# **Community Based Natural Resource Management and Social Sustainability in Ngamiland: Implications for Natural Resource Management**<sup>1</sup>

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## 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. The approach is premised on the assumption that the communities will have an economic incentive to sustainably manage natural resources since the perceived benefits from them are supposed to exceed the perceived costs (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 (2) they should own the resources or have tenure for them (3) 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 economic growth of rural areas, alleviate poverty, and conserve the environment (Johnson, 2000)

The approach is increasingly gaining recognition as an alternative strategy to the traditional protectionist conservation policies and top-down approaches to development (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), one of the constraints of the CBNRM program in southern Africa is the weakness of property rights over natural resources. In his view, the longterm sustainability of CBNRM initiatives in southern Africa will be determined by the extent to which the 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 the CBNRM initiatives only marginally benefit the intended beneficiaries, are short term in nature and more reliant on expatriate personnel, do not usually have an assessment criteria for their evaluation, and tend to marginalize certain socio-economic groups (Leach et al, 1999:226). Capacity building is narrowly defined and focuses more on what communities' lack - deficit model, and less on what communities has, an asset oriented intervention approach. In general capacity building tend to rely on expatriate personnel, creates dependency, marginalizes certain socio-economic groups, and fails to incorporate local knowledge in the packaging and delivery of training modules.

In recent years, there has been a concern in Botswana that the CBNRM program focuses on the utilization of natural resources rather than on their conservation. According to Taylor (2001:4), the program is based on the "capitalization of nature", and this means that the value of natural resources is only based on the extent to which it generates revenues. The contribution of the CBNRM to rural development and natural resource conservation has increasingly been questioned in various fora (Johnson, 1995; National CBNRM Forum, 2000; and North-West CBNRM Forum, 2002).

This paper makes an attempt 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, and their impact on natural resource management. Information for this paper was mainly obtained from primary sources (minutes, working documents, seminar/workshop reports), literature review of secondary sources, participant observation and through conducting informal interviews with CBNRM stakeholders during the period 2002 to 2003. Those interviewed included a range of CBO officers in community trusts, officers from the Department of Wildlife and National Parks (DWNP), and CBNRM service non-government organizations (NGOs) based in Maun, Ngamiland. The paper first provides an overview of the concept of sustainability and the development of the CBNRM related policies, before assessing the impact of CBNRM on social sustainability and its implications on natural resource management.

## 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 a 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 the 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 (Paehhlke, 1999).

As already stated, this paper focuses on social sustainability, a notion concerned about the conservation of social and cultural diversity" (Munasinghe and McNeely 1995:31). It examines how this notion impacts on environmental sustainability in Botswana. Social sustainability is about the preservation of indigenous knowledge systems, strengthening of 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 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 Legislative Framework in Botswana

In Botswana, a number of government policies and an enabling legislative framework, which promote the sustainable use of wildlife resources by the rural communities, 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). Cassidy (2000:10) gives a detailed description of various government bodies responsible for the administration of CBNRM related laws.

The policy framework includes the Wildlife Conservation Policy (1986), the Tourism Policy (1990), the Wildlife Conservation and National Parks Act (1992), and more recently, the Draft CBNRM Policy (1999). The "Wildlife Conservation Policy" of 1986 established the Wildlife Management Areas (WMAs) as a primary form of land-use. 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. WMAs are meant to protect the protected areas. WMAs and 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" the land for sustainable wildlife utilisation (Government of Botswana, 1986:12). The Tourism Policy is supposed to promote the receiving of benefits from tourism by the local communities in order to provide them 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 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 a 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 population.

The existence of a comprehensive policy and legislative framework provides a necessary, though not sufficient condition to facilitate the practice of CBNRM in Botswana. Arguably, a structural framework creates enforceable privileges and obligations. However, an enabling environment alone does not guarantee successful implementation and sustainability of CBNRM activities. The CBNRM process, like any other social process, is historical, relational and dynamic. It is characterized by conflict and collaboration, disagreement and concurrence between a range of stakeholder views as rules of the game change, and institutional relations are reconstituted, fractured or destroyed. The intervention process thus raises more unanswered questions and leave lingering issues regarding exactly how CBNRM really works in and across recipient communities subjected to the same policy and legislative environment.

In addition, there is also on-going contestation by less sympathetic CBNRM challengers for example, that the benefits from the CBNRM programme only accrue to the communities in wildlife areas who administer their CHAs rather than the whole nation, as in 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, 2001). The above-mentioned criticisms are not based on a clear understanding that the CBNRM approach tries to conserve natural resources by providing the local communities with income and other benefits. If such attempts are not made, there may

be scarcity of these resources, which may lead to environmental degradation and reduction in the well being of the local communities. In addition, wildlife imposes costs on local communities in the form of damage to their property and opportunity costs of alternative land-uses forgone. The CBNRM approach can potentially 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 compensate the affected households (North West District CBNRM Forum, 2003).

### **Impacts on Social Sustainability**

We now critically evaluate the impact of CBNRM initiatives on social sustainability with particular reference to formation of new institutions and organizations, capacity building and livelihood diversification.

## a) Creation of New CBNRM related Institutions and Organizations

Institutions and organizations 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 the new institutional economics define institutions as "rules, enforcement characteristics of rules, and norms of behavior (internal or external informal constraints) that structure the repeated interaction (North, 1989). Furthermore, the rules<sup>2</sup> and constraints that govern relations are commonly known and used by a set of participants to order repetitive interdependent relationships. Examples of institutions include norms, property rights, contracts, constitutions and statutes. Institutions are distinguished from organizations, defined as "groups of individuals bound together by some common purpose to achieve objectives" (Leach *et al*, 1999, cited from North, 1990). Examples of organizations include CBNRM community trusts, NGOs, and agricultural associations. CBNRM is thus intrinsic to, and an outcome of, institutionalization of relations between government and stakeholders (village trusts or residents, NGOs and donors).

<sup>&</sup>lt;sup>2</sup> Cultural rules and codes of conduct are institutions in so far as they constrain relationships.

The CBNRM program in Botswana has resulted in the creation of organizations called Community Based Organizations (CBOs) or community trusts.<sup>3</sup> Community trusts have three main distinctions: (1) those composed of one village such as Sankuyo Okavango Kopano Mokoro Trust (SOKMT), those composed of more than one village such as Okavango Kopano Mokoro Trust (OKMT), and those composed of individuals who have formed associations such as Okavango Polers Trust (Kgathi *et al* 2002). Community trusts are governed by Boards of Trustees. Those community trusts with more than one village have a Village Trust Committee (VTC) in each village. The VTC is accountable to the Board of Trustees (BTs). Trusts are governed by constitutions, which specify, *inter alia*, the memberships and duties of trusts, powers of BTs and VTCs, and resource governance (Kgathi *et al*, 2000). Community Trusts 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 with CBNRM in Botswana. 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 one hundred and thirty villages in 2001, covering eight out of fifteen administrative districts (almost half of the country). Whereas only one CBO was registered in 1993 to develop CBNRM projects, in 2001 there were forty-six CBOs, and by the beginning of 2003, their number had increased to sixty-one. 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 organizations. What is certain is that the numerical growth of these organizations within a tenyear period, is in itself an impressive benchmark that demonstrate the existence of a legitimating policy and legislative environment, but also the enhancement of public involvement in governance.

In order to become a local force for change or make significant contribution to sustainable development, CBOs cannot act in isolation. Fragmentation of effort would render CBOs invisible and their intervention would have negligible effect on power structures. In 1999, a national network organization, the Botswana Community Based Organization Network (BOCOBONET) was established to ensure coordination among and between CBOs and other stakeholders. In

<sup>&</sup>lt;sup>3</sup> Their activities include collection and sale of veld products, crafts and curios, subsistence hunting, sale of hunting quota to safari companies, campsites, processing veld foods, cultural tourism, *mokoro* trails and so on.

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 organized national CBNRM conferences in 1999, 200, 2001, 2002 and the next one is scheduled for 12<sup>th</sup> June 2003. 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 in more ways than one.

At national level, the National CBNRM Forum has also made significant contributions to the draft CBNRM policy and the review of the 1999 Joint Venture Guidelines. The Forum is increasingly recognized as instrumental in policy analysis and development (Jansen and Molokomme, 2003:9) The aim of both the district and national organizations is to provide a platform for broader stakeholder dialogue, facilitation and coordination and cooperation on CBNRM in Botswana. At regional and international level, the Forum facilitates a transnational flow of ideas and resources in the context of globalization.

In Ngamiland joint venture agreements have resulted in statutory empowerment for local level decision-making (Mvimi, 2000; Roe *et al*, 2000). The decision-making has devolved to the local levels since trusts make decisions on behalf of the communities. They decide whom they should do business with, and also the terms and conditions of such 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 CBNRM Programs. This is mainly because they do not play an active role after they have sold their quota to a safari company (Gujadhur, 2001). In some cases, the decisions are made by the Boards of Trustees without consulting other members.

In joint venture partnerships, communities become partners in business, and hence play an active role. However, most of the trusts in Botswana are in joint venture agreements rather than joint venture partnerships due to lack of training. However, network organizations such as BOCOBONET, District and National CBNRM fora and CBNRM service organization already mentioned in the second section of this paper, 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 between

Safari operators open up 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 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 become apparent.

Communities that form a "representative and accountable entity" and those who live in or adjacent to WMAs 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. The communities can in turn sub-lease part of their area to Safari Companies (Republic of Botswana, 1992; 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 designed to protect the inexperienced communities from being trapped in bad contracts for a long period (Gujadhur, 2001). As from the year 2002, they were put on three- 5-year contracts.

Access to hunting in WMAs is based on the system of community hunting licenses rather than that of the individual hunting licenses (Cassidy, 2000). According to Taylor (2001), the Basarwa of Khwai and Mababe are not happy about the CBNRM program as their main concern is to have control over the land and its natural resources. The communities of Khwai and Mababe were relocated when the Moremi Game Reserve and the Chobe National Park were established in 1963 and 1964, respectively (Taylor, 2001). They now want to be given back their land. The hunting quota license gives the communities the right to use their CHAs only over the use of wildlife resources, and not over the use of the land and other natural resources (Cassidy, 2000; Murphree, 1995). The communities are empowered by the lease to exclude others and to regulate the use of this resource (Cassidy, 2000; Gujadhur, 2001). In other words, this resource is to some degree managed under a common property resource management regime in community CHAs (Rozemeijer and Van der Jagt, 2000).

The tenurial rights given to communities by the Land Board are 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, 2001:19). 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 longterm investments. Tenurial rights need to be secure, well defined, and enforceable, in order for economic projects to achieve sustainable resource management (Panayotou, 1993; Mahammed-Katerere, 2001). There is evidence that community trusts lack accountability as revealed by a number of audit reports. For instance, Pula Associates (2002) revealed in their audit for the financial year ending 31<sup>st</sup> December, 2002 that a sum of P99 461 could not be accounted for by Mababe Zokotsama Development Trust (MZDCT (Pula Associates, 2000). The same auditors also revealed that there were no supporting documents for expenditures of P12 520 and P 6 464 incurred by the STMT in 2002 (Pula Associates, 2002).

The above financial misgivings of community trusts notwithstanding, there has been devolution of decision-making power to the local level in Botswana, as communities are directly involved with running of CBNRM projects. Devolution of proprietorship with secure tenure could provide communities with a strong incentive to find useful ways to use their wildlife income. So far the Government of Botswana makes arbitrary decisions about quotas and species to be hunted, issues directives threatening to transfer control of income earned from wildlife to councils and landboards. In addition, the Government continually makes decisions that undermine CBOs ability to earn income in a lease that only has fifteen years. Under these conditions, the investment risks are too high for these communities (Jones, 2002:24). CBO management of resources cannot take place unless there is authority to decide on how the resources will be used and what form of management will be adopted. A strong and secure proprietyship over land and resources is clearly a major foundation for successful CBNRM, and one element on community empowerment. Attention needs to be given not only to devolution of authority to take decisions, but to how those decisions are taken and by whom (Jones, 2002: 25). Trusts are given responsibility for natural resource management but little authority. There is need therefore 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, that is decision-makers, over their land and resources (Jones, 2002:24).

On the one hand, much attention has been given to the prevailing perception is that community trusts mismanage funds is one of the concerns which led the Permanent Secretary, Ministry of Local Government, in January 2001, to draft a Savingram which made an attempt to transfer the management of funds from Community trusts to the District Councils. The Savingram has, however, not been implemented as it was opposed by the stakeholders, especially through the

District and national CBNRM organizational platforms, argued that the Government had no 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 USA \$ 25 million on the development of CBNRM (National CBNRM Forum, 2001).

On the other hand, less attention has been given to difference between female-controlled income and expenditure from male controlled income. There is a great deal of evidence all over the world that these differences are paramount. Generally, women attach high priority to expenditure on enhancement of human capacity (nutrition, health and education) than men, who are more likely to spend money on personal consumption commodities such as alcohol,<sup>4</sup> cigarettes and high status consumer durables such as cars. Jones (2002:19) of the Chobe Enclave CBNRM project from 1993-2002, distribution of benefits focused on investing in community services projects such as a filling station, general or hardware store, campground, brick-making operation and a grinding mill.

During the 8<sup>th</sup> Ngamiland CBNRM Forum (2003), Cgae Cgae Tlahobolo Trust mentioned future investment of trust funds in airstrip management, purchase of office facilities, horse riding apparent for monitoring wildlife, campsite equipment for the trust and construction of a community hall (for meetings) shop to sell food to residents at affordable prices. Khwai Development Trust bought itself a truck/land cruiser and a tractor. One outstanding social issue in CBNRM communities is poverty alleviation. This concern is being substituted by purchases of status items such as vehicles and cell phones. Participants raised doubts about the extent to which projects benefits attempt to address which social development issues and are reflective of views and aspirations of villagers. It is thus not surprising that during focus group discussion Alexander et al (1999) (as quoted in Jones 2002), women and young people were concerned that they do not see any direct benefits from projects started with wildlife and tourism income, and that some of the potential benefits would benefit the more affluent members of the community.

<sup>&</sup>lt;sup>4</sup> Gujadhur (2000) study on alcohol abuse in Bushmen settlements embarking on CBNRM suggest that earnings of cash from CBNRM and other livelihood strategies are used in purchasing alcohol. Alcohol abuse committees would go a long way to reduce repercussion of alcohol abuse among other things include premature death. Purchase of vehicles would then be linked to direct provision of social services to community residents.

## b) Participative Development and Empowerment

CBNRM democratizes development process any more than any other local level process. For instance, on 17<sup>th</sup> March 2003, the Ngamiland VTCs workshop was held at Riley's Hotel in Maun<sup>5</sup>. There were about sixteen communities represented by chairpersons or secretaries to their VTCs. Other participants were chiefs/headman, 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 (one thousand Pula) quarterly. One of the goals of the workshop was for the VTC 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 that VTCs created their own organizational space, organically at district level.

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

According to Molutsi and Holm (1990), the 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 programs environment, it is strategic that local communities globalize their issues, and empower themselves in spatial terms by moving out of constrained spaces and widening the scope of action. Simply stated, a local community or organization that does not place itself in the global terrain, regardless of whether or not it has been invited to participate in officially endorsed

<sup>&</sup>lt;sup>5</sup> This was a preparatory workshop for the North West District CBNRM Forum to be held the following day (March 18<sup>th</sup> 2003) in the same venue.

organizational spaces, is less likely to challenge reproduction of the rules of the game or survive any attempt to transform old ways of doing official business in new spaces.

However, adding a new layer of participants to an already complex institutional landscape poses other challenges. The emergence of a strong CBO 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 loss of political patronage. In this context, while both Village Development Committees (VDCs) and VTCs both participate for incentives in legislated organizational spaces, CBOs pose a threat to the implementation of CBNRM activities at village level. Power struggles between different authorities and different village factions may result in increased resistance or sabotage (Jansen and Molokomme, 2003:7). In practice, this implies that CBOs have to mint 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 of CBNRM villages from commercial centers. As we have already indicated, BOCOBONET and the two CBNRM fora facilitate exchange of information, experiences and making an input in policy processes. Village residents are now engaged in CBNRM activities with strangers (safari operators, NGOs and donor agencies for example) 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 find its way through the corridors of power into legislated spaces. They participate both as beneficiaries, 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. 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. Granted that it is difficult to achieve consensus on priority needs, in order to enhance devolution, it expected that the communities should actively participate in the management of natural resources.

### c) Capacity Building

Community Trusts face a number of problems such as lack of training and capacity building, insecurity of tenure, conflicts between stakeholders, management problems of community trusts and lack of accountability (National CBNRM Forum, 2001). These NGOs provide skill 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 capacity of CBNRM service NGOs in terms of coverage is often limited due to their location. Most of them are placed in Gaborone while their client populations are rural based. These separations thus result in provision of "hit and run" services. According to Jagt & Rosemeijer (2002:19), one of the key components of facilitating CBNRM in Botswana for instance, is to help communities develop skills in formulation of land use and management plans, and to conduct socio-economic surveys. The 1999/2001 fact sheet for instance (National CBNRM, 2001), out of the fourteen (14) CBOs registered in Chobe and Ngamiland District, only 5 (35%) have had baseline or socio-economic surveys conducted, usually by a private consultant such EcoSurv, SIAPEC or a university-based interest group. Only two (14%) community trusts had prepared a Community or Village Development/Action Plan (CAP/VDP). Half (50%) of Community Trusts had no land use and development plans, another half (50%) had such plans developed by the Department of Land Use and Planning Unit and or Tawana Land Board (National CBNRM Forum in Botswana, 2001). In the Central District 40% had development and management plans, in the Kgalagadi district, only 16% had land use and management plans, and in Gantsi, 20% of CBOs development and management plan.

In general capacity building tend to rely on expatriate personnel, creates dependency, marginalizes certain socio-economic groups, and fails 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 are not able to attend because their husbands would not let them. We have pointed out elsewhere in the paper that CBNRM activities are mostly concentrated in the Ngamiland in the North West District. Compared to other districts in Botswana, Ngamiland has high composite index of human capability poverty measure

(CPM).<sup>6</sup> One indicator, female illiteracy, is 43% in the North West District compared to 18.4% in Gaborone (BIDPA, 1997: 27). These statistics suggest that capacity building intervention in Ngamiland has to take into account the low human development capacity and high CPM. Most of VTC therefore have low-level literacy skills, and may find high level of training in financial management was too demanding to understand. It is not surprising therefore that one of the complaint voiced during the North-West District CBNRM Forum (2003) 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 minimize professional differences.

Unquestionably, NGOs and government extension teams play the role of "honest broker" and long term "process facilitators" in planning, implementing and distributing resources by negotiating conflict interest among rich, poor, young, old, women and men and so on. Nonetheless, the narrow definition of capacity building contributes to lack of comprehensive baseline data that will help us find out how CBNRM really works and whether it has improved the overall well-being of community residents.

## d) Livelihoods

In Ngamiland, households have various sources of livelihoods such as livestock production, arable agriculture, fishing, hunting, and wage labor from tourism and CBNRM initiatives (Bendsen, 2002). Arable agriculture became one of the most principal livelihood strategies after the killing of all the cattle in Ngamiland in 1995, due to the outbreak of the cattle lung disease. 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 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 create substantial revenue from the sub-leasing of the land, wildlife quotas, sale of natural resources, and other activities. The revenues generated by community trusts in

<sup>&</sup>lt;sup>6</sup> In the 1996 Human Development Report, UNDP introduced the capability poverty measure (CPM) as an indicator of 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.

Ngamiland ranged from P265 000 for Cgaegae Community Trust to P1 2000 000 for Okavango Community Trust in 2001 (National CBNRM Forum, 2002). The communities use the revenue for various purposes such as purchase of vehicles, construction of toilets, salaries and wages of people employed by community trusts, and payment of dividends in some cases. There is a general concern that too much money is being spent on community assets such as vehicles rather than on manpower development and sustainable livelihood diversification (North West District CBNRM Forum, 2003). 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.

Employment creation and benefit distribution are some of the strategies adopted by policymakers to try to create such incentives for natural resource management. As Table 1 shows, the Sankuyo Tshwaragano management Trust (STMT) made an attempt to distribute dividends to its members in 1999 and 2002. The amount of money distributed to each household as dividends was P205 in 1999 (Bolaane, 2000), and in 1999 and 2000, the total expenditures of the trust on dividends were P9 250 and P12 600, respectively (Table 1). The amount of dividends distributed to individual households is rather small, and could not have any significant impact on poverty alleviation and creation of incentives for natural resource conservation. If the money was invested in a viable development project, such as property development in Maun, it could have perhaps yielded more sustainable benefits to the local communities.

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

Table 1: Administrative and Operation Costs—Sankuyo Tshwaragano Management Trust (STMT): 1999 to 2002.

Source: Pula Associates (2000, 2002)

Most of the communities benefit from employment opportunities created by community trusts. Members the Boards of Trustees and VTCs are paid sitting allowances. The National CBNRM Forum revealed that the number of people employed in various community trusts in Ngamiland ranged from 3 to 278 in 2001. Table 1 shows that the expenditure on salaries and wages at the STMT increased from P89 566 in 1999 to P151 602 in 2002, whereas cost on sitting allowances increased from P22 330 in 1999 to P61 965 in 2002 (Table 1). According to Bolaane (2000), every household of the 37 households in Sankuyo had a working member. Members of the Board of Trustees and VTCs are paid sitting allowances. Table I shows that the amount of money paid as sitting allowance by the STMT to its Board of Trustees ranged from P11 900 in 2000 to P61 965 in 2002. Such payments are necessary as they compensate the members for the transaction costs they incur in attending meetings and performing other similar activities, but they should not be allowed to rise too high as this may reduce the benefit-shares of other members.

Access to CBNRM benefits is in some cases enhanced or hindered by various factors such as ethnicity and socio-economic status. According to Taylor (2001), the Basarwa of Gudigwa village wanted to secede from the Okavango Community Trusts, serving the Basarwa village of Gudigwa, and other four non-Basarwa villages of Beetsha, Eretsha, Seronga, and Gunitsoga. They complained that they were not receiving a fair share of their benefits from the Okavango Community Trust due to their marginalization by other non-Basarwa tribal groups (Taylor, 2001). The people of Ditshiping village were also concerned that they were not receiving a fair share from their community trust. They claimed that their Board of Trustees marginalized them, and Village Trust Committees, who benefited more from the trust, were paid high sitting allowances (Mbaiwa, 2002).

Benefits are paid directly to individuals or to the community. Where benefits are direct cash to individuals, there are still lingering questions regarding intra-household relations. Returns per household are generally low and income is usually supplementary to other existing forms of livelihood. Where benefits are paid to the community, using the money for community projects without passing it to individuals does not promote a sense of "ownership" of that income (Jones, 2002). There is need to strengthen internal transparency and accountability of decision-making so that all sections of the local community can be involved.

CBNRM assume equity for men and women. Equity in the context of CBNRM, according to Cassidy (2001: 6) refers to access to and control over natural resources by all individuals in the

community having the same opportunity to be actively involved in, benefit from and to make decisions about and to manage natural resources. The approach does not different subsets (age, gender subsistence hunters and ethnicity for instance) of social groups from which individuals comes from. At the level of household head, women do not have the same status as men, and female-headed households do not have the same access to political and economic resources as male-headed households. Household members are unable to meet their livelihood obligations, they risk loosing status and being marginalized from decision-making. CBNRM initiatives thus tend to be gender blind. The very choice of wildlife, a male preserve that brings high returns and high value status added to the good. Veld products carry less prestige than meat products yet their caloric contribution is more significant (Cassidy, 2001). Focus on men's resources sideline women's status, generally, and has a particularly negative impact on the role of women in natural resource management.

In Zimbabwe, Chitsike (2000) has pointed out that cultural interpretations of women's entrepreneurship suggest that making large sums of money is a dirty pursuit for women and is often associated with immorality (prostitution). Men, as a gendered and socially differentiated group, use culture to keep women's distance from access and control over resources and power. The cultural context in which women and men live influences their ability to become entrepreneurs. It is therefore important that when considering policy issues pertaining to women's participation in CBNRM, to shift from the legalistic and economic approaches and focus more closely on how specific aspects of cultural selectivity disproportionately disadvantage women's CBNRM entrepreneurship in relation to men.

## Implications for natural resource management

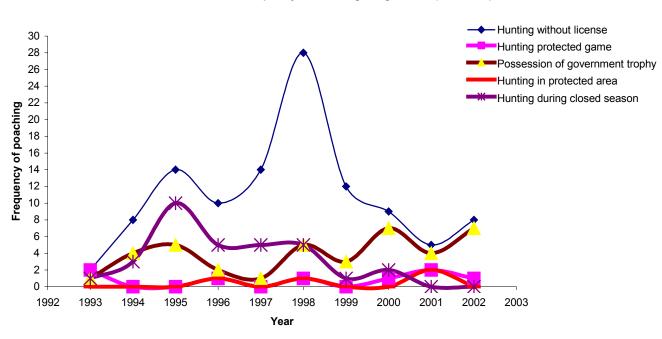
This section assesses the extent to which the CBNRM initiatives in Ngamiland have resulted in natural resource management. As already stated, communities are expected to conserve natural resources if the benefits accrued from CBNRM projects exceed the costs incurred on wildlife management. This section makes an assessment of the changes in attitudes towards wildlife, and the extent to which these changes are reflected in reductions in poaching. We focus on poaching because the CBNRM projects in Ngamiland, as in the rest of Botswana, are primarily wildlife-based (Jansen and Molokomme, 20002).

According to Mvimi (2000), people have developed positive attitudes towards wildlife in Ngamiland due to the tangible benefits they receive from the CBNRM projects. Her views are not

consistent with those of Boggs (20002), who states that 60 % of the households in Khwai and Sankuyo did not associate the benefits accrued from CBNRM to natural resource management. Benson, former Land Use Officer in the Ministry of Agriculture, also thinks that the practice of poaching has reduced in Ngamiland as compared to the 1980s, and she attributes this to the development of positive attitudes towards wildlife due to CBNRM projects.<sup>7</sup> Therefore, there are divergent views regarding whether the communities have developed a positive attitude towards wildlife.

There is also no concrete empirical evidence to support the perception that poaching has reduced. Figure 1 shows that during the period 1993 to 2002, the frequencies of poaching did not decline after the implementation of CBNRM projects in Ngamiland in the late 1990s. Definite conclusions cannot be reached as to whether CBNRM has reduced poaching in Ngamiland, partly due to the shortness of time series data.

Figure 1: Frequency of poaching in Ngamiland, 1993-2002



Frequency of Poaching in Ngamiland (1993-2002).

Source: DWNP (2003)

<sup>&</sup>lt;sup>7</sup> H. Bensen, personal communication, Harry Openheimer Okavango research Center, Maun, Botswana

This is mainly due to the fact that institutional change is gradual (Bond, 2001). The receiving of economic benefits by households is also not a sufficient condition for the conservation of wildlife resources, as the benefits may not be sufficient to offset the costs incurred on wildlife management by the communities. In addition, the economic benefits received may not be contributing sufficiently to household livelihood portfolio, and hence the need to resort to, or continue with, other livelihood strategies, such poaching (see Emerton, 2001).

## Conclusion

The paper shows that the CBNRM program has made substantial strides in strengthening local institutions, empowering local communities, and improving the livelihoods of the rural communities. Joint venture agreements have resulted in statutory empowerment of the local communities as the decision-making process has devolved to the local levels. Households receive benefits such as employment opportunities, social infrastructure, business loans, and intangibles. However, 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. These benefits might not be creating economic incentives for the conservation of natural resources.

There is a general perception in Ngamiland that the initiative has resulted in the reduction in poaching, but there is no concrete empirical evidence to support these perceptions. Available data for the period 1993 to 2002 shows that the frequency of poaching did not decline after the implementation of CBNRM projects in Ngamiland in the late 1990s. Definite conclusions cannot be reached as to whether CBNRM has reduced poaching in Ngamiland due to the shortness of time series data. Institutional change is a slow process, and it is easily captured by long time series data. It is also important to note that the receiving of economic benefits by households is not a sufficient condition for the conservation of wildlife resources, as the benefits may not be sufficient to offset the costs incurred on wildlife management by the communities and also for contributing to livelihood diversification.

The CBNRM program faces a lot of challenges. Community trusts are constrained by such factors as limited training and capacity building, insecurity of tenure, stakeholder conflicts, mismanagement of funds, and problems of how to use and equitably distribute the financial benefits to individual households. As a result of lack of training and lack of trust among

stakeholders, CBRM 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 a safari companies.

It is, therefore, necessary for the CBNRM initiatives to focus on training in order to improve the participation of the communities in CBNRM initiatives. At the same time, an attempt should be made to carry out evaluation studies on changes in attitudes towards wildlife, and on the extent to which the CBNRM initiatives impact on wildlife populations. In addition, the Department of Wildlife and National Parks should in improve its collection of the statistics for poaching in Botswana, and should publish it annually.

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