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Case study of the CBNRM programme in Botswana

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1 Brief history of CBNRM activities

Botswana does not possess a formal CBNRM policy or programme. The current CBNRM activities have emerged from several project and policy initiatives in the areas of wildlife, rangelands and rural development. For historical reasons, CBNRM-emphasis falls on wildlife based projects, which constitute the majority of projects and were established first.

Botswana's CBNRM programme was launched in 1990 through the Natural Resource Management Project (NRMP) funded by USAID and the Government and implemented by the Department of Wildlife and National Parks (DWNP) and Chemonics (McCormick and Honadle, 1999). The CBNRM projects assisted by NRMP were mostly based on the use of wildlife resources (tourism and hunting) and veldproducts.

The first CBO was established in 1993 (Chobe Enclave Community Trust or CECT). In 1997, a community-based rural development strategy was developed to increase people's participation, interest and benefits from rural development initiatives. The Strategy was incorporated in the 2002 Revised Rural Development Policy that advocates the broadening of the scope of CBNRM projects (GoB, 2002). Regrettably, rural development remains to-date largely separate from the core CBNRM programme. In 2002, UNDP and the Ministry of Agriculture started a the Indigenous Vegetation project (IVP) that pilots community-based rangeland management at three sites and its intention is to demonstrate that community-based rangeland management is an alternative to ranching, which has been at the centre of livestock policies since 1975. In 1998, CBOs formed an umbrella organisation BOCOBONET to represent their interests.

In 1999, IUCN-Botswana started a CBNRM support programme that offered support and advice to CBNRM projects and CBOs. The National CBNRM Forum was established in 2000. To date, the CBNRM policy urgently needs finalisation and approval to:

- Guide and support CBNRM projects and CBOs;
- Address growing criticism on the CBNRM projects, mostly based on the perception of widespread financial mismanagement (and less on the 'back to the barriers' argument criticised by Hutton *et al*, 2005).

The main historic events of CBNRM movement in Botswana are summarised in Table 1.

Table 1: Timeline of the CBNRM projects and movement in Botswana

Year	Event	No of registered CBO	No of JVA
1989	Start of NRMP at DWNP. NRMP and DWNP have been instrumental in policy development; preparation of management plans for CHAs and WMAs; CBNRM pilot enterprises, and initiating an extension network to support CBOs	0	0
1993	First CBO and joint venture agreement concluded (CECT)	1	1
1995	Government promotes the CBO-JVA model for wildlife resources	4	2
1996	Joint venture guidelines published by NRMP-DWNP.	5	2
1997	Community-based rural development strategy launched	10	3
1998	BOCOBONET was established to represent the interests of the CBOs	13	5
1999	NRMP ends. DWNP continues to be support CBNRM through its Community Services and Extension department. Revised Join Venture Guidelines Launch of CBNRM support programme by SNV and IUCN Botswana.	26	5
2000	The National CBNRM forum was formally established and a first national meeting was held in May 2000. The Forum published the 1999/2000 CBNRM Status Report.	27	7

2001	Savingram to recentralise to district level some aspects of CBNRM, particularly financial management and control The second National CBNRM Forum Meeting was held in November 2001	46	9
2002	Revised Rural Development Policy recognises the role of CBNRM in rural development, and recommends community management in designated areas. Start of Indigenous Vegetation Project to pilot community-based rangeland management BOCOBNET starts an AWF funded project to support ten CBOs		12
2003	CBNRM review carried out.		
2005	The CBNRM policy is still being finalised	67	14

Source: adapted from Arntzen *et al*, 2003.

In brief, the CBNRM has broadened from wildlife to veldproducts, tourism, rangelands and rural development, but the integration of the various projects is still inadequate

2 The CBNRM foundation and potential

In a relatively short period of fifteen years, the CBNRM projects now cover nine districts and more than one hundred twenty villages with over hundred thousand inhabitants and generate P 11.5 million in cash revenues and probably a similar amount in kind through game meat and other benefits (National CBNRM Forum, 2003; Rozemeijer, 2003). The average benefits are in the range of P200 to 300 per annum per capita. The rapid growth in coverage suggests that there is a need for the projects and that Botswana offers a suitable environment. What could be the reasons for this rapid growth and what could be Botswana's comparative advantages over other southern African countries¹?

The main reasons for the popularity of CBNRM lie in the lack of rural productive income and employment generating opportunities outside the agricultural sector and formal employment and the fact the limited opportunities often exceed the means of the majority of the rural population and are thus not accessible. This applies in particular to remote areas. In contrast, CBNRM offers an opportunity to participate and benefit.

Botswana has several advantages in terms of CBNRM potential. Firstly, population densities are low (2-3 person/km²), particularly in western and northern Botswana (less than one person/km²). Consequently, environmental disturbance is limited and wildlife resources can still be found outside protected areas. Wildlife spill-over from protected areas offers significant potential for CBNRM, especially around the internationally renowned Parks in the north. Secondly, wildlife resources are varied and abundant in western and northern Botswana. After heavy losses in the 1980s, wildlife resources stabilised and some recovered in the 1990s. This is a significant advantage as wildlife resources and wilderness experience are highly valued and hold a good potential for CBNRM. Thirdly, around seventy percent of the country is Tribal Land, and managed by Land Boards. While a small portion of Tribal Land is now leased out to individuals, over half of the country remains communal land, managed by the land Boards. Almost a quarter of the country (138 090 km²) is designated wildlife management area (WMA)² where agriculture is subordinate to wildlife utilisation. These WMAs are ideal for wildlife based CBNRM projects, and therefore the CBNRM programme has significant growth potential if it is accepted as a most suitable development and conservation model for WMAs. Fourthly, rural development policy initiatives offer good opportunities to 'generalise' (in Turner's terms, 2004) the CBNRM project approach. However, the

¹ Jones (2003) argues that it is important that CBNRM activities are based on comparative advantages to ensure long-term economic, social and environmental sustainability.

² WMA are larger than Parks and reserves, which cover a total of 106 880 km².

opportunities to do so are not yet sufficiently seized as will be shown later. Fifthly, government has the resources and capability to offer long-term support to communities, and therefore is capable of running CBNRM projects without external support. This is a long term advantage. While the withdrawal of donors has had adverse short term impacts on communities and NGOs that support the CBNRM process, government is in a position to offer the longer term support that donors normally do not provide. This requires, however, strong political commitment that is translated into action. This support has not yet been sufficiently mobilised, as government takes a long time to approve the CBNRM policy and support community-based initiatives. Several concerns have been raised in this respect. Most natural resources are owned by the State, and why would therefore local communities capture all benefits? Communities living in wildlife rich areas would be unduly advantaged. Do communities possess the skills and experience to ensure efficient and transparent financial and administrative management? Cases of financial mismanagement are used to argue that communities are not yet able to perform these roles.

In brief, Botswana has several advantages for CBNRM projects and has the immediate potential to broaden it from a project based approach to a community-based rural development and resource conservation approach.

3 The context of CBNRM projects

3.1 Environmental setting

Botswana is well known for its diamonds, but the country's long-term development will ultimately depend on efficient and sustainable use of renewable natural (and human) resources. The country is semi-arid with rainfall ranging from 250 mm in the south west (Tshabong) to 650 mm in the north (Kasane). The semi-arid conditions limit the economic viability of many activities other than wildlife, tourism and livestock production. The country has a small population and low population density, particularly in the west and north. Consequently, wilderness and wildlife resources are relatively abundant even outside Protected Areas. In addition, the country possesses some unique ecosystems that offer –in combination with wildlife- a good platform for CBNRM. The most distinct systems include: the Okavango swamps, the Makgadikgadi pans, the Chobe River Basin area and the Kalahari. Hills in eastern Botswana are relatively undisturbed too and offer limited but significant development opportunities (e.g. Cape Vulture colony in Otse and springs in Tswapong hills). The country has several veldproducts with commercial potential, notably the grapple plant (*sengaparile*), the Kalahari truffle (*mahupu*), mophane worm, Hodia and thatching grass. Commercial use is low but increasing. Several CBOs have expressed interest in inter CBO trade in veldproducts to meet their subsistence needs.

3.2 Rural livelihoods

There have been several major shifts in primary livelihood sources since the 1980s. Boosted by sustained economic growth, formal employment and government support have become the primary livelihood sources for most households, especially of cash. Most households have at least one member in formal employment, and many benefit from government support programmes that either aim at productive activities or social welfare. Arable and livestock production have lost importance, but remain valuable in

view of the stagnation in employment opportunities and government plans to cut down and target its support. Especially, crop production is valuable for the low income households, as it requires few resources and inputs. Households increasingly rely on cash income sources, particularly from employment. Cash accounts for three quarters of urban income and 65% of the income in large villages. As a result, in-kind income has become less important. Households also increasingly depend on external support and gifts, and their ability to meet their own livelihood needs has declined. The income generated by households themselves decreased from 81.8% in 1984/95 to 77.2% in 2002/03. External support and gifts even account for more than a third of rural income (34.4%). While poverty is decreasing, it remains common. The recent Household Income and Expenditure Survey showed that absolute poverty had declined from 46.7% in 1993/94 to 30.3% in 2002/3. However, inequality is increasing as the same survey found an increase in income inequality (Gini coefficient of 0.573 in 2002/03).

3.3 Resources use and management

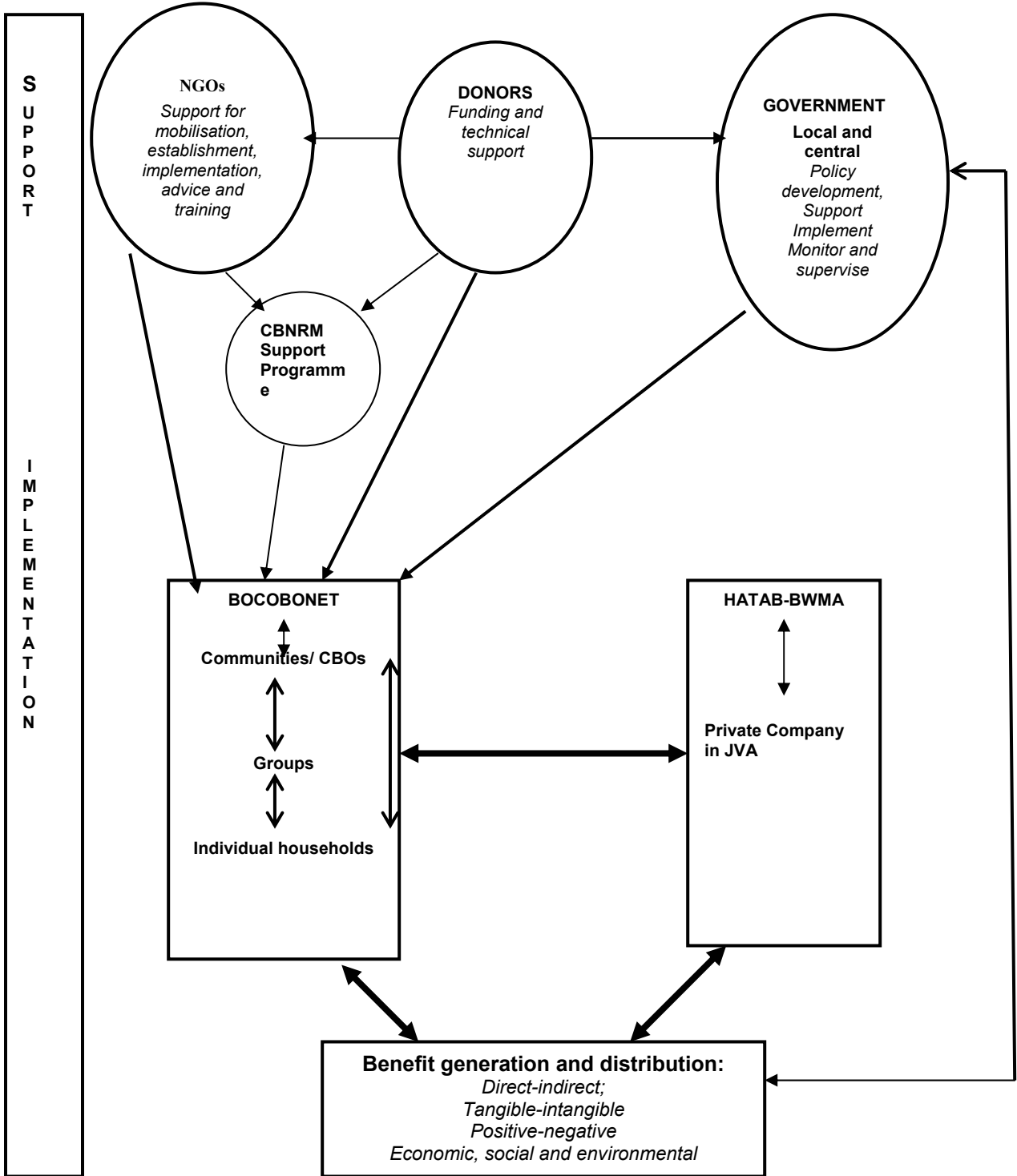
CBNRM is dependent on communal land, which is allocated and managed by Land Boards under the 1968 Tribal Land Act. Each district has a Land Board that allocates boreholes, residential and arable land, and allocates resource leases to communities for tourism and wildlife utilisation. The management of communal land and its resources is currently minimal, and open access is common, particularly close to villages.

The Agricultural Resources Board issues harvesting and trade permits for a few veldproducts (grapple plant and hodia), but the use of the majority is uncontrolled. The Water Apportionment Board (WAB) grant water use rights for boreholes and for abstraction from rivers. Virtually no monitoring takes place.

The district land use planning system is well established and has had a profound impact on resource management and use patterns. District land Use Planning Units (DLUPU) prepare district land use plan, with different land use categories. Land allocations and uses have to comply with the plan. The major categories include: residential/ villages, mixed farming (arable with limited livestock) and grazing areas which are subdivide into: private grazing land (leasehold), borehole dominated livestock grazing and wildlife management areas (WMA), mostly in the west and north. Land Boards do not allocate livestock boreholes inside WMAs, and only small numbers of livestock from residents can be kept inside WMAs. The WMAs have effectively curbed the historic process of livestock expansion. Perhaps unintentionally, they offer significant opportunities for CBNRM projects.

The CBNRM policy has been in preparation for years now, and it still not finalised. In essence, the policy aims to re establish common property resource management regimes in communal areas for a variety of resources (veld products, fish, wood and wildlife) and to increase local benefits of resources. Revenue management and distribution are contested areas, which are hotly debated. It is possible that a government managed fund will be set to administer the CBNRM revenues from JVP. This would reduce the financial incentives for CBOs to participate in and develop CBNRM projects.

Figure 1: The organisation structure of CBNRM in Botswana



Notes:

Interactions among direct stakeholders:

Linkages with external stakeholders and government

The CBNRM National Forum could not be fitted into the diagram



Source: Arntzen et.al, 2003.

3.4 CBNRM institutions

In the absence of a CBNRM, no uniform institutional framework exists for CBNRM projects. However, a clear institutional structure has emerged for projects that are assisted through DWNP. This structure is described below (see also Figure 1).

A wide range of institutions are involved in CBNRM: communities/CBOs, private sector partners, at least nine government ministries and department and around twenty NGOs.

CBOs are the core of the CBNRM programme. All are Trusts, and most have similar constitutions and organisational structures. Some CBOs have engaged in joint ventures with commercial companies, mostly in areas with rich wildlife resources or of scenic value. CBOs put out tenders for a joint venture partner (JVP) and decide together with the Technical Advisory Committee (TAC) on the most suitable partner (usually the highest bidder). The umbrella organisation BOCOBONET represents the interest of CBOs and supports them through training, advice etc.

The private sector is involved as JVP and some lobby groups (e.g. HATAB, BWMA, BWPA). The private sector largely operates on an individual, i.e. company, basis, and contributions to the broader CBNRM process are minimal. Some companies attend the annual CBNRM conference. The CBNRM review recommended that the role of the private sector needs to be clarified and strengthened (Arntzen *et al*, 2003).

At present, the Department of Wildlife and National Parks is the lead agency in government of wildlife-based CBNRM projects: it offers extension support in districts and manages a community conservation fund to support CBOs. In addition, it determines the annual wildlife hunting quotas. The Land Boards play a major role in that they grant resource leases and tourism concessions to communities. The District Technical Advisory Committees monitor CBNRM progress in their district and advise CBOs regarding tendering, administrative and financial matters. The TAC comprises local and central government personnel, and is a subcommittee of the District Development Committee that spear heads district development. The Rural Development Coordination Division, Ministry of Finance and Development Planning is responsible for the implementation of the community-based Rural Development Strategy and the revised Rural Development Policy. Given its small size and the fact that it does not have district staff, the division relies on other Ministries and District Councils for the policy's implementation. The visibility of community-based rural development other than through CBNRM is relatively low. The Ministry of Agriculture is the implementing agency of the community-based rangeland management pilot projects (IVP). IVP is organised as a separate project and has separate extension workers with communities. Existing extension staff of the Ministry is not or hardly involved, and many of them are in fact implementing the ranching component.

The role of District Councils is ambivalent and modest (Rozemijer, 2003). On the one hand, District Councils receive four percent of the gross revenues of JVPs of communities and are represented in the TAC. On the other hand, Councils do not play a direct role in the CBNRM process due to the strong direct links between Ministries and CBOs. This construction has been an attempt to simplify procedures and to prevent that

Councils appropriate a large portion of the revenues. However, it contradicts the stated policy of decentralisation towards District level.

Some twenty NGOs support the CBNRM process and CBOs, but according to the CBNRM Status Report 2003, the number of NGOs active in CBNRM is decreasing. IUCN-Botswana has hosted the CBNRM support programme. Other NGOs include KCS, Permaculture, ACORD, Conservation International, TOCADI, Veldproducts Research and Thusano Lefatsheng. Most NGOs have been hard hit by the phasing out of donors, limiting their capacity and performance. Most NGOs are based in Gaborone or Ngamiland.

The National CBNRM forum was established to bring together all stakeholders in the CBNRM process. The Forum organises annual meetings for all stakeholders to discuss progress and resolve problems and has made inputs into the CBNRM-policy formulation process. The Forum initiated the 2003 CBNRM Review.

3.5 Funding

CBNRM activities have attracted substantial financial support from donors and government. USAID has been the largest CBNRM donor with an estimated contribution of \$24.3 million (McCormick and Honadle, 1999). Other major donors include SNV, SNV, GEF, ADF and WUSC/CIDA with an estimated contribution of P 24.5 million since 1995 (Arntzen *et al*, 2003).

Direct CBNRM government funding is estimated to be in the order of P..... divided over three funds: the Community Conservation Fund (CCF), the Community Development Fund (CDF) and the Community Trust Fund (CTF).

4 Botswana Community-Based Development Policies and Action Plans for global conventions

Although the CBNRM policy is pending, several policies and global conventions offer opportunities for the CBNRM communities. In work carried out for IVP, Arntzen and Tshosa (2004) also conclude that communities have significant opportunities to apply for resource rights, even though community rights are not explicitly mentioned in older policies and legislation. For example, legally registered community organisations could apply for water rights.

4.1 Community-based rural development

Community participation and leadership in rural development has been emphasised since the development of the 1997 Community based Rural Development Strategy and the 2002 Revised National Policy for Rural Development. Developing rural areas in Botswana is difficult as the rural resource base is severely limited, particularly in the west and north. In the past, relatively little attention was paid to what people wanted, and there was little genuine participation and institution building at the local level. The Community-based rural development strategy addresses this old shortcoming. Its dual aim is to stimulate community-based rural development and to promote sustainable natural resource use. Communities would become primarily responsible for rural development activities, while government would assume the role of facilitator. The

strategy envisages: devolution of development responsibilities and control to local communities; community action plans and priorities; community liaison officers in district councils; and assistance to communities by development workers, reform of extension services and NGO involvement. The strategy has been hardly noticeable until the 2002 Revised Rural Development Policy was approved. The overall aim of rural development is to enhance the quality of life of all people who live in Botswana's rural areas, and to widen their choices. The specific policy objectives are to reduce poverty, provide opportunities for income generation and economic activities, create employment and enhance popular participation in development planning and implementation processes as a basis for broad-based, balance and sustainable development. Its planned activities include support for community-based projects and special support for women within CBNRM projects. Programme activities include livelihood diversification through veld products and wildlife; stronger and clearer property rights of communities; preparation of comprehensive integrated district land and water management plans; strengthening of local authorities, in particularly the Village Development Committees; and cost-effective restoration of degraded rangeland resources and regeneration of veld products.

4.2 Botswana's National UNCCD programme

Botswana signed the UNCCD in October 1995, and ratification took place in September 1996. Subsequently, a National Action Plan to Combat Desertification (NAPCD) was developed. (Department of Crop Production and Forestry, 2003). The NAPCD was prepared after intensive consultations with all parties involved. The consultations identified seven priority areas for Botswana's NAPCD, including poverty alleviation, capacity building, education and technology transfer, research, effective partnerships between parties, and funding to combat desertification. The NAPCD includes the establishment of pilot projects in four areas, including Rakops, Lehututu, Mokobeng and Matsiloje. The NAPCD identifies activities for each of the areas, but typically works through existing policies and programmes (e.g. NDP and DDPs). Apart from the educational material and the pilot sites, little additional activities are envisaged. Progress with the pilots is not documented.

4.3 Botswana's National Biodiversity Strategy and Action Plan

Botswana has a 2004 BD Strategy and Action in 2003, which has not yet been officially approved. CBNRM is obviously important for biodiversity resources such as rangelands, wood and veldproducts. The Action Plan contains activities on resource monitoring (including natural resource accounting), awareness raising, provision of incentives for BD conservation and utilisation. It recommends that community-based resource management will be supported as a way of re-asserting common property resource management in communal areas.

4.4 The IVP approach

The Indigenous Vegetation Project is closely linked to the UNCCD and UNCBD. It is a regional project with country programmes in Botswana, Kenya and Mali. It is a demonstration programme for dryland ecosystem restoration and for biodiversity conservation. In Botswana, the programme has the following components: 1. piloting community based rangeland management in two areas; 2. establishment of a data base with natural resource and socioeconomic data; 3. rangeland rehabilitation; promotion of livelihood diversification, 4. technology transfer to communities and targeted research.

The project is in progress. To date, four Interim Community Trusts have been formed with draft constitutions, and land use management plans are being prepared. In addition, other projects requested by communities are implemented (e.g. drift fences) and ecological baseline information is being collected. The recent Mid Term Review concluded that the Botswana activities should focus on community rangeland management pilots and that it must be accepted that community-based approaches are slow, complex and time consuming, and fit difficult in the normal time schedules of projects (pers. comm. M. Taylor).

5 Detailed description of the CBNRM programme

There is no single CBNRM programme, but there are at least three CBNRM angles: wildlife and a few other resources (DWNP), rangelands (IVP-pilots) and rural development (through RDCD). Rangelands and rural development do not (yet) have a clearly articulated programme. Below, the first angle will be described. It is expected that the CBNRM policy will provide an integrated and unified framework for all three angles.

5.1 The mainstream CBNRM programme

At present, formal procedures only exist for wildlife-based CBNRM projects. The main instrument is granting of exclusive -but limited and conditional- wildlife use rights (resource lease from the Land Board) to a community-based organisation. The annual hunting quotas (and therefore the value of the wildlife use rights!) are unilaterally determined by the DWNP. Communities are marginally involved when they comment on draft quota. Most CBOs have stopped commenting, as their comments are rarely incorporated³ (Arntzen *et al*, 2003).

Determination of the area and land use

The CBNRM area is determined by existing administrative boundaries (WMAs or Controlled Hunting Areas CHA). Botswana has built a strong tradition of land use planning. Land use plans and DWNP determine what the best use of a particular WMA or CHA: *hunting, ecotourism* or both. The community is not involved in this process, and the community cannot determine the boundaries of its area.

Application for a community resource lease and community wildlife quota

Communities have to take several steps before they can apply for a community resource lease. After initial mobilisation, communities need to prepare land/resource management plans; this is usually done with external assistance. Communities then need to discuss and agree upon the procedures, roles and responsibilities of communities and management groups, which are incorporated into the Constitution which specifies the role and responsibilities of the community organisation, membership, conservation and development objectives, activities to be carried out by the CBO, report-back and election of office bearers, etc. (Cassidy and Madzwamuse, 1999). The Board has to regularly report back to the community, usually through kgotla meetings. A community wildlife off-take quota from DWNP and a 15-year resource-use lease (that includes a tourism concession) from the Land Board are required for each wildlife-based CBNRM project. In order to get community quotas and a head lease, the communities need to have

³ Community quotas have decreased significantly over the last decade eroding the economic value of the community rights (Rozeemijer, 2004).

established a management entity –a *representative, accountable and legal* entity or RALE, which needs to be approved by District Authorities.

The provision of the lease has several requirements. Communities need to accommodate the interests of remote area dwellers, who previously received special game licenses, to adhere to joint venture guidelines and to submit audited financial accounts (Cassidy and Madzwamuse, 1999). If communities fail to meet the requirements, DWNP may withhold the quota, as happened to the Khwai community in 2003.

Formation of a community-based organisation and membership

All CBOs have opted to form Trusts to represent them. The Trust is governed by its Constitution, and has a Board and employees. All adults (over 18 years), which have been resident in the area for at least five years become automatically members of the CBO. Board members are elected by the communities, usually in *kgotla* meetings in the presence of TAC members. Where more than one village is involved in the CBO, subcommittees are usually formed for each village, each with representation in the Trust Board. The Trusts are usually newly formed, even though there are existing village-based institutions such as the Village Development Committees. Few CBOs have institutions at sub-village level. Kgetsí ya Tsie (KyT) is one of the few that has formed groups of five members inside villages. KyT is different as villagers do not automatically become members and preference is given to women. They have to apply and pay a membership fee (P 20/annum).

Joint ventures

Fourteen communities have entered into a joint venture with private companies to exploit hunting and/or tourism rights. Guidelines have been developed by DWNP to assist and guide CBOs in their negotiations with companies. The rights are usually tendered and in a few cases auctioned (Khwai Development Trust). Market forces have considerably raised the community revenues. While community leases last fifteen years, sub-leases are valid for only five years but renewable after tendering. If the existing JVP is not successful in its new bid, it has the right to top up its offer to the successful bidder. The communities receive assistance with tendering from the TAC, which also has to approve the community choice. It sometimes happens that the TAC overturns community choices.

The JVP pays land rentals and hunting fees to the community. In addition, the JVP pays royalty to the District Council (4% of its gross revenues). In addition, most JVP finance a social responsibility fund which addresses specific needs of communities. Such needs typically include support for the local soccer team, game meat, assistance with transport and funerals.

While the procedures for wildlife based CBNRM project are clear and uniform, no such model exists for veld product-based CBNRM projects. The reason is that harvesting of most veldproducts is not regulated and controlled, and there is not CBNRM policy as yet. Communities and individuals do not need special permits, except for those veldproducts governed by the 1974 Agricultural Resources Conservation Act. An example of regulated veldproducts is the grapple plant. There are few CBOs, which have veldproducts as their core business.

4.2 CBO-Goals

The CBNRM projects aim to promote rural development, in particular livelihood improvements and poverty reduction, and to conserve natural resources. CBOs tend to emphasise benefit generation while DWNP emphasises wildlife conservation. Resource conservation and improving livelihoods are the most common areas of interest, followed by craft production and marketing; sustainable use of natural resources; community-based tourism; wildlife utilisation; sustainable use of veld products and environmental education of communities. The *development objectives* include: gaining benefits through the sustainable use of natural resources; promotion of community-based tourism activities; sustainable use and marketing of veld products for community benefit; and promotion of craft production and marketing. The *environmental objectives* include: protection and conservation of natural resources; community education on the importance of and wise management of natural resources; safeguarding the cultural heritage of the people associated with the area; and conservation and sustainable use of areas of historical, archaeological and biological importance for the benefit of communities.

The IVP project aims to demonstrate that community-based rangeland management is feasible and an alternative for 'mainstream' privatisation of rangelands. The goal is to improve community benefits through sustainable use and management of rangeland resources that are currently exposed to open access.

4.3 Problem to be addressed by CBNRM

Community-based resource management has emerged in response to the problems encountered with resource management in communal areas and growing conflicts between natural resources and local development. Resources were either unmanaged (open access) or managed by (semi-)government institutions with limited success. The responsibilities and authority of traditional authorities with respect to natural resource management strongly decreased since the Tribal Land Act 1968. Wildlife resources were strictly managed by the DWNP, but enforcement appeared to be problematic and costly in a huge country with a small population such as Botswana. Land Boards and the Agricultural Resources Board had limited success in resource management. Moreover, local communities came to consider wildlife as a nuisance rather than resources as they experienced net costs (e.g. due to predation, crop damage and health risks; Bakane, 1996 and Mbututu, 2000), and it was realised by conservationists that protected areas did not suffice to conserve the existing levels of wildlife. Increased community participation and benefits were seen to be necessary to conserve wildlife resources efficiently and effectively.

4.4 CBNRM activities

CBOs have formulated a wide range of activities, but most have what can be considered *core activities*. Exploitation of wildlife use rights and tourism concessions is the core activity of most CBOs; exploitation of veldproducts and rangeland management are core activities of others (KyT and IVP).

Trusts have also developed additional activities to increase and diversify their revenue base, including (Jones, 2002; Mbaiwa, 2002, Arntzen *et al*, 2003):

- Operation of camp sites and lodges, cultural villages and tourism activities (e.g. canoeing, cultural village and craft shops);
- Bottle stores;
- Collecting and processing of veldproducts and processing facilities (oil, tannery).

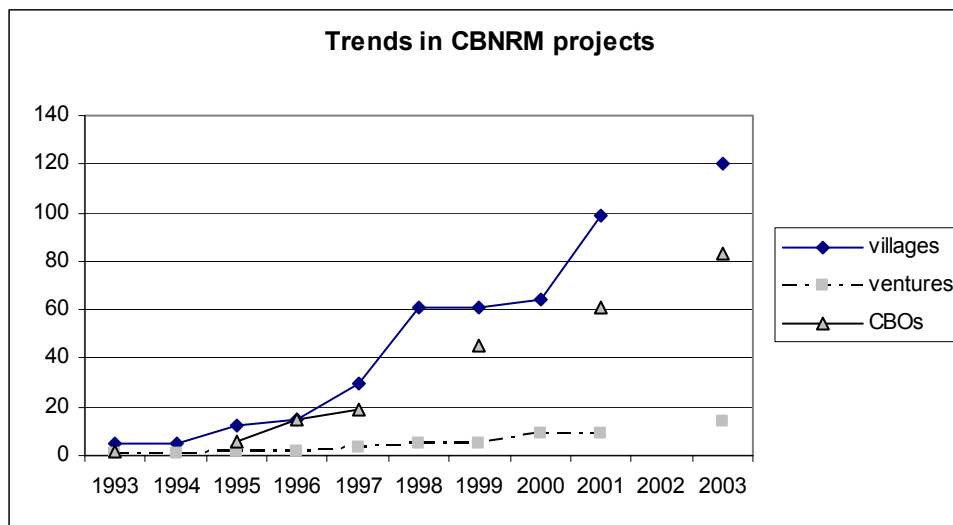
5 Results

The discussions below are based on the available literature, in particular the 2003 CBNRM Review, including four CBO case studies, a Review of four CBOs in Ngamiland by Mvimi (2001) and reviews of other CBOs, in particular CECT (Alexander, 1999; Jones, 2002 and Sorenson, 2003).

The results of CBNRM projects have been remarkable in many respects. The number of projects has grown exponentially driven by local communities (Figure 2). Moreover, revenues have increased dramatically even though the revenues are unevenly distributed among CBOs. A few CBOs receive substantial revenues (high revenue CBOs or HRCBO) while the majority receives modest to low revenues (LMRCBO). The perceived non-material benefits are another major achievement. CBO members often feel empowered and their status within the community rises. While non-material benefits are difficult to quantify, they are important and offer significant opportunities in other terrains of rural development. While CBOs are fairly evenly spread over the country, most benefits are generated in the northern CBOs because of its rich wildlife resources and scenic beauty (Table 2).

In policy terms, the CBNRM projects assist government to decentralise development efforts (one of the stated development objectives), reduce poverty (albeit to a small extent) and stimulate community-based rural development. Moreover, CBNRM projects retain some youth in rural areas, which might be an important long term benefit.

Figure 2: Growth of CBNRM villages, CBOs and joint ventures.



Sources: CBNRM Status Report 2003 and Arntzen *et al*, 2003.

Table 2: Spatial distribution of CBNRM projects and benefits (2001)

	Chobe/Ngamiland	Kgalagadi/Ghanzi	Eastern Botswana	Total
No of registered CBO	14 (29.8%)	11 (23.4%)	22 (46.8)	47
Revenues received from JVA	P 7 065 000 (96.5%)	P 185 000 (2.5%)	P 74 000 (1.0)	7 324 000
Benefiting Population	28 371 (63.5%)	5 150 (11.5%)	11 180 (11.8%)	44 701

Source: Arntzen *et al*, 2003.

Generally, the results of CBNRM vary significantly. The following factors are determinants of the success of CBOs (Mvimi, 2001; Arntzen *et al*, 2003):

- Stage of development of the CBO. Generally, older CBOs are better established and perform better;
- Resource base: the resource base is an important determinant of the economic potential of CBOs. Several CBOs in wildlife rich areas close to Parks and Reserves generate over one million Pula per annum;
- Partnership with the private sector. CBOs involved in JVA benefit from private sector expertise and receive considerable revenues. However, the private sector is mostly interested in wildlife rich areas; and
- Participation and governance. CBOs that are better run and have more participation have better results over a period of time. Poor governance leads to lower revenues and loss of community participation.

Mivimi (2000) evaluated four northern CBOs in terms of participation of members, revenues, enterprise development and perceptions about natural resources (Table 3). The evaluation shows that Sankuyo Tshwaragano Management Trust (STMT) and Cgaecgae Tlhabololo Trust (CTT) score consistently better than the other two except for perceived benefit for Okavango Community Trust (OCT). The perception of benefits is high at STMT and CTT because of the direct benefits to households (in the case of CTT despite low revenues); this also benefits the perception of CBNRM projects and participation rates. While CECT has the highest revenues, the Trust is slow in implementing development projects, limiting the perceived benefits and participation (Mvimi, 2000). CTT and STMT have successfully initiated some enterprises.

Table 3: Ranking of CBOs according to performance (1 = highest)

Factor	Chobe Enclave Community trust	Sankuyo Tshwaragano Management Trust	Okavango Community Trust	Cgaecgae Tlhabololo Trust
Participation	4	1/2	3	1/2
Revenues	1	2	3	4
Perceived benefits	3	1/2	4	1/2
Enterprise development	3	2	4	1
Perception of CBNRM	3	1/2	4	1/2
Overall performance	3	1	4	2

Source: Mvimi, 2000.

Mvimi's analysis suggests that perceived benefits are the decisive performance factor, and that the perception of benefits is more important than the actual benefits. The perception of benefits is closely related to direct benefits to households.

Sorenson (2003) evaluated the Okavango Polar Trust (OPT) which engages in tourism and canoe trips into the Okavango delta. She considers the direct involvement of the polers in the running of the tourism operation and their local skills and knowledge as the Trust's main strength (most Trusts sub-lease the tourism activities).

Few CBOs in Botswana have reached maturity and can be said to be independent and sustainable. Some such as Chobe Enclave Community Trust CECT and Sankuyo Tswharagano Management Trust (STMT) are financially sound and currently appear sustainable, but sustainability is not yet guaranteed. Others such as Kgetsi ya Tsie have built strong and transparent structures and increased their productive revenues, but the gains are not yet irreversible. Therefore, virtually all CBOs require close monitoring and technical assistance, if the need arises.

5.2 Livelihoods and poverty

The livelihood benefits from CBNRM lie in the sphere of empowerment and non-material benefits, some direct benefits, asset formation and a reduction in drought vulnerability due to livelihood diversification. Sorenson (2003) concludes for the Okavango Poler Trust (OPT) that the income of polers has helped improved food security of the polers and smoothed household incomes during the year (making up for agricultural seasonality). Revenues from tourism and hunting are less vulnerable to droughts than agriculture. The revenues that have been generated are high, particularly from JVP (average of P 700 000 per annum) but only a fraction directly benefits people's livelihoods. Typically, CBNRM is a supplementary source of livelihood for most people, but improves livelihood security.

The CBNRM Review reviewed four CBOs in greater detail: three wildlife-based (two HRCBOs in Ngamiland and one LMRCBO in Kgalagadi) and one veldproduct-based LMRCBO in eastern Botswana (details in Table 4). CBNRM project generate significant, but highly variable revenues, but the material impact on household livelihoods is still limited. The reasons are that most revenues are used for the operations of the Trust and for Trust projects or otherwise put in a savings account. The immediate benefits to household livelihoods are restricted to: small cash payments (Pula 100 to 300 per households), employment opportunities with the Trust or the JVP, benefits deriving from membership of the Board, contributions towards funeral expenditures and schooling of youth. The CBNRM Review found that per capita income from JVP ranged from as low as P 200 to 300 in the Kgalagadi to as high as P 2 500 to 3 500 in communities around the Okavango (Arntzen *et al*, 2003).

Some CBOs have developed household assets such as pit latrines (STMT) or fibre glass mekoro (OPT). Others have invested in community assets such as community halls. Some lucky CBOs acquired high value lodged through 'donations/transfers' by the Land Board (e.g. renowned Santawani and Tsaro Lodges on the fringes of the Okavango went to STMT and KDT respectively). Many CBOs have invested in productive assets such as camp sites and restaurants. This creates further employment opportunities, but the

performance of many productive projects is disappointing due to lack of enterprise acumen (for Chobe Enclave: see Jones, 2002). Most CBO have benefited from training programmes, leading to improved human skills of the members.

Social responsibility programme have offered some livelihood support, particularly for the weak, youth and during family mishaps. The programmes are problematic, as communities have very high expectations about the level of support and companies are not experienced in addressing social community needs and try to limit expenditures.

Table 4: Details of income and employment generation by case study CBO.

CBO	STMT (NG 34)	Kgetsí ya Tsie (KyT)	KDT (NG 19)	NKXT (KD1)
Setting	Wildlife in high potential area Okavango	Veldproducts mostly morula and micro lending	Wildlife in high potential area Okavango	Wildlife in area with limited wildlife resources
Financial revenues				
Range	Range from P 216 000 to P 1.5 million.	Range from P 399 000 to P 994 000 per annum in period 1998-2003	Range from P 600 000 to P 1.3 million in period 2000-02; in 2003, P 441 000 from auction.	From P 66 000 to P 312 000 in period 1999-2003
Trend	Fairly stable until 2001 followed by a huge increase	Volatile dependent on donors; recent increase in own revenues from own products	Volatile	Increase until 2000 followed by a decrease, mostly due to lower JVA revenues
Sources of revenues	JVA income normally over 90% with other income less than 10%.	Income from own products increased from 2.2% in 1998 to 23.2% in 2003 Donor income volatile but declining.	Virtually all revenues from auctioning hunting rights; No record of own other income generation	Initially mostly donor funded; later mostly JVA revenues (over 90%)
Revenues - expenditures	Positive in 4 out of 5 years (1998-2002)	Positive in 5 out of 6 years in 1998-2003	No data available	Positive (data for two years only); situation has considerably deteriorated
Own revenues-recurrent expenditures	Positive in 4 out of 5 years (1998-2002)	Negative throughout 1998-2003	No data available	One year positive; one year negative (data for two years only); situation has considerably deteriorated
Employment	Total of 95	14 full time	0 during fieldwork	17
Trust employment	39	14 at present	Currently no employment; in the past, 22 people to run camps	5 at present; peak in 2001 with 10
Employment with Private sector company	56 (not all needed)	Almost 1000 members are part-time employed in harvesting and processing of natural resources	0	12 compared to 45 in JVA agreement
3. Asset formation				

Natural resources	Exclusive hunting and photo safari rights in NG34	No special privileges or rights	Exclusive hunting and photo safari rights in NG 19. Quota suspended in 2003; later released	Exclusive hunting and photo safari rights in KD1
Financial assets	Substantial bank balance	Low	Debts	Low with debts
Physical assets	Build cultural village and camp site; plans to renovate Donation of Santawani Lodge Headquarters Community hall Toilets	Main office in Lerala with morula oil processing factory and cold storage room Plans for offices in 31 centres.	One camp, and a half complete camp Two Lodges donated by the Land Board (Tsaro and Machaba)	Headquarters and Kaa camp Three camp sites One de-funct craft shop One non-operational tannery
Human assets	Seven scholarships in 2003	Training of members		

Source: Arntzen *et al*, 2003.

5.3 Natural resource management

Communities have resource management plans and most have employed community escort guides to accompany commercial hunters and tourism parties. They record wildlife sightings. However, resources are not routinely monitored and evaluated.

CBNRM has several positive environmental impacts, which cannot be quantified due to the lack of resource monitoring. There is evidence that:

- Poaching is decreasing in CBNRM areas. In Ngamiland, poaching incidences were lower in CBO areas as compared to non-CBO areas;
- The popular resource perception has improved. The value of wildlife is better appreciated and communities learn from each other about the value of veldproducts. For example, KyT taught some groups and villages about the use value of certain veld products;
- Some CBOs have contributed towards resource regeneration through planting of veldproducts. No wildlife based CBO has invested in restocking.

In addition, it is documented that wildlife management areas have better and more diverse vegetation than rangelands primarily used for livestock. Therefore, if WMAs would be used for livestock, biodiversity would decline and the vegetation would degrade, primarily through intensified bush encroachment.

A contradictory situation has arisen with the respect to community wildlife quotas (CWQ). The CWQ have declined significantly in recent years. This should be indicative of a drop in wildlife numbers, as quota are determined by the sustainable off-take and CWQ have increased compared to other quota (citizen and concession quotas). However, the drop in quota contradicts the CBO perceptions that wildlife resources are stabilising or recovering. Possibly, a silent policy change towards lowering hunting quota is the real reason. This has become a major source of concern and frustration among CBOs and needs to be addressed through proper resource monitoring and dialogue between CBOs and DWNP.

CBNRM projects experience some negative environmental impacts such as illegal roads, destroying vegetation and disturbing wildlife, littering and pollution. However, the negative impacts are local, and can be avoided with adequate environmental management.

The expectation that CBNRM would lead to common property resource management has yet to materialise. Few (if any) CBOs practice integrated natural resource management. For example, no strategies are developed to provide watering points. On a positive note, the (non-wildlife) OPT has an environmental code of conducts for its polers and clients, which minimises negative environmental impacts and seem to be functioning well (Sorenson, 2003). To be fair to CBOs, (wildlife) resources are migratory and influenced by many factors that are beyond the control of local communities such as fences and roads that interfere with resource mobility and habitats. Therefore, communities cannot be held solely responsible for resource trends in ‘their’ area.

5.4 Governance

There have been considerable achievements with respect to governance, but governance remains a major area of concern, particularly with respect to financial management, organisation management and business activities.

Among the achievements, a total of sixty five Trusts have been registered in the period 1993 to 2003 and another twenty-two CBOs are in the making. An umbrella organisation BOCOBONET has been formed and some twenty NGOs, five of which are very active in CBNRM and supporting CBOs. DWNP has established an extension department and other departments (e.g. Tourism, National Museum, Rural Development Coordinating Division) are paying more attention to community based approaches. Pilots with community-based rangeland management inside the Ministry of Agriculture are a major achievement as these may provide alternatives for ranching that has been the core of agricultural policies since 1975. Establishing strong links with rural development and agriculture offers excellent opportunities to transform the CBNRM wildlife projects into a general cadre of CBNRM for development and resource conservation, especially in WMAs and in open access village grazing areas. In organisation terms, the establishment of the DWNP-extension department and district technical advisory committees are the major achievements.

Roping in the private sector has been another major achievement. Fourteen JVPs have been concluded between CBOs and private companies, and these JVPs generate almost three quarters of the CBOs cash revenues. Tendering and auctioning have proven to be useful resource right allocation tools that need to be considered in other sectors too. The JVPs do not deliver their full potential, as the relationship is often based on mistrust between CBOs and companies. The CBNRM Review describes it is ‘a marriage of inconvenience’. This limits the sharing of inputs and exchange of ideas to the detriment of both. This is aggravated by the short duration of the JVP (five years) that discourages companies from investing into the partnership. The Review also established that the private sector is isolated in the CBNRM process, partly by its own making and partly because they are often overlooked.

The CBNRM National Forum offers a platform for all stakeholders from the public and private sectors and civil society to meet and exchange views and ideas, and to assess

progress with CBNRM projects. The forum organises annual meetings, but funding is insecure.

The phasing out of donors has had negative short-term effects on CBOS and NGOs, as funding and technical assistance became less accessible. It should have positive long term effects, as it requires that in future CBNRM efforts are mostly based on local resources.

NRMP and BOCOBONET offered a variety of training courses and efforts in areas such as leadership and financial management, organisational management, strategic and business planning, tourism skills and feasibility studies (McCormick and Honadle, 1999; BOCOBONET, 2003). While training has been useful, its impact has been mostly inadequate to establish well managed, efficiently run and transparent CBOs. In addition, most CBOs remain dependent on external expertise (e.g. financial management, tourism, negotiations with JVP, productive activities). Training and skill development need to be continuous and sustained efforts rather than project related.

The CBNRM Review assessed the strengths and weaknesses of CBOs, JVPs and NGOs. It emerged that CBOs generally have good infrastructure and are well informed about the CBNRM process, but most are weak in strategic planning and monitoring. Management, financial situation and organisational structure are strong for roughly half the CBOs (and weak among the other half). Capacity problems exist for information dissemination/ marketing, conflict resolution, empowerment of members and technical skills. Business development, human resources and financial management are generally weak. Joint venture partners generally have good skills and track records and some have a good relationship with the CBO. Their profits are prone to exchange rate fluctuations and some over employ community members to avoid conflicts with the CBO. Some JVPs do not really understand community processes and their community development efforts do not work out well.

Apart from the dedicated NGOs (Nat. CBNRM Forum and BOCOBONET), no NGO has CBNRM support as its core business. Some have been attracted to the area to compensate for loss of direct donor support. NGOs are well organised and transparent and possess a good understanding of the CBNRM process. NGOs have proven their worth with community mobilisation and lobbying and advocacy and proposal writing. They seem to have been less successful in ensuring that communities can run CBNRM projects by themselves. This requires sustained support for a long period, which has been made impossible by the financial difficulties of most NGOs. NGOs have weak links with the private sector, and can therefore hardly assist to bridge the gap between CBOs and JVPs. The long term sustainability of NGOs is a major concern, and as a result NGOs have lost experienced staff, restricting their ability to offer technical advice.

5.4 Unexpected results

It is surprising to see CBNRM projects mushroom in a country, where people have become dependent on government. This demonstrates that CBNRM serves a need and that it is viewed as a form of empowerment of the local population (even though the rights are limited). Even those who may be disadvantaged on the short term by CBNRM, support the approach, as they feel empowered and future development opportunities. If development is about increasing choices, CBNRM is an important tool!

It is surprising that the material livelihood benefits are very limited in HRCBOs, and that non-material benefits could be more important. Given the prevalence of poverty in most CBNRM areas and given the fact that perceived benefits are the key performance factor used by the local population, material livelihood benefits need to be increased.

Some naivety of stakeholders other than communities became clear during the CBNRM process. First, working with and through communities proves to be a slow and effort intensive process, whose results tend to be time lagged. Secondly, it can hardly be surprising that revenues of over P 1 million are improperly managed in communities with incomes of a couple of hundred Pula per month and with limited financial management skills. As one CBO member put it: 'perhaps CBNRM projects have been designed to set up communities for failure so that individuals can later take over'. Communities need the opportunity to make mistakes in order to learn from them. Impatience on the part of support organisations could easily disrupt, and even kill CBNRM projects. It is probably essential to have CBNRM technical advisors on the ground that offer regular assistance and monitor progress. It is encouraging to note that older CBOs tend to perform better (Mvimi, 2000; Arntzen *et al*, 2003).

6 Conclusions

CBOs and CBNRM projects have shown significant growth, demonstrating that they serve local needs. Benefits exceed material benefits through empowerment and 'regaining local resource control' which was lost under the Tribal Land Act and in various wildlife policies and licensing systems.

Probably in response to the general enthusiasm for and upsurge in (donor) support for 'community'-projects, expectations about CBOs and CBNRM projects became unrealistically high.

Most CBNRM projects provide limited material benefits to communities and households, and are therefore mostly supplementing other livelihood sources and enhancing livelihood security. The few high revenue CBOs are the exception, as they could become the main source of livelihood. Elsewhere, CBNRM is rarely a substitute for existing livelihood sources.

While it is strong feature of Botswana's CBNRM programme that resource revenues go directly to communities, the distribution of benefits within communities has received inadequate attention. A large part of the benefits remain with the Trust or are invested; households hardly benefit. When wildlife quotas are decreasing, JVPs attempt to secure a large share of the remaining quotas to enhance their operations but at the expense of the community share.

The performance of CBOs differs greatly. Older CBOs are better established and tend to perform better. Other determinants of performance include: resource base (revenues!), involvement of the private sector (revenues!) and perceived benefits for the local population.

CBNRM has not yet led to common property resource management. There is limited pro-active resource management and no systematic resource monitoring. One reason may be that the resource rights of communities are limited and conditional. Communities are hardly involved in the establishment of wildlife quota for their areas,

and yet the quotas are critical for their economic performance and benefits. Communities realise that resource conditions are (co-)determined by factors beyond their control, especially with highly mobile resources such as wildlife.

There is a limited link between the CBO performance and management and revenues, particularly for wildlife based CBOs. The resource base is often the primary determinant of revenues. The situation is different for CBOs involved in veld products (KyT) and tourism (OPT) where there is a direct link between input and output. Such a direct link is an incentive for production and performance.

Some CBOs have established small funds to support productive activities from members. For example, KyT has a revolving fund to support micro projects in their villages. This offers opportunities to diversify the local economy and reduce resource dependency.

6.1 Lessons learned

Community based approaches and projects are time consuming and complex. They require a long time horizon and sustained external support that is frequently on-site, i.e. in the communities. This is to a large extent incompatible with a project-by-project approach. There is therefore urgent need to:

- Finalise the CBNRM policy; and
- To integrate the three perspectives of community based approaches/ projects, i.e. wildlife based CBNRM, rangeland based CBNRM and community based rural development.

Perceived benefits are the key performance factor for local people. Therefore, transparent benefit distribution systems have to be developed which ensure that benefits emerge for communities as well as individual households.

Most communities do not possess the required business skills to run productive projects efficiently, particularly in remote areas where it is hard to develop viable productive activities. Communities need to sub-lease such projects to community members or companies.

At present, the private sector and CBOs are usually reluctant partners. This attitude undermines the benefits that can be derived of the joint venture between communities and the private sector (e.g. skills transfer and investments). The current lease period of five years is too short for significant investments from the private sector, and building up a productive relationship between communities and private companies.

6.2 Links with UNCCD

The broadening of the initially wildlife based CBNRM approach offers good opportunities to incorporate activities that are part of the UNCCD-national programme. The adoption of the CBNRM policy would formalize and support this process. In the mean time, incorporation of IVP results and activities in the 'classic' CBNRM projects could strengthen the performance of CBOs and improve local resource management, which still falls short of common property management.

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