

The exclusive license for this PDF is limited to personal website use only. No part of this digital document may be reproduced, stored in a retrieval system or transmitted commercially in any form or by any means. The publisher has taken reasonable care in the preparation of this digital document, but makes no expressed or implied warranty of any kind and assumes no responsibility for any errors or omissions. No liability is assumed for incidental or consequential damages in connection with or arising out of information contained herein. This digital document is sold with the clear understanding that the publisher is not engaged in rendering legal, medical or any other professional services.

Chapter 7

PROPERTY RIGHTS AND ACCESS TO NATURAL RESOURCES IN CONSERVATION AREAS OF THE OKAVANGO DELTA, BOTSWANA

D.L. Kgathi, M. Bolaane and S. Mosojane

ABSTRACT

A property right over a natural resource is the authority one has over its control and use. This chapter aims at analysing the structure of property rights in conservation areas of the Okavango Delta and their implications on poverty and sustainable environmental management. Using information based on informal interviews and review of literature, this chapter shows that property rights in the study areas are not adequately secure. Although in concession areas the traditional rights of the collection of veldt products and fishing for subsistence purposes are in de jure terms fully recognised, the rules are not strictly followed in de facto terms as the local communities are sometimes not allowed to fish or collect veldt products in concession areas. The access of local communities to Moremi Game Reserve and surrounding wildlife management areas is also a highly contested issue. Traditional rights of communities who were displaced when Moremi Game Reserve was established are still not fully recognised. These include their rights to fish and to collect thatching grass and reeds.

INTRODUCTION

Institutional analysis undertaken by scholars of the commons has generated a lot of interest on the role played by property rights on rural development and environmental management (Agrawal, 2003). Property rights determine the relationship between people and the environment (Ostrom & Hess, 2007; Schlager & Ostrom, 1992; Hardin, 1968). The nature of this relationship has implications for livelihood security and environmental sustainability. Due to their importance in natural resources management and livelihood security, property rights have increasingly become important in recent years (Jones, 2004; Rihoy *et al.*, 1995). Research work on these institutions has contributed to the formulation of policies which recognise the role played by local communities in the management of natural resources (Agrawal, 2003; Johnson, 2009). Although in Botswana, the Government has made significant attempts to create a policy environment conducive to the evolving tenure system on natural resources (Rihoy *et al.*, 1999), there is a concern

that the traditional property rights of local communities are weak, particularly in terms of the rights of access to natural resources. In some cases, rural communities have been displaced from their ancestral lands in order to give way for ranching and development of protected areas (Taylor, 1999; Bolaane, 2004; Mbaiwa *et al.*, 2008). The failure to fully recognise traditional property rights is one of the factors which may have adverse impacts on rural livelihoods and poverty in the Okavango Delta.

Although Botswana is classified as an upper middle income country by the World Bank (2009) with a Gross National Income per capita of USA \$ 5 840 (2007), poverty is still endemic in many parts of the country, the proportion for the population in income poverty estimated at 30% in 2002/3 (UNDP, 2009). The Human Development Report of 2008 showed that Botswana was ranked 125th out of 177 countries in terms of human development with a human development index value of 0.694, higher than the average value for sub-Saharan Africa of 0.54, but lower than the global average value of 0.753

(UNDP, 2009). Botswana is also classified among countries with very unequal distribution of income with a Gini Coefficient of 0.61 (values range from 0 to 1 with 0 showing absolute equality and 1 absolute inequality). Poverty policy in Botswana should therefore place greater emphasis on property rights as they are “key assets” for sustainable rural livelihoods (Gregorio *et al.*, 2004). Secure property rights will not only ensure access to streams of income by the rural poor, but will also provide incentives for sustainable management of natural resources in rural areas (Ostrom & Hess, 2007; Gregorio *et al.*, 2004; Agrawal, 2003; Panayatou, 1993).

This chapter aims at enhancing the understanding of the efficiency of property rights of the rural households over natural resources in the Okavango Delta. The specific research objectives of this chapter are as follows: 1) to determine the extent to which households have access to natural resources, 2) to determine the characteristics of property rights in the Okavango Delta, in particular, to assess whether they are secure, transferable, and enforceable, and 3) to suggest the policy implications of the findings. This chapter is mainly based on information obtained from informal interviews and review of literature. The informal interviews were conducted with various officers in Government departments, Ngamiland District Council, NGOs, community organisations, and safari companies. The preceding section reviews the basic concepts of property rights regimes. Section three reviews the land tenure system in Botswana, whereas section four critically examines property rights regimes and access to natural resources in Ngamiland, with particular reference to the Okavango Delta. Section five concludes the chapter with some policy recommendations.

PROPERTY RIGHTS REGIMES

Defining Property Rights

According to Tietenberg (1992), property rights are about the entitlements, privileges and limitations of the society to the ownership and use of natural resources. Having a right to something does not necessarily mean that one has absolute authority over it. This is mainly because a person may hold rights which may or may not include all bundles of property rights (Ostrom & Hess, 2007; Gregorio *et al.*, 2004). Rights are particular actions that are authorised and they differ from rules which are products of rights, hence “a property right is the authority to undertake particular actions that are authorised”

(Schlager & Ostrom, 1991:250). Property rights institutions can be categorised into use and control rights (Schlager & Ostrom, 1992). Use rights include access rights (e. g. the right to enter the resource domain) and withdrawal rights (e.g. the right to harvest a resource), whereas control rights include the right to regulate resources (management), the right to exclude others (exclusion), and the right to transfer the asset to another individual (alienation). The way in which the property rights are formulated defines access to natural resources. In some cases, however, the practice of the use of natural resources may depart from the legal formulation. The rights which are in accordance with the legal formulation are known as *de jure* rights, whereas those which are in accordance with the actual practice are known as *de facto* rights (Schlager & Ostrom, 1992).

Issues surrounding property rights are critical since they form the basis for policy formulation on natural resource management and management. According to Pearce & Barbier (2000,p166), “an appropriate system of property rights is one of the key institutions determining the success of policies for sustainable and efficient management of natural capital”. In order for property rights to be effective instruments for natural resource management, they need to be well defined, secure, transferable, and enforceable (Ostrom & Hess 2007; Agrawal, 2003; Panayotou, 1993; Rihoy *et al.*, 1999). There are four types of property rights regimes: open access, common property, state property, and private property, all of which prevail in Botswana. These regimes are important frameworks for analysing issues on access to natural resources (Hasler, 2001; Arntzen & Fidzani, 1999). However, it is crucial to note that classifications into property regimes are a simplification of a complex situation because in reality individuals and households hold overlapping property rights.

Open Access

An open access regime (one without property rights) is one in which access to natural resources is not restricted because there is no exclusion, and therefore all potential users have access to it (Pearce & Barbier, 2000). In such a regime, there is a tendency for individuals to over-utilise a resource relative to socially sustainable levels because the private marginal cost of harvesting is lower than its social marginal cost given that the user costs are not taken into consideration by an individual (Tietenberg, 1996). There is rivalry of the exploitation of natural resources as a result of lack of ownership, and this leads to environmental degradation (Fernandez, 2006). This is what Hardin called “the tragedy of the commons” (Hardin, 1968), confusing open access with common property. Resources such as grazing and veldt products in communal areas of Botswana, including those in the Okavango Delta, are held under an open access management regime, although in a number of cases a mixture of open access and common property exists as will be explained later in this chapter (Hasler, 2000, Hasler, 2001 and Arntzen & Fidzani, 1999).

Common Property

In a situation whereby the rights are conferred on the community, and the rules for excluding others and regulating the use of the resource exist, the property regime is known as common property (Pearce & Barbier, 2000; Blaikie & Brookfield, 1987). In his thesis of the Tragedy of the Commons, Hardin (1968) failed to distinguish between

common property and open access regimes. His basic assumption was that common property resources were open access. Common property regimes are mainly distinguished by institutional arrangements which are adopted by people to manage natural resources, whereas open access regimes do not have such institutional arrangements. According to Blaikie & Brookfield (1987, p186), a common property resource (CPR) is : (1) “subject to individual use but not individual possession” (2) it has numerous users “who constitute a collectivity” and can introduce rules for using a resource excluding those “who are not members of that collectivity”. There is also a limited practice of free riding in the use of CPRs because users tend to co-operate (Runge, 1986). The tragedy of the commons may still be experienced in CPRs due to a breakdown in land management institutions, and not necessarily because of collective ownership as Hardin asserted (Blaikie & Brookfield, 1986). In Botswana, most of the common property regimes have access, management and withdrawal rights but do not have alienation rights and their access rights may be weak. In areas under Community Based Natural Resources Management (CBNRM) in Ngamiland, the management of wildlife resources is held under a common property management regime during the period of the lease in Community Hunting Areas (CHAs) (Hasler, 2001).

State Property

If property rights are conferred on the Government, the management regime is known as state property (Hasler, 2001). Access to natural resources by individuals or communities is made through lease holding. Although the rights for state property may be temporarily transferred to communities, as is the case with CBNRM in the Okavango Delta, it is crucial to note that these rights are not transferable because they cannot be sold. In southern Africa, national parks and forest reserves are usually under the control of the state as is the case in Botswana. The Moremi Game Reserve, located in tribal land in Botswana, belongs to BaTswana tribe but is administered by the central Government on their behalf. State property regimes are often associated with adverse impacts on economic, social, and environmental sustainability because the interests of the state individual employees often diverge from the collective ones (Tietenberg, 1996).

Private Property

The property rights of using the land could be conferred on “individuals, companies, or corporations” so that they have the right to exclude others (Pearce & Barbier, 2000). This tenure regime is known as private property. If there is no market failure, the use of natural resources in a private property regime is considered Pareto efficient. However, privatisation is associated with inequitable distribution of, and lack of access to land (Argawal, 1986; Runge, 1986). It denies access to some of the environmental goods which used to be previously obtained from the commons, leading to more resource pressures (Wisner, 1988, Blaikie & Brookfield, 1987). In Botswana, the freehold farms and leasehold ranches are a private property (Mathuba, 2003). Owners and proprietors of these farms possess all the bundles of rights such as the rights of access, withdrawal, management, exclusion, and alienation. Part of the tribal and state land under CBNRM in Ngamiland is in *de facto* terms privately used by safari companies during the period of the sub-lease agreement with the local communities. Natural resources such as wildlife in

private farms remain the property of the Government and are regulated by the Conservation and National Parks Act of 1992. However, wildlife in game ranches is considered private property by the same Act .

LAND TENURE CATEGORIES

During the Bechuanaland Protectorate period (1885 to 1966), the administration of the land, in the so-called reserves was vested in the powers of chiefs, who were assisted by headmen. The old Tswana law was the basis of the land tenure system since the Protectorate Administration had not made any attempts to reform it (Schapera, 1970). The land for grazing of livestock and gathering was a common property resource, whereas ploughing and residential land was allocated to households on the basis of the right of use rather than as personal property. Common property institutional arrangements were in most cases stipulated by the chief who was also responsible for the coordination of their implementation (Schapera, 1970).

Beginning in 1968, the chiefs legally ceased to be involved in the process of land administration as this authority was transferred to the state (Mohamed-Katerere, 2001). The Tribal Land Act of 1968 introduced the Land Boards as trustees of tribal land and also gave them the responsibility for land administration. They began to operate in 1970 (CCI, 1997). Traditional laws were done away with, and did not form a foundation for the establishment of formal laws which were introduced by the nation state (Moupo, 1987). The Land Boards are, *inter alia*, responsible for the allocation of land, cancelling of land rights, imposition of restrictions on the use of land, authorisation of the transfer of tribal land, and hearing of land disputes and appeals (Mathuba, 1998, Abel & Blaikie, 1988; Mathuba, 2003). However, they do not have the power to grant rights for the use of fugitive wildlife resources (Cassidy, 1997). Initially, the chiefs or their representatives as well as members of the District Councils, were *ex-officio* members of the Land Board. They ceased to be members in 1989 as the Central Government wanted this institution to be independent, particularly from political influence (CCI, 1997).

Botswana's three main land tenure categories are customary, state, and freehold land. Customary land accounts for 72% of the total land. It is divided into several zones, which include communal areas, some wildlife management areas (WMAs), leasehold land, and other areas. Customary and common law govern tribal land tenure. Customary law is based on traditional and historical practices, and is not written (oral). It is thus applied to the traditional use of natural resources by the Land Boards. All members of the community have traditional rights over the use of natural resources in their area, and such rights play a critical role in their livelihoods. Common law is written, and it is administered by the executive and the judiciary arms of the Government. This law is applied to commercial use of resources (issuing of leases) (Cassidy, 2000). The land for customary use is free of charge to citizens, and it is for residential, ploughing and borehole use. The tenure for residential plots under customary tenure is 99 years. On the other hand, common law plots are accessible to citizens or non-citizens, and they are for residential and commercial activities. The agreement is formalised by a lease (CCI, 1997). The tenure period for common law plots is 50 years for residential plots of non-citizens as well as for commercial activities of citizens and non citizens (CCI, 1997). In order to sell property under the customary tenure, it is necessary to change it to common law tenure. The land tenure period for concessions to both citizens and non-citizens is 15 years.

Freehold land, 5% of the land in Botswana, is for exclusive use, and can be owned perpetually. State land accounts for only 23% of the total land, which is used as game reserves and national parks, WMAs, and forest reserves (Mathuba, 2003). Parcels of the land on tribal land have been granted to people on 50 year leases under the Tribal Grazing Land Policy (TGLP). The TGLP was introduced in Botswana in 1975 to solve the problem of overgrazing by introducing property rights (Arntzen & Fidzani, 1997). It also aimed at achieving “greater equality of incomes in rural areas and “growth and commercialisation of the livestock industry on a sustained basis” (MFDP, 1975:1). As a result of the increase in the demand for land in the country due to the rapid increase in human population, freehold land is sometimes converted into state land or customary land through the process of “willing seller, willing buyer”. Whenever this happens, the owners are fully compensated (Mathuba, 2003).

In Ngamiland, 79% of the land is tribal, and the remaining 21% is state land. There is no freehold land. Tribal land includes the following land-use types: communal areas, Tribal Grazing Land Policy ranches, game reserves, game ranches and WMAs (Figure 1). Communal areas and WMAs are separated by the buffalo fence which has been erected to prevent the spread of foot and mouth disease from wildlife to cattle (Cassidy, 2000; Magole & Magole, 2009). The establishment of the TGLP marked the beginning of land use planning in Ngamiland as well as in other parts of Botswana. It led to the zoning of land into communal, commercial, and reserved areas. A spatial planning approach was then adopted by the Ngamiland District Council to divide the district into eight planning zones.

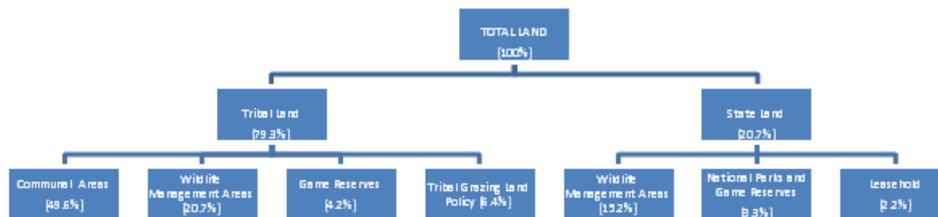


Figure 7.1. Land Tenure Categories and Use in Ngamiland

Source: Ngamiland District Council, 2009.

PROPERTY RIGHTS REGIMES IN THE OKAVANGO DELTA

In this section, the dynamics of natural resources property rights in the Okavango Delta are examined with particular reference to WMAs and Moremi Game Reserve. The types of property rights or management regimes that are associated with the use of natural resources in these land use categories are examined, as well as the extent to which households has access to these natural resources.

Wildlife Management Areas

The Wildlife Conservation Policy of 1986 established WMAs as a primary form of land-use. The policy permits other forms of land-use in WMAs provided such use is

compatible with wildlife utilisation (DWNP, 2006). WMAs were previously zoned as “reserved land” for the Tribal Grazing Land Policy, but they are now primarily used for wildlife utilisation and management (Gujadhur, 2001). WMAs and other areas in Botswana have been divided into smaller units called Controlled Hunting Areas (CHAs), and these are “administrative blocks used by the DWNP to administer” the land for sustainable wildlife utilisation (Government of Botswana, 1986:12). There are 163 CHAs in the country (Gujadhur, 2001; Figure 2), and those in WMAs were categorised as follows: community multipurpose (hunting/photographic), commercial multipurpose, community photographic, and commercial photographic (DWNP, 1999). Currently, the multi-purpose CHAs have been revoked without being backed by any statutes. Hunting is prohibited within a radius of 25 km from Moremi Game Reserve. This means that most communities in the affected areas will no longer have access to this livelihood as most of the concessions are situated within this area except NG 32 and Ng 47.

The Land Use and Development Plan for Kwando and Okavango WMAs sub-divided them into seven multiple use, eight photographic, and six community use CHAs. The plan divided the area into three zones, based on the nature of wildlife utilisation. The first is referred to as the core zone of minimum utilisation. It is surrounded by the second buffer zone for non-consumptive utilisation of wildlife resources. The buffer zone was in turn surrounded by the third zone of consumptive utilisation. The plan laid down the conditions and principles under which CHAs would be used in a sustainable manner (Van der Heiden, 1991).

Forming a Trust

Communities that form a “representative and accountable legal entity” and those who live in or adjacent to WMAs can apply for a “head lease” to hold user rights in their area or CHAs for either consumptive or non-consumptive wildlife utilisation (MEWT, 2007; DWNP, 1999). The lease is for the use of the fugitive wildlife resources but not for the use of the land and other natural resources (Rozemeijer & Van der Jagt, 2000). The communities can in turn sub-lease part of their area to Safari Companies (DWNP, 1992; Gujadhur, 2001) or can find a joint venture partner (JVP). To be able to apply for a lease, communities must be legally registered as a trust (DWNP, 1999; Gujadhur, 2001). Community Trusts and other organisations, which may come together to undertake a project, are usually known as Community Based Organisations (CBOs) (DWNP, 1999). In theory, trusts are supposed to represent the interests of the community in CBNRM projects, and also manage the projects on their behalf (Republic of Botswana, 1999). This involvement of the community in such arrangements aimed at achieving a common goal is known as collective action (Gregorio *et al.*, 2004). According to Matta and Alavalapati (2006), collective action in CBNRM is influenced by factors such as the nature of the resource, management group, and institutional arrangements as well as by external forces. A number of studies suggest that appropriate policies for collective action and property rights can significantly contribute to poverty reduction.

alienate in terms of selling their collective rights. However, the government also plays a role of being a custodian of the land and its natural resources by monitoring and ensuring that there is sustainable management of these natural resources (DWNP, 2007).

Community natural resource management leases in CHAs used to have a tenure period of 15 years, renewed after every five years (DWNP, 2007). Currently, the new integrated lease which combines the three leases has a tenure period of 15 years with an option of another 15 years. The tenure period for all the three leases of community natural resource, tourism and wildlife management is now the same, thus avoiding the disparities that used to occur in the previous leases (Republic of Botswana, 2009). The property rights given to communities by the Land Board, the relevant legal body, prior to the review of the old lease were considered insecure in that the 15-year period was too short to make meaningful investments in the CHAs (Gujadhur, 2001, Rozemeijer & Van der Jagt, 2000). The safari operators were also concerned about the insecurity of their resource user rights (Mvimi, 1999; Gujadhur, 2001). Firstly, they argued that the system of renewing the contracts after short-duration periods does not allow them to make long-term investments. However, the resource user rights are still insecure because they are only over the use of fugitive wildlife resources, and not over the use of the land and other natural resources. The Government has not conferred control rights over the use of the land to the communities (Cassidy, 2000; Murphree, 1995). As already stated, property rights, whether in the form of ownership or user rights, need to be secure, well-defined, and enforceable, in order for economic projects to achieve sustainable resource management (Panayotou, 1993). 2001). Murphree (1995) is of the view that the long-term sustainability of CBNRM programmes in southern Africa will be determined by the extent to which the property rights over the use of natural resources are strengthened. In his view, the tenure period for community leases is one of the main factors determining the strength of property rights.

Access to natural resources depends on whether the CHAs are under multi-purpose management or photographic management (Cassidy, 2000). In multi-purpose CHAs, communities used to have no control over the use of non-wildlife resources as they cannot restrict others from harvesting them (Rozemeijer & Van der Jagt 2000). The draft regulations for WMAs state that traditional hunting will be allowed if it is carried out with traditional weapons, whereas subsistence hunting shall only be allowed in designated hunting areas (DWNP, 2000). Commercial exploitation of non-wildlife resources (e.g. veldt products and fish) is prohibited, but the traditional rights over their use are recognised as communities are allowed to collect or use them for subsistence purposes (Van der Heiden, 1991). Such recognition is consistent with principles of the Convention on Biological Diversity which requires that resource user rights of communities, as well as their knowledge, should be protected (Mohammed-Katerere, 2001). Non-wildlife resources are, therefore, subjected to an open access-regime in the WMAs as access to their use is unrestricted (Rozemeijer & Van der Jagt 2000; Pearce & Barbier 2000).

In photographic CHAs, tour operators are given exclusive rights over the use of the area for tourism and other commercial uses in the area, but they are not allowed to make these areas private property regimes (Ecosurv, 1996). Subsistence hunting was not allowed in these areas. However, traditional resource rights such as those of the collection of veldt products and fishing for subsistence purposes are recognised (Van der Heiden, 1991; Ecosurv, 1996 and DWNP, 2000).

Table 7.2. Regulations for natural Resources use in WMAs

Type of CHA Type of use	Photographic	Multi-purpose
Traditional hunting	Not allowed	Not Allowed
Subsistence Hunting	Not allowed	Nor Allowed
Collection of veldt-products	Allowed	Allowed
Subsistence fishing	Allowed	Allowed
Commercial harvesting of veldt products	Not allowed	Not allowed
Rearing of domestic animals	Not allowed	Draft WMAs guidelines state that it will be allowed in designated areas

Sources: Ecosurv (20000), van der Heiden (1991), and Cassidy, 2000.

However, there is evidence that these rules are not strictly followed in practice as the local communities are sometimes not allowed to fish or collect veldt products in concession areas (Ramberg & Van der Waal, 1997; Mosepele and Mosepele, 2005). The construction of lodges and camps in photographic CHAs is allowed, provided that it does not have aesthetic, ecological, or physical adverse impacts. Concessionaires are only allowed to construct semi-permanent structures without brick or mortar. In addition, the rearing of domestic animals and the planting of exotic plants are prohibited (Ecosurv, 1996). The draft regulations for WMAs state that the Director responsible for the DWNP may designate certain areas for certain land-use types. These include areas for the collection of veldt products for subsistence or commercial purposes as well as for arable farming. In addition, there will be livestock and development free areas (DWNP, 2000).

In CHA, NG 32, under the control of Okavango Kopano Mokoro Community Trust (OKMCT), the communities have rules for regulating and sanctioning the use of thatching grass. Informal interviews revealed that the grass can only be harvested in June after the new seeds have ripened and their dispersal has taken place. Thatching grass is not only collected for traditional use, but is sold to tour operators and other members of the community. It has a high demand as roof material for traditional and modern houses as well as for tourist lodges. According to the information stipulated on the OKMCT board at the entrance of the buffalo fence in Daonara, there is a need to obtain a permit from the Board of Trustees in order to harvest thatching grass and other resources such as firewood and reeds in the areas of NG 32 situated in the buffalo fence. The permit is obtained free of charge, and is meant to regulate the amounts of natural resources collected. The collection of large amounts of these resources is not allowed. There are gate-keepers at the entrance of the buffalo fence who ensure that the stipulated rules are followed.

Similar restrictions also occur in Khwai, situated in NG 18 and 19, where there are rules for regulating and sanctioning the harvesting veldt products. According to Bolaane (2000), the rules were introduced by the Khwai community before the implementation of the CBNRM programme in order to generate incomes in the village. According to the established rules, the grass can only be harvested in June when the process of seed dispersal has taken place. Apart from the seasonal harvesting of thatching grass, other

economic activities open to the residents of Khwai, according to Bolaane (2004), include the harvesting of reeds for thatching as well as production of baskets (from mokola palm) and handicrafts for sale to passing tourists. Reed can only be collected for a year to two years before it left to recover. The rules for sanctioning and regulating these natural resources only applies to the Khwai community, and there is no effective mechanism for excluding outsiders (Bolaane, 2000). The Khwai community tries to enforce their right to exclude others as the area is zoned but they do not fully implement this because people from other parts of Botswana such as Chobe still collect grass in Khwai and the surrounding areas. However, the number of outsiders who collect veldt products in Khwai is limited because the CHAs of NG 18 and 19 are far from other villages such as Maun and Shorobe. The management regime under which the grass is held in Khwai is neither an open access nor a common property resource, but rather a mixture of the two regimes.

Moremi Game Reserve

Game reserves and national parks account for 6.4% of the tribal land in Ngamiland, including Moremi Game Reserve and Nxai Pan National Park. This study focuses Moremi Game Reserve since the latter is not located in the study area. According to Spinage (1991), game reserves can legally be created on any land by a Presidential Notice. They are legally meant to protect the animals and not the land on which they exist. However, the Minister in charge of national parks and game reserves has the power to make regulations for protecting the land (Spinage, 1991). In practice, however, game reserves have been created on tribal land in Botswana. According to Government policy, “game reserves are set aside for the total preservation of natural and scenic features of national and international significance for scientific, educational, cultural and recreation purposes” (KCS & KGS, 1991). On the other hand, national parks are legally meant to protect the land and its natural resources. They can be created by a Presidential Order on state land or “any land bequeathed or donated to him or to any other person, to be a national park” (Republic of Botswana 1992: A.124). Though in legal terms, a distinction is made between national parks and game reserves in terms of the development of wildlife and the land in these protected areas, in practice they are given the same treatment in Botswana as the land in game reserves is also protected like wildlife (Selitshena & McLeod, 1998).

Moremi Game Reserve, established in 1963, belongs to BaTawana tribe in Ngamiland but it is administered by the Central Government on their behalf. Initially, it was known as Moremi Wildlife Reserve and administered on behalf of the tribal authorities by Fauna Preservation Society (FPS) of Ngamiland, an affiliate of the then Fauna Preservation Society of London (KCS & KGS, 1991). The administration of the Moremi Wildlife Reserve by FPS was terminated by the Presidential Directive CAB 25/79 on the 8th October 1976. The establishment of Moremi Game Reserve in 1963 led to the displacement of the people who used to live in the reserve. Those displaced by the reserve settled in what is today known as the village of Khwai, and they are mainly the Bugakhwe or River Bushmen (Taylor, 1999 and Bolaane, 2000). According to Taylor (2001), those displaced by the creation of the Moremi Game Reserve ceased to have control and access to the veldt products and wildlife resources. In addition stricter hunting regulations were introduced, “legally alienating Basarwa further from a resource that they had used for generations” (Taylor, 2001, p6). According to Bolaane (2004), the people of Khwai still regard the old settlement of Khwai and other areas in Moremi Game Reserve

as their territory. They define what they call their territory of Khwai in a broader context to include the current and large parts of the conservation areas in Moremi Game Reserve, and the Controlled Hunting and Wildlife Management Areas of NG 18, 20, 21 and also the area towards the Panhandle of the Okavango Delta.

Table 7.3. Protected Areas Visitor Statistics in 2007

Category of visitors	Moremi Game Reserve	Makgadikgadi/Nxai Pan National Park	Total
Private Self-drive	12 424	5 124	17 552
Mobile Tour Operators Clients	9 896	2 334	12 230
Fixed Camps/Lodges Clients	7 776	0	7 776
Total	30 096	7 458	37 558

Source: DWNP (2008),

Moremi Game Reserve (4 871 sq km) accounts for 20% of the greater Okavango Delta (DWNP, 2007). Photographic tourism is the main form of land use in Moremi Game Reserve and it may be formal or informal in nature. In the case of the former, tourists may find accommodation in fixed lodges and designated camping sites or tourism activities may be organised by tour operators. In the case of the latter, tourists drive themselves to do game viewing and canoe safaris in the reserve. In 2006, there were 12 424, 9 896 and 7 776 clients for self drive tourists, mobile tour operators and fixed camps and lodges, respectively in Moremi Game Reserve (Table 5). They accounted for 41%, 33% and 26% of the total number of tourists who visited Moremi Game Reserve in the year 2007, respectively. The number of tourists who visited Moremi Game Reserve was more than those who visited Makgadikgadi and Nxai Pan National Park.

According to the National Parks and Game Reserves Regulations, no person is allowed to enter a national park or game reserve without a permit and a fee is charged for this permit. However, certain categories of people are exempted from paying this fee such as those living in communities nearby, those on transit, and those employed by the Government who may be living in a national park or game reserve or on official duty (DWNP, 2000). The guidelines also mention that community use zones will be created in certain areas in order to cater for the needs of communities living inside or adjacent to national parks or reserves (DWNP, 2000). The current Moremi Game Reserve Management Plan states that sustainable use of natural resources by the neighbouring communities will be allowed in the peripheral areas of the reserve. The implementation of this policy will be undertaken only in areas where there is conflict over the use of natural resources. Some of the factors which determine the implementation of this strategy include the following: 1) harvesting of the natural resources for livelihood purposes 2) evidence that the resources are not available in the areas where the harvesters come from, 3) evidence that the harvesting of the natural resources is a historical practice and 4) adoption of environmentally sustainable harvesting methods (DWNP, 2007).

The issue of access to Moremi Game Reserve by the nearby communities is a highly contested issue (Mbaiwa, et al, 2008) and the current management Plan (DWNP, 2007) is trying to address this issue. The plan is seen as an integral part of the greater Okavango Delta Management Plan currently being developed. It divides Moremi Game Reserve into five management zones of Medium Density Tourism Management Zone (wildlife based tourism), Low Density Tourism Zones (non-motorised tourism), Wilderness Zones

(minimum disturbance), Temporary Community Access Zones (use of local communities) and Special Protection Zones (areas requiring more environmental management) (DWNP, 2007).

CONCLUSION

This chapter has revealed that the predominant property regimes in conservation areas of the Okavango Delta are common property and state property. In WMAs, the main form of land-use is wildlife utilisation, but other forms of land-use are permitted, provided that they are compatible with wildlife use. Communities in WMAs perceive the land rights given to them by the Land Board are weak. For instance, they perceive the tenure period for the lease to be too short to create incentives for long term investments. Although, the guidelines for WMAs allow communities to collect veldt products and fish in concession areas, in practice communities are sometimes not allowed to collect these natural resources. In other words, the *de facto* rights over the collection of veldt products are not in accordance with the *de jure* rights.

In Moremi Game Reserve, the highly contested issue is the access rights of communities over the use of natural resources. The establishment of Moremi Game Reserve displaced a number of communities who lived in the reserve for generations and these communities still want to benefit from the natural resources found in the Reserve such as thatching grass, fish and reeds. The National Parks and Game Reserves regulations do not allow people to enter these areas without a permit. However, the Government now intends to establish community use zones in order to cater for the needs of the nearby communities who have traditional user rights over the use of these resources.

There is need to review the legal framework in order to ensure that it strengthens the property rights of the communities in conservation areas. Related to this issue is the full recognition of their traditional rights. It is critical to strengthen the property rights of the communities in conservation areas because tenure security is a major factor influencing decision-making for investment in rural areas. Lack of alternative livelihood options may influence the poor to degrade the natural resources, hence result in low productivity of these resources. Whenever there is a need to displace communities from their ancestral lands, there should be proper consultation about the idea, and if they refuse to move out, they should be left alone. If they agree to move out, they should be fully compensated for the loss of their resource user rights. The implementation of the idea of community use zones should be given the importance it deserves in order to enhance access of communities to natural resources in Moremi Game Reserve.

REFERENCES

- Agrawal, A. (2003). Sustainable governance of common pool resources: context, methods, and politics. *Annu. Rev. Anthropology*, 32, 243-262.
- Arntzen, J., & Fidzani, H. (1998). Incentives for sustainable natural resource management and economic diversification in Botswana. Gaborone: University of Botswana.
- Ashley, C., & Carney, D. (1999). Sustainable livelihoods: lessons from early experience. London, Department for International Development (DFID).

- Blaikie, P.M., & Brookfield, H. (1987). *Land Degradation and Society*, London: Methuen.
- Bolaane, M. (2000). the common property management regime. *Commons Southern Africa*, 2(2), 8-10.
- Bolaane, M .M. (2004). Wildlife conservation and local management: the establishment of Moremi Park, Okavango, Botswana in the 1950s-1960s”, PhD Thesis, Trinity: University of Oxford.
- Cassidy, L. (2000). CBNRM and legal rights to resources in Botswana, Occasional Paper no.4. IUCN/SNV. Gaborone: CBNRM Support Programme.
- CCI, (1997). Land Allocation Procedures. Booklet One of the Land Board Manual. Gaborone: Ministry of Local Government Lands and Housing.
- Di Gregorio, M., Hagerdorn, K., Kirk, M., Korf, B., McCarthy, N., Meinzen-Dick, R., & Swallow, B. (2004). Property Rights, collective Action and poverty: The role of institutions for policy reduction. A paper prepared for the Tenth Biennial Conference of International Association for the Study of Common Property, Oaxaca: (Mexico), 9-13 August, 2004.
- Department of wildlife and National Parks (DWNP). (1992). Wildlife Conservation and National Parks Act, 1992. Gaborone: Government Printer.
- DWNP. (1999a). CBNRM Practitioners Guide. Gaborone: DWNP.
- DWNP (1991b). Moremi Game Reserve Management Plan. Gaborone: DWNP..
- DWNP, (2000). Draft Regulations for Wildlife Management Areas: A Discussion Draft, Gaborone: DWNP.
- DNWP. (2007). Moremi Game Reserve: Park Management Plan. Department of Wildlife and National Parks, Gaborone: Ministry of Environment, Wildlife and Tourism.
- Government of Botswana (1986). Wildlife Conservation Policy. Government paper no. 1 of 1986. Gaborone: Government Printer.
- Gujadhur, T. (2001). Joint Venture Options for Communities and Safari Operators in Botswana, Occasional Paper no.6. Gaborone: IUCN/SNV CBNRM Support Programme.
- Gujadhur, T (2000). Organisation and their approaches in Community Based Natural Resources Management in Botswana, Namibia, Zambia and Zimbabwe, Occasional Paper NO1, Gaborone: IUCN/SNV, CBNRM Support Programme.
- Ecorsuv (1996). Photographic Areas and Management Plans: Part 1: Background and Management Principles. Maun and Kasane, Tawana and Chobe Land Boards,
- Hardin, G. (1968).. The Tragedy of the Commons. *Science*, 162(3855).
- Hasler, R. (2000). The hydro-politics of the Okavango Delta: property rights and the management implications of competing land and water use strategies. *Botswana Notes and Records*, (32),
- Jagannadha, R.M., & Janaki, R.R.M. (2006). Perceptions of collective action and its success in community based natural resource management: An empirical analysis. *Forest Policy and Economics*, 9(3), 274-284.
- Jones, B.T. B. (2004). CBNRM, poverty reduction and sustainable livelihoods: developing criteria for evaluating the contribution of CBNRM to poverty reduction and alleviation in Southern Africa. *Commons southern Africa series*, No 7. Harare, Centre for Applied social sciences and Cape Town, Programme for Land and Agrarian Studies.
- Johnson, S., (2009). State of CBNRM 2009: Botswana. Gaborone, Kalahari Conservation Society.

- Lipsey, R.G., & Crystal, K.A. (1995). *An Introduction to Positive Economics*. Oxford, Oxford University Press.
- Mansundire, H. (1995). Wetlands of Botswana: Ecology, Management and Conservation. Proceedings of the Conference on wetlands, 14-16 November, 1994. Kasane, Mowana Lodge.
- Mathuba, B.M. (1998). Institutional Mechanisms of Land Use and Controls in Botswana, Presented to U. B. Post Graduate Students, Gaborone.
- Mbaiwa, J. E., Ngwenya, B. N., & Kgathi, D. L. (2008). Contending with unequal and privileged access to natural resources and land in the Okavango Delta, Botswana. *Singapore Journal of Tropical Geography*, 29 (2), 155-172.
- Ministry of Environment, Wildlife and Tourism (MEWT) (2007). Community Based Natural resources Management. Gaborone, Government Printer.
- Mmopelwa, G. (2000). the ecology conservation, and utilisation of thatch grass in northern Botswana. Gaborone, National Institute of Development Research and Documentation, University of Botswana.
- Mohammed-Katerere, J. (2001). Review of the legal policy framework for transboundary natural resources management in southern Africa, Gaborone, IUCN.
- Mosepele, K., & Mosepele. B. (2005). An analysis of spatial and temporal variations in the Okavango delta fishery: Towards the development of a fisheries management plan. Botswana Notes and Records, 37,280-291.
- Moupo, M. (1987). The Law in Botswana : A Contribution to the National Conservation Strategy. Gaborone, Ministry of Local government and Lands.
- Murphree, M. (1995). Optimal Principles and Pragmatic Strategies. The Commons Without the Tragedy? Strategy for Community Based Natural Resources Management in Southern Africa: Proceedings of the Regional Natural Resources Management Programme Annual Conference, ed E. Roiho, Kasane, April 3-6 1995.
- Mvimi, E.S. (2000). Assessing and Comparing Success of Four Community Based Organisations Managing Natural Resources in Northern Botswana. MSc thesis, Centre for International and Environmental Studies, Agricultural University of Norway.
- Ngamiland District Council, (2009). Ngamiland District Development Plan 7: 2009-2016. Maun, Ministry of Local Government Lands and Housing.
- Ostrom E., & Hess, C. (2007). Private and Common Property Rights. Workshop in Political theory and policy analysis, Indiana University. Available at: <http://ssrn/abstract=1304699>.
- Panayatou, T. (1993). Green Markets: *The Economics of Sustainable Development*. San Francisco: ICS.
- Pearce, D., & Barbier, E.B. (2000). Blueprint for Sustainable Economy. London: Earthscan.
- Ramberg, L., & Van der Waal. (1970). Fisheries Management in the Okavango Delta, A Workshop Organised by the Fisheries Section, Ministry of Agriculture. 27 to 30 January, 1997, Maun, Botswana.
- Riho, E. Jones, B. Anstey, S., & Rolfes, M. T. (1999). Tenure transition: a stakeholder's guide to natural resource tenure in southern Africa- Community Based Natural Resources Management. Harare: Africa Resources Trust.
- Rozemeijer, N., & Van der Jagt, C. (2000). Community Based Natural Resources Management (C.B.N.R.M.) in Botswana. How Community Based is C.B.N.R.M. in Botswana? In Shackleton S. & Campbell, B. (eds) Empowering Communities to

- Manage Natural Resources. Case Studies from Southern Africa. Lilongwe, Malawi. C.S.I.R /WWF.
- Republic of Botswana (2009). Memorandum of agreement of lease. Gaborone: Ministry of Lands and Housing.
- Runge, C. F. (1986). Common property and collective action in economic development. *World Development* 5 (5), pp 623-635.
- Schapera I. (1970) Tribal Innovators: Tswana Chiefs and Social Change 1795-1940. London, Athlone Press.
- Silitshena, R. M. K., & McLeod, G. (1998). Botswana: A Physical, Social, and Economic Geography. Gaborone, Longman Botswana.
- Spinage, C. (1991). History and Evolution of the Fauna Conservation Laws of Botswana. Gaborone, Botswana Society.
- Taylor, M. (1999). "You Cannot Put a Tie on a Buffalo and Say that it is Development" Differing Priorities in Community Conservation, Botswana, Paper Presented at "African Environments, Past and Present" Conference, Oxford, 5-8 July 1999.
- Taylor, M. (2001) Whose agendas? Reassessing the Role of CBNRM in Botswana. Gaborone, Department of Sociology.
- Tietenburg, T. (1996). Environmental and Natural Resource Economics. New York, Harper Collins College Publishers.
- United National Development Programme (2009). Human Development Report 2009. New York, United Nations Development.
- Van der Heiden, L. J. (1991). Land-use and development plan: Kwando and Okavango Wildlife Management Areas. Gaborone, Ministry of Local Government and Lands
- Wisner, B. (1988). *Power and need in Africa basic human needs and development Policies*. London. Earthscan Publication Ltd.
- World Bank. (2009). World Development Report. Washington, DC: World Bank.