

Contending with unequal and privileged access to natural resources and land in the Okavango Delta, Botswana

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This paper reviews how state policy and regulatory instruments, including protected area alienations and concessions, have altered or denied the access to land and natural livelihood resources of the indigenous Basarwa and minority subsistence-oriented communities in the Okavango Delta (OD) in Botswana. Drawing on field research and guided by a sustainable rural livelihoods framework, the paper provides an overview of key institutional interventions – in particular the setting up of the Moremi Game Reserve, Wildlife Conservation Policy, Tourism Policy, Agricultural Development Policy and the erection of veterinary fences – that have served to privilege a foreign-owned and dominated commercialized wildlife and nature tourism sector and the export-oriented beef industry in the OD. The officially sanctioned barriers to customary and usufructory rights and access, and the non-recognition of historically embedded traditional land uses have decimated already marginalized resource-based subsistence livelihoods, and precipitated inter-group conflicts over preferential rights and access to resources and opportunities, notably wildlife, non-timber veld products, agriculture and community-based tourism schemes. Such outcomes, moreover, will have consequences for the longer-term sustainability of the OD both as a socioeconomic resource base and as a natural ecosystem.

Keywords: access to natural resources, policies, indigenous peoples, subsistence livelihoods, wildlife, Botswana

Introduction

Wetland areas located in the global south have become important sites of programmes for economic development, particularly agricultural production and international ecotourism. Wetlands are attractive because of their rich natural resources such as permanent water supply, wildlife, riverine and forest products. However, modern state institutions, policies and other regulatory measures developed by governments to direct economic programmes in wetland areas have disrupted long established the customary and usufructory access to land and environmental livelihood resources that form the bases of the socioeconomic practices and cultural identities of the indigenous and other communities that reside within.

The Okavango Delta (OD), the largest inland delta in the world, situated in Ngami-land District, Botswana, provides an illustrative case study to review how policy and regulatory instruments have modified the access to and utilization of resources for subsistence by the indigenous Basarwa peoples (as the San, more universally dubbed as 'Bushmen', are officially called in Botswana) and other minority ethnic communities settled in the delta. The Basarwa, the oldest surviving indigenous inhabitants of the territory constituting Botswana, have been increasingly pressured to abandon their semi-nomadic natural resource based subsistence cultures and traditional knowledge and opt for a sedentary rural existence; in the OD especially, this has involved forced removals, without compensation for the loss of user rights or ancestral land, through the administration of the Remote Area Development Programme (RADP).¹ In the contested

resource rich OD, however, even the minority Batawana – an agropastoral community like the mainstream Tswana majority – whose chiefs have held sway over all other groups in the delta (Tlou, 1985), have been negatively impacted by state interventions and control of resource use.

The OD is, paradoxically, one of the most fragile ecosystems in Botswana, even though its rich and unique diversity of flora and fauna continue to be promoted as a premier ecotourism attraction. Increasing demands for economic development have intensified overt resource competition in the delta between differentially positioned land users and interest groups, most notably for water resources as 80 per cent of Botswana consists of drought-prone Kalahari rangeland.² In the last 10–15 years, the successful international marketing of the OD as a major nature and wildlife tourist destination has been accompanied by an increasing commoditization and privatization of choice wetland and adjacent sandveld areas. These alienations, together with the burgeoning tourist market for handicraft, have induced scarcities of natural livelihood resources in the subsistence economies of delta communities.

Another competitive land use activity similarly increasing pressure on natural resources is beef production, for which compliance with European Union (EU) import regulations has necessitated the erection of veterinary fences cordoning off wide expanses of the OD since the 1980s. Beef exports are a monopoly controlled by the government-established Botswana Meat Commission and the third largest national economic sector after the largely foreign-owned and managed nature and ecotourism sector, and historically entrenched top earning mining sector, dominated by the expanding operations of Debswana, an equal partnership between the government and the international diamond cartel DeBeers, and the copper-nickel production of Botswana Concessions Limited in which the government also has substantial equity.³

Drawing on field interviews conducted between January and April 2004, this paper examines the extent to which policy and regulatory instruments continue to modify and deny access to subsistence livelihood resources in the OD. It also looks at how regulatory measures, including alienations of land for protected areas and the gross encroachments of veterinary fences, have engendered resentments, antagonisms and resistance to change among local communities. Thus the paper suggests that a bureaucratic decision making process more responsive to the need for increased rural community participation in natural resource management policy – specifically through close assessments of state community-based natural resource management programmes for rural development – is critical for improving sustainable resource use in rural subsistence livelihoods and ameliorating abject poverty, which, in turn will improve prospects for preventing overexploitation or degradation of this environmental resource base.

Conceptual and regulatory framework

Livelihoods and natural resource conflicts

The sustainable livelihood framework which informs this review pertinently derives from the discourse on poverty alleviation, rural development and environmental management. The framework traces to a number of key research works, notably Chambers and Conway (1992), Scoones (1998) and Ellis (2000), and has been applied to studies of rural settings sub-Saharan Africa including Malawi (Ellis *et al.*, 2003), Uganda (Ellis & Bahigwa (2003), Tanzania (Ellis & Mdoe, 2003) and South Africa (D'Haese & Kirsten, 2003).

According to Ellis (2000: 10), the strategies or ways that households employ to generate a livelihood:

[comprise] 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.

Subsistence-based households in the OD, like other rural households who form the national majority in Botswana, engage in a variety of resource-based livelihood activities, utilizing access to a combination of assets to secure positive livelihood outcomes, particularly increased income, reduced vulnerability and improved health (Farrington *et al.*, 2004; Kgathi *et al.*, 2004). The diversified mainstays of delta villagers include *molapo* or flood recession arable farming of millet, maize, sorghum and pumpkins; artisanal fishing; livestock farming of goats, sheep, cattle, donkeys and horses; collecting non-timber veld products – such as berries, wild fruits and tubers for dietary needs, grass for thatching and *mokola* or palm leaves and other roots and bark for basketry products; and community-based tourism activities such as safari and photographic tours. Related to the tourist market, recent research points to the livelihood-generating potential of traditional basketmaking and similar weaving productions – mostly the preserve of women (eg Kgathi *et al.*, 2004).⁴ Non-natural resource based sources of subsistence include employment in tourism facilities, typically as cleaners, security guards, drivers, cooks and safari guides; remittances from relatives and family members working in various unskilled and skilled jobs in urban centres like Gaborone and Maun; providing cheap labour on government assistance schemes for poverty alleviation such as the drought relief programme initiated in the serious drought of 1978, which offers temporary work, generally unskilled, in forest clearances for road building, construction sites and so on; and engaging in rural trade markets for homemade beer, livestock and chicken.

Central to the sustainable livelihood framework is the identification of stakeholders with different perspectives and the institutional factors and social relations mediating their access to a range of resource uses that influence livelihood or business outcomes (Chambers & Conway, 1992; Scoones, 1998; Ellis, 2000). Social relations, or the way individuals and households are positioned in society, is influenced by factors such as religion, class, age, ethnicity, and gender (Ellis, 2000). The framework therefore clarifies how, in different social contexts, livelihoods are sustained through access to a range of livelihood resources (natural, economic, human and social capital) used in combination in the pursuit of different livelihood strategies (Chambers & Conway, 1992; Scoones, 1998). In the case of the traditional subsistence practices of marginalized OD communities, apart from instances of hazards, access to natural resources are determined and mediated primarily by social relations and the Department of Wildlife and National Parks (DWNP). Illustrative of this is the role and actions of (intensely disliked) wildlife officers who mete out harsh penalties and harassments on communities suspected of or found to have killed wildlife without a licence, while the untold fatalities caused by the veterinary fences that cut across wildlife migratory routes across the OD and that have continually prevented animals from reaching water sources in a drought driven environment are not punishable.

Competition and contestation between different stakeholders and commercial actors over natural resources needed for securing livelihoods and different land uses:

refers to a condition in which one identifiable group of human beings (whether tribal, ethnic linguistic, cultural, religious, socioeconomic, political, or other) is engaged in conscious opposition to one or more identifiable human groups because these groups are pursuing what are or appear to be incompatible goals (Dougherty & Pfalzgraff, 1981, cited in Lee, 1997).

Furthermore, as Buckles and Rusnak (1999) spell out, resource conflicts can occur at multiple scales because of the following reasons. First, embeddedness of natural resources in the environment such that conflicts over resources arise when several interest groups use resources differently in the same natural system or geographical location. This is clearly seen in the erection of veterinary fences that have cut off OD communities from their water boreholes leaving their cattle parched. Second, the embeddedness of natural resources in a 'shared social space' such that conflicts arise if the sharing of resources is unequal among actors. This has certainly been the experience of the displaced Basarwa communities of Khwai, Mabebe and Gudigwa villages whose ancestral hunting and gathering areas were disappeared into the Moremi Game Reserve (MGR), with the active support of Batawana traditional chiefs of Ngamiland District, after it was established by the British colonial administration. Third, increasing scarcity of natural resources that leads to resource access competition and conflicts among various user groups. Not uncommonly, those with more political and social influence are given leeway in commandeering access to and control of natural resources, such as the conflicting access posed by those fishing for sport and recreation versus those fishing for survival as seen in Samochina, in the Okavango Panhandle area (Darkoh & Mbaiwa, 2005:171) And fourth, the symbolic use values of natural resources by some groups such that changes in their use or access may result in conflicts.

Given that natural resource access serves material and symbolic use values, it is hardly surprising that the promotion of international nature tourism in the OD – which delta communities famously associate with altered access, alienations and evictions from concession and reserve sites, and arrests and harassments for hunting without a licence by the DWNP – is perceived by the Basarwa peoples as culturally damaging because it drastically diminishes the scope for the spectrum of hunting, fishing, gathering and cultivation activities that are integral to their identity – expressed in a way of life (Taylor, 2000). Thus, threats to livelihood security, specifically the access and control over historically managed natural resources, by the privileging of large-scale commercial and other vested interests, do not just worsen the challenges of poverty but manifests in other integral spheres of social or spiritual well-being (Anderson, 2005; Buckles & Rasnak, 1999; Darkoh & Mbaiwa, 2005).

In Botswana, as in many parts of the world and the global south characterized by inadequately or poorly articulated institutional mechanisms, protracted conflict, even involving violence, can result from unresolved contention over the right to and use of 'scarce' resources (Homer-Dixon, 1994). This is enacted in another international ecotourism product, the Central Kalahari Game Reserve in Ghanzi District, which was created in 1961 under British colonial administration as a protected area in perpetuity not just for the Kalahari wildlife and ecosystem but also its indigenous semi-nomadic Basarwa inhabitants. In 2002, the Botswana government forcibly removed the Gana and Gwi Basarwa clans to peripheral and game scarce locations in the Kalahari – in order to 'develop' them. With assistance of international human rights organisations, particularly British-based Survival International, the Basarwa filed a case against the government, which brought them and their culture to international attention as 'first peoples' of the Kalahari fighting for the right to an ancient way of life. After dragging five years, in 2006 the Botswana High Court ruled that their eviction and denial of access to resources in their ancestral land were unlawful, and that they had the right to their traditional lifestyle. While their return to the Central Kalahari Game Reserve continues to be complicated by legal technicalities,³ the wider important issue of having the power to determine rights to livelihoods and resource use is far from resolved: for instance, the livestock acquired and

raised by displaced Basarwa households in the intervening years are legally prohibited in the protected reserve, and those return to live there will not enjoy the health, education and basic amenities provided for those in resettlement sites.

Institutions, policies and regulations

Institutional policies and modern state practices have played a key role in regulating natural resources in rural areas. Luckham *et al.* (2003:18) define an institution as a socially constructed arrangement of routinely exercised and accepted ideas. In this sense, institutions are embedded in a set of social arrangements for legitimizing and managing competition for resources and accountability in governance. Current literature on parks and protected areas (e.g. Brandon *et al.*, 1998; Mordi, 1991; Child, 2004) provides ample evidence that all too often policies, institutions and strategies deliberately displace people living within proposed preserves, and curtail or ban their customary rights of access to natural resources in these areas, which invariably creates antagonisms between displaced communities and protected park or wildlife managers. Ironically, such problematic outcomes are universally glossed as selling points in the nature and eco tourism sector, as typified, for example, by the accolade given to Moremi Game Reserve in the OD by a South African-based safari company: 'It is a true privilege to go on a game drive and not see another soul besides the animals' (http://www.rhythmafricatours.com/E_general_info_bot.asp). Currently 17 per cent of Botswana's land surface is set aside as game reserves and national parks.

In Botswana, specific institutions and government departments have the mandate to regulate access to natural resources (land, veld products, wildlife and water) in the OD – the DWNP, Agricultural Resources Board, Department of Water Affairs and the various land boards that report directly to the Minister of Lands. These institutions are therefore directly involved in determining access and rights to resource use by OD communities. Additionally, several government policies and intervention strategies include guidelines on the use of natural resources in the delta, notably the Wildlife Conservation Policy of 1986, the Tourism Policy of 1990 and the Agricultural Development Policy of 1991. The Wildlife Conservation Policy established wildlife management areas (WMAs) as a primary form of land use in which other land uses are permitted only if these are compatible with wildlife and their utilization (GoB, 1986). WMAs are divided into smaller controlled hunting areas (CHAs), which are the 'administrative blocks used by the DWNP to administer' land and wildlife utilization, which are leased as concessions for community-based tourism activities (GoB, 1986:12). Developments under the Tourism Policy aim at promoting international tourism as a means of diversifying Botswana's economy from reliance on diamond mining (GoB, 1990). And finally, the Agricultural Development Policy encouraged the fencing off of gazetted communal lands for improved productivity of the national livestock subsector and sustainable use of range resources (Darkoh & Mbaiwa, 2002). The implementation of these policy instruments and politically imposed validations of land use implicate both the often contradictory applications of rules and regulations by government agencies and an ethnic politics, which marginalized and displaced OD communities have to contend with in their day-to-day survival efforts.

Background to the study

The OD in northwest Botswana is a wetland that covers a surface land area of about 22 000 km² (Figure 1). It is home to 2000–3000 plant species, over 162 arachnid species, more than 20 species of large herbivores, over 450 bird species (Monna, 1999), and

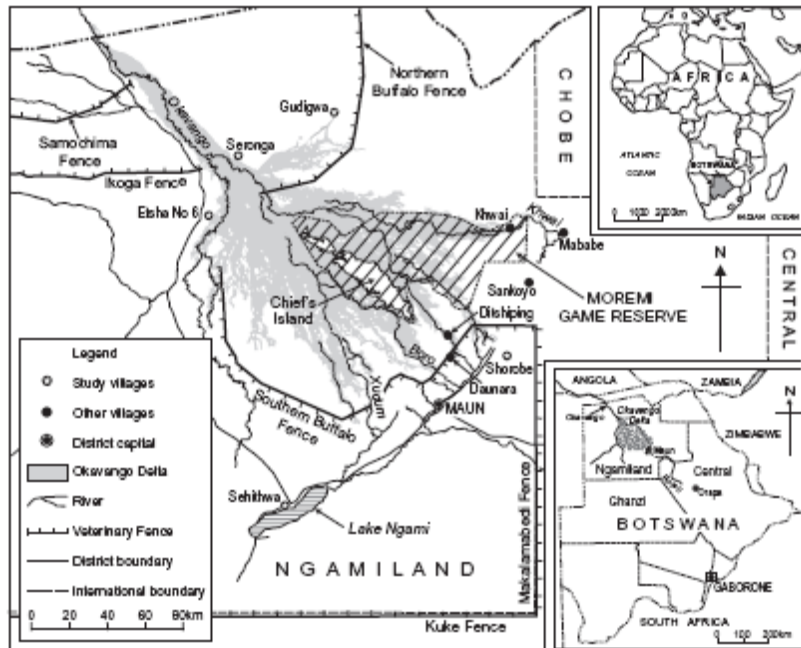


Figure 1. Map showing the location of the five study villages, veterinary fences and the other settlements mentioned in the Okavango Delta, Ngamiland District, Botswana.

more than 80 fish species (Kolding, 1996). It is also home to some 124 712 people (comprising some 7.3 per cent of the national population of 1.7 million in 2001), whose subsistence base is adapted to and engendered by access to wetland resources (CSO, 2002). According to the 1996 United Nations (UN) human poverty index, close to half (40.6) of the inhabitants of the Okavango region live in 'human poverty' (a composite measure of long and healthy life, knowledge, economic provisioning and social inclusion) (UNDP, 2000; 2005). Amongst the co-existing ethnic groups long settled in the delta – such as the Bayei, Bakgalagadi, Bambukushu, Basubiya, Batawana, Baherero, Batawana and other smaller minorities – the Basarwa are the only hunters and gatherers, and also the most disadvantaged and poorest ethnic group in Botswana (Masego Watlala, social worker, pers comm, Gumare Okavango Subdistrict Office, January 2003). Having been resettled under the RADP from the 1980s onwards, some Basarwa have adjusted to agropastoral livelihoods, the subsistence base of the rest of the rural communities in the OD and Botswana, and have adopted practices to position themselves within mainstream rural Tswana society.⁶

The field study involved conducting formal interviews with community leaders in five resettlement villages located within the drier, less productive lands outskirts of the OD – Shorobe, with 955 residents, Seronga, with 1641 residents and Sehithwa, with 1478 residents, all three established in the 1940s; Etsha No. 6, established around 1970, with 2629 residents; and Gudigwa, established in 1987, with 737 residents. The livelihood mainstays are little varied. In Sehithwa, a predominantly Baherero community,

livelihoods centre on livestock and crop farming, and labour on government assistance schemes. In Shorobe, dominated by Bayei and Basubiya communities, livelihoods mainly derive from women's basketry products, dry *molapo* arable farming, labour on government assistance schemes and livestock farming. Residents of Etsha 6, of Bam-bukushu origin, are involved in dryland farming, labour on government assistance schemes, brewing beer and women's basketry products. In Seronga, also mostly Bam-bukushu, the main livelihoods are community-based tourism activities (especially wild game hunting and photographic tours), dryland farming, labour on government assistance schemes and fishing. In the primarily Basarwa settlement of Gudigwa, the main livelihood sources are labour on government assistance schemes, safari and photographic tourism activities, collecting veld products, and livestock and crop farming. All the communal land designated for the use and settlement of the villagers remain the property of the state under the purview of the Tawana Land Board; part of the land in Gudigwa and Seronga are DWNP concessions leased to them as CHAs to run community-based tourism activities.

Seven community leaders (village chiefs and their deputies, all men) were formally interviewed with the administration of open-ended questionnaires. Community leaders were interviewed individually, for about an hour, in their offices and asked about the state of livelihoods and subsistence options and resources in their communities; what they believed were the constraints in livelihood development and how these might be addressed; and what resource conflicts were faced in their areas with other land users and how they believed these could be resolved. Given their role as village representatives in liaising with officials, community leaders were selected as being the most knowledgeable about the impact of policies and regulations on natural resource management in the OD on livelihoods in their villages.

Formal interviews were also conducted with six trustees (4 men, 2 women) of the Okavango Community Trust (formed by five villages including Gudigwa) in order to ascertain the viability of and extent to which community-based tourism activities, a component of the national eco-tourism strategy (NES) aimed to increase the rural share in development, and related land use management policies and regulations have affected livelihood resource access. These interviews were conducted over the same period, generally also lasting an hour, in the community trust office. All interviews were conducted in the national language Setswana, except for those in Gudigwa, where an interpreter assisted in translations into the indigenous Serwa dialect.

Prior to carrying out field interviews, informal meetings and discussions were held with officers of relevant state agencies and government bodies in the OD, including the DWNP, Tawana Land Board and North West District Council. Discussions focused on policies relating to wildlife management, veld products and subsistence agricultural production in the OD and were very useful in unravelling sensitive information that could not be obtained through formal interviews based on open-ended questionnaires.

While the research design did not allow for the collection of sufficient data for robust statistical analysis, this was arguably outweighed both by our research objective of corroborating how natural resource institutions, policies and other regulatory measures implemented by the modern (Botswana) state have impact access to resource use and the subsistence-based livelihoods. Moreover, the reliability and validity of the qualitative data from interviews with affected and displaced villages were enhanced by being obtained through face-to-face in-depth interviews with key informants in not easily accessed locations who are not often given a voice, supplemented by informal discussions with various officials.⁷

The research for this paper was carried out 2002 and 2005 and formed part of a larger EU-funded Water and Ecosystems Resource in Regional Development project aimed at understanding the livelihoods, environment and resource use policies within international basins such as the OD.

Discussion

Establishment of Moremi Game Reserve (MGR) in the Okavango Delta, 1963

Polices and regulatory measures to limit or prohibit access and use of natural resources by 'remote area inhabitants' began under British colonial rule (1885–1966). The Fauna Wildlife Act of 1961, for example, led to the establishment of Moremi Game Reserve (MGR) as a protected area encompassing about 4,610 km² of choice resource rich wetland in the heart of the OD (DWNP, 1991). The initial designated reserve area and subsequent extensions (in 1992 and the inclusion of Chief's Island in 1976) now comprise 20 per cent of the OD and encompasses the ancestral and traditional homelands of several communities. As the DWNP (1991) notes, between 1,500 and 2,100 people were 'removed' to make way for the MGR in 1963. While these figures might be underestimates, they give credence to the accounts of Basarwa informants in Shorobe and Gudigwa that the reserve grounds are still regarded by evicted communities (including Basarwa clans of Khwai, Mabebe and Sankoyo villages) as their ancestral home and hunting gathering preserve, and furthermore, that the Basarwa were the worst affected by these removals (an assertion reinforced by interviews in other Basarwa communities conducted in other studies). Up till now no local settlement is permitted within MGR, which is used exclusively for wildlife management and tourism development.

Described by the Botswana Department of Tourism as 'Bushmen' who have reportedly hunted in the OD, including Moremi, for at least 10 000 years (<http://www.botswana-tourism.gov.bw/attractions/moremi.html>), in 1963, the Basarwa now residing in Gudigwa, Khwai and Mababe villages were displaced from their homelands within MGR perimeter and relocated to the outskirts of the reserve under the authority of British colonial officials and Batawana traditional chiefs.⁶ Recollections of removals, including the 1963 resettlement of Basarwa of Khwai village (who are mentioned on the same Department of Tourism MGR webpage cited above) are still vivid – of their huts being burnt down and of being transported to areas they had no part in selecting (Mbaiwa 1999). The Bayei minorities of Daunara and Ditshiping villages were also relocated from the reserve claim to their present peripheral sites (DWNP, 1991). Other groups similarly displaced by the establishment of MGR include the Bayei and Bam-bukushu residents of Sankoyo village (Mbaiwa, 1999).

Main impacts of MGR on subsistence livelihoods in the OD. The establishment and exclusionist management of MRG, quite clearly, was carried out with little regard to the interests, rights and livelihoods of displaced communities, bringing in its wake lingering outrage and land use conflicts. Resettled communities have ceased to have control of and access to their wetland preserves; regulations after 1963 explicitly 'forbidding hunting by tribesmen in the reserve' (DWNP, 1991: 3) legally alienated them from resources that had provided their subsistence for generations (Taylor, 2000). The loss of control over land and resources, particularly wildlife, led to deeply resentful, antagonistic and confrontational attitudes towards the DWNP, which took over the running of MGR in 1976. Set up in the way it was, through forced removals of whole communities without any

consultation, prior consideration or compensations, the MGR fostered negative attitudes towards wildlife conservation, ironically one its core objectives.

The adoption of laws prohibiting hunting and gathering within former homelands affected more than material livelihoods, especially for the Basarwa, for whom wildlife resources constituted the integral bases of their socioeconomic philosophy and expression of identity. Consecutive national governments, in the mould of the colonial administration, have simply *expected* the Basarwa to adapt to subsistence options introduced through the RADP, namely farming crops (maize, sorghum, beans) and livestock (cattle, goats, sheep and donkeys) – in line with traditional practices of the majority rural Tswana population in Botswana (Mbaiwa & Ranstundu, 2003). Curiously, for its stated aims of enabling people in remote areas to benefit from national economic growth through resettlement and improved agricultural productivity, no RADP scheme has been guided by any environmental or social impact assessment nor have the feasibility or environmental potential of relocation sites been assessed.⁹

After 1985, when the DWNP was given the mandate as the authority for wildlife reserves to collect gate revenues (previously collected by the Batawana Tribal Authority of the Ngamiland chiefs), all entry into MGR required a permit; even indigenous communities displaced to the outskirts of MGR could only transit through their former homelands with a permit and after paying gate fees to enter as tourists! Community leaders at Gudigwa and Shorobe expressed their unhappiness at being denied access to veld resources, especially thatching grass in MGR and firmly believed that DWNP had usurped them of resources that had previously *belonged* to them. Moreover, they actually viewed DWNP as a government surveillance body meant to monitor and deny them the use of resources they previously controlled. Policing restrictions on wildlife use by DWNP has severely impacted communities in the Okavango region since this area alienated by MGR is one of the richest in wildlife resources in Botswana (Mbaiwa, 2005; Bolaane, 2004).

Wildlife management areas (WMAs) and controlled hunting areas (CHAs)

In 1989, the OD was divided into WMAs, land use zones that are further partitioned into CHAs and administered by the DWNP for tourism purposes. CHA concessions are denoted as 'NG' areas in land use plans (Government of Botswana, 1986: 12). The concept of WMAs in Botswana arose with the orthodox conservation objective of controlled utilization of wildlife in community areas outside national parks and game reserves, and need for buffer zones between national parks and human settlements, particularly of indigenous communities.

Restrictions on traditional land uses like livestock farming in some WMAs have sustained widely felt negative impacts because cattle have multiple values in the rural economy amongst the different ethnic groups in the OD (including some now semi-sedentarized Basarwa communities). Cattle are sold to raise cash quickly. Cattle also provide milk and by-products such as hides that are sold to tanners and contribute to household income security; cow dung when used as manure for crops enhances household food security and when mixed with clay is a durable construction material used to build traditional houses. Equally pertinently, cattle are a status symbol with high cultural values – they are used to pay the bride price, passed to the next generation by inheritance, slaughtered on special occasions like wedding or funerals (significant events for enhancing family and community cohesion) and used as draught power in agriculture. All resettled village leaders interviewed expressed the desire of the community to expand their cattle herd and their frustrations over the restrictions created by

WMAs and veterinary fences. Thus, while the prohibition on cattle raising in some WMAs was part of policies to promote conservation, it has had a range of adverse effects on the livelihoods, identity and traditions of the indigenous and minority delta communities.

Unfortunately, the demarcation of WMAs was effected without the benefit of either environmental or social impact assessment studies. Compounding this, intervention strategies were initiated and implemented without any semblance of consultation with settled communities in the OD (Mbaiwa, 1999). Little wonder that delta communities were open about feeling betrayed and disinherited to see *their* best lands portioned off for foreign investors while the community is consigned to drier, less fertile areas (Mbaiwa, 2005).

During our interviews, community leaders expressed the opinion that WMAs were imposed on them by special interest groups.¹⁰ While ostensibly designed to improve rural livelihoods through the utilization of natural resources for tourism purposes, in 1989, the establishment of WMAs had involved the extension of MGR boundaries into gazetted communal lands allocated to residents of Shorobe, Mababe and Sankoyo without their consent (Mbaiwa, 1999). This validates Mordi's (1991: 89) assertion that in Botswana, wildlife laws 'were parachuted, fully formed into society and literally imposed by the government on the people'. Unilateral policy decisions have created protracted conflicts between government bodies and marginalized communities. Even though WMAs are operational, their administration continues to ignore the ecological dynamics and the basis of traditional land and resource uses in rural subsistence economies. The long-term problems emanating from this situation threaten the sustainability of the OD as a natural ecosystem and resource base.

Ironies of hunting licences: trophy versus subsistence

Hunting regulations in the OD also date back to British colonial era. After the establishment of MGR in 1963, subsistence hunting activities were allowed outside designated national parks and game reserves for minority disadvantaged communities such as the Basarwa. In 1979, a Special Game Licences (SGLs) permit for subsistence hunting was introduced which exempted holders from payment of licence fees. However, with the exception of the Basarwa, stricter controls restricted subsistence hunting areas for all ethnic groups in the OD – including the Basubiya, Bayei and Bakgalagadi households who had to draw lots for their licences! At the same time, the annual hunting season was limited to 1 April–30 September. Then, in 1986, the DWNP announced the decision to suspend the SGLs scheme on the grounds that it was being abused.¹¹ No statistics or evidence of any damaging impacts from alleged 'illegal hunting' were presented, nor were these made available when the abolition was made effective in 1996, when prominence was given to wildlife quotas for community-based tourism activities.

The proposal for a community-based natural resource management (CBNRM) programme in the Wildlife Policy of 1986 was extolled as a new opportunity in rural conservation and development through utilization of wildlife through community-based tourism ventures. But by the time this was operational in the OD, the withdrawal of the SGLs had caused irrevocable damage to livelihood options, and indeed basic survival; as our interviews in Gudigwa confirmed, not a few Basarwa households had become dependent on RADP social welfare provisions of food, seeds and clothes. Because, even after being made to settle in Gudigwa village in 1987, hunting and gathering had continued to be important subsistence and income-generating pursuits

for many, supplemented by agropastoral activities. Basarwa leaders of Gudigwa wanted the SGLs restored so that they could hunt freely in and out of their OD homelands.

Field interviews indicated that the much touted community-based tourism has not involved much community participation for villagers of Seronga and Gudigwa, who continue to be excluded from decision making, particularly relating to the hunting quota and issuing of hunting licences. This routine systemic exclusion reinforces the views of delta communities that the regulation of hunting through quotas is a foreign intrusion into their traditional culture of wildlife utilization. In addition, in some villages such as Shorobe, which was not eligible for any CHAs, community leaders were bitter over their exclusion whilst their neighbours were seen to benefit from natural resources. Shorobe's exclusion from CHA allocation was largely due to the DWNP's focus on mobilizing communities located within rich wildlife areas for tourism projects – the needs and access of peripherally situated villages, including Shorobe, were ignored. This has become a heated source of contention – between communities that have been allocated CHAs and those that have not.

Another policy contradiction and source of grievance among OD communities is that in some wildlife areas, particularly in those not allocated any community-based tourism projects, urban recreational (citizen) hunters can obtain hunting licences at the same fee, and therefore unfairly compete with subsistence hunters in the OD. The increased demand for a limited number of licences has resulted in a significant proportion of rural dwellers who do not own cattle and therefore need to hunt for survival being unable to obtain licences. It is only rational that if subsistence-based communities fail to achieve a measure of food and income insecurity by legal means they are likely to be forced into doing so by poaching, which is a problem, particularly along veterinary fences (Scott Wilson, 2000).

The Tourism Policy of 1990

In the attempt to reduce Botswana's economic reliance on diamond mining through wildlife-based tourism, the OD's rich flora and fauna has been marketed within affluent consumer markets by state agencies and private tour operators alike, as a 'pristine' and 'undisturbed' wilderness destination. This has resulted in higher concession fees and high capital investments to construct luxury end lodges and camps, ventures in which foreign companies from the affluent global north, invariably, have out-competed local companies and entrepreneurs.

Thus, the quest for a diversified economic base appears to be placing nature tourism development, particularly wildlife, under foreign ownership while denying delta communities access to resources that have been their patrimony for ages. Foreign domination of the tourism industry (particularly of capital and personnel from South Africa, United Kingdom, Australia, New Zealand, the EU and US) and the leasing of the tourism rich interior of the OD to foreign companies have fostered local perceptions of the wetlands as a foreign enclave (Mbaiwa, 2005). Legislative interventions requiring minimum capital deposits and various incentives to favour the participation of foreign investment groups at the expense of local and national elites, ultimately, do little to encourage ownership in the resource management and conservation process within the national environment. Thus, exclusionary institutionalized norms unduly precipitate land use conflicts and resentment among local people (Mbaiwa, 2005).

The community-based natural resource management (CBNRM) programme (1986). The CBNRM programme in the OD allows village communities to participate in safari hunting,

photographic, overnight camp and handicraft tour activities in their respective CHAs. Communities like those of Gudigwa and Shorobe involved in CBNRM elect a board of trustees to manage community tourism projects in collaboration with the DWNP, Tawana Land Board and Department of Tourism. Community trusts enter into partnerships with foreign safari companies by signing a lease agreement (usually renewable for five years) that allows their wildlife quota and CHA concessions to be marketed abroad as part of safari, photographic and craft tour packages. Understandably, however, the marginalized Basarwa villagers of Gudigwa, Mababe, Ditshiping and XaiXai (about 200 km south of Maun, near the Namibian border) see themselves as hugely disadvantaged by the terms of competition with private and wealthy foreign tour companies, who they believe have been allocated the wildlife rich wetland hunting areas, whereas they are assigned peripheral areas that are dry and hold no viable attractions for tourism (though, remote areas with hardly any viable prospects for subsistence are, in themselves, marketed as a tourist attraction – as part of the ‘untouched’ inhabited wilderness!).

Veterinary fences

The erection of the veterinary fences in the OD – to separate livestock from wildlife, especially foot and mouth disease carriers such as buffalos – to protect the export beef industry, primarily caters to EU import requirements that necessitate rigorous standards of veterinary hygiene and disease management. Under the authority of the Department of Animal Health and Livestock Disease Control in the Ministry of Agriculture, containment controls have been partly achieved through the construction of a network of veterinary cordon fences and quarantine camps, which divide the country into disease control areas and buffer zones which restrict livestock and wildlife movements and make it easier to isolate or quarantine livestock in case of a disease outbreak in any zone in the country. But even early fences like the Kuke Fence (1959) and Southern Buffalo Fence (1982) attracted negative publicity for causing entanglements and deaths of endangered species because these were erected across established wildlife migratory routes (Albertson, 1998; Perkins & Ringrose, 1996).

The erection of veterinary fences across natural resource access routes has imposed boundaries to livelihood and survival options for OD communities resettled in drier and game scarce areas. Veterinary fences erected in 1995–96 to control the outbreak of contagious bovine pleuro-pneumonia (CBPP) – the Northern (1998), Makalamabedi (1995) Samochima (1995), Setata (1995) and Ikoga (1995) fences – are still associated with the killing of over 320 000 cattle to control the disease. The loss of cattle sustained by OD communities had caused major social and economic hardships from which they still have not recovered (Fidzani *et al.*, 1999). Community leaders interviewed perceived the fences as barriers to free movement and access of livelihood resources including the palm leaves for basket weaving, thatching grass, berries and wild fruits.

Ikoga Veterinary Fence. This CBPP fence originates from the Panhandle of the Okavango River and stretches westwards towards the Namibia border. The chief at Etsha 6 pointed out that the fence cuts across not only land management zones already designated for pastoral, arable, and residential use, but also NG24, the community-based tourism area allocated to Jakotsha Community Trust (involving the villages of Ikoga, Etsha 1, Etsha 6 and Etsha 13). Moreover, because the fence was erected without consultation with the villages concerned, the alignment does not follow land use boundaries and cuts across villages, restricting and hindering rural livestock owners’ access to their water points and grazing grounds.

The Northern Buffalo Fence (NBF). Initiated in the 1990s and completed in 1996, community leaders that the presence of this fence, coupled with enforced restrictions on hunting, has increased livestock predators such as lions because the fence acts as a conduit that congregates wildlife during the dry season, especially buffalos and elephants, at the western end of the fence where permanent water exist. Interviews in Gudigwa confirmed that the collection of thatching grass, wild fruits and berries has been impeded by the alignment of the southern section; specifically, access to the southwest quarter of NG12 – the CHA that stretches across the lands of the Okavango Community Trust villages – and adjoining CHAs traditionally accessed for subsistence hunting and collection of veld products. CBNRM project leaders in Seronga also informed that the alignment limits their activities in NG12 such as the trails for *mokoro* (local dugout canoe) drivers employed by the Okavango Polers' Trust. Due to the absence of stiles in strategic places, the erection of the fence has increased incidents of illegal hunting, losses of grazing land, predation on livestock and restrictions on the collection of veld products along the fence by Gudigwa residents.

The declaration of the OD as a cattle-free zone in 1982 has deprived communities of their traditional right to utilize the inner OD wetlands as fallback grazing area during lean years (Bendsen & Meyer, 2003). Communities who had remained with some cattle inside the fence – such as Jedibe, Ditshiping, Daunara, Sankoyo, Khwai and Mababe villages – were urged to move their cattle out. Since the 1995 CBPP outbreak, livestock movement regulations have been strictly enforced to avert any potential threat of cattle disease (Bendsen & Meyer, 2003). Village chiefs and village development committee leaders in Seronga and Gudigwa recounted how elephants walk through the fence, clearing a way for large numbers of cattle from the villages to enter the livestock-free zone. Whenever this happens, officers from the Ministry of Agriculture kill and burn the remains of all cattle that have breached the fence boundaries. For farmers struggling over years to build and upkeep their breeding stock, the summary disposal of large numbers of cattle is not only traumatic but also exposes the households in the community to threats of long-term poverty, food and income security.

The Southern Buffalo Fence (SBF). Erected in 1982, this fence has made it impossible for communities living inside the fence such as the residents of Sankuyo, Mababe, Khwai and Ditshiping to sell meat in Maun, the nerve centre of commercial activities in the district located beyond the fence (Mbaiwa, 1999). Shorobe village leaders felt that the SBF has reduced their livestock grazing areas and inhibited the collection of palm leaves for basket weaving and thatching grass in particular. For Gudigwa, the fence reduced the NG12 CHA area that the villagers had hoped to use for tourism activities. Also, villagers in Shorobe contended that they no longer have access to their communal lands inside the SBF, which in 1996 was leased to the village of Sankuyo by the Tawana Land Board for tourism activities. This shifting demarcation of access boundaries has created conflicts between these two villages, especially as the land was held as a resource to fall back on. The change in the watercourse channels has also exacerbated tensions between the two groups and constrained potential expansion of community-based tourism activities in the near future (Scott Wilson, 2000).

Conclusion

Conflict over modifications and restrictions of access to and control over natural resources occurs in many postcolonial developing economies (Homer-Dixon, 1994).

The sustainable livelihoods framework is one of the tools that have been used to study access to resource use and livelihoods in rural socioeconomic environments. However, as modern state institutions and regulatory instruments increasingly modify the access of indigenous communities to natural resources in their traditional homelands in Africa as in many parts of the world, including more remote areas, the contention and latent conflict between poor marginalized rural communities and state institutions over historically embedded resource use can also become a cause of resource degradation. Gebre (2001) illustrates that the bias in state sponsored development policies in Ethiopia towards developing large-scale mechanized farming and crop cultivation restricted access to land for subsistence pastoral farmers in the Awash River valley. This situation has made pastoral farmers vulnerable to encroachment and land appropriations by outsiders, drastically transformed the viability of resource use and brought about undesirable and intense competition for natural resources. Similarly, in the OD, the continued alienation of ancestral and traditional homelands, for the establishment of MGR and ongoing promotions of international wildlife/nature tourism, and for the buffer zones introduced by veterinary fences catering, ultimately, to protect European beef markets, have escalated contentions over resource use between delta communities, state bodies and outside agencies implementing these programmes. When subsistence livelihoods are threatened, the rural poor predictably resort to overexploitation of natural resources for survival. Chambers (1987) notes that in many parts of the world where environmental degradation has resulted from growing numbers of poor people just trying to meet basic survival needs on a day to day basis and Buckles and Rusnak (1999) argue that people everywhere compete for the natural resources they need or want to ensure the sustainability of their livelihoods.

Clearly, there is a direct link between officially sanctioned and enforced restrictions on subsistence supports and the contestation among various communities as well as with outside commercial interests that compete to enhance or secure their own profits. Formal or informal negotiations to address these conflicting interests are, *inter alia*, hampered by ineffective government intervention strategies and, more specifically, poor communication between policymakers, policy implementers and resource end-users. Consequently some displaced OD communities will be more likely than others to circumvent institutionalized regulations and controls, say by resorting to poaching or 'illegal' hunting, for example, just to meet survival needs. In fact, data from DWNP show that arrests and cases related to illegal hunting are higher in non-CBNRM areas than in CBNRM areas.

Areas like the OD or the Awash River valley in Ethiopia are classic study sites that exemplify the manner in which modern state institutions have restricted access to resource use for sustainable livelihoods. Communities long settled and adapted in these areas perceive modern state policies and regulatory instruments as encroachments and denials of their territorial rights and traditional land uses and livelihood base. Such state policies and zonings have generated livelihood insecurity, which in turn prevents appropriate management of natural resources and exacerbates the very overexploitation of resource utilization which was meant to be avoided. The challenge for governance in developing economies of the global south is to work out institutional frameworks that place rural subsistence communities and access to natural resources at the centre of natural resource use planning in order achieve sustainability in both livelihoods, resource use and social relations.

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Endnotes

- 1 The Basarwa clans and closely affiliated groups in the OD mentioned in the paper include the Bukakwe clans (of Gudigwa and Khwai villages), Tsega (of Mababe and Sankoyo), Ju/hoansi (of XaiXai) and the Gana and Gwi (of the Central Kalahari Game Reserve). All the resettlements of the displaced Basarwa communities in the OD have been effected under the aegis of the RADP. While the study community in Gudigwa was resettled in their present site in 1987, many Basarwa of the Khwai settlement resisted relocation for decades; in 2005, the government finally gazetted Khwai as a permanent settlement (which entitles residents to access to piped water supply and education, health and road services). This backing down might well be explained in the light of the then ongoing highly publicized case filed in 2002 against the government by the Basarwa of the Central Kalahari Game Reserve for their forceful removal, and its justification in the name of 'development' under the RADP.
- 2 Among other recent development projects threatening to undermine the sustainability of the OD ecosystem, for example, was the dredging of the Boro River by the Botswana government in 1992, undertaken as part of the Southern Okavango Integrated Development Project, to supply water to Maun, the district capital and the diamond mining town of Orapa in neighbouring Central District, which was suspended after the intervention of local communities, in particular the Batawana of Maun, and the recommendations of the International Union for Conservation of Nature (IUCN), whose assessment was invited by the government, and Greenpeace (Kgathi *et al.*, 2004: 108).
- 3 In terms of national economic share, in 2003, tourism contributed 9.7 per cent, beef production 4 per cent mining, 35 and services, 50.7.
- 4 Five main raw materials are used for in basketry weaving in the OD: *mokola* or palm leaves (Hyphaene petersiana), *moshikiri* (Eragrostis pallens), *moitsentila* (Berchemia discolor), *mothakola* (Euclea divinorum) and *mokokosi* (Parinari capensis). Palms leaves are used as a binding or thread to weave and hold all the materials together tightly, the coils are formed of Eragrostis pallens and the barks or roots of Berchemia discolor, Euclea divinorum and Parinari capensis, separately cooked with palm leaves (for about an hour and half) produces the vegetable dyes used in decorating and patterning.
- 5 For instance, the government insisting that only those named in the court documents can return and access resources in the reserve without a permit – leaving the rest, including their family members, behind in the New Xade and Kaudwane resettlement villages.
- 6 For example, our interviews with community leaders indicated certain adoptions never associated with Basarwa peoples. For example, the payment of a bride price – in cattle – common among agropastoral groups in Botswana, the *kgotla* (customary village law courts and assembly) system presided over by 'chiefs' – whereas the Basarwa have congregated in small groups with a 'band leader', and voting for members of parliament and political counsellors to represent their interests.
- 7 In addition to the information and perspectives gleaned from interviews, we gathered materials from searches and retrievals of unpublished and official survey reports from libraries and documentation centres in Botswana. Secondary sources included policy documents on tourism, wildlife and national parks.
- 8 Some scholars who argue that the Batawana paramount traditional chiefs of Ngamiland had the upper hand in the establishment of MGR (e.g. Bolaane, 2004; Tlou, 1985) also present evidence that colonial officials in Botswana persuaded the British government to have the reserve established. What is not disputed is that the cooperation of the Batawana chiefs, whose

supremacy over all others in the OD was well established, was necessary for establishing the reserve. Similarly, the extension of Moremi Game Reserve to include Chief's Island (Figure 1) in 1976 was possible only with the blessing of the Batawana chiefs. Although traditional chiefs (a hereditary position) lost their powerful hold over resource use and land management in their traditionally defined jurisdictions during British colonial rule of Botswana – and the vestiges of this after 1968 with the setting up of government land boards – they continue to command popular respect and support for the decisions of the village parliaments and courts (*kgotla*) over which they preside.

- 9 The RADP was launched in 1974 (and revised in 1978) to promote social, political, economic and cultural development of people living in harsh remote areas, irrespective of their ethnicity. The programme has changed the lives of some resettled Basarwa in the OD – that is, they have been semi-sedentarised into the mainstream Tswana society. But RADP cannot be said to be promoting sustainable livelihoods in that it has left a lot of people high and dry without prospects; at Gudigwa, in particular, former hunters and gatherers could do little without access to veld products to sustain their traditional skills and livelihood base.
- 10 In 1998, when Kgosi Tawana II, Paramount Chief of Ngamiland District was asked for his view on DWNP's adoption of WMAs within the OD, he was quoted as saying: 'whose land is this anyway . . . before implementation of this Dutch man's plan [referring to this zonation of the OD by the Dutch consultant Leo Van Heyden] by over eager authorities, the people on the ground [those living there] need to understand what's going on' (*Botswana Gazette*, 1998). While chiefs still resent their traditional spheres of authority being curtailed and subsumed by various government agencies, interestingly, the sentiments voiced out here are similar to those elicited during our interviews in the five study villages, despite the fact that there are elected councillors and members of parliament for the OD who are expected to represent community views and interests.
- 11 The exclusion of Basarwa households from these SGL restrictions was a grouse among other communities who claimed that that the Basarwa were killing more than their allowance. In fact, Basarwa households could access a permitted number of species, meant to be 'ticked off' after each hunt, which was not always done. When the SGLs were scrapped, so was this subsistence hunting entitlement.

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