA	Lesotho South Africa	8100	Lesotho: 5 184 South Africa: 2 916	State-owned protected areas (SA, Lesotho) Communal land (SA, Lesotho)	Governments and protected area authorities
Kgalagadi Transfrontier Park	Botswana South Africa	37 991	Botswana: 28 400 South Africa: 9591	State-owned protected areas (Botswana, SA) Communal land (within SA protected area)	Governments and protected area authorities
Richtersveld/Ai-Ais TFCA	Namibia South Africa	6 200	Namibia: 4 300 South Africa: 1 900	Communally owned, state-run protected area (SA) State owned protected area (Namibia)	Governments and protected area authorities
Gariep TFCA	Namibia South Africa	2 800	Namibia: 644 South Africa: 2 016	Land currently in private ownership	Governments and protected area authorities

Initiative	Countries involved	Total land area (sq. km.)	Land area by country (sq. km.)	Land use and tenure	Controlling organisations
Zimoza TBNRMA	Mozambique Zambia Zimbabwe	Boundaries not yet determined		Communal land (Moz., Zambia Zimbabwe)	District authorities, Communities, NGOs
Four Corners TBNRMA	Botswana Namibia Zambia Zimbabwe	200 500 (approx)		State owned protected areas (Botswana, Namibia, Zambia Zimbabwe) Communal land (Botswana, Namibia, Zambia) Community wildlife areas (Namibia, Botswana, Zambia)	NGOs Governments
Every River has its People Project	Angola Botswana Namibia	160 000 (approx)		Communal land (Angola, Botswana, Namibia) State- owned Hunting areas (Angola, Botswana) Community wildlife areas (Botswana)	NGOs
Limpopo/Shashe TFCA	Botswana South Africa Zimbabwe	4900	Botswana: 1 372 South Africa: 2 597 Zimbabwe: 931	State-owned protected areas (SA) Private ranchland (Botswana, SA, Zimbabwe) Private game farms (Botswana, Zimbabwe) Communal land (Zimbabwe) State-owned Hunting areas (Zimbabwe)	Governments, Peace parks Foundation
Zambezi Wetlands Conservation & Resource Utilisation Project	Botswana Malawi Mozambique	1 300 000		State-owned protected areas (Botswana, Malawi, Namibia, Zambia)Communal land (Botswana, Malawi, Moz., Namibia, Zambia)	NGOs

Initiative	Countries involved	Total land area (sq.km.)	Land area by country (sq.km.)	Land use and tenure	Controlling organisations
				Communal wildlife areas (Botswana, Mozambique Namibia, Zambia)	
Lake Malawi/ Nyasa Transfrontier NRMA	Malawi Mozambique Tanzania	100 000		State owned protected areas (Malawi, Mozambique Tanzania) Communal land (Malawi, Mozambique, Tsanzania)	Governments, Peace Parks Foundation
Benguela Current Large Marine Ecosystem Project	Angola Botswana Namibia	4 500 000		Economic Exclusion Zones (Angola, Namibia, SA) International waters (common pool fishing resources)	Governments

TABLE 3. NUMBER OF EACH INITIATIVE (ACCORDING TO TYPOLOGY IN TABLE 1 WITH WHICH EAC COUNTRY IS INVOLV

Country	TCFA	TBNRMA	SDI	Development Corridor
Angola	0	2	1	0
Botswana	0	4	1	1
Lesotho	1	0	0	0
Malawi	1	2	0	0
Mozambique	3	3	2	3
Namibia	2	4	2	1
South Africa	6	2	3	3
Swazi;land	1	0	1	1
Tanzania	0	1	0	0
Zambia	0	3	1	0
Zimbabwe	2	3	2	1