

Community Based Natural Resource Management and Social Sustainability in Ngamiland, Botswana

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Abstract

This paper examines the impact of Community-Based Natural Resource Management (CBNRM) in Ngamiland over the past ten years. It shows that CBNRM has made some strides in strengthening and creating new organisations/institutions, empowering local communities, creating social networks and improving the institutional capacity of community trusts. Communities receive benefits from employment opportunities, social infrastructure, provision of transport, and assistance on meeting the costs of funerals. However, the contribution of most of the benefits to livelihood diversification is limited as they mainly accrue to the communities rather than individuals. The programme faces many challenges, such as limited institutional capacity for running organizations, insecurity of tenure, stakeholder conflicts, mismanagement of funds, and problems of how to use and equitably distribute the financial benefits to individual households.

Introduction

The Botswana Community-Based Natural Resource Management (CBNRM) approach tries to transform open access regimes into true common property resources in order to promote sustainable rural development. According to Blaikie & Brookfield (1987:186), a Common Property Resource (CPR) has the following characteristics: it is 'subject to individual use but not individual possession' and it has numerous users 'who constitute a collectivity' and can introduce rules for using a resource and excluding those 'who are not members of that collectivity'. The CBNRM approach is mainly premised on the assumption that communities will have an economic incentive to sustainably manage natural resources since the perceived benefits from them are supposed to exceed the perceived costs (Steiner and Rihoy, 1995). According to Shackelton (2000), some of the assumptions implicit in CBNRM initiatives are the following: local communities should have access to natural resources and participate in their management; they should 'own' the resources or have tenure for them; and they should obtain income and other benefits from the use and management of natural resources so that they have an incentive to conserve them. In a nutshell, CBNRM initiatives are supposed to promote the economic growth of rural areas, alleviate poverty, and conserve the environment (Johnson, 2000).

The CBNRM approach is increasingly gaining recognition as an alternative strategy to the traditional protectionist conservation policies and top-down approaches to development. It is based on common property theory which discourages open access resource management and promotes resource use rights of the local communities (Rihoy, 1995). The driving forces behind the introduction of CBNRM in southern Africa are problems such as depletion of wildlife species, conflicts in land-use, and scarcity of resources for wildlife management (Rihoy, 1995). By 1995, the southern African countries of Botswana, Namibia, Zimbabwe and Zambia had already introduced community-based approaches to wildlife and natural resource management (Steiner and Rihoy, 1995). According to Murphree (1995:49-51), one of the constraints of the

CBNRM programme in southern Africa is the weakness of property rights over natural resources. In his view, the long-term sustainability of CBNRM initiatives in southern Africa will be determined by the extent to which property rights are strengthened, their weakness or strength being determined by the tenure period and the 'conditionalities attached to it'.

A wider review of the literature in developing countries reveals that CBNRM initiatives only marginally benefit the intended beneficiaries, are short-term in nature, more reliant on expatriate personnel, do not usually have assessment criteria for their evaluation, and tend to marginalise certain socio-economic groups (Leach *et al*, 1999). It is also revealed that capacity building is narrowly defined, and focuses more on what communities lack and less on what communities have, an asset-oriented intervention approach. In general, capacity building tends to rely on expatriate personnel, creates dependency, marginalises certain socio-economic groups, and fails to incorporate local knowledge into the packaging and delivery of training modules.

In recent years, there has been a concern in Botswana that the CBNRM programme focuses on the utilization of natural resources rather than on their conservation. According to Taylor (2001:4), the programme is based on the 'capitalisation of nature', and this means that the value of natural resources is based only on the extent to which they generate revenues. The contribution of CBNRM to rural development and natural resource conservation has increasingly been questioned in various fora (Johnson, 2000; National CBNRM Forum, 2002; North-West CBNRM Forum, 2002). Thus, it is not clearly understood how CBNRM initiatives contribute to economic and social development in Botswana, in general, and Ngamiland District in particular, where there is a concentration of these projects. This paper attempts to improve the practice of the CBNRM approach in Botswana by critically evaluating its performance, drawing on the perspectives of development studies. It examines the social sustainability of CBNRM initiatives in Ngamiland. The paper first provides an overview of the concept of sustainability and the development of CBNRM-related policies, before assessing the impact of CBNRM on social sustainability and concluding the discussion. The major contribution of the paper is on the assessment of the impact of CBNRM projects on social sustainability, as there is a significant major gap in the literature on this subject in Botswana. The vast literature on CBNRM in Botswana is to a large extent lacking in conceptual analysis.

Study Area and Methodology

Ngamiland is situated in northern Botswana. The Okavango Delta, a globally renowned Ramsar Site, is an important feature in Ngamiland District (Figure 1). The Delta is characterised by perennial and seasonal swamps, and is home to a variety of wildlife and vegetation species. For instance, there are 2,000 to 3,000 plant species, over 162 arachid species, more than 20 species of large herbivores, over 450 bird species (Monna, 1999), and more than 80 fish species (Kolding, 1996). The population of Ngamiland increased by 3% during the intercensal decade 1981-1991, and by 2.8% during the decade 1991-2001. The reduction in population growth rate recorded in the 2001 census was partly attributed to HIV/AIDS. However, the population of Maun, the district capital of Ngamiland, increased by 6% and 5% during the intercensal decades 1981-1991 and 1991-2001, respectively.

The Okavango Delta is a major source of livelihood for the local communities, and also an important attraction for tourism, the second most important economic activity in Botswana after diamond mining (Mbaiwa, 2002). In 1997, tourism contributed P800 million to the nation's economy - 4.5% of overall GDP or 7% of the non-mining GDP (Department of

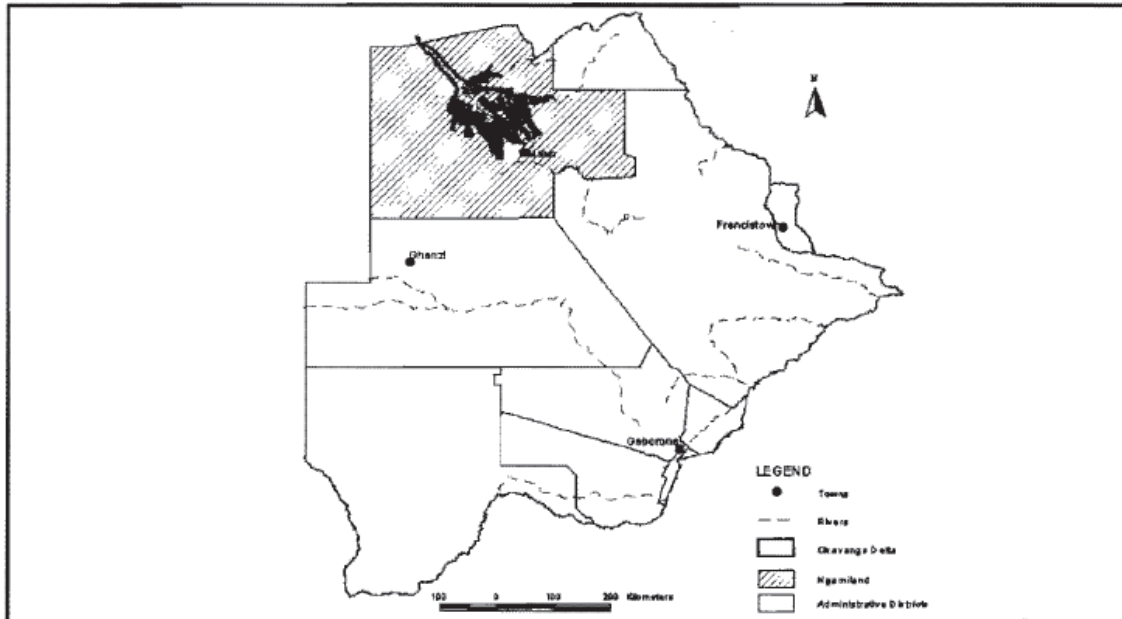


Figure 1. Map of Botswana showing Ngamiland.

Tourism, 2000). Given the importance of achieving sustainable development in Ngamiland, it is therefore crucial to explore the extent to which CBNRM contributes to social sustainability.

Information for this paper was mainly obtained from secondary sources, interim reports from current research at the Harry Oppenheimer Okavango Research Centre (University of Botswana), and informal interviews. The current research includes the European Union-funded research project on Water and Ecosystem Resources in Regional Development (WERRD), which has led to a number of reports (Kgathi *et al*, 2002; Kgathi *et al*, 2004; Bendsen and Meyer, 2002). Those informally interviewed included CBO officers in community trusts, officers from the Department of Wildlife and National Parks (DWNP), and CBNRM non-governmental organisations (NGOs) based in Maun in Ngamiland District.

The Concept of Sustainability

The CBNRM approach aims at promoting sustainability, broadly defined by the three notions of economic, social and environmental sustainability (Munasinghe and McNeely, 1995). Sustainability is thus defined in a broader context, and not in the sense it is generally understood in everyday use as ‘resource sustainability’ (Paehlke, 1999:244). Economic efficiency of a development project is achieved when the production of goods and services is such that the benefits per unit cost are sufficiently high to contribute to the economic progress of the country or region concerned. Simply stated, this is a situation whereby a project produces non-declining or constant benefits (Munasinghe and McNeely, 1995). Environmental sustainability is a process of ‘maintaining or improving the life support system of the earth’ (Holdren *et al*, 1998), a necessary condition for the welfare of both present and future generations. It is a broad concept which incorporates values of ecology, biodiversity, air and water quality, and resource sustainability, usually confused with the broader concept of sustainability (Paehlke, 1999).

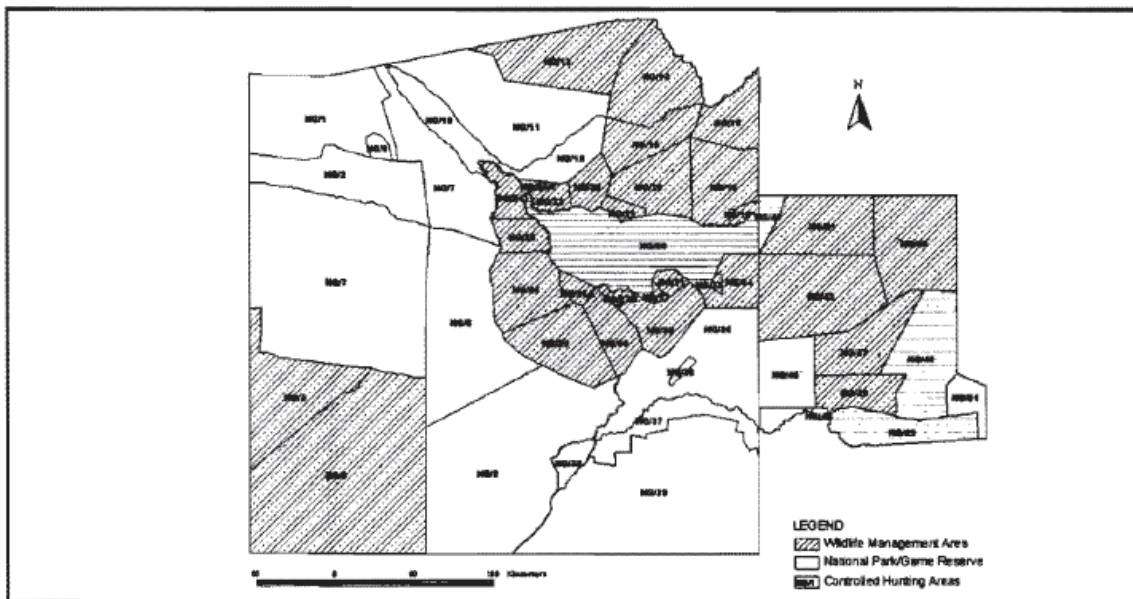
As already stated, this paper focuses on the impact of CBNRM on social sustainability. The broader concept is concerned with the ‘conservation of social and cultural diversity’

(Munasinghe and McNeely, 1995:31). Social sustainability is about the preservation of indigenous knowledge systems, strengthening local institutions that manage natural resources, empowerment of local communities, promotion of sustainable livelihoods, and achievement of intergenerational equity (Ashley and Carney, 1999; Munasinghe and McNeely, 1995). In social sustainability terms, unequal distribution of income and high levels of absolute poverty are seen as undesirable as they often lead to conflicts, crime, migrations and wars (Munasinghe and McNeely, 1995). In addition, it is important to note that there cannot be any social sustainability without environmental sustainability, and no environmental sustainability without social sustainability. As Sachs (1999:27) puts it, 'social and environmental sustainability condition each other'.

CBNRM Policy Development and the Legislative Framework in Botswana

In Botswana, a number of government policies laid down the foundation for development of the CBNRM concept. The Wildlife Conservation and National Parks Act of 1992 allows the Department of Wildlife and National Parks (DWNP) to issue permits for the commercial exploitation of wildlife. The Act recommends that the revenue from the fees for licenses and permits for wildlife activities, excluding those of the reserves and parks, should be paid to the District Councils (Government of Botswana, 1992).

The policy framework includes the Wildlife Conservation Policy (1986), the Tourism Policy (1990), the Wildlife Conservation and National Parks Act (1992), and the Draft CBNRM Policy (1999). The Wildlife Conservation Policy of 1986 established Wildlife Management Areas (WMAs), where wildlife management is a primary form of land-use (Figure 2). The policy permits other forms of land-use in WMAs, provided such use is compatible with wildlife utilisation (Government of Botswana, 1986). WMAs also function as buffer zones between protected areas and communal areas, and are meant to protect the protected areas. WMAs and



Source: Okavango Delta Management Plan (2005).

Figure 2. Map of Wildlife Management Areas (WMA) and Controlled Hunting Areas (CHAs) in Ngamiland.

other areas in Botswana have been divided into smaller units called Controlled Hunting Areas (CHAs). The CHAs are administrative blocks used by the DWNP to administer wildlife resources (Government of Botswana, 1986). The Tourism Policy is supposed to promote the receiving of benefits from tourism by local communities in order to provide the communities with an incentive for wildlife management. The main objective of the policy is to contribute to rural development by generating income and employment opportunities (DWNP, 1999). Finally, the draft CBNRM policy document of 2000 promotes the involvement of communities in the sustainable use and management of natural resources (wildlife, veld products and forest resources), and lays down the instruments and mechanisms for achieving this objective (Government of Botswana, 2000). This policy is still in draft form as attempts are still being made to make it consistent with other national policies, which are based on the idea that the benefits of natural resources from a particular area should benefit all the people in the country rather than the local community only.

The existence of a comprehensive policy and legislative framework provides a necessary, though not sufficient, condition to facilitate the practice of CBNRM in Botswana. It should be acknowledged that CBNRM actually mushroomed before many policies were written, let alone put in place. However, an enabling environment alone does not guarantee the successful implementation and sustainability of CBNRM activities. The CBNRM process, like any other social process, is historical, relational and dynamic. It is characterised by conflict and collaboration, disagreement and concurrence between a range of stakeholder views as the rules of the game change and institutional relations are reconstituted, fractured or destroyed. The intervention process thus raises more unanswered questions and leaves issues lingering regarding exactly how CBNRM really works in and across recipient communities subjected to the same policy and legislative environment.

The CBNRM Model in Botswana

The CBNRM programme in Botswana was introduced by the Natural Resources Management Programme (USAID funded) and the Department of Wildlife and National Parks in 1989 (Arntzen *et al*, 2003; Thakadu, 2005). It is generally thought that the Zimbabwe's Community Areas Management Programme for Indigenous Resources (CAMPFIRE) project played a pioneering role in the introduction of CBNRM in southern Africa (Roe *et al*, 2000). According to the guidelines to communities and potential joint venture partners, communities that form a 'representative and accountable entity' and those that live in, or adjacent to, WMAs in Botswana can apply for a 'head lease' to hold user rights in their area or CHAs so designated for either consumptive or non-consumptive wildlife utilization (DWNP, 1995). The communities can in turn sub-lease part of their area to safari companies (Gujadhur, 2001). To be able to apply for a head lease, communities must be legally registered as a trust (DWNP, 1999; Gujadhur, 2001). Community leases in CHAs have a tenure period of 15 years, renewable after every five years. The sub-leases to the safari companies used to be on short contracts of two one-year, one three-year and two five-year periods in order to protect the inexperienced communities from being trapped in bad contracts for a long period (Gujadhur, 2001). It should be made clear that in most cases no joint venture went past the second contract. In 2002 the DWNP decided that the sub-leases should be put on three five-year contracts.

The tenurial rights given to communities by the Land Board - the relevant legal body - are considered insecure in that the 15-year period is too short to encourage them to 'act as real owners of the land and invest in its management and utilisation' (Gujadhur, 2001, p. 19). The

safari operators are also concerned about the insecurity of their resource user rights (Mvimi, 2000; Gujadhur, 2001). They contend that the system of renewing the contracts after short-duration periods does not allow them to make long-term investments. Tenurial rights need to be secure, well defined and enforceable in order for economic projects to achieve sustainable resource management (Panayatou, 1993; Mohammed-Katerere, 2001). There were 45 registered community trusts in Botswana in the year 2000, of which 12 or 27% were in Ngamiland (Kgathi *et al*, 2002; National CBNRM Forum, 2002). The Okavango Community Trust (OCT) in Seronga was the first to be registered (March 1995), followed by Sankuyo Tshwaragano Management Trust (STMT) in Sankuyo in November 1995 (Kgathi *et al*, 2004; National CBNRM Forum, 2002). However, the STMT was the first to start operation in 1995. Although Khwai was one of the first villages to be encouraged to participate in the CBNRM programme, it was among the last villages in Ngamiland to implement it (Taylor, 2001; Mbaiwa, 2002). This is mainly because the Khwai people were not sure whether they would stay permanently in this village as there were possibilities that they could be relocated to another area since Khwai is situated in a WMA. The other reason is that the dominant ethnic group in this village, the San, wanted a different model of CBNRM, whereby they would have full control of the land and other natural resources in the concession area. In addition, they wanted a concession for the San people only, an idea which the government did not accept as such a concession would exclude other ethnic groups. This delayed the registration of the trust (Mbaiwa, 2002).

Most of the trusts in Ngamiland are engaged in activities such as sub-leasing their concessions to safari companies, managing cultural tourism, marketing baskets and crafts, photographic tourism, and marketing reeds and grass (National CBNRM Forum, 2001, Table 1). In communities involved in CBNRM, the control of wildlife resources is conferred on local communities in order to achieve sustainable rural development by restoring historically lost rights over the use of wildlife resources (Rihoy *et al*, 1999). Access to hunting in WMAs is based on community control over the hunting quota rather than on the system of individual hunting licenses followed previously: as from 1979, communities who were dependent on wildlife were provided with special game licences. This system was replaced by the community quota system in 1995/96 when CBNRM was introduced (Taylor, 2000).

The hunting quota license gives the communities the right to use wildlife in their CHAs. They are empowered by the lease to exclude others and to regulate the use of this resource. In other words, wildlife resources are to some degree managed under a common property resource management regime in community CHAs (Rozemeijer & Van der Jagt, 2000). Access to natural resources depends on whether the CHAs are under multi-purpose management or photographic management. In multi-purpose CHAs, communities have no control over the use of non-wildlife resources, as they cannot restrict others from harvesting them (Rozemeijer & Van der Jagt, 2000).

According to the draft regulations for WMAs, traditional hunting will be allowed if it is carried out with traditional weapons, whereas subsistence hunting shall only be allowed in designated areas (DWNP, 2000). Commercial exploitation of non-wildlife resources (e.g. veld products and fish) is prohibited, but the traditional rights over their use are recognised, as communities are allowed to collect or use them for subsistence purposes (Van der Heiden, 1991). Such recognition is consistent with the principles of the Convention on Biological Diversity, which requires that resource user rights of communities, as well as their knowledge, should be protected (Mahammed-Katerere, 2001). Non-wildlife resources are, therefore, subjected to an open access-regime in the WMAs as access to their use is unrestricted.

Table 1. Basic information on community trusts in Ngamiland, Botswana.

Name of Community Trust	Date of Registration	Villages Covered	CHAs Used	Types of Activities (2001)	Revenue Generated (2001) (P)	No. of People Employed (2001)
CGAECGAE TLHABOLOLO TRUST	1997	XaiXai	NG 4 NG5	Sale of quota, Subsistence hunting, Cultural tourism, Craft marketing, Village shop.	215,000	30
KHWAI DEVELOPMENT TRUST	2000	Khwai	NG 18	Marketing hunts, Subsistence hunting, Grass and crafts	600,000	3
OKAVANGO COMMUNITY TRUST	1995	Beetsha, Eretsha, Gudigwa, Seronga, Gunitsoga.	NG22, NG 23.	Sale of quota, Land rental	1,500,000	130
OKAVANGO JAKOTSHA COMMUNITY TRUST	2000	Etsha 1- 13, Ikoga, Jao Flats	NG24	Photographic tourism, Development of camp site.	Not stated	Not stated
NGWAO BOSWA WOMENS CO-OPERATIVE	Not stated	Gumare, Danega, Nokaneng.	None	Marketing of baskets, Domestication of palm, Woodcarving.	Not stated	96
OKAVANGO KOPANO MOKORO COMMUNITY TRUST	1997	Ditshiping, Quxau, Daonara, Boro+ Associated settlements	NG32	Sale of quota, Marketing of campsite, Mokoro, grass, reeds, and fish	1,200,000	100
BOKAMOSO WOMENS CO-OPERATIVE	Not stated	Shorobe	None	Basket marketing	Not stated	Not stated
BUKAKHWE CULTURAL CONSERVATION TRUST	2000	Gudigwa	Part of NG12	Eco-cultural tourism	Not Stated	Not Stated
SANKUYO TSHWARAGANO MANAGEMENT TRUST	1995	Sankuyo	NG34	Sale of quota, Thatching grass, Subsistence hunting, Campsite.	595,460	53
MABABE ZOKOTSAMA DEVELOPMENT COMMUNITY TRUST	1998	Mababe	NG41	Sale of quota, Subsistence hunting, Land rental	750,000	49
OKAVANGO POLERS TRUST	1999	Seronga and Gunitsoga	NG12	Tourism viewing, Sale of crafts, Restaurant.	750,000	100
TEEMASHANE TRUST	1999	Kaputura, Ngarange, Ncoagom, Sekondombo	NG11	Cultural Tourism, Thatching grass, Development of CBNRM project Proposal for NG13.		278

Source: National CBNRM Forum (2002) and Field Research.

There is also an on-going dispute raised by CBNRM challengers that the benefits from the CBNRM programme only accrue to the communities in wildlife areas that administer their CHAs, rather than to the whole nation as is the case of other natural resources such as diamonds. These opposing views argue that CBNRM projects are discriminatory in outlook since they only provide jobs and other direct benefits to participating communities (National CBNRM Forum, 2002). The above-mentioned criticisms are not based on a clear understanding of the basic principle of CBNRM, namely that the CBNRM approach tries to conserve natural resources by providing local communities with income and other benefits in order to create incentives for the sustainable management of those natural resources. If such attempts are not made, natural resources may be over-exploited, which may lead to environmental degradation and reduction in the well-being of local communities. It is also important to mention that these challengers do not understand that it is more important to gain the support of rural people than urban people, because the former are not only in the frontline but also have the largest role to play in reducing conflict with wildlife. In addition, rural people bear the costs of damage to their crops and property by wildlife as well as the opportunity costs of foregone alternative land uses. The CBNRM programme has the potential to contribute to the generation of revenues that could be used to compensate households for the costs imposed by wildlife. The Government of Botswana has already established such a fund in order to assist communities living near elephant areas to start projects which could be of benefit to them: the Conservation Trust Fund, as it is called, has accrued income from the sale of stock-piled ivory, facilitated through the down-listing of the elephant population of Botswana to the CITES Appendix 2 in 1997 (North West District CBNRM Forum, 2003). The Botswana CBNRM model has managed to devolve power to local communities in order to enable them to manage their natural resources, although it was a struggle to maintain power at this level as demonstrated by the government's attempt to try to transfer the management of funds to the District Councils in 2001 (discussed in more detail later) (North West District CBNRM Forum, 2001). The CBNRM programme in Botswana is in this way similar to the Conservancy CBNRM model of Namibia, but different from the CAMPFIRE programme of Zimbabwe, which has devolved power to the local councils and not to the communities (IIED, 1994; Arntzen *et al*, 2003).

Impacts on Social Sustainability

We now critically evaluate the impact of CBNRM initiatives on social sustainability with particular reference to the formation of new institutions/organisations, capacity building, participatory development and empowerment, and livelihood diversification. Information on the latter aspect has been obtained from the interim reports of our EU-funded research project at HOORC, whereas information for the other aspects was obtained from informal interviews and secondary sources.

Creation of New CBNRM-related Institutions and Organisations

Institutions and organisations are historical phenomena. They emerge, mutate, thrive, or collapse at specific times and in specific places under specific conditions in any given society. Leading scholars of institutional economics define institutions as 'rules, enforcement characteristics of rules, and norms of behaviour (internal or external informal constraints) that structure repeated interaction' (North, 1989). Examples of institutions include norms, property rights, contracts, constitutions and statutes. Institutions are distinguished from organisations, with the latter defined as 'groups of individuals bound together by some common purpose to

achieve objectives' (North, 1990 cited in Leach *et al*, 1999:237). Examples of organisations include CBNRM community trusts, NGOs and agricultural associations. CBNRM is thus intrinsic to, and an outcome of, the institutionalisation of relations between government and stakeholders (village trusts or residents, NGOs and donors).

The CBNRM programme in Botswana has resulted in the creation of organisations called Community Based Organizations (CBOs) or community trusts.¹ Community trusts are of three types: those composed of one village such as the STMT, those composed of more than one village such as the OCT, and those composed of individuals who have formed associations such as the Okavango Polers Trust (Kgathi *et al*, 2002). Community trusts are governed by Boards of Trustees. Those with more than one village have a Village Trust Committee (VTC) in each village. In the case of the Okavango Community Trust, which is based in five villages (Seronga, Gunotsoga, Beetsha, Eretsha, and Gudigwa), the members of the VTC are elected at the *kgotla* (indigenous public assembly), and two members of each VTC (chairperson and secretary) automatically become members of the Board of Trustees (ACCORD, 2002). Community trusts are governed by constitutions, which specify, *inter alia*, the memberships and duties of trusts, powers of Boards of Trustees and VTCs, and resource governance (Kgathi *et al*, 2002). They implement the activities of the CBNRM projects on behalf of the communities (DWNP, 1999).

There has been a significant increase in the number of villages involved in CBNRM in Botswana over the last decade. Records show that CBOs such as trusts, co-operatives, and interest groups involved in CBNRM in 1993 were found in only two districts and five participating villages, compared to 130 villages in 2001, covering eight out of 15 administrative districts (almost half of the country). Whereas only one CBO was registered in 1993 to develop CBNRM projects, in 2001 there were 46 CBOs, and by the beginning of 2003 their number had increased to 61. Ngamiland has a high concentration of CBOs (National CBNRM Forum, 2001). However, we concur with Jansen and Molokomme (2003:7) that the increase in the number of registered CBOs in itself does not tell us much about the effective performance of these organisations. What is certain is that the numerical growth of these organisations within a ten-year period is in itself an impressive benchmark that demonstrates the existence of a legitimating policy and legislative environment, but also the enhancement of public involvement in governance.

CBOs cannot act in isolation if they wish to become a local force for change or make a significant contribution to sustainable development. Fragmentation of effort would render CBOs invisible and their intervention would have a negligible effect on power structures. In 1999, a national network organisation, the Botswana Community Based Organization Network (BOCOBONET), was established to ensure coordination among and between CBOs and other stakeholders. In 2001, BOCOBONET had 35 paid members. The aim of the network is to disseminate relevant information to its members, represent the interest of the members in policy discussion and link them with required service providers. In addition to the formation of a network of CBOs, the North West CBNRM Forum and the National CBNRM Forum were established, respectively. The National Forum has to date organised national CBNRM conferences annually as from 1999. The District level forum has also hosted several meetings in between. These two structures give members an opportunity to share experiences and to move CBNRM forward.

At the national level, the National CBNRM Forum has also made significant contribu-

tions to the draft CBNRM policy and the review of the 1999 Joint Venture Guidelines. The Forum is increasingly recognised as instrumental in policy analysis and development (Jansen & Molokomme, 2003). The aim of both the district and national organisations is to provide a platform for broader stakeholder dialogue, facilitation and coordination, and for cooperation on CBNRM in Botswana. At the regional and international level, the Forum facilitates a trans-national flow of ideas and resources in the context of globalisation.

In Ngamiland, joint venture agreements have resulted in statutory empowerment for local level decision-making. The decision-making has devolved to the local levels since trusts make decisions on behalf of the communities. They decide who they should do business with, and also the terms and conditions of business agreements (Roe *et al*, 2000). The main problem, however, is that in joint venture agreements, the communities do not fully participate in the design and implementation of the CBNRM programme. This is mainly because they do not play an active role after they have sold their quota to a safari company (Gujadhur, 2001).

In joint venture partnerships, communities become partners in business, and hence they play more active role. However, most of the trusts in Botswana are in joint venture agreements rather than joint venture partnerships due to limited training and experience of the leaders of community trusts. There is a need to move from the situation where communities are simply passive recipients of income from trophy hunting and tourism to one in which they are true managers, - decision-makers - over their land and resources (Jones, 2002). Network organisations such as BOCOBONET, District and National CBNRM fora, and CBNRM service organisations should be seen as structures of facilitation (between CBOs, state and external agencies). They strengthen horizontal relations within and between CBNRM (notably village members and Village Trust Committees). Vertical relations among safari operators open lines of communication with state and external agencies. While change in legislation creates a new space for partnerships, these changes alone will not necessarily lead to effective partnerships between CBOs, safari companies and the government. Changes in mind-sets of all partners, including external support agencies, are necessary so that exchange of knowledge and experience between service providers and recipients becomes apparent.

There is evidence, as revealed by a number of audit reports and the recent evaluation of the CBNRM in Botswana (Arntzen *et al*, 2003) that community trusts lack accountability. The latter states that these institutions tend to abuse power and also suffer from financial mismanagement (Arntzen *et al*, 2003). In addition, Pula Associates (2002) revealed in their audit for the financial year ending 31st December 2002 that a sum of P99,461 could not be accounted for by the Mababe Zokotsama Community Development Trust (MZCDT). The same auditors also revealed that there were no supporting documents for expenditures of P12,520 and P6,464 incurred by the STMT in 2002.

The perception that community trusts mismanage funds is one of the concerns that led the Permanent Secretary, Ministry of Local Government to draft the savigram of the 30th January 2001, which made an attempt to transfer the management of funds from community trusts to the District Councils (North West District CBNRM Forum, 2001). Other concerns that led to this decision included 1. the funds only benefit a few people and not the whole nation, as in the case of diamonds; 2. CBNRM projects are discriminatory as they only provide jobs and other benefits to participating communities; and 3. that the CBNRM projects are failing to promote rural development in the participating areas as was originally intended. The savigram has not been implemented, however, as it was opposed by the stakeholders who argued that the government had no legal right to instruct legally registered community trusts to transfer their funds to the District Councils. They were also concerned that the implementation of the

decision of the government as outlined in the savingram would undermine the efforts of donor agencies, especially USAID, which has spent over US \$25 million on the development of the CBNRM programme in Botswana in order to empower rural communities (CBNRM Forum, 2002).

Participative Development and Empowerment

CBNRM democratises the development process more than any other local-level process. To use the expression of Roe *et al* (2000), CBNRM projects are characterised by ‘alliances, linkages, and networks between different institutions’, and such institutions are an essential condition for natural resource management. For instance, the Ngamiland VTCs workshop was held at Riley’s Hotel in Maun² on 17 March 2003. Approximately 16 communities were represented by chairpersons or secretaries to their VTCs. Other participants were chiefs/headmen, councillors, and community extension or outreach workers from various government departments. A Steering Committee was elected, and it was agreed that each trust should pay a membership fee of P1,000.00 quarterly. One of the goals of the workshop was to assist the VTCs to identify issues that are of concern to them, prepare case studies to share experience, and select a committee which would be represented at the North-West District CBNRM Forum. This was the first time in the history of CBNRM initiatives in Botswana that VTCs created their own organisational space at the district level.

This development exemplifies that trusts are gradually creating new spaces in which agents of the state and supranational organisations can meaningfully engage in shaping decisions together in a deeply complex socio-cultural and political process. In fact, the savingram mentioned earlier resulted in CBOs that have become more aware of, and ready to advocate for, development rights (Jansen & Molokomme, 2003). The incident demonstrated a situation in which a feeling of ownership is likely to increase among village residents if these organisations become more responsive to their priorities. In this sense the participation of CBOs and other stakeholders disrupted the hierarchical order by creating new rules for the game and offered otherwise silent actors a chance to be heard.

According to Molutsi and Holm (1990), civil society in Botswana is weak in the sense that it is controlled by a strong paternalistic state. Intervention by NGOs and supranational institutions therefore played a mediating role in reasserting values of democratic participation following the publication of the savingram. Given the ‘strong state - weak civil society’ scenario in Botswana’s policy and programmes environment, it is strategic that local communities globalise their issues and empower themselves by moving out of constrained spaces and widening their scope for action. Simply stated, a local community or organisation that does not place itself in the global terrain, regardless of whether or not it has been invited to participate in officially endorsed organisational spaces, is less likely to challenge the set rules of the game or survive any attempt to transform old ways of doing official business into new spaces.

However, adding a new layer of participants to an already complex institutional landscape poses other challenges. The emergence of a strong community with necessary resources to direct their own development is of course likely to be perceived as a threat to established authority, more especially if the powers that be perceive this as a loss of political patronage. In this context, while both Village Development Committees (VDCs) and VTCs participate for incentives in legislated organisational spaces, CBOs pose a threat to the implementation of

CBNRM activities at the village level. Power struggles between different authorities and different village factions may result in increased resistance or sabotage (Jansen & Molokomme, 2003). In practice, this implies that CBOs have to maintain cordial relations with key local authorities, notably the District Council, Landboard and District Administration.

CBNRM is thus evolving or emerging as a model whereby the management of key natural resources undergoes devolution of power from state to local communities, especially in terms of breaking the exclusion imposed by inadequate communication infrastructure and remoteness of most CBNRM villages from commercial centres. As we have already indicated, BOCOBONET and the two CBNRM fora facilitate the exchange of information and experiences, and contribute to policy processes. Village residents are now engaged in CBNRM activities with strangers (e.g. safari operators, NGOs, and donor agencies) to make community decisions regardless of the merits or challenges of those decisions.

What is important is that the voices of ordinary people through their representatives can find their way through the corridors of power into legislated spaces. Ordinary people should participate both as beneficiaries and users or citizens of Botswana. This can be considered a politically inclusive and empowering process, with intended and unintended outcomes that impact on all stakeholders one way or another. Interestingly, the government does not consult local communities when setting boundaries of CHAs and making decisions on 'annual offtake [hunting] quota' (Taylor, 2000), despite the fact that the CBNRM programme is intended to promote participation and empowerment. Empowerment in the context of CBNRM means transferring power from governments to the communities in order to enhance economic growth, poverty alleviation, and natural resource management. It is expected that communities in Ngamiland should participate more actively in the management of natural resources in order to enhance the effectiveness of devolution to the lowest levels of proprietorship.

Capacity Building

The wider literature on community-based wildlife management suggests that in order for devolution of power to local communities to be effective, there is a need for a strong institutional capacity (Roe *et al.*, 2000; IIED, 1994). Lack of training and capacity building are some of the constraints faced by community trusts in Ngamiland. Other constraints include insecurity of tenure, conflicts between stakeholders, management problems of community trusts, and lack of accountability (National CBNRM Forum, 2001). NGOs provide CBOs with skills training in financial management; legal advice on policies, regulations, joint venture agreements, inventory development, land use, tourism and management plans; income distribution and re-investment; and gender awareness training (BOCOBONET, 2001).

The coverage capacity of NGOs providing CBNRM services is often limited due to location. Most of them are based in urban areas such as Gaborone, while their client populations are rural-based. These separations result in the provision of 'hit and run' services. According to Rozemeijer and van der Jagt (2000), one of the key components of facilitating CBNRM in Botswana is to help communities develop skills in formulating land use and management plans, and to conduct socio-economic surveys. An analysis of the 1999/2001 Fact Sheet (National CBNRM Forum, 2001), suggests that out of the 14 CBOs registered in Chobe and Ngamiland District, only five (35%) have had baseline or socio-economic surveys conducted, usually by a private consultant such as EcoSurv, SIAPEC, or a university-based interest group. Only two community trusts (14%) had prepared a Community or Village Development/Action Plan (CAP/ VDP). Half of the Community Trusts had no land use and development plans, the other half had such plans developed by the District Land Use Planning Unit and/or the Tawana Land

Board. By comparison, in the Central District 40% of CBOs had development and management plans. In Kgalagadi and Gantsi Districts only 16% and 20% of CBOs had development and management plans, respectively (National CBNRM Forum 2001).

Interventions on capacity building in Ngamiland tend to rely on expatriate personnel, create dependency, marginalise certain socio-economic groups, and fail to incorporate local knowledge in the packaging and delivery of training modules. Cassidy (2001) observed that capacity building workshops often take place outside the villages, and some women were not able to attend because their husbands would not let them. As mentioned earlier, CBNRM activities are mostly concentrated in Ngamiland. Compared to other areas in Botswana, Ngamiland has a high composite index of Human Capability Poverty (CPM).³ One indicator, female illiteracy, is 43% in the North West District compared to 18.4% in Gaborone (BIDPA, 1997). These statistics suggest that capacity building intervention in Ngamiland has to take into account the low human development capacity and high CPM. Most VTCs, therefore, have low-level literacy skills, and may find that the high level of training in financial management is too demanding to understand. It is not surprising, therefore, that one of the complaints voiced during the North West District CBNRM Forum (2003) was that NGOs were 'robbing trusts by not enabling them to develop capacity to run their affairs' and that they 'leave behind a trail of broken promises'. This complaint might be taken to mean that capacity building interventions by NGOs tend to amplify rather than minimise professional differences. Unquestionably, NGOs and government extension teams play the role of 'honest brokers' and long term 'process facilitators' in planning, implementing, and distributing resources by negotiating conflict among people of different socio-economic status, age, and gender.

Our informal interviews revealed that one international NGO, known as ACCORD (Agency for Cooperation, Research, and Development), made a substantial impact in raising awareness and strengthening the institutional capacity of the Board and VTC members of the Okavango Community Trust (OCT). Training was given on the interpretation of the constitution, management procedures, accountability and sensitivity (Tsietso, pers. comm., 2004). According to ACCORD (2002), the training raised the awareness of the VTCs as demonstrated by the fact that after the training they were able to challenge their Board of Trustees, who had renewed the agreement with their joint venture partner, Micheletti Bates, in 2001 without adequately consulting the general membership (ACCORD, 2002).

Livelihoods

Okavango Delta households have diverse livelihood activities, which are both natural resource and non-natural resource-based. These include livestock production, arable agriculture, fishing, hunting, and wage labour from tourism and CBNRM initiatives (Bendsen, 2002). The results of our livelihood study revealed that arable agriculture was the most important livelihood activity in the Okavango Delta, followed by formal employment and social welfare schemes (Kgathi *et al*, 2004). Arable agriculture became the main livelihood activity after the killing of all the cattle in Ngamiland in 1996, which was done to stem the spread of cattle lung disease (Kgathi *et al*, 2004). Access to livelihood strategies and assets are not only mediated by the outbreak of diseases, but also by other socio-economic, social, and biophysical factors. As Ellis (2000) puts it, 'a livelihood comprises the assets (natural, physical, human, financial and social capital), the

³ In the 1996 Human Development Report, UNDP introduced the capability poverty measure (CPM) as an indicator of the human capability dimension of poverty. It covers three dimensions, namely nutrition, safe reproduction and female literacy. It is an indicator of how well basic social services and safety nets function in raising human capabilities.

activities, and the access to these (mediated by institutions and social relations) that together determine the living gained by the individual or household’.

Community trusts in the Okavango Delta create substantial revenue from the sub-leasing of land, wildlife quotas, the sale of natural resources, and other activities. The revenues generated by community trusts in Ngamiland District ranged from P265,000 for Cgaegae Community Trust to P1,500,000 for OCT in 2001 (National CBNRM Forum, 2002). The communities use the revenue for various purposes such as the purchase of vehicles, construction of toilets, paying salaries and wages of people employed by the trusts, and in some cases the payment of dividends. During the 8th Ngamiland CBNRM Forum (2003), Cgae Cgae Tlhabololo Trust identified several future investments intended for trust funds, including an airstrip management, the purchase of office facilities, horse patrols for monitoring wildlife, campsite equipment for the Trust, construction of a community hall (for meetings), and a shop to sell food to residents at affordable prices. Khwai Development Trust said it had bought itself a truck and a tractor. Table 1 indicates that the employment created by these trusts in 2001 ranged from three people at Khwai Community Trust to 278 at Teemashane Trust. These numbers will be related to the population figures later.

The STMT is the only trust which distributes dividends to households. The amount of money distributed to each household was P205 in 1999 (Bolaane, 2000), and in 1999 and 2002 the total expenditures of the Trust on dividends were P9,250 and P12,600, respectively (Table 2). The amount of dividends distributed to individual households is rather small, and could not have any significant impact on poverty alleviation and the creation of incentives for natural resource conservation. If the money were invested in a viable development project, such as property development in Maun, it could have perhaps yielded more sustainable benefits to the local communities.

Table 2. Administrative and operation costs - Sankuyo Tshwaragano Management Trust (STMT): 1999 to 2002.

Expenditure	2002	2001	2000	1999
Vehicle Maintenance and Repairs	78,200	60,169	35,006	11,942
Household Dividends	12,600	0	0	9,250
Salaries and Wages	151,602	143,507	89,880	89,566
Sitting Allowance	61,965	36,132	11,900	22,330
Funeral Expenses	14,000	11,000	0	0
Travel and Accommodation	4,719	1,714	0	1,350
Sub Total	323,086	252,322	136,786	134,438
Other Costs	174.05	159,276	79,851	53,779
Total	497,136	411,698	216,637	188,217

Source: Pula Associates (2000, 2002).

Members of the Boards of Trustees and VTCs are paid sitting allowances. Table 2 shows that the expenditure on salaries and wages at the STMT increased by 69% from P89,566 in 1999 to P151,602 in 2002. According to Bolaane (2000), each of the 37 households in Sankuyo had a working member. Our calculations, based on Table 1 and population statistics, reveal that those who were formally employed by this community trust accounted for 14% of the total population in 2001. Table 2 also shows that the total paid as sitting allowance by the STMT to its Board of

the more affluent members of the community. CBNRM will thus widen the distribution of income among different households in the areas where it exists in the Okavango Delta.

Conclusion

The paper shows that the CBNRM programme has made substantial strides in strengthening local institutions, empowering local communities, and improving the livelihoods of the rural communities. New organisations have been created and traditional institutions such as the *kgotla* and village development committees have been strengthened. The new institutions are mainly in the form of community trusts, which have entered into joint venture agreements with safari companies. In addition, alliances and networks have been created in order to promote dialogue between different institutions, a necessary condition for the successful implementation of the CBNRM programme.

Joint venture agreements have resulted in statutory empowerment of the local communities as the decision-making process has devolved to the local levels. However, there is a need to improve the management and financial capacity of community trusts in order to enable them to run their organisations in an effective way. It is therefore necessary for the CBNRM initiatives to focus on training in order to improve the participation of the communities in CBNRM initiatives. As a result of lack of training and lack of trust among stakeholders, CBNRM partnerships have mainly been in the form of joint venture agreements rather than joint venture partnerships, and the participation of the communities has therefore been limited, as they do not do much after they have signed agreements with safari companies. Limited knowledge of how to run an organisation is also associated with stakeholder conflicts, mismanagement of funds, and problems of how to use and equitably distribute the financial benefits to individual households.

Households receive benefits such as employment opportunities, social infrastructure, business loans, and intangibles. Those who benefit from employment opportunities are mainly those who have members in the Board of trustees or VTCs, or with members who are employed by community trusts. Apart from employment opportunities, the contribution of most of the benefits to livelihood diversification is limited as they are mainly in the form of infrastructural development and provision of community assets such as vehicles. Too much money is being spent on community assets such as vehicles rather than on manpower development and sustainable livelihood diversification. Provision of social infrastructure (e.g. toilets and community halls) is very much appreciated by the communities, but its contribution to livelihood diversification is limited, and may thus not create economic incentives for the conservation of natural resources. In some cases, the introduction of CBNRM has resulted in withdrawal of special hunting licenses, and this had adverse effects on livelihoods since access to meat was reduced and replaced by cash income which does not necessarily accrue to individual households. CBOs should work out ways in which they can invest their money in viable projects. The proceeds of these projects could be shared by the communities in a more equitable way in the future.

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References

- Arntzen, J.W. Molokomme, D.L., Terry, E.M., Moleele, N., Tshosa, O., Mazambani, D. (2003) *Main findings of the review of CBNRM in Botswana*. Occasional Paper No. 14. Gaborone: IUCN/SNV CBNRM Support Programme.
- Ashley, C. and Carney, D. (1999) *Sustainable livelihoods: lessons from early experience*. London: Department for International Development (DFID).
- Bendsen, H. (2002) *The dynamics of the land use systems in Ngamiland: Changing livelihood options and strategies*. Maun: University of Botswana.
- Blaikie, P.M., Brookfield, H. (1987) *Land degradation and society*. London: Methuen.
- BOCOBONET (2001) *The CBNRM services directory for Botswana*. Gaborone: IUCN/SNV CBNRM Support Programme.
- Bolaane, M.M. (2000) Community-based models of wildlife enterprise development in Botswana: A cooperative study of Khwai and Sankuyo in Ngamiland. In: D. Dore and J. Chafota Lilongwe (Eds) *Institutional Analysis of Community-Based Wildlife Enterprises and Use of Other Natural Resources - Case Studies from Southern Africa*, pp. 78-96. SADC Wildlife Technical Cooperation Unit.
- Botswana Institute of Development Policy Analysis (1997). *The study of poverty and poverty alleviation in Botswana*. Gaborone: Ministry of Finance and Development Planning.
- Cassidy, L. (2001) *Improving Women's participation in CBNRM in Botswana*. Gaborone: CBNRM Support Programme.
- Cassidy, L. (2000) *CBNRM and legal rights in Botswana*. Occasional Paper No. 4. Gaborone: IUCN/SNV CBNRM Support Programme.
- Department of Wildlife and National Parks (2000) *Draft regulations for wildlife management areas: a discussion draft*. Gaborone: Department of Wildlife and National Parks.
- Department of Wildlife and National Parks. (1995) *Savigram: Minimum conditions for communities seeking hunting quotas and resource leases*. Gaborone: Department of Wildlife and National Parks.
- Department of Wildlife and National Parks (1999) *CBNRM Practitioners Guide*. Gaborone: Department of Wildlife and National Parks.
- Ellis, F. (2000) *Rural livelihoods and diversity in developing countries*. Oxford: Oxford University Press.
- Fortmann, L., Roe, E. van Eeteen, M. (2001) At the threshold between governance and management: community-based natural resource management in southern Africa. *Public Administration and Development* 21, 171-185.
- Government of Botswana (1986) *Wildlife Conservation Policy*. Gaborone: Government Printer.
- Government of Botswana (1992) *Wildlife Conservation and National Parks Act 1992, Act No. 28 of 1992*. Gaborone: Government Printer.
- Government of Botswana (2000) *Community Based Natural Resources Management Policy, Revised Discussion Draft*. Gaborone: Government Printer.
- Gujadhur T. (2001) *Joint venture options for communities and safari operators in Botswana*. Occasional Paper No. 6. Gaborone: IUCN/SNV CBNRM Support Programme.
- Holdren, P.J. Gretchen, C., Erlich, P. (1998) *The meaning of sustainability: biogeophysical aspects*. <http://www.dieoff.org/page113.htm>.
- International Institute of Environment and Development (1994) *Whose Eden? An overview of community Approaches to wildlife management*. Nottingham: Russell Press.

- Jansen, R., Molokomme, K. (2003) Mid- term review: German Development Services (DED) Natural Resources Management Programme. Gaborone: Ministry of Finance and Development Planning and DED.
- Jones, B.T. (2002) *Chobe enclave, Botswana: Lessons learnt from a CBNRM Project 1993-2002*. Gaborone: CBNRM Support Programme.
- Johnson, S.T., (2000) *Conservation and Development: taking CBNRM into the 21st Century*. Background Paper for the SADC NRMP 3rd Biennial Conference. Lilongwe, Malawi: SADC Wildlife Sector.
- Kgathi, D.L. (2002) *Natural resource tenure and access to natural resources in the Okavango Delta*, WERRD Draft Report for Deliverable 4.1, Maun: University of Botswana.
- Kgathi, D.L. Bendsen, H., Blaikie, P., Mbaiwa, J., Ngwenya, B. and Wilk, J. (2004) Rural Livelihoods, Indigenous knowledge systems and political economy of access to natural resources in the Okavango Delta, Botswana. Maun: University of Botswana.
- Kgathi, D.L. Mbaiwa, J.E., and Motsholapheko, M. (2002) *Local institutions and natural resources management in Ngamiland*, WERRD Draft Report for Deliverable 5.1, Maun: University of Botswana.
- Kolding, J. (1996) *Feasibility study and appraisal of fish stock management plan in Okavango*. Bergen: University of Bergen.
- Leach, M. Mearns, R., Scoones I. (1999) Environmental entitlements: dynamics and institutions in Community-Based Natural Resource Management. *World Development* 27 (2), 225–247.
- Mendelson, J., el Obeid, S. (2004) *Okavango river: the flow of a lifeline*. Cape Town: Struik Publishers.
- Mbaiwa, J. (2002) *The socio-economic and environmental impact of tourism in the Okavango Delta, Botswana. A baseline study*. Maun: Harry Oppenheimer Okavango Research Centre (HOORC), University of Botswana.
- Mohammed-Katerere, J. (2001) *Review of the legal policy framework for transboundary natural resources management in southern Africa*. Gaborone: IUCN.
- Molutsi, P., Holm, J. (1990) Developing democracy when the civil society is weak: the case of Botswana. *African Affairs*, 89, 323-348.
- Monna, S.C. (1999) A framework for international cooperation for the management of the Okavango Basin and Delta. Ramsar COP7 DOC.205. The Ramsar Convention on Wetlands. http://www.ramsar.org/cop7_doc_205.5_etm.
- Murphree, M. (1995) Optimal principles and pragmatic strategies. Key note address. In: E. Rihoy (Ed) *The commons without the tragedy? Strategies for Community-Based Natural Resources Management in southern Africa*, pp. 47-52. Lilongwe: SADC Wildlife Technical Cooperation Unit.
- Munasinghe, M., McNeely, J. (1995) Key concepts and terminology of sustainable development. In: M. Munasinghe and W. Shearer (Eds) *Defining and measuring sustainability*, pp. 19-46. Washington: The United Nations University and the World Bank.
- Mvimi, T.E. (2000) Assessing and comparing success of four community-based organizations managing natural resources in northern Botswana. Unpublished MSc Thesis, Agricultural University of Norway.
- National CBNRM Forum (2002) *Proceedings of the Second National CBNRM Conference in Botswana, 14-16 November 2001*. CBNRM Support Programme, Gaborone.

- North, D.C. (1989) Institutions and economic growth: an historical introduction. *World Development*, 17 (9), 1319-1332.
- North West District CBNRM Forum (2001) Minutes of the 5th North West District CBNRM Forum, March 29, 2001, Maun.
- North West District CBNRM Forum (2003) Minutes of the North West CBNRM Forum, March 18, 2003, Maun.
- Paehlke, R. (1999) Towards defining, measuring and achieving sustainability: tools and strategies for environmental valuation. In: Becker, E., Jahn, T. (Eds) *Sustainability and the Social Science*. London: Zed Books.
- Panayotou, J. (1993) *Green Markets: the economics of sustainable development*. San Francisco: ICS Press.
- Pearce, D.W. Barbier, E.B. (2000) *Blue print for sustainable economy*. London: Earthscan Publications.
- Pula Associates (2002) Mababe Zokotsama Community Development: financial statements for year ended 31 December 2002. Maun: Pula Associates.
- Pula Associates (2002) Sankuyo Tshwaragano Management Trust: financial Statements for the year ended 31 December 2002, Maun: Pula Associates.
- Rihoy, E., Jones, B. Anstey, S., Rolfes, M.T. (1999) *Tenure transition: a stakeholders guide to natural resource tenure in southern Africa-Community Based Natural Resources Management*. Harare: Africa Resources Trust.
- Roe, D. Mayers, J. Grieg-Gran, M. Kothari, A. Fabricius, C., and Hughes, R. (2000) *Evaluating Eden: exploring the myths and realities of community-based wildlife management*. London: International Institute of Environment and Development.
- Rozemeijer, N. and Van der Jagt, C. (2000) *Practical Guide for Facilitating CBNRM in Botswana*. Gaborone: IUCN/SNV Support Programme.
- Sachs, I. (1999) Social sustainability and whole development: exploring the dimensions of sustainability development. In: E. Becker and T. Jahn (Eds) *Sustainability and the Social Sciences*, pp. 25-26. London: Zed Books.
- Shackelton, S. (2000) *Generic criteria and indicators for assessing the sustainability of common property/community-based natural resource management systems*. Pretoria: CSIR.
- Steiner, A. and Rihoy, E. (1995) The commons without the tragedy: strategies for community-based natural resources management in southern Africa. In: E. Rihoy (Ed) *Proceedings of the regional natural resources management program annual conference*, pp. 9-43. Lilongwe: SADC Wildlife Technical coordination Unit.
- Taylor, M. (2000) Life, land and power :contesting development in northern Botswana. PhD Thesis, University of Edinburgh.
- Taylor, M. (2001). *Whose agenda? Reassessing the role of CBNRM in Botswana*. Gaborone: National Museum of Botswana.
- Thakadu, O.T. (2005) Success Factors in Community Based Natural Resources Management in Northern Botswana: Lessons from Practice, *Natural Resources Forum*, 29, 199-212.
- Tsietso, R.M. (2004) personal communication on the theOkavango Community Trust, Seronga, Okavango Community Trust.
- van der Heiden, L.J. (1991) Land-use and development plan: Kwando and Okavango Wildlife Management Areas. First Draft. Maun: Ministry of Local Government and Lands.

