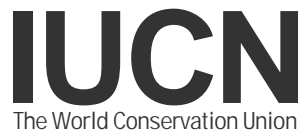


**A Critique of Transboundary
Natural Resource Management
in Southern Africa**

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INTRODUCTION

One of the most significant events in natural resource management in southern Africa has been the integration of environmentalism into development policy. An outcome of the rise of environmentalism is the concept of natural resource management. The last decade or more has witnessed a growing focus on social and scientific research and policy-making in natural resources management and the emergence of community-based natural resource management (CBNRM) as a popular movement. More recently, factors such as globalisation and increasing efforts at achieving regional economic integration have contributed to growing enthusiasm in transboundary natural resource management (TBNRM) by NGOs, donors and the private sector as an additional natural resources management movement.

The meteoric rise of transboundary approaches is due to several factors, including the need to better manage shared resources; the drive for economic growth through regional integration and development; the need to promote peace and security; and more external factors such as globalization and the agendas of international donors and organizations. Numerous TBNRM initiatives have emerged in the region and are being developed and implemented at a rapid pace. However, there are numerous concerns arising from these initiatives ranging from community marginalization to inter-state inequity in the distribution of benefits. There are fears that border communities, already at the margins of social, political and economic opportunities will become further isolated through TBNRM initiatives. At the same time TBNRM initiatives are bringing into focus these otherwise ignored communities. Hence, TBNRM presents real opportunities and constraints that require a sharp focus.

This paper seeks to analyze TBNRM in a broad sense. The purpose of the paper is fourfold:

1. To analyze the rationale for TBNRM and the factors which are driving the emergence of specific initiatives.
2. To analyze and characterize the nature and types of TBNRM in the SADC region.
3. To highlight some key concerns related to the likely effectiveness and sustainability of TBNRM initiatives in the region.
4. To suggest a way forward in terms of key needs and the appropriate roles for organizations and institutions involved in TBNRM initiatives.

The paper is one of three papers commissioned by IUCN (The World Conservation Union) as part of a scoping study of TBNRM in Southern Africa. The second paper is a comprehensive review of specific initiatives (Jones and Chonguica 2001) and the third is a review of the legal and policy framework for TBNRM (Mohamed-Katerere 2001). This paper draws on some of the material from those two reviews, and also incorporates some findings from a regional workshop held in February 2001 to identify and discuss key issues related to TBNRM.



RATIONALE AND DRIVERS FOR TBNRM

There are numerous factors which provide the rationale for TBNRM or are currently acting as drivers of TBNRM initiatives. They range from basic development needs to external factors influencing Southern Africa. By describing these factors, this section of the paper helps to shed light on the emergence of TBNRM as a major development thrust in the region. However, if the potential benefits of this development are to be realised and achieve the goal of equity, then a critical and independent analysis of the drivers of TBNRM is necessary.

The Cross-Border Nature of Resources and Ecosystems

The livelihoods of most people in Southern Africa are dependent on the use of natural resources and the environment. Consequently, effective management of natural resources is essential for long-term sustainable development in the region. Yet these resources are under increasing pressure from human population growth, poverty resulting from inequitable distribution of resources, and macroeconomic changes associated with globalization. National governments in the region have struggled with management of natural resources within their borders, but many now have effective policy and legal frameworks. Commercial poaching of some wildlife species such as elephant and rhino, for example, has been effectively countered in recent years. Unfortunately, many resources in the region cannot be managed at state level alone because they straddle international borders. Major rivers form the boundaries between several SADC countries, and numerous valuable wildlife populations migrate across borders. Activities in one country often have effects on neighbouring countries, and in an era of increasing resource depletion and scarcity, the need for collaboration in management of these resources is growing. Efforts at rhino conservation provide a practical example of the importance of cross-border collaboration. In some cases rhino range states find themselves in a situation where all their rhinos have been poached and hence they are totally dependent on neighbouring countries for breeding animals and expertise.

Economic Growth and Tourism

There is also an economic justification for TBNRM in southern Africa. Natural resources are a significant basis of economic activity in the region. In particular, tourism based on wildlife and other resources is considered to be an industry with high growth potential, especially in areas which have marginal value for agriculture. The World Travel and Tourism Council has forecasted that annual economic growth in tourism in the SADC region should be 5.9% over the next decade with the appropriate policy framework and implementation, and the World Tourism Organization predicts a 5.4% average annual increase in the number of tourist arrivals to the region over the next 20 years (WTTC 1999). In addition to tourism, transboundary initiatives such as Spatial Development Initiatives (SDIs) are expected to boost regional trade. Different TBNRM initiatives are expected to attract direct foreign investment as well as cross-border investments. As the tourism sector flourishes and industrial activities increase, it is assumed that other stakeholders such as local communities will benefit through employment and trade opportunities.

The SADC Treaty and Regional Economic Integration

An additional justification for TBNRM is the drive for regional economic integration that is enshrined in SADC Treaty. In the preamble, the Treaty refers to

“deeper economic cooperation and integration, on the basis of balance, equity and mutual benefit, providing for cross-border investment and trade, and freer movement of factors of production, goods and services across international boundaries”.

Since its formation in 1980 SADC has experimented with different approaches to regional integration in order to guide its strategy for regional cooperation, development and integration. The SADC Treaty signed in August 1992 states that coping with complex regional and global changes, facilitating cross border trade, and achieving economic integration would be more feasible on a regional than national basis. The Treaty provides the institutional basis for cooperation and integration, and uses an approach which is based on project or sectoral coordination (Lee, 1999). The Treaty lists the following seven areas or sectors in which cooperation towards integration will be pursued:

- Food security, land and agriculture;
- Infrastructure and services;
- Industry, trade, investment and finance;
- Human resources development, science and technology;
- Natural resources and environment;
- Social welfare, information and culture; and
- Politics, diplomacy, international relations, peace and security

The Treaty further provides for the conclusion of protocols that would define the nature of and institutional mechanisms for integration and cooperation (SADC, 1992). One of the objectives of SADC is to “achieve sustainable utilisation of natural resources and effective management of the environment”. This is to be achieved through popular participation, development of policies aimed at eliminating obstacles to free movement of people, goods and services, and harmonisation of policies and plans of member states (SADC, 1992).

Through the submission of national projects for funding, it was felt that all member states would benefit from regional development cooperation even though their economies were at different stages of development. Regional cooperation in the SADC context is aimed at overcoming underdevelopment in the spheres of production and infrastructure. Further, such a strategy was intended to be incremental and generate regional identity. This was also seen as a way of not impinging on the sovereignty of member states since national development efforts take priority over regional cooperation.

However, the cooperation model has been criticised because cooperation can be broad and hence not suited to resolving key, yet complex policy issues. For shared natural resources such as water, the SADC functional integration model displays weak linkages between national policies and plans and regional integration efforts. The project-based approach is not designed to respond to potential resource-based conflicts arising from differences in national and regional sectoral policies and plans



(SADC, 1992) and also a growing competition for natural resources. Recognising these weaknesses, SADC resolved to formulate and adopt effectively coordinated sectoral plans and policies and to develop a regional capacity in policy analysis and planning. These weaknesses are still evident and continue to be a constraint to effective regional cooperation. Weaknesses in the functional integration model are exposed by the fact that a project focus has overshadowed the necessity to devise non-military mechanisms for conflict resolution (Moyo and Tevera, 2000). This is a major weakness especially for a shared resource like water with potential for conflict arising from competing demands for a finite resource.

The Tragedy of the Commons

There is strong rationale for the need for formal management of transboundary resources, based on the theory of common property and the so-called “tragedy of the commons.” The theory was proposed by Hardin (1968) and holds that resources such as rivers, oceans, and grazing lands that are not privately owned or controlled are susceptible to overexploitation because individual resource users gain the full benefits of using the resource but only bear a portion of the costs of overuse. Individual users acting rationally will continue to use the resource even if the collective rate of resource use is unsustainable. In reality, the theory does not reflect the complexity of human use of the environment, and overuse of the commons may or may not occur in particular circumstances depending on numerous social and other factors (Goldman 1998). Still, there is no doubt that common property resources have in many cases been overexploited as human populations have grown and technology has improved our ability to harvest or otherwise use resources.

As with resources in Communal Areas, natural resources which are shared across international borders can also be characterized as commons because users cannot control use or impacts caused by actors on the opposite side of a border. As pressure on natural resources increases in the region due to human population growth, poverty, and other factors, there is growing concern about the sustainability of transboundary resource use. Many resources are shared across international borders in the region. For example, virtually every country in the SADC region, with the exception of the two island states, shares a major river basin with at least one other country. The Zambezi River Basin alone spans eight countries in the region (Chenje 2000). Resources such as drinking water and fish are therefore held in common among nations. Other resources such as wildlife populations are also shared across borders because of migratory behaviour and other characteristics. Even resources that are stationary such as forests must often be regarded as transboundary if they have traditionally been accessed by cross-border communities.

Unfortunately, overcoming the tragedy of the commons through management is a daunting task for several reasons. First, while national governments generally have the authority and power to regulate resource use within their borders, they do not have authority or power to regulate resource use across borders. Thus transboundary resource management requires cooperation among governments, which is voluntary and not mandatory. In the case of the Zambezi River Basin, the Zambezi River Authority (ZRA) was established between Zimbabwe and Zambia to manage the Kariba dam and to develop other dams along the river where it flows between the two countries. The activities of ZRA do not include other countries such as Mozambique

which would surely be impacted by upstream developments (Chenje 2000). Second, actual or perceived inequities in resource use between nations can be difficult to overcome and can inhibit cooperation (Ingram et al. 1994). Third, scientific uncertainties about the status of and trends in resource abundance hinder decision-making and therefore often contribute to overexploitation. For example, a common cause of the collapse of fish populations historically has been optimism about the size and productivity of populations (Hilborn and Walters 1992). Often data regarding transboundary resources are incomplete and uncertain. Fourth, uncertainties also complicate attempts at international cooperation over environmental issues because nations are unsure about and disagree over the consequences of agreements for themselves and other nations (Helm 1998). Fifth, international law for management of transboundary resources is poorly developed (Hamner and Wolf 1997). In Southern Africa it is believed that weak policy and legal frameworks are largely responsible for poor historical management of shared resources (Mbizvo 2000).

Globalization of the Commons

As part of modernity and the emerging new environmentalism, there is a growing global commons movement whose perspective is that the world is becoming small and interconnected in a manner that requires global responses to what they term the global commons (Goldman 1998). The advocates of global commons argue that local environmental problems have global impacts and consequently are considered transboundary in nature. The response to such transboundary problems, according to their logic, requires global science to understand, and global institutions and experts to manage them. In response, there is a growing culture of responsibility to an external constituency such as international conventions, donors and academic peers. Increasingly, academics and policy makers are striving to direct supranational decision-making on the global commons hoping to discover the perfect commons model.

The global commoners argue that continued dependence on natural resources will result in over-exploitation and pollution. They argue that there is already uncontrolled deforestation, reduced habitats for wildlife, threatened biodiversity, increasing pollution of the air and water and climate change due to greenhouse gas emissions that require global action. This type of thinking has major implications for southern Africa where at least two thirds of the region's population resides in the communal lands. The global commoners further argue that a global commons institution can regulate access to global resources in such a manner as to reduce or minimise conflicts amongst nations or other interest groups; promote equity; and support efforts at sustainable resource use (Goldman 1998). The growing culture of responsibility to the global commons agenda is a key driver in the development of TBNRM projects in the region, as evidenced by the leading role played by international and northern institutions and organizations.

The risk of not questioning the global commons model is that TBNRM initiatives fail to respond to regional realities and nuances.



Promotion of Peace and Security

A further justification for transboundary initiatives is peace and security. TBNRM could provide a non-military model for addressing conflicts and promoting stability in the region. While some of the factors contributing to human insecurity in the region are natural disasters such as cyclones, floods and drought, many are human induced such as pollution and natural resource degradation. Inter-state conflicts and competition over control of and access to natural resources such as water that are central to national and regional economic development are likely to escalate as the region's population increases. The situation is complicated by a history of civil war and destabilisation that has displaced many families within their countries and at times forced many others into refugee camps in neighbouring countries. Involuntary migrations across the region's borders result in human and environment insecurity due to degradation of the environment and conflicts with host communities.

While the region has finally emerged from a protracted period of liberation-inspired armed struggles in Angola, Mozambique, Namibia, South Africa and Zimbabwe, military conflicts have not entirely disappeared. The region has been experiencing violent and often protracted post independence military conflicts. Angola remains mired in a senseless and bloody civil war since the Portuguese granted that country independence in 1975. Namibia has seen the Angolan civil war spill over its borders following its official backing of Angola's ruling party, the Popular Movement for the Liberation of Angola (MPLA). Prior to this, Namibia was itself threatened by civil war in August 1999 when a separatist group attacked the town of Katima Mulilo in the Caprivi Strip demanding cessation.

One of SADC's newest members, the Democratic Republic of Congo (DRC) has experienced little peace since the overthrow of Mobutu in May 1998. One year after acceding to power, Kabila's rule was challenged by a loose alliance of several rebel groups. Backed by Uganda and Rwanda these groups have been fighting Mr. Kabila's government that is backed by Angola, Namibia and Zimbabwe. At the centre of the conflict are claims by Kabila that the invasion by Rwanda and Uganda was motivated by their ambition to control the DRC's natural resources (Democracy Factfile, 1999). With the recent assassination of Kabila, it is unclear how the situation in the DRC will change.

In September 1999 a combined force of South African and Botswana forces entered Lesotho to prevent the overthrow of the sitting government. This followed an attempt by mutinous soldiers to overthrow the government that was accused of election irregularities. The battle between the rebels of the Lesotho army and the combined SADC forces met with resistance resulting in the destruction of the capital, Maseru (Democracy Factfile, 2000).

A potentially volatile and acute conflict is that between Mozambique and its upstream neighbours on the Zambezi River. Mozambique is unique in the sense that at least 50 percent of its land is drained by 8 international shared rivers and 54 percent of all its surface water resources comes through its borders with neighbouring countries. In addition, the Zambezi river alone contributes almost 50 percent of the surface water resources of the country. Increased upstream activities such as the proposed dams between Zambia and Zimbabwe will decrease the river's flow causing severe environmental degradation and salinisation of water supplies. This can result in a wave of environmental refugees as has been experienced on the Ganges between India and Bangladesh (Wolf and Hammer, 2000).

In war-torn societies, the conflict potential may be exacerbated as a result of large-scale population displacement, refugee accumulations and movements, demobilisation and reintegration of large numbers of ex-combatants. In general, community-level institutions can become destabilised while institutions of government get challenged. There may also be large numbers of landmines laid by the previously warring factions, which prevent access to cropland, fresh water and other resources by the rural poor and compromise livelihoods. Recent floods in Mozambique may have resulted in the relocation of landmines into new areas creating new forms of instability.

While the region is connected in many ways ranging from shared cultures and traditions to infrastructure (roads, rail and electricity grids), trade and shared resources, many SADC countries are now openly competing for shared natural resources. At least 15 of SADC's major river systems are shared by two or more riparian states. These rivers define the international boundaries of most of these countries adding yet another potential point of conflict since it is sometimes difficult to define the precise location of international boundaries located along river systems. Examples of such boundary disputes include the Sedudu/Kasikili island between Botswana and Namibia which was found to legally belong to Botswana by the International Court of Justice in December 1999. Hangula (1993) reports other border disputes in the Caprivi between Namibia and Botswana. Similarly, South Africa and Namibia agreed to re-locate their international boundary along the lower Orange river to the deepest channel of the river (Ashton, 2000). These boundary disputes highlight the regional nature of southern Africa's water resources and the need for TBNRM approaches such as basin-wide agreements and joint management at the basin level.

These realities are a worrying development for natural resources management. The region is clearly highly militarised due to its past history of armed struggles, and armed conflicts point to a growing tendency towards the use of military force rather than conflict management mechanisms to resolve political and resource-based conflicts. According to Moyo and Tevera (2000) a militarised approach to conflict resolution is to be expected since the region has a legacy of promoting regional integration and cooperation in the social and economic sectors rather than in the conflict resolution sphere. For a region whose national and regional economies are highly dependent on natural resources, the implications of a culture of military resolution of conflicts in the region are not encouraging. There has to be a new regional paradigm and strategy that promotes non-military regional solutions to natural resources management, particularly water. Such an approach must of necessity facilitate improving the livelihoods of the people through broadening of benefits (Moyo and Tevera, 2000). Transboundary natural resource management is an option with potential to broaden the benefits from natural resources management and facilitate a culture of non-military approaches to natural-resource-based conflicts.



Opportunities for Redistribution of Land and Resource Benefits

TBNRM also offers a potential opportunity for resolving some of the inequity in the distribution of land, resources, and associated benefits. The history of land in most southern African countries is one of expropriation from local people during the colonial period. The land resources continue to be inequitably distributed and dominated by a few land owners with a growing tendency towards privatisation (Moyo and Tevera, 2000). Colonial settlers in many countries forced indigenous people into marginal and often crowded Communal Areas. In Zimbabwe, for example, 49% of the land was contained in Communal Areas as of independence in 1980 (Vudzijena 1998). The Communal Areas are generally located on lands of poor rainfall and productivity, yet they are expected to support a disproportionately large human population. It is no surprise that resources have been overexploited and degraded in many Communal Areas due to competition and ineffective management. Resource depletion has led to increased human insecurity in many countries and in many cases to resource-based conflicts (Moyo and Tevera 2000). In turn, those conflicts have prevented governments from regulating resource use and have therefore exacerbated resource degradation (Katerere and Hill 2000). Broadening the benefits to the people from the region's rich natural resources is unlikely to happen without addressing the skewed nature of land ownership. For many, TBNRM initiatives represent an opportunity to address this issue of distribution of land, resources, and associated benefits.

In many countries in southern Africa, TBNRM is being promoted under the banner of the "African Dream" that assumes that expanding areas under tourism will deliver broad benefits to the region's poor people. The success of this model further assumes that development will be private sector driven. Such an approach is closely dependent on the prior allocation of resource rights, an arrangement that many people are increasingly objecting to.

Donor Imperatives and the Evolution of CBNRM

International donors have generously supported natural resource management initiatives over the past 15 years, largely in the form of Community-Based Natural Resource Management (CBNRM). Recently, many donors have focused more effort on natural resource management at the larger transborder scale in response to perceived needs and opportunities in the region. Many donors and others see TBNRM as an opportunity to apply lessons learned in CBNRM at a larger scale. The donor imperative must be complemented by legitimacy. If there is no legitimacy, then we end up with "choiceless" partnerships and failed but expensive experiments.

The Conservation Imperative

Another driver of TBNRM is conservation, based on the belief that large protected areas such as some transfrontier parks are essential for biodiversity conservation and can pay for themselves through non-consumptive utilisation. Hence, the larger the conservation area, the more biodiversity that can be conserved and the more tourists that can be accommodated at any one time. The conservation drive is based partly on the concept of ecosystem management. Ecosystem management seeks to manage natural resources at the ecosystem level (Pirot, Meynell and Elder 2000), and recognizes that an area of ecosystem might overlap with administrative,

political and international boundaries. By creating mega-parks such as the Gaza-Kruger-Gonarezhou, it is hoped that a single management plan and approach can be adopted in order to minimise competing management objectives and administrative arrangements.

There is a long tradition in southern Africa of promoting conservation through protected areas. The conservation sector through wildlife departments has provided the foundation for community-based natural resource management (CBNRM) initiatives giving rise to initiatives such as the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe, Administrative Management Design for Game Management Areas (ADMADE) in Zambia and conservancies in Namibia and Zimbabwe.

TBNRM IN THE SADC REGION

This section defines TBNRM and its objectives in the SADC context, and analyzes the major types of TBNRM that are occurring in the region.

A Definition of TBNRM

Transboundary Natural Resource Management (TBNRM) attempts to address the challenge of managing resources that are shared across international borders. TBNRM is a broad concept, and has been defined as:

“Any process of cooperation across boundaries that facilitates or improves the management of natural resources (to the benefit of all parties in the area concerned).” (from Griffin et al. 1999).

While this definition is useful and broad, there is a need to further distinguish among different types of initiatives based on different proponents, goals, types of land use and other factors. As well, it must be noted that TBNRM includes not only specific initiatives but also traditional or informal resource sharing arrangements at community-level as well as multi-lateral agreements and authorities. Finally, it is acknowledged that boundaries are not just international borders but can include any boundaries within states. However, the international aspect of TBNRM has been the focus of work to date, and we believe that international borders deserve that focus in Southern Africa and this paper.

Objectives of TBNRM

Resource management in border areas deserves special attention because borders are areas where inequities surface and conflicts erupt (Ingram et al 1994). Water resources in particular are potential sources of conflict as they are increasingly scarce, are viewed as an important component of national security (Appelgren and Klohn 1997), and are shared extensively among SADC countries. In response to the problem of resource management in border areas, arrangements and initiatives focused on Transboundary Natural Resource Management (TBNRM) have emerged with the following objectives:



1. To improve conservation of shared resources that are being depleted or degraded at unsustainable rates.
2. To ensure that communities and other stakeholders benefit from sustainable use of resources (in particular, to counter inequitable resource distribution associated with land and resource appropriation by local elite and foreign investors).
3. To optimize regional distribution of benefits from resource use.

Of course, the specific proponents of TBNRM initiatives may also have their own particular objectives, but these are the overall objectives of these initiatives taken collectively.

Traditional Management and Sharing of Transboundary Resources

Traditionally, people in the region survived, depending on their exact location, on a combination of agriculture and harvesting of forest resources. Communities located near the borders constructed by colonial governments traditionally used resources in surrounding areas that in many situations are now separated by international boundaries. Even within countries, many communities traditionally used areas which have since been designated as parks or are otherwise officially not accessible. In any case, it is important for resource management initiatives in border areas to recognize when and how communities use resources across borders, and if appropriate to promote this resource use. Yet, these traditional forms of natural resource management are under threat from trends toward formalised models of TBNRM driven by the state, NGOs and donors. There are legitimate reasons for promoting these organic forms of TBNRM that have withstood the test of time. Initiatives that exclude communities from accessing resources that they traditionally use are likely to fail to gain community support. These models need to be understood and perhaps improved and not replaced by the more charismatic and well-resourced current initiatives.

Formal TBNRM Initiatives in the Region

Access to, and demand for resources, has increased as a result of human population growth, economic liberalization and infrastructure development. Prior to these developments, formal sharing arrangements were generally not as necessary (due to relative resource abundance) or as enforceable (due to poor ability to access and regulate rural behaviour) as they are now. Currently, as a result of numerous factors discussed earlier, there are several identifiable types of formal TBNRM initiatives in the region that aim to improve management of transboundary natural resources. These initiatives can be grouped into broad categories comprising (1) transfrontier conservation areas (TFCAs); (2) spatial development initiatives (SDIs); (3) transboundary natural resource management areas (TBNRMAs), (4) Regional Authorities and Protocols, and (5) International Conventions and Agreements (see table 1). Jones and Chonguica (2001) and Mohamed-Katerere (2001) provide detailed descriptions of these types of initiatives. However, it is useful here to understand the differences among the various types of initiatives in terms of the resource(s) they target and the institutions and organizations that are typically involved. As with any typology, the categories are imperfect and there are initiatives in southern Africa which are not easily identified with one category; still, it is useful at a general level to understand the differences among initiatives (Table 1).

**Table 1. Formal Types of TBNRM Initiatives in the SADC Region
(adapted from Jones and Chonguica 2001)**

Type of Initiative	Proponents	Dominant Objective	Dominant Land Use Types	Beneficiaries
Transfrontier Conservation Area (TFCA)-	-international organizations, wildlife departments, donors, national governments	- long-term conservation of wildlife	- protected areas, game reserves, hunting concessions-	-protected areas interests, some spin-offs to communities
Transboundary Natural Resource Management Area	-communities, NGOs, donors government	-community - based NRM across international boundary	-variable, often community lands	-local government and local communities
Spatial Development Initiatives (SDI) including Development Corridors	-South Africa government, private sector, Earlier concept of corridor driven by frontline states e.g Zimbabwe and Mozambique	-Stimulate development in areas with under-utilised economic potential through anchor projects. -Achieve regional economic integration and cross-border investments	-focus is on all resources that support investment opportunities including tourism mining and agriculture.	-private sector with potential trickle down effects to communities
Regional Authority or Protocol	-bi-lateral governments or multi-lateral through SADC	-establish basis for cooperation in management of specific resources such as water and wildlife	-can be variable but include water, power generation, wildlife, tourism, and trade.	-national governments with trickle down effects
International Convention or Agreement	-SADC and international communities	-establish basis for cooperation in management of resources and the environment internationally	-wildlife, trade in endangered species, water, toxic waste, biodiversity	-national governments with trickle down effects

It is also interesting to look at the number of each type of initiative underway in each country of the region. South Africa is clearly either leading or is involved in the majority of the spatially explicit initiatives (i.e., TFCAs, TBNRMAs, and SDIs) (Table 2).

Table 2. Number of Each Type of Initiative With Which Each Country is Involved
(adapted from Jones and Chonguica 2001)

Country	TFCA	TBNRMA	SDI/DC
Angola	0	2	1
Botswana	0	4	2
Lesotho	1	0	0
Malawi	1	2	0
Mozambique	3	3	5
Namibia	2	4	3
South Africa	6	2	6
Swaziland	1	0	2
Tanzania	0	1	0
Zambia	0	3	1
Zimbabwe	2	3	3

Transfrontier Conservation Areas

Transfrontier Conservation Areas (TFCAs), also known as Transborder Conservation Areas (TBCAs) are based on linking one or more protected areas in neighbouring countries (Fall 1999; Griffin et al. 1999; Westing 1998; Duda and Roche 1997), but often involve other lands to some extent. These initiatives have focused predominantly on large mammal populations that require large contiguous areas of habitat. The private sector has been very actively involved in TFCAs in an effort to generate revenue through tourism.

Kock and Nyoni (1994) identify several principles that guide the implementation of the TFCA process. First, agreeing to participate in a transfrontier conservation area does not lead to loss or dilution of national sovereignty. Second, each country is not required to pursue a particular model of conservation in its park. The TFCA model provides for the integration of local communities and could theoretically allow related communities in neighbouring countries previously separated by the park and international boundaries to re-establish links. In practice, however, TFCAs have been pushed forward at a rapid pace without much time for consultation with communities and other stakeholders. While there has been little implementation yet, individual countries have signed agreements committing themselves to TFCAs with very little understanding of the consequences.

It is worth noting that within countries in the region, private landowners have in some cases pooled their lands to form nature conservancies which offer tourism opportunities. The Save Conservancy and others in Zimbabwe are examples. In the context of regional integration, we can expect that such initiatives could occur in future on a larger scale in border areas as private individuals and groups appropriate land and explore economic opportunities. Unfortunately, it is only Namibia that has legislation and administrative guidelines specifically developed to facilitate the establishment and management of conservancies. The provisions allow the establishment of conservancies on privately owned and communally held land. In Zimbabwe, conservancies have been confined to private commercial farming land whose owners

have agreed to manage their individual land as a single and integrated unit. Such an arrangement effectively means that wildlife on private farm land is under the agricultural administrative domain. Since communities do not own the land on which they live, the animals belong to the state.

Transboundary Natural Resource Management Areas

Transboundary Natural Resource Management Areas (TBNRMAs) can include virtually any spatial area straddling a border in which there is management of transboundary resources. Thus those initiatives that cannot be categorized more specifically as TFCAs or other initiatives fall in this category. One example is the ZIMOZA initiative which is underway at the intersection of Zimbabwe, Mozambique and Zambia (the acronym denotes the three countries). This initiative is driven by communities and the state, and does not involve any protected areas. Rather, the initiative is aimed at improving sharing, exchange, and management of resources and tradable goods among communities in the area. Another TBNRMA in its inception phase is the "Four Corners" TBNRMA defined by the area bordered by Botswana, Namibia, Zambia and Zimbabwe. This initiative has not been community and state-driven so far, hence there are unresolved concerns about its legitimacy.

Spatial Development Initiatives and Development Corridors

Spatial Development Initiatives (SDIs) are created to stimulate local economic development through key anchor projects such as harbours, toll roads, mining and industries with a potential to attract other investments and create opportunities for secondary and tertiary industries that were previously not possible. Spatial Development Initiatives (SDIs) focus on developing areas that are believed to have underutilized economic potential, to curtail the problem of economic imbalances within a country and also between countries as part of the drive for regional economic integration. Development Corridors are specific SDIs that focus on promoting development along lines of existing transport and communications infrastructure that link countries.

SDIs are a legitimate intervention to achieve regional economic integration and to attract cross-border investment. Features of SDIs include the concentration of private investment in selected geographic areas, export orientated growth and employment creation. In southern Africa, the most vigorous push for SDIs has been by South Africa. This was part of its strategy to realign resources and create markets and jobs in the post apartheid era as articulated in the Reconstruction and Development Programme (RDP) of 1994 and the Growth, Employment, and Redistribution (GEAR) Policy Framework (Tevera and Chimhowu 2000).

The success of SDIs has been mixed. Beira corridor which was one of the earlier initiatives between Zimbabwe and Mozambique was planned mainly as a transport route designed to reduce dependence on South Africa and provide alternative and shorter access to the sea for Botswana, Zambia and Zimbabwe. (Tevera and Chimhowu 2000). It would appear that prior to the resurgence of SDIs driven mainly by South Africa, they were designed principally as transport corridors with no linkage to regional economic development. South Africa's leadership in SDIs is based on her economic, technological and military superiority. This means that the SDIs attract-



ing the greatest attention are those that involve South Africa. The notable regional SDIs are the Maputo, Lubombo, Lobito, Okavango-Upper Zambezi and Walvis Bay.

While many SDI initiatives claim benefits will accrue to local communities, the national elites and private business tend to be the ones that accrue benefits through increasing concentration of land ownership (Moyo and Tevera 2000). SDIs do not focus on particular resources but rather on all resources that support opportunities for investment including tourism. Where private capital is dominant the participation of locals is generally not provided for. In the case of the Maputo Corridor, Tevera and Chimhowu (2000) report that the SDI performed badly in terms of accruals to the poor. Other questions that arise concern the extent to which the state should withdraw from SDIs in favour of private capital. The short term interests of private capital may fail to address the longer-term considerations of employment and involvement of previously marginalised groups.

SDIs can have major social and environmental impacts that need to be considered. For instance, successful SDIs can act as labour magnets resulting in mass migrations by people seeking employment. Unless proactive steps are taken to cater for such eventualities, there could be major health risks and social conflicts. Besides the potential for increasing opportunities for investment, SDI initiatives can have major impacts on local communities that are at times not considered. Transport corridors can expose local communities to both positive and negative consequences. For instance transport corridors can provide access to markets, new technology, and social services. At the same time roads can also have negative impacts on local communities in the form of increased incidents of HIV infection.

The SDI model that has been driven by South Africa could be seen as another form of South African domination over its neighbours in terms of the provision of raw materials to South Africa and in some cases a clear strategy of locating polluting industries outside South Africa's borders. This raises the sensitive issue of interstate equity.

Regional Authorities and Protocols

Various regional and subregional authorities, protocols, and other agreements have been made that commit nations to cooperate on management of transboundary resources. Management bodies such as the Zambezi River Authority (ZRA) involve two or more countries and transfer decision-making power from nations to sub-regional bodies (see Milich and Varady 1998; Mumme 1993 for general discussion of transboundary resource authorities). In the case of the ZRA, upstream actions can have major transboundary impacts on downstream Mozambique. As well, several SADC protocols have been signed which establish a basis for cooperation in the management of specific resources such as water and wildlife (see Mohamed-Katerere 2001 for details). In general, these protocols commit countries at a general level but do not include specific recommendations that are binding.

International Conventions

International conventions and treaties exist which bind nations in SADC and elsewhere, to particular commitments aimed at conserving specific resources (see Boadu

1998 UNCE 1994 for discussion). For example, the Convention for International Trade in Endangered Species (CITES) controls opportunities for trade in animal products among nations and therefore limits opportunities for wildlife use by communities.

KEY ISSUES AND CONCERNS

Transfrontier arrangements are seen by many as exciting experiments for building on the past experience of Community-Based Natural Resource Management (CBNRM) in the region, enhancing biodiversity conservation, and creating economic opportunities for private investors and communities. It is claimed that these TBNRM initiatives are capable of improving the quality of lives of rural people. While experimentation is important in order to refine our thinking in this new and exciting field of TBNRM, it is important that we analyze these new initiatives and mold them so that they deliver on their promises. Here we raise a number of concerns that have emerged from our experience and the experience of others with TBNRM, as well as the earlier experiences of CBNRM.

The Pace of Implementation

The urgency surrounding the creation of transfrontier conservation areas raises serious questions about the justifiability of the approach, the appropriateness of the model, the pace of implementation and the overall implications for regional economic integration and local communities. The region lacks experience in managing mega conservation areas and yet in 2000 alone two agreements were signed creating the Kgalagadi (Botswana and South Africa) and Gaza-Kruger-Gonarezhou (GKG) (Mozambique, South Africa and Zimbabwe) transfrontier parks. The GKG is expected to cover an estimated area of 100 000 km² and is likely to involve the removal of local communities to make it a reality. Despite real community interests in Mozambique, South Africa and Zimbabwe, there is no evidence that local communities have been consulted and are aware of the short and long-term implications. Without the benefit of past lessons and experience there are several other TFCA initiatives that have been identified and await formal agreements. These include the Limpopo/Shashe TFCA (Botswana, South Africa and Zimbabwe), Richtersveld/Ai-Ais TFCA (Namibia and South Africa), Maloti/Drakensberg TFCA (Lesotho and South Africa) (all three promoted and supported by the Peace Parks Foundation, a South African-based not for profit organisation) and the Chimanimani TFCA (Mozambique and Zimbabwe). These initiatives show clearly that South Africa through the Peace Parks Foundation and some key donors are driving TFCAs in the region.

The main concern regarding the current approach by NGOs, the private sector and donors, to fast track TBNRM, is the ill-defined framework and context. In the past these types of initiatives have yielded lopsided benefits although claiming to be flexible, strengthening human rights of local communities, and enhancing their control over local resources. If the time is taken to legitimately frame and construct these initiatives, TBNRM can expand opportunities for improving national and cross-border natural resource management and widen the benefits from natural resources and even contribute to the expansion of the resource base.



The Important Role of the State in TBNRM

In contrast to past experiences in CBNRM, the role of the state in TBNRM is much more important since cross border resource management impinges on issues of sovereignty and national security. For instance, many of the parks proposed as transfrontier conservation areas are also sites of national security management in the form of maintenance of boundaries and curtailing insurgency and poaching. Under CBNRM the role of the state has been challenged, and at times reduced to that of “facilitator”, guarantor and enforcer of rights. TBNRM, on the other hand, will challenge the power and nature of the nation state. This raises the question of the extent to which SADC member states are willing to cede some power or autonomy to SADC or other supra-national structures.

Further, cross-border cooperation, investment and trade are creating new patterns of resource ownership that are placing new and additional demands on national institutions in terms of administration and policy analysis that go beyond project implementation. The supporting and technical capacities that these emerging resource arrangements demand are regional and global and require matching skills in terms of enabling policies and negotiations. From our experience with particular initiatives, some national governments in the region are struggling to cope with this new burden. There is therefore a threat to the success of TBNRM initiatives in the form of unequal implementation of liberalization policies and the failure of governments to cushion the most vulnerable groups against the impacts of liberalisation. The key to ensuring sustainable and equitable use of transboundary resources and other commons is management that is based on equitable and enforceable rules and incentives agreed to by all resource users (WCED 1987). Clearly the burden on the state in TBNRM and regional development generally is significant.

The Shift from Agriculture to Wildlife and Tourism

Many TBNRM initiatives, similar to past CBNRM initiatives, are focused on trying to convert the rural areas into tourism destinations. The approach is generally to try and generate income primarily from wildlife and not from livestock and crop production systems. The argument by economists that wildlife-based tourism is more viable and profitable than other land-use systems has effectively led to a decline in the investment in research, extension and technology development for rural-based agricultural production systems. It is hoped that under such a scenario, rural communities could behave “rationally”, reconvert much agricultural land to wildlife habitat, and use the economic benefits from ecotourism and big game hunting to buy food and other products. While it is true that many areas which are the focus of CBNRM and TBNRM initiatives are poor agricultural lands, there is still a push to switch from agriculture to wildlife in many cases. This rationale led to the creation of CBNRM initiatives such as Communal Areas Management Programme for Indigenous Resources (Campfire) and similar approaches in neighbouring countries.

There are several problems with this model of CBNRM and TBNRM. First, there are social disruptions and displacement of people. In the case of Zimbabwe, the establishment of Campfire areas required partitioning of land for wildlife and agriculture. This led to the evictions of people from their established homes, fields and grazing areas to make way for wild animals. In Mozambique, communities residing in Coutada

16, a hunting area that borders Kruger National Park in South Africa, face possible eviction if the proposal by the Gaza-Kruger-Gonarezhou TFCA to fence Coutada 16 as an extension of Kruger National Park goes ahead. The communities residing in this area had embarked on CBNRM activities with government support which will likely be abandoned. The coordinator of the GKG TFCA is quoted as saying "the status of Coutada 16 will be changed from a hunting concession to a protected area, preferably a national park" (Mail and Guardian, May 4-10, 2001, page 14). People will be moved to make way for the relocation of 1,000 elephants. As with many other cases of displacement, the communities currently residing in Coutada 16 will get little or no compensation and face zero prospects of benefiting from the expansion of protected areas.

Second, the growth of wildlife ranches has created an additional complication with livestock production particularly for beef export markets. To gain access to international beef markets, livestock producers have to meet international trade standards. This entails strict controls on movement of livestock between foot and mouth free zones and wildlife zones where buffalo are carriers of the disease. Fences are erected to maintain disease free areas and prevent the movement of livestock and fresh meat from foot and mouth zones. This arrangement effectively means that livestock producers located in game areas cannot "export" beef as they are located in foot and mouth designated areas. This arrangement essentially limits the size of the internal markets for such local livestock producers. In these situations fences are used as a means to guarantee access to foreign markets without due regard of the broader impacts on the economy. Responding to external markets further undermines the wider social and economic objectives such as poverty eradication.

Third, the switch from agriculture to tourism as a source of livelihood makes communities vulnerable to shifts in the tourism industry which are outside of their control. When tourism revenues decline due to political unrest (e.g., the current situation in Zimbabwe) or to changes in the preferences of tourists, communities could easily be faced with food security problems because of lack of revenue. It is appropriate to question whether it is smart from a human security perspective for communities to rely on a source of livelihood that is largely outside of their control.

Poor Community Consultation and Participation

Many of the transboundary initiatives make references to involvement of local communities. The nature of this "community involvement" needs to be clearly articulated since such involvement could be limited to the extent to which local communities act as a labour pool to make protected areas and private property more productive. It is now evident that CBNRM needs to be capable of addressing local values, needs and interests; failure to do so undermines the potential of such initiatives. In order for communities to participate in TBNRM initiatives, the benefits of such initiatives must outweigh the costs from the community perspective.

One danger with the current movement to formalise TBNRM is that efforts of local communities currently engaged in organic forms of community-based natural resources management that offer opportunities to cooperate with other cross-border communities could be severely constrained. Firstly, formalisation of cross border arrangements will result in greater state control and regulation. Another problem



relates to the unequal power relations between the potential parties interested in formalising TBNRM. The state and private sector have greater lobbying capacity and power to influence the direction of policy. Intermediary organisations such as NGOs can represent the interests of communities provided they do not allow their internal agendas to undermine their ability to play a credible role as mediator. Third, the poor harmonisation of policies and legislation between neighbouring countries often results in conflicts between users of resources such as fish where two countries establish different quotas and fishing seasons.

There are models of community involvement in the region from which we can learn. The Forestry Commission in Zimbabwe, for example, has been experimenting with co-management of forests in Gokwe South District. In this case the state forest authority sought to mobilise protected forest area neighbours to co-operate in the management of the forest in exchange for economic benefits from the forest. The failure by the Forestry Commission to demonstrate the benefits of co-management in the form of local development, is cited as the main reason communities did not support state conservation initiatives (Mamimine 2000). Namibia has gone a step further than Zimbabwe by introducing a Conservancy programme that seeks to empower communities and not local government authorities to define the basis for the conservancy. Despite the move towards greater community participation, the state retains a degree of control since it is the state that approves the nominated committees and registers the conservancies and ultimately has authority to disband them.

Exacerbation of Inter-State Inequities

The problem of distribution of and access to natural resources as well as access to finance, technology and skills is not limited to intra-state inequities. At the regional level inter-state inequities arise from differing resource endowments and the dominance of larger and economically powerful states like South Africa and to a lesser extent Zimbabwe. These differences tend to fuel economic resentment among the states in the region and conflicting claims over natural resources. In some instances the inter-state inequities have fuelled xenophobic reactions towards citizens of poorer neighbours who try to seek better opportunities across their borders. The implementation of TBNRM initiatives could easily be undermined by the fact that South Africa and some donors have emerged as the key proponents of TFCAs. The aggressive and dominant role being played by South Africa in TFCAs is threatening the economically poor countries that hitherto have been reactive to the agenda being set by South Africa and some donors.

This raises the concern that the justification for TBNRM is located external to the region and is being driven by expanding international trade, particularly interests in tourism. Such an approach would suit South Africa, which is highly geared to capture a larger share of visitors to the region given its superior infrastructure, technology, and airline industry. However, the type or success of cross border cooperation and economic integration is very much dependent on real power relations between the collaborating countries. In some instances, economically powerful countries such as South Africa are seen to be gaining control over key natural resources in neighbouring countries (Moyo and Tevera 2000). For instance Mohamed-Katerere (2001) refers to perceived inadequacies in the Lesotho Highlands Water Project (LHWP) agreement between South Africa and Lesotho. The agreement does not take

into account future water demands in Lesotho which is exporting itself into scarcity. The formula for compensation to displaced people for loss of homes and agricultural production has proved grossly inadequate and promised jobs have not materialised. Although Lesotho would like the agreement to be renegotiated, she lacks both the political and economic influence to coerce South Africa to the negotiating table.

Liberalization, Resource-Raiding and Loss of Local Control over Resources

Cross-border investments in tourism, mining, transport corridors, and agriculture have become an attractive window for foreign investors. This trend is seen as eventually increasing the foreign control of land and resources in the region with limited local benefits. Private investors have been characterized as “natural resource raiders”, who take advantage of the under-valuation of natural resources to exploit indigenous timber and wildlife (Mudenda 2000). Some countries in the region (e.g., Zambia, Mozambique) give rights over resources to global investors. Indeed there is a growing regional trend towards the privatisation of control over natural resources, often by transnational companies. This process undermines local actors’ ability to utilise natural resources in a manner that is sustainable and facilitates accrual of economic benefit to them. It may also be an important factor in generating conflict that is yet to be analysed and understood.

To facilitate investment, many private sector interventions are disguised as “partnerships” with communities. Many of these agreements are inappropriately labeled “joint ventures” and “partnerships” when in reality they are nothing more than lease agreements to gain access to valuable natural resources. Similarly, communities deprived of essential social infrastructure due to dysfunctional and corrupt governments, become desperate and enter into less than perfect “partnership” arrangements with the private sector in order to generate some revenue. Hence many partnership arrangements that are hailed as success stories are actually not what the communities want, but more of a private sector agenda. Under these circumstances, many resource raiders have little long-term commitment in the country (Mudenda 2000). The resource-raiding phenomena can be attributed in part to inappropriate national government policies that are designed to promote direct external investment. Some business interests vociferously defend the maintenance of the communal land systems in the region, so that they can expand access beyond protected areas and private property into the communal areas. The proliferation of different forms of agreements between communities and the private sector is evidence of this trend.

Furthermore, in line with the conventional paradigm of natural resource management, approaches suggested to counter overexploitation include utilitarian measures such as centralized control and privatization of land and resources (Goldman 1998). Centralized control has been popular for decades, but in recent years has given way to privatization under the umbrella of globalization. TBNRM initiatives have elements of both centralization and privatization. While in theory such approaches can control overexploitation, there are many drawbacks. Both centralized control and privatization generally fail to manage resources to the benefit of local people. Centralized authorities have historically marginalized people and channeled the benefits of resource use back to the state and the elite. Similarly, private land-



owners generally keep benefits for themselves or shareholders with little meaningful distribution to local communities. In the context of globalization and market liberalization, local resources are increasingly controlled not by local users but by non-local users or actors (Goldman 1998). Even resources which have always been regarded as commons, such as water, are now being treated as commodities which can be owned and traded (GWP-TAC 2000). This thinking presents major problems for a region such as southern Africa where resource inequities are structural and institutionalised. Market mechanisms cannot be used to resolve gross inequities and glaring disparities in wealth between the rich and poor sectors of the population. There is a need to improve rural livelihoods by increasing access to land and resources. Addressing past inequities requires bold political decisions and cannot be left to market mechanisms to resolve.

The Global Commons Discourse

Globalisation is not just about the speed and freedom with which capital, goods and services, and information can circulate. It has resulted in the massive importation of ideologies regarding for instance the management of the commons and the role of external experts in this process. According to Goldman (1998), the global commons movement does not view communal land in southern Africa as an isolated land-use category. Its degradation is seen as threatening all life on the planet. Hence, the air, atmosphere, the ozone shield and land are all considered part of the global commons. Land is considered a global resource since it supports terrestrial biomass that is harvested with impacts on the earth's atmosphere. The global commons movement holds that global problems require global solutions and therefore justify the involvement of global experts and the global agenda.

There is a general paralysis of national and regional development agendas in response to this notion of the global commons. As the transboundary movement in southern Africa gains momentum we need to ask whether globalization justifies unfettered access to regional resources, markets, politics and knowledge by northern researchers and international capital? The fragmentation of ideology and concepts with respect to management of natural resources has undermined our ability to understand the nature of the natural resources crisis and the way forward. This fragmentation is apparent in the manner we shape our projects or responses. However, allowing a northern agenda to drive natural resource management in the region could lead to resource overexploitation and marginalisation of local actors for the many reasons discussed in this paper. For this reason decisions regarding the management of land, terrestrial, aquatic and marine resources cannot be surrendered to global experts and institutions. It is important that the region articulate its own vision for resource management that is informed by the reality on the ground and not responsive to common property theory developed elsewhere and perhaps not sensitive to local-level nuances.

There do appear to be many parallels between the global commons agenda and the theory of TBNRM. As Fakir (2000) notes, TBNRM may be described as "regional commons" rather than a global commons. The "regional commons" include rivers, marine resources, forests and wildlife that were once freely accessible prior to the creation of international borders. The creation of international boundaries by colonial powers not only divided Africa, its resources and communities that once moved freely, but

more significantly, changed the nature of the relationship that communities had between them and with their natural resources giving rise to new forms of conflict. In the same manner that the global commoners argue for international institutions and experts to manage global commons, the region has created its own multi-lateral arrangements under SADC that include regional protocols on Shared Watercourses, Wildlife Management, Tourism, and Forestry (under discussion). This has led to some criticisms that the TBNRM movement is nothing more than an extension of the global commons agenda. In addition, should the “regional commons” approach succeed in facilitating a regional development approach that minimises damage to a fragile ecosystem by diversifying resource use and promoting high product development, then the region can expect fewer environmentally-induced disasters that exacerbate human suffering. However, for “regional commons” in the form of TBNRM to work, they should respond to regional needs and not global discourse, be led by regional experts and not global commoners and be governed by regional institutional arrangements. Such an approach will mark a critical point of departure with the global commons agenda.

Furthermore, fundamental differences between the global commons discourse and the TBNRM concept are found in the motivational factors. Transboundary cooperation is intended to promote economic development in the region rather than trying to find a solution to the world’s emission problems (emissions that originate mostly in the north). Still, the question remains the extent to which the “regional commons” agenda is independent of the global commons agenda and whether it is responsive to regional realities and needs. It is feasible that the creation of mega transfrontier parks is part of the global commons agenda to prevent degradation by local commoners of the land-based natural resources that would threaten to imperil all forms of life on earth. Already, many of the regional responses to conservation and the environment are driven by international conventions supported by the new institutions created to administer and finance them. It is not enough simply to try to understand how these global and regional trends operate since this can only result in a reactive response and prolong our accountability to an external constituency. We need to evolve new and alternative concepts that challenge conventional wisdom on TBNRM.

Privatization and Market Failures

In addition to the problems above related to liberalization, there are specific problems related to privatization of land, resources and institutions which accompany some transboundary initiatives. Progress towards regional economic integration and liberalization increases the need for management of shared natural resources. First, since the market generally fails to account for environmental externalities of resource development, and also fails to account for equity concerns, resource development by market mechanisms requires political interventions. Second, privatization can change land and resource use patterns so that traditional management mechanisms can easily become obsolete. Third, with privatization comes competition, so there is increased likelihood of resource use in some areas being affected by resource use in other areas. For example, downstream water users can be adversely affected by high rates of water consumption or pollution upstream – such effects are not accounted for by the free market and require management intervention. This phenomenon is especially true for Southern Africa where economic growth is largely resource-based.

Clearly, privatization associated with TBNRM, if appropriate at all, must be accompanied by measures that ensure that resources are managed sustainably and equitably. In the case of transboundary resources, the same in-state market failures that have clearly failed to redress environmental and equity concerns will occur. Private sector-driven development has been criticised for increasing flows of money rather than contributing to improved rural development. This is precisely the failure of CBNRM that cites private sector “choiceless partnerships” with communities as a measure of success.

Poor Devolution of Rights

One key failure of CBNRM which persists in the case of TBNRM has been poor transfer of rights over land, resource and decision-making powers to local actors (Katerere 2000). Shackleton and Campbell (2000) found that in most countries in the region, NGOs and donors have been instrumental in driving the CBNRM agenda towards greater local control over natural resources. Despite these efforts, transfer of rights to local actors in most countries has been partial and mainly designed to diffuse conflicts between the state and rural communities. The main reason for this appears to be a legacy of manipulating and dis-empowering local institutions by successive governments. Further, a lack of commitment by the state to release power to local actors, despite numerous policies advocating devolution has fuelled a trend towards centralisation.

Under such conditions can the communities expect that TBNRM will go beyond the unfulfilled promises of CBNRM? On the contrary, it seems feasible that the minimum gains made under CBNRM with respect to decentralisation and participation can be lost under the TBNRM experimentation given the greater role of the state. For example, the approach to TFCAs is not dissimilar to colonial models of creating protected areas. Local people are moved out of the protected areas and wildlife fences erected. While fences might be necessary to minimise human-animal conflicts and to control the spread of diseases across boundaries, the social and economic implications of fencing need to be assessed. Fences as boundaries between communities and protected areas should not alienate communities from the resources but rather define the relationship between the community and the resources.

Given that past failures in CBNRM have been linked to the non-participatory and centralised methods of planning, decentralisation and empowerment are now considered key to any new natural resource management projects and initiatives. These are precisely the same issues that TBNRM will have to resolve if it is to succeed in fulfilling its objectives.

The Complexity of Multiple Resources

A key concern with TBNRM is the complexity of managing multiple resources. CBNRM and many TBNRM initiatives have focused on single resources, particularly wildlife. However, many recent TBNRM initiatives are aimed at management of multiple resources. In general, TBNRM initiatives that target a single resource, such as a particular wildlife population, are much simpler to implement than initiatives that target complex, multi-faceted resources such as biodiversity, watersheds or tracts of land. Even initiatives targeting a single watercourse such as a stream are complex

because of the myriad of uses of water, the importance of water quality as well as quantity, and the timing of access for upstream versus downstream users. Furthermore, dealing with multiple resources may exceed the authority or capacity of relevant agencies and organizations. Legal frameworks quickly become complex for multiple resources as well. In spite of these complexities, it is often necessary to consider multiple resources since targeting a single resource may oversimplify human-environment relations.

TBNRM and Re-distribution of Rights and Benefits

There are legitimate concerns that some forms of TBNRM such as transfrontier parks and SDIs simply reinforce the inherited colonial models of land-use planning and prior allocation of land rights. When many of these initiatives are being planned, decisions are made around issues such as animal corridors and re-classification of current uses without adequate consultation with those likely to be affected. Little attention is being paid to potential impacts of TBNRM on the poor, such as forced removals and social dislocation. Rather than reinforce the colonial legacy of land alienation and inequitable distribution of resources, people are demanding that TBNRM initiatives become a vehicle for re-distribution of rights. Unless this happens then the current huge income disparities between the rich and the poor can only increase, as will conflicts. TBNRM is currently viewed as being supply driven and consequently not able to address the imbalance of power between the local actors on the one hand and the state and private investors on the other. As long as the powerful and influential dominate the TBNRM process then the very legitimacy of TBNRM initiatives is likely to be contested in the medium and long-term. The big question is whether the regional governments actually see TBNRM as an opportunity to begin to tackle re-distribution of rights and benefits including in many contested protected areas.

THE WAY FORWARD

This paper highlights the emerging challenges in the design and implementation of TBNRM initiatives. Unless we pay attention to some basic principles we are likely to experience similar disillusionment with TBNRM that Murphree (2000) aptly describes for CBNRM. TBNRM should avoid forcing people into “choiceless” partnerships and imposing itself as the way forward for conservation and as a solution to poverty and economic development in the region. Further, TBNRM should not be seen as an alternative model or answer to protected area challenges. TBNRM must have legitimacy with a clear methodology that creates space for broader involvement of key stakeholders, particularly local communities, and must offer a real opportunity to re-distribute property rights and tangible benefits. While trying to take advantage of the opportunities presented by TBNRM, we have to be careful that we do not inadvertently marginalise communities in pursuit of the mega-scale of TBNRM. The real danger posed by the TBNRM approach is to further isolate the poor by pooling common transboundary resources while de-facto privatising associated benefits. The absence of a system of community rights and the non-acknowledgement of historical rights further undermines community interests and rights.

The future of TBNRM will undoubtedly be influenced by successes in regional economic integration, trade, population dynamics and their influence on production



and consumption trends, inequities and attendant poverty, and the political commitment by regional governments to find common but lasting and durable solutions to the region's common heritage. SADC member states need to be able to articulate regional versus national and identify or allocate accountability. These are important issues especially with regard to how benefits are generated and distributed.

Based on the issues raised in this paper, and incorporating suggestions from a broad-based workshop on TBNRM held in February 2001, we have a number of recommendations regarding the way forward for TBNRM in Southern Africa.

Building State Level Processes and Capacity

The success of transboundary initiatives will depend largely on the capacity of national governments to facilitate national level dialogues, provide meaningful and informed inputs into the design of initiatives, and negotiate with other countries. There have been concerns that unequal partnerships will undermine the success of transboundary initiatives. On the other hand, Tevera and Chimhowu (2000) argue based on regional integration experiences in Africa that the dominant country acts as the growth catalyst enabling the weaker partners to benefit from the spillover effects. However, unless the dominance of one partner is applied positively it could undermine the spirit of the partnership. In addition, if there is no perception of equitable distribution of the benefits, the initiatives might suffer from lack of political support. Closely linked to leadership and benefits sharing in TBNRM initiatives is the issue of accountability between collaborating states and also between the state and local communities.

Ultimately, transboundary initiatives are creating new and additional demands on administration of natural resources; policy development and harmonization; consultation processes; and on-the-ground implementation that is not confined to the national level. This means in part that the region needs to develop a new cadre of expertise capable of operating in a complex and multi-layered policy environment. At the same time, the role of the state should not be based on centralization that excludes local communities, nor should the state be seen to withdraw in the interest of the private sector.

Slowing the Pace of Implementation

There are numerous reasons for slowing the pace of signing and implementing transboundary agreements. They include the need to:

- Consult and ensure broad participation in policy and specific initiatives within and between countries.
- Incorporate lessons from past experience into the design and planning of new TBNRM initiatives.
- Build capacity among interested parties so that the skills of potential partners though variable do not skew power relations and ultimately the outcome of any agreement.
- Collect and analyze baseline information and to share that information with all stakeholders.

Documenting Lessons from CBNRM

Over the past few years many Community-Based Natural Resource Management (CBNRM) initiatives have been implemented which attempt to facilitate the sustainable use of local resources by communities (Steiner and Rihoy 1995; Mickels-Kokwe 2000; Hughes 2000). CBNRM policies are still evolving in many countries in southern Africa. Experience in Zimbabwe and Namibia offers examples of where considerable progress has been made but also illustrates some difficulties that must be overcome if CBNRM is to become a meaningful option for both communities and the environment. Although these initiatives do not necessarily focus on transboundary resources, many of them include transboundary resources depending on the location of communities. The experiences of CBNRM are the basis for the enthusiasm in TBNRM although no empirical evidence is available to support the transferability of CBNRM to TBNRM. Given the wide range of CBNRM initiatives in the region, there are lessons that can be learned such as the importance of:

1. Devolving rights and powers to the local level, most importantly tenure or redistribution of rights and benefits.
2. Gaining legitimacy so that partnerships are mutually beneficial and not dominated by the powerful and elite.
3. Consulting and evolving a management system that is inclusive.
4. Demonstrating community benefits in order to ensure community participation and support.

Sharing of Information and Expertise

In addition to lessons from CBNRM, there is a wealth of experience arising from TBNRM initiatives in the region. It will be important to ensure that lessons are documented and disseminated so that actors involved in different initiatives and different types of initiatives can learn and improve on past failures. As well, as expertise develops in TBNRM, various initiatives must be aware of the nature of that expertise so that it can be engaged appropriately. Regional networks, dialogues, and/or fora will be essential mechanisms for sharing of information and expertise.

Defining Roles for Organisations and Institutions

TBNRM initiatives have involved various organizations and institutions such as state governments, regional or sub-regional bodies such as SADC or the Zambezi River Authority, civil society (e.g., non-government organizations, academics), communities, and the private sector. In order for TBNRM initiatives to succeed, these groups must not only collaborate but also fulfil the roles to which they are best suited. Each situation demands a careful analysis of the objectives and type of the particular transboundary initiative. Of importance is the nature of power relations between the various interested stakeholders and in particular the power relations between these interested parties. The nature and quality of skills required to develop and manage transboundary resources must also be understood.



Perhaps more than any other player, the state governments must play a key role in facilitating the effective management of transboundary resources. Control over resources resides mainly at the national level, so it is imperative that neighbouring country governments cooperate to ensure that resources are shared and appropriately managed. SADC must play a leadership role in facilitating the cooperation of national governments, and in ensuring that regional economic integration is accompanied by more integrated management of natural resources. This integration is occurring in the form of SADC protocols, under which signatory nations pledge to cooperate.

Non-government organizations and other representatives of civil society must ensure that the states and SADC implement policies and agreements that truly improve management of resources to the benefit of the people. Many democracies in the region remain weak, and so NGOs have a particularly important responsibility in supporting them to implement successful TBNRM programmes. They must also ensure that the private sector and others do not take advantage of communities where resource development experience is limited. Extra effort is needed to involve otherwise marginalised border communities in the implementation of TBNRM initiatives to ensure that natural resources will be managed to their long-term benefit.

Cooperation among various groups is essential. The state ultimately has control over resources and resource use, and it is therefore the state's responsibility to involve communities and other groups. At the same time, however, communities must engage the state in an effort to acquire more responsibility in the management of local resources, and to cooperate with the state on particular issues. Involving communities in TBNRM is proving more difficult to implement than simply acknowledging that it needs to be done. The reason for this is that communities are the least understood actors in transboundary initiatives. Ultimately, communities cannot control other communities and cannot regulate resource use outside of the community (e.g., upstream), and therefore they must work closely with state institutions and SADC. The important issue is that the notion of TBNRM should be holistic to avoid the view that natural resources on their own could significantly improve the livelihoods of the region's people. Natural resources management has to be complemented through improved agricultural production and wage labour, as envisioned for example under SDI initiatives.

The private sector has also emerged as a key player in the different types of TBNRM initiatives. In the case of SDIs in particular the state needs to re-examine the extent to which private capital can be left to determine the nature of development in the corridors. The private sector often has short-term objectives and is not necessarily committed to community involvement and equity considerations between countries. Since the private sector is ultimately responsible financially to shareholders and not to communities, it is important for the state and other groups to ensure that benefits are distributed fairly and to ensure that private sector resource development is sustainable. As economies in southern Africa liberalize, there is potential for market failures such as monopolies in the energy sector and environmental externalities such as pollution, which could exacerbate inequities and environmental problems. The private sector's role in TBNRM must be directed to ensure that it contributes to the objectives of equitable and sustainable use of resources.

Conclusion

In southern Africa TBNRM is a reality. The challenge is not to frustrate the progress to date but rather to ensure that its design is right. There remain numerous but pertinent issues that need addressing. These include amongst other issues, inconsistencies in law and policy, conflicts between community and private interests, unresolved imperatives of land reform, confusion around the organisational roles and responsibilities of the state, local versus international NGOs, donors, and the power imbalances amongst key actors. It is clear that in the context of resource development and integration in Southern Africa, effective approaches to management of transboundary resources are needed. It is hoped that this paper, along with the two additional papers that describe in detail the current state of TBNRM in the region, will provide a basis for development of a regional TBNRM networking programme that will allow stakeholders to learn from past experience and develop improved TBNRM initiatives in future.



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