

NATIONAL AFFAIRS

Botswana

Damage Caused by Wildlife – Legal and Institutional Arrangements –

by Nixon Sifuna*

The present and future survival of wildlife¹ in many parts of the world and especially in African countries depends in a large measure on the favour of the people, particularly local communities, in their everyday contact with it. While wildlife is an important resource for economic and social development, some wild animals do cause damage to people and property such as livestock and infrastructure.² The resultant losses often arouse negative feelings against wildlife, such that the people are unlikely to support conservation. These negative feelings sometimes lead to retaliatory attacks on the animals, some of which are protected by international instruments.

It is important therefore that there are appropriate and efficient policy, legal and institutional frameworks that address wildlife damage. The absence of such frameworks, or their inefficiency, is likely to increase tension between wildlife authorities and local communities when people adopt measures that the authorities do not approve of. The trend is that initially, incidents of wildlife depredation result in heavy losses to people, who appear to be the victims, but later wild animals become the real victims and suffer greatly when people in turn retaliate by poisoning, attacking them or ensnaring them using traps or man-holes.³ Such retaliatory responses from local communities usually attract adverse reactions from state and governmental agencies such as arrests and prosecution of the locals. These direct harmful interactions between humans and wildlife are referred to as the human-wildlife conflict.⁴ The practical solution lies not in blaming the people or the animals but in establishing appropriate legal and institutional arrangements on wildlife damage, while at the same time adopting benign abatement measures.

Akama observes that developing countries are pre-occupied with alleviating socio-economic problems arising from underdevelopment and poverty “as manifested in increasing poverty levels among the rural populations, landlessness, famine, starvation and malnutrition, and lack of clean water for domestic use”.⁵ He identifies four fundamental issues that wildlife authorities in developing countries are confronted with in trying to win the support of the local people for wildlife conservation, namely: (a) How to address the increasing negative costs that wildlife imposes on the local communities in terms of

depredation, predation and competition for resources; (b) How to conserve wildlife in an environment where the lives of the local people are increasingly threatened by landlessness, poverty, famine, starvation and malnutrition; (c) How to conserve wildlife in the context of increasing inequality in the distribution of the costs and benefits of wildlife conservation among different classes and groups of people; (d) How to conserve wildlife in an environment where there has been a long history of resentments, suspicions and hostilities among the local people towards state wildlife policies and programmes.⁶

This paper evaluates the adequacy, suitability as well as effectiveness of the existing legal and institutional arrangements for wildlife damage in Botswana and is based on a six-month study conducted in Botswana between July and December 2006. Information was gathered through archival research, questionnaires, observation as well as interviews and focus group discussions held with government officials, experts and local communities.

Background to Wildlife Damage in Botswana

Botswana has one of the most abundant and diverse wildlife endowments in the world, with a rather robust wildlife sector that brings in billions in foreign currency through wildlife tourism. The people of this country are indeed privileged to inhabit a country with such a richly endowed and diverse wildlife estate, surpassing many parts of the world. The key species include the hare, otter, mongoose, aardvark, ratel, caracal, wild dog, wild pig, hyena, warthog, antelope, zebra, hippo, rhino, wildebeest, giraffe, buffalo, elephant and the lion. Botswana has the highest elephant population in the world, estimated to be over 100,000.⁷

At independence Botswana was one of the poorest economies in the world. Now it is one of the richest economies in Africa with its currency (the Pula (BP)) being one of the strongest. The main reasons for its strong currency and economy are wildlife tourism⁸ and diamond mining. Notably, 37 percent of the total land area is devoted to wildlife, 17 percent as wildlife protected areas and 20 percent as wildlife management areas (WMAs).⁹ Botswana's wildlife protected areas comprise several National Parks and Game Reserves as well as WMAs and Nature Reserves.

The Botswana Government in its 9th National Development Plan notes that wildlife, minerals and range-

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lands are the three main valuable natural resources.¹⁰ It further lists the benefits derived from wildlife as cultural, socio-economic and biological integrity; creation of employment opportunities; enhancing environmental stability; providing aesthetic, scientific, nutritional and educational value; and promoting tourism.¹¹ The government in fact reports that "Botswana's tourism industry is currently overwhelmingly dependent on wildlife".¹² These statements demonstrate the government's commitment to wildlife conservation. This commitment is further demonstrated by the government's having set aside large tracts of land as wildlife reserves as well as the existence of an impressive array of policies, legislation and institutions devoted to wildlife conservation.

Despite the importance of wildlife to Botswana, wild animals do impose negative costs on the people of the country in terms of the damage they cause to people and their property. Research for this study established that most damage occurs in the areas adjacent to protected areas.¹³ The most common incidents of damage include:¹⁴ Killing and wounding people;¹⁵ killing and wounding livestock and other domestic animals as well as fowl; destruction and eating of crops; destruction of property such as houses, food stores and granaries; and destruction of infrastructure. While wildlife damage critically undermines the economic productivity, livelihoods¹⁶ and peaceful existence of humans, the fear of attacks also disrupts normal life when people stay indoors and in some areas children are kept away from school for fear of being attacked.¹⁷ The resultant losses often arouse negative feelings against wildlife, such that the people are unlikely to support conservation. These negative feelings sometimes lead to retaliatory attacks on the animals, even those protected by international instruments. Despite the damage that some wild animals cause, wildlife remains a valuable resource to the people of Botswana in economic, nutritional, ecological, socio-cultural and educational terms. It is therefore proper that despite its negative costs, wildlife is a valuable resource that should be preserved for present and future generations.

The local communities in Botswana generally have rather positive attitudes towards wildlife as compared to most parts in Africa. Indeed, over 60 percent of the people interviewed, and almost all opinions expressed during focus group discussions, supported wildlife.¹⁸ The damage caused by wild animals seems to be mitigated by the benefits and incentives that local communities derive through community-based natural resources management (CBNRM). Under this model, local communities not only derive certain direct benefits from wildlife, but are allowed to participate, to a certain extent, in decision making as well as the general management of the sector. This system emphasises direct utilisation, benefit sharing, as well community-based management of resources through a partnership between the local communities and the government and the private sector. Under CBNRM, the local communities are allowed to manage wildlife either on a community basis or in joint ventures with the private sector. In Botswana, the benefits

that the local people obtain from wildlife include revenue sharing, employment opportunities, as well as concessions on traditional uses of wildlife, for instance subsistence hunting. These seem to have played out well as manifested by the positive attitudes of the people of Botswana towards wildlife.¹⁹ It is encouraging that while wildlife conservation in many parts of the world is more often thought of in terms of wildlife welfare and hardly in terms of human welfare, Botswana has endeavoured to provide incentives to local communities through the community-based wildlife conservation system. This is critical because it is the local communities who bear the brunt of wildlife damage. In the absence of appropriate policies as well as legal and institutional arrangements on wildlife damage, people are likely to take the law into their own hands and resort to unacceptable methods of addressing the problem, such as persecution of the animals.

Aware of the importance of addressing the problem, the Botswana government has put in place legal and institutional mechanisms for controlling and alleviating wildlife damage.

Policy Initiatives and Measures Employed in Botswana for Wildlife Damage Control and Alleviation

Policy Initiatives by the State and Governmental Authorities

Botswana has clear policies on wildlife conservation. These policies are contained in the various policy documents such as National Development Plans and government policy papers. They can also be discerned from pronouncements of key government officials. Wildlife damage alleviation is one of the programmes that the government of Botswana undertakes to address the human-wildlife conflict.²⁰ While Botswana's wildlife policies acknowledge the importance of wildlife in national and social development, its policy documents are not explicit on the problem of wildlife damage. For instance they do not espouse the need for mechanisms on damage, nor do they outline the strategies to be adopted in this regard. This is a grave omission because policy spells out a government's commitment on a particular issue as well as providing the general guidelines for action by both the public sector and the private sector. Although presently the policy in force in Botswana is the Wildlife Conservation Policy of 1986, this policy is currently being reviewed.²¹ There are also Strategic Management Plans for particular predator species as well as particular wildlife reserves, and a National Conservation Strategy (NCS) Action Plan. The main aim of the above policy documents is the sustainable management of wildlife resources and they are in line with the CBNRM model of wildlife management.

Measures Employed for Wildlife Damage Control and Alleviation

There are various measures commonly employed by the local communities and wildlife authorities in Botswana to control or respond to wildlife damage.²² They generally fall into one of three damage intervention strategies, namely, prevention, mitigation and reparation. The most

common methods employed by the local communities and the wildlife authorities for preventing and mitigating damage include using deterrents and erecting game-proof barriers.²³ Deterrents are widely and increasingly being used for the prevention and abatement of wildlife damage.²⁴ Some of the commonly used deterrents are: fires; light, thunder flashes and flares; dummies and decoys; noise; repellants; and buffers. Erection of physical barriers is the other widely applied method of wildlife damage control. Physical barriers are invariably considered to be one of the most enduring solutions to human-wildlife conflict hence are the most common form of wildlife damage control because they separate wildlife from farms, settlements and people.²⁵ The usual forms of such barriers are fences (both electrified and non-electrified). Apart from the use of deterrents and erection of physical barriers, the Department of Wildlife and National Parks (DWNP) also has three major programmes on wildlife damage. These are: the creation of buffer zones around wildlife protected areas; wildlife translocation; and the problem animal control (PAC) programmes.

Specific Measures Employed by State and Governmental Authorities

(a) Fencing

Fencing is generally the most popularly adopted method of preventing wildlife damage. There are two types of fences, electrified and non-electrified. Sitati and Walpole report that non-electrified fences are generally ineffective against large mammals such as elephants (*Loxodonta africana*) which challenge them quite often, most of the time successfully.²⁶ The elephant, for instance, uses its trunk to pull down such fences.²⁷ Electrified fences are therefore the most effective fences in preventing wildlife damage as they are effective against both small and large animals.²⁸ Nevertheless, even where fences are not electrified, they must be “of solid construction, of sufficient height and they should be visible”.²⁹ Kangwana, however, reported that elephants have passed through a six-strand 7,000 volt fence.³⁰ Most wildlife protected areas in Botswana have been fenced, some of them with electrified fences. The fencing is done by the central government in the case of national parks and local councils in the case of game reserves. As already noted above, fencing of whatever kind is not a perfect prescription for wildlife damage control, as studies have shown that even electrified fences are not game-proof.

(b) Shooting problem animals

This method is also known as “Problem Animal Control” (PAC). It is widely used by the wildlife authorities in Botswana to control wildlife damage.³¹ It entails the shooting of the particular problem animal having been positively identified to be notorious for causing harm. This method is also called “control shooting”. It is usually carried out by state and governmental authorities, usually personnel from the wildlife authorities. Nelson *et al.* note that “on a PAC programme, attempts are made to identify a ‘culprit’ [animal] that is a known and persistent crop-raider, or one that has caused a human fatality”.³² The

effectiveness of this method will depend on the accuracy in identifying the particular problem animals because there are circumstances that may make accurate identification difficult. Circumstances such as incidents occurring at night or raids by large herds, unfavourable weather conditions affecting visibility, can make identification difficult. In most of the wildlife systems however, shooting of animals is used very sparingly, and as a last resort, in cases of human death or persistent crop-raiding.³³ Esikuri has noted that while shooting of problem animals may lower the incidents of wildlife damage, it “is likely to attract opposition from conservationists opposed to killing of wildlife under any circumstances”.³⁴

(c) Wildlife translocation³⁵

Nelson *et al.* note that even though wildlife translocation is not usually intended for wildlife damage control, it is an auxiliary panacea to the problem of wildlife damage “through the removal of ‘problem animals’ from areas of conflict to areas where there will be reduced contact with people and their crops”.³⁶ In so doing it may reduce incidents of damage. Translocation is practised in Botswana as a management strategy, usually for re-stocking and de-stocking.³⁷ There have been several translocations of wild animals from one habitat to another.³⁸ From experience, translocations sometimes exacerbate human-wildlife conflict; when animals are moved from one conflict area to yet another conflict area, worsening the situation in the latter.³⁹ There is no guarantee that the remaining animals will not cause further damage.⁴⁰ Moreover, translocated animals in some cases have returned to their original habitat, causing damage along the way. Esikuri has reported that some relocated animals have walked back after several weeks.⁴¹ Where relocation separates mothers from calves, the mothers are likely to return to look for their young ones, causing damage along the way. Apart from this danger, the mere separation of a lactating mother may lead to death of the calves. In translocations therefore, care should be taken to ensure that mothers are moved along with their calves.

Translocations may not be effective in controlling wildlife damage. They may, however, have a role in the overall management of wildlife for restocking purposes where the animals are taken where there are resources or for tourism purposes where they are moved to tourist destinations. The communities affected by these translocations expressed reservations over translocation as a method of controlling wildlife damage.⁴² Their concerns relate to the lack of clear guidelines and procedures on translocations particularly on community involvement.⁴³ The respondents complained that the government on virtually all occasions does not involve the local communities whenever it is relocating wildlife.⁴⁴

(d) Monetary compensation schemes

In the context of this study, the term “compensation” refers to the payment made by wildlife authorities to victims of wildlife damage, or their kin in the case of death.⁴⁵ Botswana has schemes for money payments to those who suffer damage resulting from wild animals. For

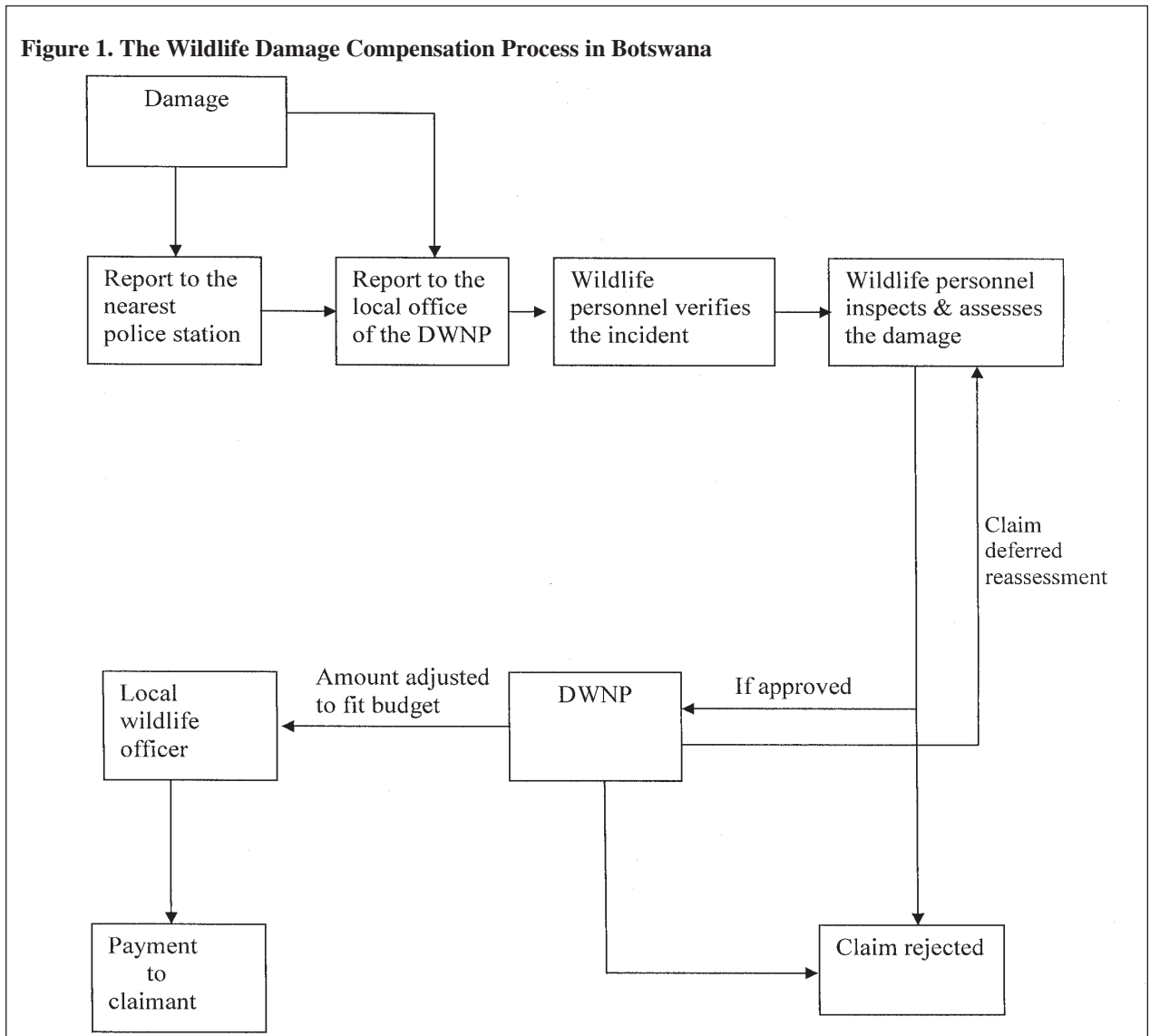
instance, between 1994 and 1997 the Botswana government paid farmers a total of BP 99,758 and BP 20,120 as compensation for wildlife damage to crops and livestock, respectively.⁴⁶ Some conservationists, however, argued that there is non-monetary compensation in the form of material donations or food rations or where victims are considered compensated by indirect benefits such as schools, hospitals and other such amenities that they already derive from wildlife conservation activities.⁴⁷ “Non-monetary compensation” would therefore be where victims are considered compensated by these indirect benefits. For the purposes of this study, “compensation” means monetary payment where damage has already occurred while “non-monetary compensation” (provision of social amenities such as infrastructure to the community generally) is considered to be part of wildlife benefits in the overall wildlife management.

Botswana has a large livestock sector and a developing agricultural sector, and since the major forms of wildlife damage are crop damage and livestock loss, it is only logical that such losses be compensated and adequately.

It is encouraging that the Botswana government already maintains a monetary compensation scheme for wildlife damage. Unfortunately, these compensation processes are flawed. Firstly, the amounts paid are neither fixed nor stipulated in the law, and are calculated by the department in consultation with the claimant and experts.⁴⁸ However, the claimants do not seem to mind the present rates of compensation because of the other benefits they are already deriving from wildlife.⁴⁹ Secondly, the time taken to process claims is not stipulated in the law. Therefore whereas at present the process takes between two to six months, one cannot rule out the possibility of claims taking longer in future. Thirdly, compensation is paid from the Consolidated Fund which covers the government’s entire expenditure, and allocations from it are usually made according to what the government considers to be its priority issues. Government priorities do change hence there is no guarantee that wildlife damage will remain a priority issue on the government’s agenda.

The wildlife damage compensation process in Botswana is represented in Figure 1 below.

Figure 1. The Wildlife Damage Compensation Process in Botswana



(e) Buffer zones

Another approach involves encircling wildlife reserves with plants that are either unattractive or less palatable to wild animals, for instance, tea, chilli peppers and sisal. It is usually undertaken as part of land-use planning and zoning. If properly undertaken, this strategy is a viable option for reducing wildlife damage since it will prevent animals from accessing private farms. Buffer zones are also useful for protecting wildlife dispersal areas and migratory corridors from encroachment by human activity.⁵⁰ Not all crops are eaten by wildlife. While there are some crops that wild animals love to eat, there are others that are inedible or which wild animals dislike. If such crops are grown to surround other crops they may provide a buffer and therefore protect such crops.

Specific Measures Employed by Local Communities

There are a number of techniques that the local people employ to prevent or minimise wildlife damage.⁵¹ Eight of them are worthy of mention here: fencing; lighting fires; making noise; use of dummies and decoys; use of torches, thunder flashes and flares; use of repellants; spiritual measures such as praying and cursing; and retaliation. Some of these are discussed below.

(a) Fencing

While fencing remains the most popularly adopted method of preventing damage by wildlife among the local communities, electrified fences are very rare among these locals, most of whom are poor.⁵² Electrified fences have only been used by rich ranchers or the government and not the rural folk who comprise the bulk of the local communities in wildlife areas.⁵³ They are usually used on state-owned protected areas and wildlife ranches owned by rich individuals and companies. For instance, De Beers and Debeswana, a mining company, sponsored a 28km electrified fence around the Khama Rhino Sanctuary in Serowe.⁵⁴ The cost of constructing electrified fences (which can be more than US\$ 10,000 per km) places them beyond the reach of the ordinary Mtswana, thereby leaving them with the options of ordinary wire fences or hedges.

(b) Lighting fires

Fire has been one of the most used traditional methods in most communities in Botswana for scaring away wild animals. Nelson *et al.* report that most wild animals avoid fire and that fire can therefore serve as a deterrent, though only as a short-term measure.⁵⁵ The most commonly used source of fire used in local communities is the burning of wood.⁵⁶ Fires are only effective at night.⁵⁷ However, even at night, fires are still not a very effective deterrent unless accompanied by some other measure such as making noise. In most cases farmers light fires which they leave in the field as they go home to sleep. Fires therefore serve merely as psychological deterrents, only having an effect when animals begin to associate them with the presence of humans.

(c) Making noise

Another widely used method in preventing and abating wildlife damage in Botswana is making noise.⁵⁸ This

is perhaps the oldest method of scaring anything; in order to be effective on wildlife, the noise has to be loud enough to frighten the animal. The most common methods of generating noise to scare wildlife are: beating drums, hitting plastic and metal containers, cowbells, shouting and screaming, cracking whips, whistling, blowing whistles and trumpets, as well as firing weapons over the heads of the animals.⁵⁹ Like fire, it serves as a psychological deterrent only, having an effect on the animals that associate noises with the presence of humans.

(d) Use of dummies and decoys

Decoys and dummies are widely used in many local communities in Botswana for scaring away wild animals and birds. They are particularly successful in scaring birds and small animals such as monkeys.⁶⁰ The most common items are human effigies⁶¹ as well as tying old clothes and rags on poles and trees.⁶² These items are popular with local communities because they involve almost no monetary expense or very little. However, they are not effective in scaring large mammals such as elephants, rhinos, buffaloes and lions.⁶³ Quite the opposite has been reported. They can even enrage such animals and therefore increase the incidence of attacks on humans.⁶⁴

(e) Use of torches, thunder flashes and flares

Torches are most commonly used by local people although thunder flashes from hand-held "fire-crackers" are also used especially by government agents and rich farmers.⁶⁵ Their use is limited, however, because usually they are only used at night especially in the tropics where there is plenty of light during the day. Nelson *et al.* reports that light, thunder flashes and flares have been applied with success outside the tropics.⁶⁶

(f) Spiritual measures

Interestingly, there are cases of people resorting to spiritual methods to address the problem of wildlife damage. The most common spiritual methods include collective prayer, magic and cursing.⁶⁷ These methods as well as their supposed success are principally based on superstition; hence in the absence of empirical evidence, it is difficult to attribute any tangible results to them. It may, however, be necessary to investigate their effect in a future study.

Legal Arrangements

The legal basis for establishing mechanisms for addressing wildlife damage in Botswana is founded on constitutional principles, court decisions and legislation, as well as Roman Dutch law as modified by English common law. While wildlife damage has been the subject of litigation in other countries, such as Kenya, it is yet to find its way into Botswana's courts. It will be interesting to see what the latter would say on responsibility for such damage and since incidents of wild animals damaging property do occur in Botswana, they will eventually be the subject of litigation. It is therefore important to examine the legal arrangements in the country in terms of its constitution as well as legislation. ➔

The Legal Status of Wildlife in Botswana

The legal status of wildlife in Botswana is based on legislation, court decisions and the Roman Dutch law as modified by English Common law. Under common law and the Roman Dutch law there are generally three doctrines with regard to the legal status of wildlife, namely, the public trust doctrine, the *res nullius* doctrine (*res nullius* is a term adopted from Roman law, meaning “belonging to nobody”), and the state ownership doctrine. Aspects of all three of these doctrines on wildlife ownership are present in the law and practices of Botswana.

Under the public trust doctrine, wild animals living in natural conditions are considered to be public property belonging to the people collectively, with the state being vested with the power to protect and manage the resources on their behalf and for their benefit.⁶⁸ A good example of a jurisdiction where the public trust doctrine has been applied is the United States. Whereas the law in the US is silent on wildlife ownership, the courts in that country have held that the state does not own wildlife but only protects it.⁶⁹ Rodger, a US authority, observes that for a resource to qualify as a subject of the public trust doctrine and therefore be protected from unfair dealings and dissipation, it has to be a public resource and it ought to be for public use.⁷⁰

According to the *res nullius* doctrine, wildlife in its *in-situ* condition is nobody's property.⁷¹ This in essence means that while wild animals in the natural habitat belong to nobody, any person who is the first to lawfully appropriate or alienate any such animal for instance by enclosing it on his land in a game-proof enclosure becomes the owner of it. An example of a jurisdiction where this doctrine has been applied is Morocco. In Morocco, wild animals are considered as things that cannot be subject to ownership even by the owner of the land on which they occur unless they have been legally taken, or otherwise obtained.⁷²

Under the state ownership doctrine, the state owns all the wildlife occurring within its territory as an extension of sovereignty in line with its permanent sovereignty over its natural resources.⁷³ Cirrelli observes that “there are many countries where wildlife is state property, ranging throughout the continents”.⁷⁴ For example, China, Uganda and Malawi⁷⁵ have legal provisions expressly vesting wildlife ownership either in the government⁷⁶ or in the executive which could either be a president or a monarch.⁷⁷ It is the view of this author that the state ownership doctrine is misplaced. A state is only a custodian of wildlife on behalf of the people and can never own it because wild animals are public property.

State ownership of wildlife converts what is essentially a public good into state property, radically changing public perceptions and attitudes towards it.⁷⁸ With time this exacerbates conflict between local populations and state agencies with regard to matters of wildlife use, access as well as its negative costs such as depredation and predation. Wildlife, wherever it occurs, whether on private or public lands, belongs to the people collectively as their natural heritage.⁷⁹ As such, it *stricto sensu* cannot be subject to state ownership, or even private ownership, despite the widespread attempts at domesticating or privatising it.⁸⁰ The real owners of wildlife are the people collectively, and no amount of legal provisioning can divest the people of this birthright. Therefore, the only thing the law can confer is the authority of control or stewardship over it, not ownership.

Botswana's national Constitution makes no mention of the term “wildlife” and neither does it have any direct clauses on wildlife or natural resources. A constitution is a basic charter for a country, representing the national goals as well as the primary obligations and mandate of state and governmental authorities. It should therefore recognise a country's major resources and sectors. In Botswana, as in the US, while the existing laws are silent on wildlife ownership, they vest the responsibility for wildlife protection and management of wildlife in the hands of the state.⁸¹ The state undertakes this stewardship by promulgating laws protecting wildlife



Rock paintings of Tsodilo Hills

Courtesy: Wikipedia

and its habitats, by creating protected areas for wildlife conservation, and by having laws regulating the off-take of certain species. Notably, however, in such circumstances the state is only a custodian of wildlife on behalf of its subjects; and being only a trustee, there is a public trust created between the people and itself over the resource.

The Kenyan case of *Abdikadir Sheikh Hassan & 4 Others v. Kenya Wildlife Service*⁸² seems to embrace this position. The plaintiff in this case, on his own behalf and on behalf of the community sought an order from the High Court of Kenya to restrain the defendant, a Kenya Government Agency operating under an Act of Parliament, from removing or dislocating a rare and endangered species named the *Hirola* from its natural habitat. Judge Mbiti observed, "according to the customary law of the people, those entitled to the use of the land are also entitled to the fruits thereof which include the fauna and flora, unless this has been changed by law. According to the Wildlife Conservation Act, the defendant is required to conserve wild animals in their natural state".⁸³ The court acknowledged the historical relationship between the local community and the animal and held that the agency would be acting outside its powers if it were to remove any animals or flora from their natural habitat.⁸⁴

From a property law point of view, ownership operates back to back with the power to control. This is, however, not the case unless such ownership is accompanied with possession. Possession alone without ownership is to be understood in terms of mere physical control. It is those with the power of controlling something that should bear liability for any undesirable consequences arising from it, for instance wildlife damage in the case of wild animals. Apparently, however, the High Court of Kenya seems to say that even in common law, the government does not have an obligation to control wild animals. This was the position in *Anyama Mogona Suondo v. The Accounting Officer, Ministry of Tourism & Wildlife*,⁸⁵ where Judge Shield held that there was no duty in common law on the government to confine and keep wild animals within national parks.

While in Botswana the care and management of wildlife is the preserve of the government, the Wildlife Conservation and National Parks Act of 1992 (WCNPA) however, recognises the traditional hunting rights of the people; such that landowners may hunt on their land without a licence, subject to restrictions as to the number of animals hunted and the payment of fees.⁸⁶ Despite the absence of express provision in Botswana's legislation or policy on who owns wildlife in the country, Section 83 of the WCNPA allows landowners to enjoy limited rights of ownership over wild animals enclosed within game-proof fences on their land. These rights are limited rather than absolute because they are subject to the public trust doctrine which is applicable in the country through English common law.

Constitutional Basis for Addressing Wildlife Damage

As already indicated above, Botswana's national Constitution makes no mention of the term "wildlife" and neither does it have any direct wildlife protection clauses. In Anglo-American jurisprudence, the constitution is the supreme law of a country, from which all other laws derive legitimacy. This is also the position in Botswana. The imperative for the state to establish a regulatory regime for addressing wildlife damage springs from its constitu-

tional mandate to provide for the welfare of the people. As Ojwang, a Kenyan scholar notes, "the constitution represents the primary obligations of the state and the public institutions, and constitutes the basic organizational norm of the public domain".⁸⁷ Indeed the constitution provides the overall political and legal framework for the national goals as well as the primary obligations and mandate of state and governmental authorities.

The absence of provisions on wildlife in the national constitution is a major drawback for conservation in Botswana. Constitutional provisioning could, for instance, establish a solid base for the legal status of wildlife in terms of its ownership and responsibility for its management; which would in turn provide the basis for responsibility for the damage caused by wild animals. Conventionally, whoever has the responsibility to manage wildlife is the one liable for the damage caused by it. Similarly wildlife ownership carries with it the primary responsibility to compensate damage caused by wild animals.⁸⁸ Ideally, whoever owns wildlife should be the one responsible for controlling it and ensuring it does not cause harm to society. Besides, including wildlife provisions in the national constitution would give wildlife conservation issues a higher rank in the normative structure where it would enjoy primacy over legislative and administrative rules as well as court decisions. This is because the constitution is the supreme law of the land, hence its provisions override all other laws.

Common Law and Roman Law Positions on Wildlife

Apart from legislation, the other major source of law in Botswana is the Roman Dutch law as modified by English Common law. The former was inherited from the cape colony, and the latter was introduced into the country by the British when it became a British protectorate.⁸⁹ Over the years, the Roman Dutch law applicable in Botswana has been influenced and modified by English Common law, hence the Botswana version of Roman Dutch law applies in a modified form that has adopted much of the latter.⁹⁰ Incidentally, the positions of both these laws on wildlife ownership and tort law (derelict law under Roman Dutch law) are similar since both these laws have their origins in Roman law. Under the latter, wild animals living under natural conditions are considered to be public property and the state holds them under the public trust doctrine.⁹¹

Under both regimes the state's obligation to take measures to mitigate wildlife damage stems from its obligation to manage wildlife in trust for the people. Failing to adopt measures is tortious and can be vindicated through the law of tort (or derelict under the Roman Dutch law), particularly the torts of negligence and nuisance. If there is any aspect of law on which English Common law and Roman law have similar principles, it is the law of tort especially on the three tort law formulations of negligence, nuisance and trespass. This is mainly due to the influence that Roman law had on English customary/common law. The section below examines the legislative arrangements put in place by the government of Botswana to address wildlife damage. ➤

Legislative Provisions

A Survey of Legislative Provisions

In Botswana, wildlife damage control is one of the major programmes that the government undertakes in addressing the human-wildlife conflict. The bulk of Botswana's legal mechanisms for the conservation and protection of wildlife, as well as for addressing the problem of damage by wildlife are in legislation. Most of Botswana's law on wildlife damage is contained in the Wildlife Conservation and National Parks Act (WCNPA) of 1992, with some additional related legislation.⁹² While this piece of legislation has provisions on wildlife damage, there are also other provisions which although they do not directly address wildlife damage, their enforcement can be instrumental in stemming the menace. Irrespective of the form of the provision, it will either prevent the occurrence of damage or provide redress for damage that has already occurred. There are four common legislative approaches to the problem of wildlife damage, namely: provisions to protect certain species of wildlife from harm; provisions to protect wildlife habitats from human encroachment; provisions addressing land-use control and planning; and provisions for dealing with injurious wildlife. The following section examines the extent or otherwise to which the Botswana government has adopted these approaches in its legal framework on wildlife damage. The particular legislative provisions applicable to human-wildlife conflicts and particularly wildlife damage are discussed below.

(a) Provisions to protect wildlife from harm by humans

Botswana has provisions in its legislation, which aim to protect wild animals from being harmed by humans. These provisions set measures for protecting wildlife generally or certain wildlife species from interference or harm by humans.⁹³ The provisions may be classified into three broad categories, namely: creating certain categories of wild animals; addressing the killing, wounding, hunting and capture of wild animals; and controlling the introduction of weapons into wildlife protected areas.

(i) Provisions creating certain categories of wild animals

Cirelli observes that "the legal mechanism for protecting specific species is often to provide for a classification of animals which are to receive varying degrees of protection and therefore for the creation of lists".⁹⁴ Botswana has provisions in legislation classifying wild animals into certain categories and prescribing rules for the protection of animals in respective categories. The WCNPA has four categories of wild animals, namely, "game animals", "protected game animals", "partially protected game animals" and "non-designated animals" and has various rules regarding animals in the respective categories. Under the Act, the protected and partially protected categories comprise game animals in respect of which no hunting or capture is allowed except with a permit.⁹⁵

Incidentally, most of the animals listed in the "game animals" category are also known to cause damage to people, livestock, crops, infrastructure and other physical

property, and are essentially dangerous animals; for instance the elephant, leopard, lion, rhinoceros and the crocodile. The "protected animals" category mainly comprises animals in need of special protection, by reason of being vulnerable, rare or endangered. Vulnerable species are those that are predisposed to danger by reason of factors such as young age, pregnancy, being nursing mothers, albino or melanistic. Kumar and Asija say that this category comprises species likely to move into the endangered category in the near future, if the causative factors continue to operate.⁹⁶ These factors include overexploitation and extensive destruction of habitats. Rare species are those with small populations usually localised within defined geographical areas or scattered over a rather extensive range.⁹⁷ Endangered species for their part are those which are in danger of extinction and whose survival is unlikely if the causative factors continue to operate.⁹⁸ This is usually a legal status declared by a government or international community for particular species. The conservation and protection of the above categories of species is necessary by reason of their being unique, endangered, or representative biomes; and is therefore useful for conservation purposes.

(ii) Provisions on the killing, wounding, hunting and capture of wild animals

Another way in which the law in Botswana protects wildlife from harm is through controls and prohibitions on the killing, wounding, hunting, capture and disturbance of wild animals. Prohibiting attacks by humans on certain species of wildlife is one way in which the law can address wildlife damage. Attacks by humans on the animals and entry into wildlife territory can result in attacks by animals on such persons. Wild animals are generally known to be savage and dangerous especially if provoked by activities such as hunting. These activities make the animals perceive humans as enemies against whom they should protect themselves. The part below examines the various types of provisions under this category.

- Provisions on killing and wounding of wild animals

A person may not kill or wound a wild animal except in accordance with wildlife legislation *i.e.*, the WCNPA. Under the Act, it is an offence for any person to kill a wild animal except in defence of human life, crops, livestock and property or unless he/she is a holder of a valid hunting permit.⁹⁹ Where an animal is killed by a hunter, an entry must be made on the hunting card and in any other case a report has to be made to the relevant state and governmental authority. Where the killed animal is an elephant the killer is required to produce its lower jaw, its tail and its tusks to the wildlife office;¹⁰⁰ where the animal killed is a rhinoceros he must produce its horn; and for a lion or leopard its skull.¹⁰¹ Wilful wounding of wild animals is also prohibited. Section 54 of the Act also requires any person who, in any circumstances, wounds a wild animal to take reasonable steps to kill such an animal at the earliest opportunity.¹⁰² Where such person fails to kill the wounded animal he or she is required to report the incident to the nearest convenient police station or wildlife officer at the earliest opportunity after the failure of his efforts.

- Provisions on hunting and capture of wild animals

Botswana has in its laws provisions prohibiting hunting and capture of wild animals except with a permit from a competent authority. Under Section 17 of WCNPA, the hunting or capture of a protected game animal is an offence punishable by a fine of BP 10, 000 together with imprisonment for seven years.¹⁰³ Where the animal is a rhinoceros, the sentence is BP 100, 000 together with 15 years imprisonment.¹⁰⁴

(b) Provisions to protect wildlife habitats from human encroachment

Botswana has legal provisions for the protection of wildlife territory. This they do by creating wildlife protected areas and prescribing rules regarding them. As already noted above, the wildlife protected area estate comprises approximately seventeen (17) percent of the total land area in Botswana.¹⁰⁵ This is the land area covered by national parks; and game or national reserves as the case may be. Protected areas are given legal protection by legislation and their boundaries cannot be altered without the permission of the relevant state or governmental authority.¹⁰⁶ With regard to wildlife, a protected area is a geographically delimited area set aside for wildlife conservation and within the boundaries of which human access and activity are restricted by law.

Indeed the major approach to wildlife management in the country is the protected area system. The law adopts this system by designating some wildlife habitats as protected areas (PAs) and imposing regulations that restrict human access and activities in such areas. The activities prohibited in these protected areas include settlement, cultivation, hunting, grazing, drilling of boreholes, mining, prospecting for honey, fishing and traffic.¹⁰⁷ The conduct prohibited in such areas includes the following: carrying weapons, explosives, setting of traps or poison; being in possession of game animals or their parts; introduction of

domestic animals; destruction of vegetation; destruction of infrastructure such as water installations and fences; erecting buildings or infrastructure; passing through such areas; and causing fires in such areas.¹⁰⁸

Human encroachment on wildlife habitats such as parks, biosphere reserves or other wildlife areas and the carrying on of human activities in such areas expose humans, their property and enterprises to destruction by wild animals. Through separation of humans from wildlife as well as restrictions on human access and activities in wildlife areas, the law is likely to reduce incidents of wildlife damage because most damage occurs where people have encroached on wildlife territory.¹⁰⁹ Legal and regulatory measures that protect wildlife habitats from encroachment by human activities, in consequence also protect humans and their property from ravage by animals. They would otherwise be predisposed to attacks by wild animals as a result of living in close proximity to wildlife habitats. Growing crops or keeping livestock at wildlife's doorstep, for instance, is like inviting the animals to a feast, because they can hardly resist the urge to prey on such crops or livestock. Klemm says that when it comes to the protection of the habitats, emphasis should be placed on the prevention of conflicts rather than procedures for their resolution once they have occurred.¹¹⁰ Botswana's Wildlife Act also establishes three types of wildlife protected areas, namely, national parks; game reserves; and wildlife sanctuaries.

It also establishes a special category of wildlife habitat called Wildlife Management Areas (WMAs). The country also has forest reserves that were created under their respective forest legislation, the Forest Act.¹¹¹ Apart from Forest Reserves which are managed by the forest department, the management of wildlife reserves in the country is vested in the Department of Wildlife and National Parks (DWNP). Table 1 shows the protected areas in the country, by category and by size. ➔

Table 1: Protected Areas in Botswana

National Parks (NP)		Game Reserves (GR)		Wildlife Sanctuaries	
Name	Size (km ²)	Name	Size (km ²)	Name	Size (km ²)
Chobe NP	10,566	Central Kalahari GR	52,800	Khama Rhino Sanctuary	4.5
Kgalagadi NP	38,000	Gaborone GR	5	Maun Game Sanctuary	5.0
Makgadikgadi Pans/Nxai Pan NP	7,478	Khutse GR	2,500		
		Manyelanong GR	3		
		Mashatu GR	450		
		Moremi GR	4,800		

Source: Government of Botswana. (2006). *Bajanala: A Tourist Guide to Botswana Vol. 5*, at 4–9. Also available at <http://www.botswanatourism.org>. Last accessed on 22 December 2007.

(i) National Parks

A national park is an area set aside on state land exclusively for wildlife habitat and in which the killing of animals as well as human activities such as agriculture, pastoralism, forestry and any consumptive forms of wildlife utilisation are completely excluded.¹¹² The only permitted human activity in a park is tourism. Notably, national park status usually abolishes traditional user rights such as hunting. National parks are established exclusively for the purposes of propagation, protection and preservation of wildlife, and they are usually established on state lands which are managed exclusively to preserve species in a reasonably natural state. Human presence is generally excluded and restricted to paying visitors only.¹¹³ When the interests of the local communities conflict with those of the park, then the park should take precedence.¹¹⁴ In Botswana, the Wildlife Conservation and National Parks Act vests the power of establishing national parks in the President; with the minister for wildlife only having the power to manage and control these parks after they have been declared.¹¹⁵ The law prohibits human entry and the killing, capture and hunting of wildlife, as well as other human activities in national parks.¹¹⁶ Botswana has three national parks, namely, Chobe, Kgalagadi and Makgadikgadi Pans-Nxai Pan national parks.

(ii) Game Reserves

Game reserves are areas set aside for wildlife conservation but in which there is limited human activity such as grazing of livestock. Such activities though permitted are strictly regulated. These areas like national parks are also meant for the protection of wildlife; however, they differ from parks in two major respects. Firstly, unlike in national parks where human entry or activities are prohibited, in national and game reserves, human entry and limited rights of settlement as well as authorised activities such as traditional hunting rights, fetching firewood, honey harvesting and even livestock grazing are permitted.¹¹⁷ Secondly, while game reserves may be established on non-state land such as communal land and land owned by local authorities, national parks can only be established on state land having been owned by the government or having been acquired from private ownership through the powers of eminent domain.

The power to declare a game reserve or alter its boundaries lies with the President, who carries out this authority by publishing an order to that effect in the government's official gazette.¹¹⁸ The country has several game reserves. They include: Central Kalahari, Gaborone, Khutse, Manyelanong, Mashatu and Moremi. Botswana's law allows individuals, with the consent of the government, to establish private game reserves for the protection and preservation of wildlife and in which hunting is restricted.¹¹⁹

(iii) Game Sanctuaries

Game sanctuaries or wildlife sanctuaries are areas set aside to give special protection to certain wild animals or animal communities in need of protection for being endangered, vulnerable or rare species. Botswana's law

provides for the establishment of local wildlife sanctuaries in which a specified animal or animals shall not be hunted or captured.¹²⁰ By dint of Section 12 of the WCNPA, sanctuaries are often created for a specific animal or animals hence the particular animal or animals need to be specified in the legal notice declaring the particular sanctuary. A list of the sanctuaries will in most cases confirm the animal(s) concerned. Botswana's game sanctuaries include the Khama Rhino Sanctuary and the Maun Game Sanctuary.¹²¹

(iv) Wildlife Management Areas (WMAs)

Protected areas (PAs) may be surrounded by conservation zones called Wildlife Management Areas (WMAs) which serve as buffer zones between PAs and human settlements as well as migratory corridors and dispersal areas for animals. Section 15 of Botswana's Wildlife Act gives the President powers to declare an area a wildlife management area and empowers the minister for wildlife to make rules to govern the areas. Currently, the WMAs include Kwando Wildlife Management Area, Maltho-a-Phuduhudu Wildlife Management Area, Nata Wildlife Management Area, Ngamiland State Lands Wildlife Management Area, Nunga Wildlife Management Area, Okavango Wildlife Management Area, Okwa Wildlife Management Area, Quago Wildlife Management Area and Southern District Wildlife Management Area. Besides acting as buffer zones to help ease human-wildlife conflict, these areas allow the local communities to enjoy traditional hunting rights as well as obtain food, firewood and traditional medicine in wildlife habitats. These activities are, however, regulated since certain conducts are prohibited in these areas, for instance, human settlements.¹²²

Currently, 22 percent of Botswana's land area is designated as wildlife management areas.¹²³ Notably, due to the country's low population density there is no great human demand for land as to pose a very serious threat to the wildlife habitat. However, while human encroachment on wildlife habitats is not a problem in Botswana at the moment, it is proper to put in place measures to check the likelihood of such encroachment as the populations of both humans and wild animals grow. The establishment of these WMAs prevents human encroachment into the wildlife protected areas since they act as buffer zones for the protected areas.

(v) Forest Reserves

This is a special category of wildlife protected area created under the Forest Act.¹²⁴ Under Section 4 of Botswana's Forest Act of 1976, the President may in consultation with the competent authority declare any area a Forest Reserve.¹²⁵ Human activities such as residing, hunting, harvesting of forest produce, grazing livestock and starting a fire are restricted; and permission for them shall only be given with the object of conserving the natural flora and amenities of the reserve or for cultural, religious, educational and scientific reasons.¹²⁶ Consumptive use of wildlife in these areas is also strictly restricted. Botswana's forest reserves include Kasane Forest Reserve, Chobe Forest Reserve, Sibuyu Forest Reserve, Maikaelo Forest Reserve and Kazuma Forest Reserve.¹²⁷

(c) Provisions for land-use control and planning

In Botswana, as anywhere else, wildlife is a form of land use that competes with other forms of land use such as agriculture, mining, industrial activity and pastoralism. Botswana has planning legislation which allows wildlife areas to become an integral part of land-use planning. Presently, land use does not pose a real problem to wildlife conservation or the human-wildlife interface in Botswana. The major reason for this is that Botswana has a low population density resulting in extensive wildlife ranges unlike many other countries, which are characterised by high population pressure and a fast-shrinking wildlife range. There are two ways in which land-use control and planning can address the problems associated with wildlife damage. Through land planning and zoning; through the use of Environmental Impact Assessments (EIA) and environmental audits for projects; and through certain anthropogenic activities especially in areas adjoining wildlife habitats.

(i) Land-use planning and zoning regulations

Indeed land-use regulation and zoning laws can be one of the best ways for controlling wildlife damage in Botswana, as they direct the manner in which important areas are used for conservation. Before the coming into existence of public control over the use and development of land in the country, landowners were free to use their land as they wished, subject only to any limitations in the grant under which they held it and to obligations placed upon



Wild Dog in Kalahari National Park

Courtesy: Wikipedia

them in common law.¹²⁸ Provided an owner acted within the confines of his estate and interest, and committed no nuisance or trespass against his neighbour's property, he was free to use his land for the purpose for which it was economically best suited.¹²⁹ However, with regulation, the situation has changed and any developmental activities have to be in accordance with the land-use planning laws, which provide for the granting of permits and prescribe land zoning regulations.

The bulk of Botswana's land-use regulations and zoning laws are found in the Town and Country Planning Act of 1980.¹³⁰ This Act provides for the preparation and implementation of physical development plans for urban areas, rural areas and even regions in order to regulate development and other land-use activities. Such regulation achieves this goal by requiring that certain development and land-use activities in wildlife areas or the surrounding areas are subject to the approval of the relevant wildlife and local government authorities.¹³¹ Regulation also ensures that the available land is applied to the various uses, for instance, by the creation of zones for the respective land uses. With regard to wildlife, there are three classifications of zones, namely (a) protected area; (b) wildlife management area; and (c) outside protected areas. Incidentally, these zoning patterns have not been incorporated into Botswana's land-use planning laws. This has led to a disconnect between wildlife conservation and land-use planning, such that the latter does not serve the interests of conservation.

(ii) Environmental impact assessments and audit regulations

EIA provisions if properly applied are an important way of protecting wildlife from harmful human activities and humans from harmful activities of wild animals such as wildlife damage. Where damage is unavoidable, as in the case of some notorious species, appropriate mitigation criteria and procedures should be developed to reduce or compensate the resultant harm. Botswana has recently enacted an EIA law, the Environmental Impact Assessment Act of 2005.¹³² Subsequently, EIA is now a legal requirement in Botswana for certain prescribed activities or activities with certain effects, including effects on natural ecosystems and wildlife habitats. There is now a legal obligation on a developer or industrialist in the country to conduct an EIA or audit as the case may be and to take mitigation measures if the activity has significant effects on natural ecosystems and wildlife habitats.¹³³

(d) Provisions on injurious wildlife

While wildlife is a valuable resource to the people of Botswana, some wild animals are injurious and a source of nuisance to people in terms of injury and death to people and domestic stock as well as damage to crops and other property. This has prompted the government to enact legal provisions regarding such wild animals as are harmful or dangerous and to set up procedures as well as institutional structures for dealing with them.¹³⁴

Legal response to wildlife damage should not just be looked at in terms of providing compensation where damage has already occurred. A good law on wildlife damage should be proactive (and not merely reactive) by putting in place mechanisms for avoidance and abatement of damage. Besides, in a country where depredation occurs, an ideal wildlife law will be expected to contain provisions regarding harmful wildlife species and activities. It is encouraging that Botswana has legal provisions regarding injurious wildlife. These provisions fall into three categories, namely, (i) provisions seeking to control

such animals; (ii) provisions for destruction of wildlife in defence of human life and property as well as provisions for self-defence;¹³⁵ and (iii) provisions for payment of compensation for damage caused by wildlife.¹³⁶

(i) Provisions to control injurious wildlife

These provisions give power to wildlife authorities to take measures to control harmful wildlife. They mainly comprise provisions with clauses regarding abatement and control measures such as responsibility to confine wild animals and the shooting of problem animals. The WCNPA¹³⁷ expressly permits wildlife authorities to destroy problem animals. Under Section 80(1) of the Act, a wildlife officer may kill a wild animal which threatens human life, causes or is likely to cause damage to any livestock, crops, water installation or fence.¹³⁸

The Act designates some animals as “protected game animals” and prohibits the hunting and capture of these categories of animals except with a permit from the wildlife authority.¹³⁹ Indeed most of the animals listed in these two categories are also those known to cause damage to people, livestock, crops, infrastructure and other physical property, and are essentially dangerous animals; for instance the elephant, leopard, lion, rhinoceros and the crocodile.

Apart from these two categories, the Act introduces a third category of wild animals, namely, “dangerous animals”.¹⁴⁰ The Ninth Schedule to the Act lists “dangerous animals” as leopard, lion, elephant, rhinoceros, hippopotamus, buffalo and crocodile.¹⁴¹ Although the Act does not define what a “dangerous animal” is, logically this is an animal that can kill or maim a human being or livestock.¹⁴² In determining the actual meaning of this expression, common law criteria can be applied, which adopt the test of danger. With regard to damage, this is a very critical category of wildlife and one would have expected the legislators to provide a clear definition of the term and even formulate a list of attributes of an animal that may be classified as dangerous. However, most wild animals in the natural state (except those that are domesticated) are essentially dangerous and that is why they are referred to as wild or *ferae naturae* (fierce by nature).

Although Botswana’s Department of Wildlife and National Parks uses translocation to control wildlife damage, this activity is not embodied in the law. Clear guidelines and procedures on translocations are lacking; hence, they are carried out at the whim of the administrative authorities,¹⁴³ usually without involving the local communities in the affected areas.

(ii) Provisions for destruction of wild animals in defence of human life and property

Another way in which the law addresses the problem of wildlife damage is by expressly recognising a person’s right to attack the animals in defence of oneself, one’s property or any other person. Botswana has provisions in the WCNPA that permit people to attack and even kill wild animals in defence of human life, crops, livestock and property.¹⁴⁴ This is called self-defence. Self-defence is defined by Black’s Law Dictionary as “the use of force

to protect oneself, one’s family or one’s property from a real or threatened attack”.¹⁴⁵ Allen refers to it as private defence and defines it as “the use of force to protect oneself, one’s property or others from attack”.¹⁴⁶ Indeed self-defence is a justification recognised by common law and legislation in many jurisdictions, as a fundamental right of every creature. Legislation can recognise it while not having created it. However, in order for the use of force to be recognised as self-defence, the user of such force ought not to have provoked or engineered the attack. For an act of force to qualify as self-defence it ought usually to have been pre-emptive and not retaliatory. In other words it should be immediately before an attack and when such an attack is imminent, and not after the attack is complete. If the attack was avoidable, for instance, where a person had a chance to run away or where one has himself/herself engineered or provoked the attack, self-defence does not arise.

This right of people to attack wild animals in defence of human life and property is provided for in Sections 46 and 47 of the WCNPA. Section 46 deals with the killing of wild animals for the protection of crops, livestock and property. It states that “Notwithstanding anything to the contrary in this Act, the owner or occupier of land, any agent of such owner or occupier may, subject to the provisions of this Act, kill any animal which caused, is causing or threatens to cause damage to any livestock, crops, water installation or fence of such land”.¹⁴⁷ Section 47 deals with the killing of wild animals for the protection of human life. It states that “it shall not be unlawful for any person to kill or wound any animal in defence of himself or any other person if immediately and absolutely necessary”.¹⁴⁸ The burden of proving that an animal has been killed or wounded in self-defence lies with the person who did the killing or wounding.¹⁴⁹ In some countries, for instance Kenya, pre-emptive killing is only permitted in the case of human harm, hence with regard to damage to crops, livestock or other property, a wild animal may only be killed where it has actually caused damage and continues to do so.

While Botswana’s laws provide for a right to self-defence, they strictly circumscribe this right by stipulating the acts permitted to be used for self-defence. Whereas Botswana’s laws expressly permit people to kill wild animals in defence of both life and property, research for this study established that, in practice, killing is allowed more widely in defence of people than property; and is in any event required to meet strict conditions.¹⁵⁰

(iii) Provisions on compensation for wildlife damage

The WCNPA provides for payment of compensation to victims of wildlife damage, or their next of kin in the case of death. Compensation is provided for in Section 46(4) which provides: “Compensation may be paid, as may be provided in regulations made under the Act, to any person who satisfactorily establishes that he has suffered damage from an action of a wild animal”.¹⁵¹ Consequently, the Botswana government maintains compensation procedures under the Act to pay those who suffer damage resulting from wild animals. Compensation is available for any kind

of damage, be it human death, injury, livestock loss, crop damage or other material damage.

Apart from the kind of damage for which compensation should be paid, there is also the issue of the rates of compensation. Although Botswana's law provides for compensation, it currently does not stipulate the amounts. Section 46(5) provides that "the Minister may, by notice in the [Official Government] Gazette, determine rates of compensation to be paid in respect of claims made under the provisions of this Section, where he considers such claims and such rates to be justified".¹⁵²

A Critical Assessment of the Effectiveness of Botswana's Wildlife Damage Laws

Having laws on wildlife damage is one thing; whether or not they are effective in addressing the problem is a different issue altogether. This study rests on the premise that an effective corpus of laws on wildlife damage is not only key to the success of conservation policies and programmes in Botswana, but also crucial to the survival of the problem species themselves. The reason is that by addressing such a critical problem the law will win over public support for conservation and also build tolerance to wildlife depredation. Despite having an extensive plethora of laws on wildlife damage in Botswana, there are a number of factors which have affected the efficiency of these laws in addressing the problem of wildlife damage. On the effectiveness of laws, Allot says "...laws are often ineffective, doomed to stultification almost at birth, doomed by the over-ambitions of the legislator and the under-provision of the necessary requirements for an effective law, such as adequate preliminary survey, communication, acceptance, and enforcement machinery".¹⁵³

The study identified the following factors as being the major ones affecting the effectiveness of wildlife damage control laws in Botswana: (a) their suitability for the purpose as well as their relevance to the local circumstances of the country; (b) their acceptability to the stakeholders and particularly the local communities; (c) the appropriateness of the relevant policy frameworks; (d) the presence and effectiveness of wildlife-related dispute resolution mechanisms; and (e) the effectiveness of the existing institutional mechanisms.¹⁵⁴ The next section examines how these factors have played out in Botswana, and how the country can cope with them.

(a) Relevance and suitability

For a law to be effective for the purpose for which it was promulgated and to be applied smoothly, it has to be suitable and relevant to the local circumstances of the jurisdiction or locality in which it is applied and to its inhabitants. Laws which are perceived as being either irrelevant or unsuitable usually do not work well. Some of Botswana's wildlife damage laws were, for instance, imported by the colonialists and then retained by the post-independence governments. Laws of this nature are often unsuitable because first of all the circumstances under which they were adopted have since changed, and secondly, they are fashioned on western concepts, values

and perceptions which are inappropriate to the indigenous African circumstances.

Before the introduction of western laws and policies by the colonialists, the indigenous communities in Botswana had their own customary laws and practices on wildlife as well as traditional African wildlife values and uses. There were also traditional customary norms and practices that ensured wildlife, including many problematic species, co-existed with humans without much threat to each other, for instance norms and practices that totemised certain animals or regulated their off-take. The introduction of foreign concepts relegated these traditional practices and traditional wildlife values and uses to the backyard. Indeed, wildlife laws in most of Africa including Botswana are generally still insensitive to traditional African cultural practices. For instance, while the Maasai in their culture



Male Kudu

Courtesy: Wikipedia

have to kill lions as part of their rite of passage, there is no mention in the law of such practices.

Some cultural orientation even makes people resist the edicts of law despite the presence of sanctions for violations.¹⁵⁵ In Africa, most government programmes and policies have failed because of their insensitivity to the cultural values of the people.¹⁵⁶ This is compounded by the fact that in most countries in Africa including Botswana, African customary law is one of the sources of law. The neglect of traditional customary values is well summarised

by Miller in the following poetic words when commenting on the Kenyan scenario: "The historic tragedy in Kenya is not the slaughter of so many animals....Most of the species could still rebuild their numbers. The tragedy is that African interests, particularly farmers, were not taken into account when formulating policies [and laws] governing wildlife management. Herein lies the seed of wildlife destruction".¹⁵⁷

Another problem is that wildlife damage laws in Botswana are in most cases reactive instead of proactive, such that the law will typically address a problem after it has occurred. With this characteristic the law will often lack mechanisms for anticipating and preventing wildlife damage. In the area of wildlife damage for instance, farmers in the northern hemisphere have resources to adopt abatement measures and are even cushioned by insurance cover and government subsidies. Their African counterparts are peasants who rely on farming to produce for their families' direct consumption. They cannot afford insurance cover and neither do they have subsidies from their governments. In the event of a raid by wild animals on their crops, they would most likely attack the animal rather than report the incident to state and governmental authorities. A law for example requiring landowners to adopt abatement and preventive measures on their land against wildlife depredation and predation would be unsuitable. This lack of mechanisms for anticipating wildlife damage is a major drawback because some consequences especially those affecting public resources such as wildlife may have implications that seem remote but with far-reaching effects on posterity.

(b) Acceptance by stakeholders

Some wildlife damage laws in Botswana are unacceptable to key stakeholders particularly the local communities.¹⁵⁸ The unacceptability of such laws hampers their effectiveness in addressing the problem of wildlife damage. Whereas the local communities are key stakeholders in wildlife management, conservation laws in Botswana generally tend to favour wildlife interests over those of the local communities and the welfare of wild animals over that of humans.¹⁵⁹ Legislation often abolishes, limits or restricts traditional user rights such as subsistence hunting.

This can foment tension between state agencies and local communities where wildlife is exclusively a state affair with the people having very little say if any in its management. This tension has resulted in decreased co-operation between local communities and state agencies. This tension has been mitigated by the community-based system of wildlife conservation although there are still pockets of discontent among the locals.¹⁶⁰ These pockets of discontent could be further mitigated by the establishment of a co-management system where the government and local communities manage wildlife as equal partners. However, the situation in Botswana is plausible unlike in many countries where there is a war-like relationship between the state agencies and the local communities. In order to guarantee a future for wildlife conservation this state of affairs has to change, otherwise both the people

and wildlife will find it increasingly difficult to co-exist as is the situation in some West African countries where wildlife has almost been eradicated.

Indeed wildlife laws fall in the province of public law hence should incorporate certain subtle public values such as participation, consultation as well as promotion of the public interest.¹⁶¹ Public law as the name suggests is concerned with public interest issues and public rights. Such a law should shift from theory to values in order to institutionalise certain societal values such as democracy, fairness, human rights and livelihoods. It should, for instance, attempt to strike a balance between wildlife conservation and competing human interests as well as other forms of land use, and between the different wildlife group interests such as the interests of conservationists and the state on the one part, and those of the local communities on the other part.¹⁶² Rosencranz *et al.* assert that "wildlife and people are not always compatible".¹⁶³ Legal intervention on wildlife damage is therefore desirable in any country with wildlife and it is encouraging that Botswana has laws on the subject.

In setting up legal frameworks on wildlife damage, the law makers ought to take into account the acceptability of these frameworks to the stakeholders and the public generally, also known as the persuasive power of the law. These stakeholders comprise the local people as well as diverse interest groups such as expatriate researchers, local researchers, conservationists, wildlife enthusiasts, amateur naturalists, the international community, financial donors, non-governmental organisations, and governmental and state authorities. Wildlife laws for instance, should embrace the interests of conservationists and those of the local communities. The enactment of laws should be preceded by wide consultations between the law-making authorities and key stakeholders such as the general public. This is because laws that are imposed without adequate consultation with the stakeholders do not work well as they are likely to be resisted by them.

Sifuna and Mogere observe that the general public, especially in Africa where customs are a law in themselves (African customary law), will be prepared to disobey such laws.¹⁶⁴ In order to avoid these situations, the government needs to be careful about clothing controversial wildlife policy positions in the form of law, because laws resulting from this will be resisted by the people. Undeniably, the public's acceptance of laws and their ability to comply with them are some of the most crucial determinants of the effectiveness of any law.¹⁶⁵ As a fact, for conservation efforts to succeed they require the support of the local communities.¹⁶⁶ Atiyah observes "Unless the mass of the public feels that there is some moral obligation to observe established law, then the law may come to be unenforceable".¹⁶⁷ Draconian and militaristic laws such as the ones that take away established rights, established traditions or disregard human welfare and livelihoods fall into this category. Such laws will be unacceptable to the local communities and will therefore not operate smoothly.

Notably, most legal frameworks are fashioned on the "command and control" systems that emphasise

punishment as the only means of enforcing policy.¹⁶⁸ This approach is inimical to the broader goals of conservation programmes as over-emphasis on penalties without provision for incentives makes the implementation agencies unpopular with the very communities whose wildlife resources they are to conserve.¹⁶⁹

The operation of this fact can be illustrated by the example of the Ogiek, a forest-dwelling hunter-gatherer aboriginal tribe of the Mau Forest in Kenya who the Kenya government has been trying to evict from the said forest for years without success. In 1999 the government issued a notice to the community to vacate the forest or risk being forcibly ejected from it. After receiving the eviction notice, the community filed a constitutional reference in the High Court alleging that the intended eviction violated their constitutional rights to livelihood; *Francis Kemai & Others v. Attorney General & 3 Others*.¹⁷⁰ They argued that despite the forest being a gazetted forest, it was their ancestral home where they lived and made their livelihoods through hunting, gathering food, farming and harvesting wild honey. The government on the other hand argued that the said forest, being a gazetted forest, was subject to the provisions of the Forests Act which made it illegal for anybody to live there. This case was dismissed by the court. In dismissing the case, the court (Judges Oguk and Kuloba) held that, under the Forests Act, no settlement or other human activities are permitted in the forest, except with a permit from the relevant authorities. Members of the community (other Kenyans) can obtain permits to enter the forest and engage in lawful activities. The court observed "...allowing the Ogiek to remain in the forest would be tantamount to allowing its conversion to private ownership without following the laid down procedure, or ...allowing a reckless access to a public natural resource".

Several years after that ruling, the Ogiek community still resides in the Mau Forest, arguing that the Forests Act was enacted in 1942 when they were already in the forest.¹⁷¹ This is a perfect example of a case where people are prepared to disobey the law and the courts, if the law is not acceptable to them. Unlike Kenya, the High Court of Botswana held that the San (Basarwa) people were entitled to reside in the Central Kalahari Game Reserve because it was their ancestral land and that the restrictions imposed on the reserve under the Wildlife Conservation and National Parks Act while applicable to other communities do not apply to the San because they were permanent residents of the reserve. This was in *Roy Sesana & Others v. Government of Botswana*.¹⁷² In this case the government had attempted to evict the community from the reserve in order to set aside the area for wildlife and tourism development. This is a rather progressive decision and it is unclear why the Kenyan

court failed to recognise the Mau Forest as the ancestral land of the Ogiek where they had always lived and from which they hunted, gathered and farmed. This is a case of the authorities clothing controversial policies in law, as shall be illustrated in the next section.

(c) Appropriateness of the relevant policy frameworks

Any study of the legal mechanisms relating to an issue inevitably calls for the examination of the state of policy on it, because law is one of the tools for implementing policy, hence without an appropriate policy framework to support the legal framework, the latter cannot be effective. Elsewhere, this author has argued that law is a tool for enforcing policy.¹⁷³ It does this by enforcing the national policy position on a particular issue, wildlife damage for instance. Ojwang has also argued that while the state has to design and implement policy, it has to enact the relevant laws to validate such policies.¹⁷⁴ Indeed any country with policies on wildlife damage will be expected to have laws relating to the same.¹⁷⁵

Policy, however, may be likened to a toothless bulldog that barks but does not bite. It is legal provisioning that gives policy the teeth to bite; by translating policy statements into legally enforceable obligations and rights.



Courtesy: Wikipedia

Atiyah considers law to be an instrument of policy and a means by which goals and values can be pursued.¹⁷⁶ The effectiveness or otherwise of law depends, among other things, on its response to trends in policy. Such a study should also examine the state of national policies on wildlife damage and wildlife generally. Ogolla also says that law "...translates policy into specific enforceable norms, standards of behaviour and compels, by threat of sanctions, their observance...lays down to public officials, basic guidelines for implementation of demands of the normative regime".¹⁷⁷

One of the reasons why wildlife damage laws in Botswana are generally ineffective is because they lack the appropriate policy arrangements to support the regulatory regime. As already noted above, wildlife policy in Botswana tends, to some extent, to favour wildlife over local communities, which is quite unacceptable to the locals. Indeed wildlife legislation seems to have gone the same way as these policy trends. These policies, for instance, tend to divest wildlife ownership and control from the public domain (from the people) and vest it into the state hence curtailing the people's rights of access to, and use and management of, wildlife resources.

(d) Presence and effectiveness of wildlife-related dispute resolution mechanisms

One of the social functions of law is the resolution of disputes. With regard to wildlife damage the law should establish mechanisms for resolution of disputes arising from damage. The law in Botswana has such mechanisms. In Botswana, wildlife damage compensation claims are handled by the Department of Wildlife and National Parks (DWNP) with no clear mechanisms for appeals. However, there is a practice where persons dissatisfied by decisions of the DWNP may appeal to the Minister in charge of wildlife, for intervention as part of his reserve powers under Section 46 of the Wildlife Conservation and National Parks Act.¹⁷⁸ The effectiveness of the wildlife damage laws in Botswana depends to a great measure on the effectiveness of these dispute settlement mechanisms, but unfortunately people are generally dissatisfied with them.¹⁷⁹ In Botswana, needless to say, the dispute resolution mechanisms are not well provided for in the laws hence there is no clear mandate on the same. This ambiguity and looseness, stakeholders complain, is the reason for the ineffectiveness of the dispute resolution mechanisms.¹⁸⁰

(e) Effectiveness of the existing institutional mechanisms

Another challenge to the effectiveness of wildlife damage laws in Botswana is institutional weaknesses especially in the agencies responsible for administering wildlife policies and laws, and particularly those responsible for wildlife damage control or compensation processes for damage caused by wild animals. This is because for wildlife damage laws to thrive they require effective institutional mechanisms for their implementation and enforcement. Generally, three major institutional problems hamper the smooth operation of wildlife damage laws in Botswana, namely: (i) overlapping responsibilities; (ii) lack of adequate resources; and (iii) lack of motivation among staff. While these are generally the factors that affect the effectiveness of the institutional arrangements on wildlife damage, some play out more in one country than the other. The next section examines how these factors have played out in Botswana.

(i) Overlapping responsibilities

Wildlife is a sector that interacts with many other sectors, namely, land, agriculture, water, livestock, forestry and so on. For this reason, some of the policies, laws and

programmes in these other sectors are likely to have and usually do have impacts on wildlife. Laws on forestry, agriculture and land tenure, that although for the most part are not intended to govern the wildlife sector, may have implications that adversely affect wildlife resources or militate against the declared objectives of wildlife policies. Forestry activities, for instance, are likely to affect wildlife. Forests are known to be a key wildlife habitat and the clearing of forests through excision programmes reduces the wildlife's habitat. This is likely to cause wild animals to leave the forest and wander onto private land, which will increase human-wildlife conflict in areas of human settlement when the animals cause damage to people, crops, livestock and other property. Similarly, poor land-use practices and inappropriate agricultural activities such as crop farming near a national park may also increase the incidents of wildlife damage.

In Botswana, however, the management of these sectors is vested in various ministries, namely, Ministry of Agriculture, Ministry of Water Resources, Ministry of Livestock Development and Ministry of Environment; and are governed by various sectoral laws enforced by the respective agencies. This poses a great challenge to the management of the wildlife sector and to the enforcement of wildlife laws and policies because of the overlapping responsibilities among the various agencies. Overlapping responsibilities are likely to lead to inter-agency conflicts where the respective agencies take different positions on a particular issue or where the officials argue over which agency is best-suited to act in a particular situation. It may also lead to inaction where one agency expects the other one to act in a given situation.

Besides, where there is a duplication of roles among various agencies, there is need for effective coordination so as to harmonise and synchronise the respective efforts of these institutions. Botswana lacks effective coordination of the responsibilities of the various agencies, which has greatly undermined the efficacy of these institutions in the discharge of their duties as well as their effectiveness in enforcing wildlife-related laws and policies.¹⁸¹ Where a responsibility is vested in various ministries, wildlife for instance, there is a need for an inter-ministerial committee to coordinate the efforts of the various ministries. Notably, there is also a lack of effective coordination in wildlife damage control efforts between public agencies and local communities in the country.¹⁸²

(ii) Lack of adequate resources

Botswana generally lacks adequate resources for wildlife management and for wildlife damage programmes in terms of personnel, infrastructure and finances. This is a common problem in most developing countries such as Botswana because of their level of development. As a result Botswana has to rely on expatriates as well as donor funding for paying the salaries of the wildlife staff; constructing roads in wildlife areas; building schools and hospitals for the local communities in wildlife areas; carrying out wildlife damage control programmes; paying compensation for wildlife damage; and maintaining wildlife protected areas,

(iii) Lack of motivation among staff

Another factor that undermines the effectiveness of wildlife institutions in Botswana is lack of motivation among their staff, mainly as a result of low pay and poor terms of service such as housing, allowances, transport and other fringe benefits as compared with their counterparts in the private sector.¹⁸³ This has resulted in lack of morale hence what may be described as “the public service attitude”. This is an attitude of lethargy in most cases accompanied by corrupt or unethical practices such as collusion with poachers. Richard Leakey, a former Director of the Kenya Wildlife Service (KWS), in his memoirs reported:

It is no wonder that rangers, wardens, and indeed many in public service look for ways to augment their official earnings. Some rangers worked together as poaching teams, using coded messages to alert their fellow criminals when and where an aerial survey, for instance, was to take place. At Meru, for example, I discovered that senior park officers were almost certainly involved in the killing of the five white rhinos in their boma (an enclosure similar to a karaal),.... The poachers had entered the park in broad daylight and shot the animals (which were supposedly being guarded by rangers) scarcely a mile from the park's headquarters. No shots were fired at the poachers, and no arrests were ever made. I'm sure that some park officials received a handsome payoff for those rhino horns.¹⁸⁴

Institutional Arrangements in Botswana on Wildlife Damage

The wildlife sector in Botswana is under the Department of Wildlife and National Parks (DWNP) which is contained within the Ministry of Environment, Wildlife and Tourism (MEWT).¹⁸⁵ The country has a conservation system adapted to the Community-Based Natural Resources Management (CBNRM) model.¹⁸⁶ Under this model, the people are not only involved in the management and utilisation of wildlife, but in planning as well.¹⁸⁷ The local communities organise themselves into Community-Based Organisations (CBOs) and get registered. The government through the DWNP then grants these CBOs wildlife user rights, quotas and leases. These user rights would either be consumptive (hunting) or non-consumptive (tourism).¹⁸⁸

The performance of the department in wildlife damage control is rather ineffective not only due to bureaucracy and lack of adequate resources but also because the department lacks a clear mandate on wildlife damage. Its role with regard to damage is amorphous and is determined by the whims of government officials. The problem of wildlife damage is of such grave concern to conservation that it needs to be addressed within the framework of a clearly defined legal mandate and not left to the administrative discretion and whims of government officials as is the case in Botswana currently. The DWNP faces several other challenges in the execution of its functions.

Being a government department, the DWNP is so tied to the ministry's structure and mandate that it lacks

institutional autonomy to develop proposals independently and approach donor organisations for funding. Any project or programme it develops has to go through a lengthy bureaucratic process in the ministry. DWNP does not have a clear mandate of its own because under the Wildlife Conservation and National Parks Act, the responsibility of managing Botswana's wildlife resources and reserves is vested in the Minister in charge of wildlife, currently the Minister for Environment, Wildlife and Tourism.¹⁸⁹ Interviews with the department's officials revealed that its activities are hampered mainly by lack of adequate funding.¹⁹⁰ The department relies on the parent ministry's budgetary allocations by the Treasury from the government's recurrent expenditure which has to be shared by other departments within the ministry. Also, the DWNP cannot retain all the revenue it receives from national parks and game reserves; a large share of the funds must go to the Treasury. As a result, the department lacks adequate funds to cover its running costs in terms of better staff salaries, good infrastructure and modern equipment. It also lacks well trained personnel as most experts prefer the better terms offered by the private sector and NGOs. As a mere department within a government ministry, its activities are limited by the ministry's resources in terms of finances and expertise, which are, as is typical of many government departments in the developing world, usually inadequate.

The respondents within the DWNP also complained of unnecessary bureaucratic delays and structures within the ministry. For instance, it took this author close to a year to obtain authorisation to conduct research for this study despite informing ministry officials that this was degree work that was limited in terms of time and finances. The difficulty was due to the ministry having just banned all wildlife research in Botswana by foreigners. The author had to spend several months shuttling between South Africa and Botswana, which was obviously very frustrating. Even though the department's staff were sympathetic they could not actually assist as the ban was a government directive issued by the Permanent Secretary in the Ministry. These are some of the problems associated with locating vital institutions within the regular government bureaucracy. Ojwang observes that “functions usually conducted within the bureaucratic machinery [do] not always fully accommodate the order of priority that should be attached to certain activities involving national resources and heritages”.¹⁹¹

Conclusion and Way Forward

While wildlife is a valuable resource for the people of Botswana with numerous beneficial uses, wildlife also impose negative costs on society when wild animals kill and injure people and livestock, and also destroy crops and other physical property such as infrastructure. However, wildlife's positive value outweighs these negative costs hence there is a need to conserve wildlife for the present and the future generations. Despite the overall positive value of wildlife, the losses attributable to wildlife are known to make the local communities have negative attitudes towards wildlife and become politically opposed

to conservation efforts, making wildlife a major source of conflict. However, local communities in Botswana in general still support wildlife conservation, remarkably. The major reason for this support is the community-based system of wildlife management which allows local communities to not only participate in management but also to derive direct benefits from the resource. Besides, given the country's low population and arid climate resulting in less agricultural activity, incidents of damage to agricultural enterprises are not rampant. One cannot rule out the possibility of cases of depredation and predation rising in future as the populations of both humans and wildlife increase. Ordinarily, people who have suffered wildlife damage are more likely to hold more negative attitudes towards wild animals than those who have not.

While it is encouraging that Botswana has an array of legal and institutional arrangements on wildlife damage, these arrangements are generally ineffective. Most of the laws are irrelevant or unsuitable to the circumstances of Botswana, or are unacceptable to the local communities, because they were passed without broad consultation or based on controversial policy positions. Most wildlife policies are not appropriate to damage control and alleviation efforts; dispute resolution mechanisms on wildlife damage are weak; and existing institutional mechanisms with regard to wildlife management and wildlife damage control are ineffective. Another major drawback to the country's wildlife laws relates to wildlife ownership. While there is no clause in Botswana's laws on wildlife ownership, the practice is to treat wildlife as state property. This has, in effect, turned what is essentially a public resource into state property hence in reality alienating it from its true owners, the people. There is a need therefore for the Botswana government to have effective legal and institutional arrangements on wildlife damage and maintain sustainable wildlife management systems that do not undermine human rights, human welfare and livelihoods. To achieve this, the author has the following recommendations:

1. Establish Constitutional Provisions on Wildlife

While Botswana has legislative provisions on wildlife, it lacks constitutional provisions on wildlife or even natural resources. A Constitution is a basic charter for a country, representing the national goals as well as the primary obligations and mandate of state and governmental authorities, and should therefore recognise a country's major resources and sectors. Wildlife is one of the key resources and sectors in the country. Inclusion of wildlife-related provisions in the national constitution is likely to give direction to law making and provide a basis on which to enforce such laws. One such provision could be in the form of a statement of public policy, for instance, stating that wildlife is a national heritage vested in the state on behalf of and for the benefit of present and future generations. It could either be on natural resources generally or specific to wildlife. Such a statement would not only be a guideline for governmental action in matters of wildlife but would also give direction on issues of wildlife ownership, control, use, as well as benefits and revenue.

2. Establish Legal Provisions on Wildlife Ownership

Botswana's constitution and the Wildlife Act should be amended to expressly provide for wildlife ownership. Liability for wildlife damage is linked to ownership, hence it will be easier to know who should pay compensation or alleviate loss. Such provisions could, for instance, vest ownership in the government for the benefit of the people and devolve part of it to the local communities, by allowing landowners to own wildlife.¹⁹² This approach would allow those people who feel that they do not receive enough income from pastoralism or crop agriculture to keep wildlife instead. Such ownership would go hand in hand with liability to compensate or alleviate wildlife damage as well as the obligation to adopt preventive measures. The government and donor agencies could assist landowners to convert their land from unprofitable uses to wildlife conservation and tourism.

3. Stipulate Compensation Amounts in the Law

Botswana should amend its wildlife legislation to stipulate exactly the amount of compensation payable for wildlife damage, preferably with detailed scales. Currently, the wildlife statutes neither specify the amount payable nor provide a formula to be used in assessing compensation. Either a Schedule containing detailed payment scales could be added to the WCNPA, such as with the Workmen's Compensation Act, or a simple formula could be devised for assessing the amount of compensation, using existing schemes used by insurance companies and courts¹⁹³ for calculating compensation for injuries and death. Factors to be considered in the assessment of compensation should include age, status in society, number of dependants, inflation and loss of earning.

4. Stipulate the Maximum Length of Time for Processing Compensation Claims in the Law

In Botswana it takes about six months to process compensation claims for wildlife damage, which is less than in many other countries but the chances of claims taking longer in future cannot be ruled out. The solution to this would be for the duration for processing claims to be stipulated in law so as to ensure the claimants get their compensation in a timely fashion and without undue delay. The WCNPA should be amended to include a provision stipulating the maximum amount of time within which the claims are to be processed. There is need for a time limit so as to ensure efficiency and diligence in the process. A gestation period of, say, six months from the date of lodging the claim, is reasonable and adequate for verification, investigation and processing of payment. The incorporation of a specific waiting period in the law grants victims the right to sue if the claim is not paid on time.

5. Establish a Compensation Fund for Wildlife Damage

Under the wildlife damage compensation schemes in Botswana, compensation is currently paid from budgetary allocations voted by Parliament from the Consolidated Fund according to expenditure items that Parliament

considers a priority at the time. Such priorities usually vary according to circumstances and political exigencies and there is no guarantee that wildlife damage will always remain a top priority item, hence there is usually not enough allocation for wildlife damage compensation. There is a need therefore to set up a fund specifically designated for paying victims of wildlife damage. Monies from this Fund should then be used only for compensating damage caused by wildlife. Such monies may be derived from revenue from tourism and wildlife-related activities, or through the traditional methods of raising government revenue, for instance taxation.

In a country like Botswana where wildlife is a public resource, a wildlife tax should target only the stakeholders. Such stakeholders include conservationists, tourist establishments and communities living adjacent to wildlife areas. These stakeholders could be subjected to modest taxes or levies. It is however easier to impose such levies for private-sector resources than for public-sector resources such as wildlife. Nevertheless, for this taxation in the wildlife sector to work, the government should consider privatising wildlife resources or at the very least democratising their management to create room for increased stakeholder participation, not only in management but in planning as well.¹⁹⁴

Take the case of tourism. Wildlife-based tourism is one of the leading foreign exchange earners, bringing in millions of Pula annually. There is no harm in designating a percentage of this income for compensating damage caused by wildlife. Botswana's wildlife is perhaps its leading tourist attraction and, if there was none, these tourists would go to other destinations. It is therefore only fair that the tourism industry pays for the nuisance associated with these animals. Besides, since wildlife is a common heritage of humankind, the international community should support it wherever it is located. Donor countries, international financial institutions and international NGOs involved with conservation are a possible source of funding for the compensation fund. Since charity as we know "begins at home", money can also be raised locally from voluntary donations by well-wishers.

6. Expand Wildlife Damage Alleviation Measures Adopted in Legislation

There is a need for Botswana to review its current wildlife as well as land-use control and planning legislation to establish a legal regime that incorporates wildlife damage control strategies and methods. This entails three things. First, incorporate into legislation, provisions that address issues of land tenure in areas surrounding PAs, where necessary creating environmental wildlife easements for local communities. The law needs to expressly recognise that it is not practicable to contain wildlife in protected areas alone. Such a law could have built-in land-use controls for the areas surrounding wildlife PAs, for instance, by seeking to ensure that developments on land adjacent to wildlife PAs do not interfere with wildlife conservation. This would help harmonise conservation and development needs. There needs to be an integrated approach where wildlife PAs are managed not as islands

in a sea of humanity, but as an integral part of the national land-use process.

Secondly, there is also a need to make wildlife an integral component of land-use planning and zoning. One way of doing this is by making provision for wildlife zones and plans, and the other way is for the law to make wildlife considerations a mandatory factor to be considered in making any decisions on land use. When dealing with land-use control and planning in areas adjacent to protected areas, there is need for instance to restrict incompatible land uses and practices. Thirdly, there is need for wildlife legislation to catalogue and regulate all the acceptable methods that may be used by wildlife authorities and landowners to control wildlife damage in Botswana. Botswana's legislation currently only provides for compensation and the killing of problem animals. The legislation should stipulate as exhaustively as possible the legitimate methods of damage control that may be applied in any area, such as erection of physical wildlife-proof barriers, making noise, use of firecrackers, as well as wildlife translocation. This would not only preclude the use of crude and cruel methods such as poisoning, use of pits, placing nails on the wildlife routes, ensnaring and entrapment. It will also provide clear guidelines and procedures on the way in which legitimate methods are to be used by the state and governmental authorities and landowners.

7. Establish Legal Provisions in Botswana that Obligate the State to Initiate Wildlife Damage Control Programmes

Although Botswana's wildlife statute empowers the Minister in charge of wildlife to provide compensation to victims of damage caused by wild animals, it lacks a clause obligating the government to take measures to prevent harm. Nothing in the law binds the government to initiate wildlife damage control measures, which are usually undertaken by virtue of government policy without any legal prompting. The law should oblige the government to initiate wildlife damage control programmes at community level and also enhance the capacity of the local communities in wildlife damage control. The local communities should be facilitated to adopt one or more wildlife damage control strategies. These programmes can be initiated by government and non-governmental agencies in partnership with the local communities but then run by local communities themselves through local institutions. There are three ways in which this can be done. The first involves initiating training programmes for the local communities in wildlife damage control or simply providing them with literature on the contemporary methods of controlling wildlife depredation or assisting them in designing fences and other means of protection. Because of widespread illiteracy in Botswana, information could be transmitted through radio broadcasts, films and advertisements.

Second, schemes should be initiated to give local communities loans with which to undertake wildlife damage control measures such as fencing, spraying and compatible land-use forms. Funds for these schemes could be provided by governmental as well as non-governmental

players with an interest in wildlife conservation, preferably through a fund to be called “Wildlife Support Fund”. This fund should be established through legislation so that it has legal backing. Money for this Fund may come from revenue derived from tourism and wildlife-related activities, or through the traditional methods of raising government revenue, for instance taxation. Thirdly, the government could reduce tax on certain wildlife damage control equipment such as fire-crackers, fencing wire and high voltage torches.

Even where the above resources are provided by the state, governmental agencies, NGOs and donors, the programmes should be managed in partnership with the local communities and employ locals themselves to guard their property, dig trenches and fences.¹⁹⁵ The advantage of this is that the locals know the terrain and hence it is likely to increase the effectiveness of the programmes. Participation by locals also reduces the operational cost by obviating the need to provide transport, and provides the locals with employment and income. It can also attenuate the negative feelings that some locals have against wildlife. This attenuation may in turn increase local support for conservation efforts.

8. Establish Legal Provisions that Obligate the State to Undertake Wildlife Civic Education

Government and non-governmental players in the conservation sector should initiate education programmes to educate local communities living around wildlife areas on the importance and benefits of wildlife. These education programmes should not only focus on the local communities but should also include the policy makers and implementers as well as law enforcement agencies. They should be made aware of the need to integrate conservation with human needs and welfare. This is



Warthog

Courtesy: Wikipedia

because wildlife tourism is a key major contributor to Botswana’s economy and a major source of foreign exchange. Wildlife therefore is a resource that deserves to be conserved for present and future generations while mitigating the harm that wild animals are likely to cause. There is need, for instance, to disseminate information on the strategies used by the local communities for preventing damage. Knowledge of such strategies may be used

to reinforce the existing methods of wildlife damage control. A general problem noted with the majority of the population in rural areas is ignorance. This is compounded by the lack of a broad enough provision in the law for self-defence. Most local people are not aware that the law allows them to attack wild animals or that compensation is available for wildlife damage. Besides, they seem to have no voice against the wildlife authorities in cases of depredation by wild animals.

There is need for wildlife civic education to educate the people on their rights and duties with regard to wildlife. This will help empower them and involve them in the decision-making processes and wildlife management in general. Local communities should also be sensitised to the need to adopt benign abatement measures to prevent damage.¹⁹⁶ People who have suffered wildlife damage are more likely to hold negative attitudes towards wildlife than those who have not.

9. Adopt Legislative Provisions Requiring Consultation and Public Participation in the Establishment of Protected Areas

As noted in this paper, protected areas have been established by the government without consulting and involving the local communities. Even the eminent domain procedures through which the state acquires private land for public purposes in Botswana are not particularly democratic.¹⁹⁷ They for instance do not make provision for wide consultation and negotiation. Incidentally, these areas are sometimes set up in places of human activity and usually involve displacement of people; who usually subsequently come back to settle on the fringes of such areas. Such people later become victims of wildlife raids, with wild animals trampling their crops and houses, and sometimes attacking them and their livestock.

The provisions in Botswana’s legislation regarding the powers of the government to establish PAs neither oblige it to consult the local communities nor make provision for public participation. This is an anomaly because in a democracy the role of public participation in decision making especially on a public resource such as wildlife can not be over-emphasised. The laws should be amended to provide mechanisms for such consultations and negotiations with stakeholders. People who have been forcibly displaced to create space for the establishment of wildlife protected areas develop negative attitudes and are unlikely to support conservation. Such people are unlikely to tolerate incidents of wild animals leaving the protected areas and causing damage to them or their property. Conversely, cordial relations between those managing protected areas on the one hand and local communities on the other hand, may provide incentives for such communities to adopt compatible land-use practices in the adjacent areas.

In 1975, the International Union for Conservation of Nature (IUCN) at its twelfth General Assembly at Kinshasa, Congo, adopted a resolution discouraging the establishment of wildlife reserves without adequate consultation.¹⁹⁸ Public participation in natural resource decision making is a cornerstone of environmental good governance. Including stakeholders’ voices in

decision making promotes governmental accountability and increases the likelihood that decisions will take into account the concerns of those directly affected by them. Promoting public participation is, in effect, promoting the democratic process by fostering transparency and broadening the base of people involved in making the decisions, which can strengthen the efficacy of the decisions themselves. Moreover, public participation in the process is more likely to generate public support for the eventual outcomes of that process.

10. Establish an Autonomous Statutory Institution to Manage the Wildlife Sector

Botswana needs to establish an autonomous institution to replace the Department of Wildlife and National Parks (DWNP). This should preferably be done through an amendment to the Wildlife Conservation and National Parks Act, creating the institution as a legal entity with the ability to borrow money, negotiate with donors for funds, control the revenue generated from the wildlife sector and control its own budget. In order to manage effectively the country's wildlife resources and address the problems facing the wildlife sector in the country, for instance damage by wildlife, such an institution should be established outside the bureaucratic machinery of government so that it is not tied down to the limitations inherent in the regular government bureaucracy. It should preferably be a parastatal business corporation called the Botswana Wildlife Service. Institutional and financial autonomy would help it avoid the bureaucracy currently experienced by the DWNP where any decisions, proposals or projects are subject to the excessive red tape of the Ministry of Environment, Wildlife and Tourism. Being a commercial entity with financial autonomy would enable the new agency to source and control its funds hence alleviate the lack of funds associated with over-reliance on a ministry's annual budgetary allocations by the Treasury.

Notes

- 1 The term "wildlife" in common parlance is taken to mean both wild animals and wild birds generally. In the context of this study, however, it is restricted to wild animals only. Wildlife therefore means undomesticated animals found in their natural habitats.
- 2 Wildlife damage is any activity of an individual or group of wild animals that, during their foraging activities outside wildlife protected areas, causes crop loss, livestock injury or death, human injury or death, or destruction of physical structures such as buildings and water pipes. The term therefore does not include incidents that occur within the boundaries of wildlife protected areas.
- 3 See Sifuna, N. (2005). "Providing compensation for damage caused by wildlife: a case study of Kenya with particular reference to elephants". *J. of Social Development in Africa* 20(1): 7-39, at 7, 11. Some of these animals on the other hand are magnificent and attract a lot of tourists who bring in millions in foreign currency to the exchequer hence the need to protect and conserve wildlife while at the same time addressing human needs and concerns.
- 4 The term "human-wildlife conflict" refers to direct harmful interactions between humans and wildlife.
- 5 Akama, J.S. (1996). *Wildlife Conservation in Kenya: A Political-Ecological Analysis of Nairobi and Tsavo Regions*. African Development Foundation (ADF) Research Report Series 24. Washington, DC: ADF.
- 6 *Ibid.*
- 7 Interviews with officials of the Department of Wildlife and National Parks (DWNP) in Gaborone on 16 August 2006.
- 8 It is estimated that between 1998 and 2000, the total number of visitors who visited the parks was about 278,000 people, earning the wildlife sector approximately 43 million Pula. See Government of Botswana. (2003). *Ninth National Development Plan for 2003/04-2008/09 (NDP 9)*, at 240.

- 9 Government of Botswana, *supra*, note 8, at 2. See also: http://www.botswana-tourism.gov.bw/tourism_s/tourism_s.html. Last accessed on 22 December 2007.
- 10 Government of Botswana, *supra*, note 8, at 236.
- 11 *Ibid.*
- 12 *Ibid.*, at 249.
- 13 Research conducted by the author in Botswana between July and December 2006.
- 14 Waitthaka, J. (1993). "The Elephant Menace". *Wildlife Conservation* 96(2): 62. See also Emerton, L. (2001). "The nature of benefits and the benefits of nature: why wildlife conservation has not economically benefited communities in Africa". In: Hulme, D. and Murphree, M. (Eds). *African Wildlife and Livelihoods: The Promise and Performance of Community Conservation*, at 207, 208. Portsmouth, NH: Heinemann.
- 15 Attacks on humans by wild animals are rare, the major reason being that Botswana is sparsely populated hence it is not easy for a person to encounter a wild animal.
- 16 Kamugisha *et al.* define the term "livelihoods" as a means of earning a living, implying availability of and access to production resources; see Kamugisha, J.R., Ogutu, Z.A and Stahl, M. (1997). *Parks and People: Conservation and Livelihoods at Crossroads - Four Case Histories*, at 190. Nairobi: Regional Soil Conservation Unit.
- 17 From interviews by this author in Botswana between July and December 2006.
- 18 From research conducted by the author in Botswana between July and December 2006.
- 19 Besides, traditional hunting is usually for subsistence and the methods used are far less likely to threaten game populations than the use of modern weapons such as firearms. The tools used in this kind of hunting are mainly spears and arrows.
- 20 From interviews by this author in Botswana between July and December 2006.
- 21 Government of Botswana, *supra*, note 8, at 252.
- 22 Research conducted for this study in Botswana between July and December 2006.
- 23 From interviews by the author in Botswana between July and December 2006.
- 24 Interviews with local communities and DWNP officials between January and December 2006.
- 25 Nelson, A., Bidwell, P. and Sillero-Zubiri, C. (2003). *A review of human-elephant conflict management strategies*. People & Wildlife Initiative. Oxford: Wildlife Conservation Research Unit, Oxford University. See <http://www.people-andwildlife.org.uk/crmanuals/Human-ElephantConflictP&WManual>. Last accessed on 22 December 2007.
- 26 Sitati, N. and Walpole, M. (2006). "Assessing farm-based measures for mitigating human-elephant conflict in Transmara District, Kenya". *Oryx* 40(3): 279-286; but see Kangwana, K. (1995). "Human-Elephant Conflict: The Challenge Ahead". *Pachyderm* 19: 11-14, who reports that elephants have in the past passed through a six-strand 7,000 volt fence.
- 27 Interviews with local communities in Botswana between July and December 2006. See also reported in Esikuri, E.E. (1998). Spatio-Temporal Effects of Land Use Changes in a Savanna Wildlife Area of Kenya, at 100. Unpublished PhD Thesis, Virginia State University.
- 28 Kasilly, F.N. (2002). "The Fence as a Moderator of the Wildlife Menace in Kenya". *African Journal of Ecology* 40(4): 407-409.
- 29 Mackinnon, J., Mackinnon, K., Child, G. and Thorsell, J. (Eds). (1986). *Managing Protected Areas in the Tropics*, at 157. Gland: IUCN.
- 30 Kangwana, *supra*, note 26.
- 31 From interviews the author had with DWNP officials in Botswana between July and December 2006.
- 32 Nelson *et al.*, *supra*, note 25.
- 33 Esikuri, *supra*, note 27, at 124.
- 34 *Ibid.*
- 35 This is the relocation, by wildlife authorities, of wild animals from one habitat to another.
- 36 Nelson *et al.*, *supra*, note 25, at 9.
- 37 Interview with DWNP officials in Gaborone on 16 August 2006.
- 38 From interviews conducted by the author in Botswana between July and December 2006.
- 39 Sifuna, *supra*, note 3, at 10.
- 40 Esikuri, *supra*, note 27, at 124.
- 41 *Ibid.*
- 42 Interviews with local communities in Botswana between July and December 2006.
- 43 Interviews with local communities in Botswana between July and December 2006.
- 44 Interviews with local communities in Botswana between July and December 2006.
- 45 Sifuna, *supra*, note 3, at 14.
- 46 Kgathi, D.L., Sekhwela, M.B.M. and Hamandawana, H. (2003). "Sustainability

- of Commercial Agriculture and Forestry in Chobe District, Botswana". <http://www.savannas.net/botswana/ubforst.htm>. Last accessed on 16 March 2009.
- 47 See debate on direct versus indirect compensation in Ferraro, P.J. and Kiss, A. (2002). "Direct Payments to Conserve Biodiversity". *Science* 298(5599): 1718–1719. <http://www.sciencemag.org/cgi/content/full/298/5599/1718?Max-toshows=&hits=...8/7/2003>. Last accessed on 22 December 2007.
- 48 Interview with Ms Nametso, a DWNP research officer, in Gaborone on 14 August 2006.
- 49 Interviews with local communities in Botswana between July and December 2006.
- 50 Wildlife dispersal areas are areas adjacent to or surrounding wildlife areas (especially protected areas) into which wild animals move during some periods of the year. Wildlife migration corridors are areas used by wild animals when migrating from one part of the ecosystem to another periodically in search of basic requirements such as water, food, space and habitat.
- 51 Observation and interviews by this author in Botswana between July and December 2006.
- 52 Kasilly, *supra*, note 28.
- 53 From observations in the field during research for this study in Botswana between July and December 2006. A later visit to the study areas between October and December 2007 established that nothing has changed on the ground.
- 54 Interviews with DWNP officials in Gaborone, Botswana in August 2006. See also <http://www.iexplore.com/eintmap/Zambia/58296>. Last accessed on 22 December 2007.
- 55 Nelson *et al.*, *supra*, note 25, at 4.
- 56 Interviews with local people in Botswana between July and December 2006.
- 57 Interviews with local people in Botswana between July and December 2006.
- 58 From interviews by the author in Botswana between July and December 2006.
- 59 From interviews conducted by the author in Botswana between July and December 2006. These methods are usually used by the community as a cooperative effort among neighbours. Cowbells are widely used in Botswana.
- 60 Research conducted for this study in Botswana between July and December 2006.
- 61 From interviews by this author in Botswana between July and December 2006.
- 62 From interviews by this author in Botswana between July and December 2006.
- 63 From interviews by this author in Botswana between July and December 2006.
- 64 From interviews by this author in Botswana between July and December 2006. Some respondents reported that large mammals do often vandalise effigies and dummies.
- 65 Though they produce loud noise and bright light when detonated, their use may require government authority.
- 66 Nelson *et al.*, *supra*, note 25, at 5.
- 67 From interviews conducted by the author in Botswana between July and December 2006. Some respondents interviewed by this author in local communities reported that these spiritual methods sometimes work. They were however unable to support their claims with empirical evidence.
- 68 See Shaw, J. (1985). *Introduction to Wildlife Law*, at 19. See also Wantrup, S.V.C. (1952). *Resource Conservation: Economics and Policies*, at 169. University of California Press. This therefore means that the state being a mere custodian, it is the people (the public) who are the real owners of wildlife.
- 69 See, for example, *Sickman and others v. United States* 184 F.2d 616 (7th Circuit 1950). The US Court of Appeals for the 7th Circuit upheld a holding by a District Court that, while the government has a duty to protect wildlife, it does not own wildlife and therefore cannot be liable for damage caused by wild animals or birds. In this case, the plaintiff, Charles Sickman and others, brought action against the US government to recover damages for the destruction of their crops by migratory fowl. The plaintiffs in their submissions had argued that liability arose from the fact that wildlife was the property of the government. The trial court dismissed the claim, and an appeal by the plaintiffs was subsequently dismissed by the appellate court. While the court in this case ruled that the state does not own wildlife it did not say who does.
- 70 Rodger, W.H. (1986). *Environmental Law: Air and Water*, at 158. St Paul, MN: West.
- 71 Cirelli, M.T. (2002). *Legal Trends in Wildlife Management*, at 39. Rome: FAO.
- 72 *Ibid.*
- 73 *Ibid.*
- 74 *Ibid.*
- 75 *Ibid.*
- 76 Art. 3 of the Chinese Constitution.
- 77 For example Section 4 of the Ugandan Constitution and Section 4(1) of the Malawian Constitution.
- 78 See Kameri-Mbote, P. "Land Tenure, Land Use and Sustainability: Towards Innovative Use of Property Rights in Wildlife Management". IELRC Working Paper 2005 - 4. <http://ielrc.org/content/w0504.pdf>. Last accessed on 22 December 2007.
- 79 Whether in the wild, on private ranches, on private land or domesticated.
- 80 The demerit of vesting wildlife ownership and management exclusively in the hands of the state brings about the tendency to expect solutions to all wildlife-related problems from the government; which in itself is a disincentive to public participation in conservation.
- 81 In Botswana, wildlife is under state protection, such that the final authority on wildlife lies with the government, irrespective of whether it is on private or public lands.
- 82 2004. KLR, at 214.
- 83 *Ibid.*, 214–15.
- 84 *Ibid.*
- 85 Misc. Civil Application No. 63 of 1990 High Court of Kenya at Mombasa (unreported).
- 86 Wildlife Conservation and National Parks Act (WCNPA). (1992). Cap 38:01, Section 20. See also Section 83 under which a landowner who has kept or confined a wild animal inside a game-proof fence has a right of ownership over the animal.
- 87 Ojwang, J.B. (1996) "The Constitutional Basis for Environmental Management". In: Juma, C. and Ojwang, J.B. (Eds). *In Land We Trust: Environment, Private Property and Constitutional Change*, at 39, 40. London and Nairobi: Zed Books and Initiatives Publishers.
- 88 Cirelli, *supra*, note 71, at 41.
- 89 http://www.nyulawglobal.org/Globalex/Botswana.htm#_Historical_Note.
- 90 *Ibid.*
- 91 Shaw, *supra*, note 68, at 19.
- 92 WCNPA, *supra*, note 86.
- 93 In some instances the protection is explicit in that the law expressly provides for those species. In other instances the protection is implicit or even incidental, especially where this protection is a secondary purpose. See de Klemm, C. (1994). "Conservation Legislation". In: Given, D.R. (Ed.) *Principles and Practice of Plant Conservation*, at 189, 200. London: Chapman & Hall. De Klemm notes that "wild species may also be preserved by other legal instruments that are not specifically directed at the conservation of individual species, but which, nonetheless, provide a high degree of protection to natural and semi-natural habitats and, as a result, to all the species they contain...for example.....protected area legislation".
- 94 Cirelli, *supra*, note 71, at 23. Governments may create lists of totally protected or partially protected species and prohibit attacks.
- 95 WCNPA, *supra*, note 86, Sections 17 and 18. See also the Sixth and Seventh Schedules to the Act.
- 96 But see Kumar, U. and Asija, M.J. (2000). *Biodiversity: Principles and Conservation*, at 31.
- 97 For example, the Sitatunga antelope.
- 98 For example, the Hirola antelope and the White rhino.
- 99 WCNPA, *supra*, note 86, Sections 11, 17, 46, 47, 48, 58, 59 and 67.
- 100 *Ibid.*, Sections 59 and 67(1), (2), respectively.
- 101 *Ibid.*, Section 70.
- 102 *Ibid.*, Section 54.
- 103 *Ibid.*, Section 17(2).
- 104 *Ibid.*
- 105 From interviews with DWNP officials in Gaborone, on 16 August 2006.
- 106 WCNPA, *supra*, note 86, Section 5.
- 107 *Ibid.*, Sections 8–14.
- 108 *Ibid.*
- 109 Ottichilo, W.K., de Leeuw, J., Skidmore, A.K., Prins, H.H.T. and Said, M.Y. (2000). "Population trends of large non-migratory wild herbivores and livestock in the Masai Mara ecosystem, Kenya, between 1977 and 1997". *African J. of Ecology* 38(3): 202–216, at 202, 205.
- 110 Klemm, *supra*, note 93.
- 111 Forest Act. (1976). No 38: 04.
- 112 Du Saussay, C. (1984). *Legislation on Wildlife and Protected Areas in Africa*, at 28. Legislative Study No. 25. Rome: FAO.
- 113 Matiru, V. (1999). *Forest Cover and Forest Reserves in Kenya: Policy and Practice*, at 36. Nairobi: IUCN. <http://www.iucn.org/places/earo/pubs/forest/forestcover.pdf>. Last accessed on 22 December 2007.
- 114 Eltringham, S.K. (1979). *The Ecology and Conservation of Large African Mammals*, at 216.
- 115 WCNPA, *supra*, note 86, Section 5.
- 116 *Ibid.*, Sections 7, 8 and 10.
- 117 See Mugabe, J., Marieka, N. and Mukii, D. (1998). "Biodiversity Management in Kenya". In: Mugabe, J. and Clark, N. (Eds). *Managing Biodiversity: National Systems of Conservation and Innovation in Africa*, at 91, 99. Nairobi: African Centre for Technology Studies.
- 118 WCNPA, *supra*, note 86, Section 12.
- 119 *Ibid.*, Section 13.
- 120 Created to protect specified species.
- 121 <http://www.parks.it/world/BW/Eindex.html>. Last accessed on 22 December 2007.

- 122 From interviews conducted by this author in Botswana between July and December 2006, these rights are restricted to indigenous Botswanan people who may for instance hunt in these areas for food without a licence.
- 123 See Government of Botswana. (2006). *Bajajana: A Tourist Guide to Botswana*, Vol. 5, at 2.
- 124 Forest Act, *supra*, note 111, Cap 38:04.
- 125 *Ibid.*
- 126 *Ibid.*, Section 32 and note 499, Section 12(1).
- 127 <http://www.parks.it/world/BW/Eindex.html>. Last accessed on 22 December 2007.
- 128 From interviews conducted by this author in Botswana between July and December 2006.
- 129 From interviews with wildlife experts and as well as DWNP officials between July and December 2006 during research conducted by this author for this study.
- 130 Town and Country Planning Act. (1980). Cap 32:02.
- 131 From interviews by this author with government officials in Botswana between July and December 2006. Most planning legislation has given to the local government direct power and responsibility to administer planning control.
- 132 Act No. 6 of 2005.
- 133 *Ibid.*, Section 6.
- 134 In the context of this study, wild animals are harmful if they can cause material damage and are dangerous if they can maim or cause loss of life.
- 135 These comprise provisions allowing public authorities to destroy particular animals posing a danger to people or allowing people to attack such animals in self-defence.
- 136 Provisions providing for compensation for such damage as well as those setting up institutions and procedures for receiving reports and for processing claims arising from incidents of damage by animals.
- 137 WCNPA, *supra*, note 86.
- 138 *Ibid.*
- 139 *Ibid.*, Sections 17 and 18. See the Sixth and Seventh schedules to the Act.
- 140 *Ibid.*, Section 2 and *supra*, note 68.
- 141 *Ibid.*, Ninth Schedule.
- 142 *Ibid.*
- 143 A fact admitted by senior DWNP officials on a non-attributive basis during research for this study.
- 144 WCNPA, *supra*, note 86, Sections 46 and 47 respectively.
- 145 Black, H.C. (1999). *Black's Law Dictionary*. 7th Edition, at 1364. St Paul, MN: West Publishing Company.
- 146 Allen, M.J. (2001) *Textbook on Criminal Law*. 6th Edition, at 195. London: Blackstone Press.
- 147 WCNPA, *supra*, note 86.
- 148 *Ibid.*, Section 47(1).
- 149 *Ibid.*, Section 47(2).
- 150 From interviews with wildlife authorities in Botswana between July and December 2006.
- 151 WCNPA, *supra*, note 86.
- 152 *Ibid.*
- 153 Allot, A. (1980). *The Limits of Law*, at 287. London: Butterworths.
- 154 Bolen, E.G. and Robinson, W.L. (1995). *Wildlife Ecology and Management*, at 481. Englewood Cliffs, NJ: Prentice Hall.
- 155 See Sifuna, N. and Mogere, S. (2002). "Enforcing Public Health Law in Africa: Challenges and Opportunities, the Case of Kenya". *Zambia Law Journal* 34: 148–159, at 148, 149.
- 156 *Ibid.*
- 157 Miller, N.N. (1982). "Wildlife: Wild Death". *Swaro* 5(3): at 7.
- 158 There are three key groups of stakeholders in wildlife management, namely, local communities, the government and the conservation community.
- 159 From interviews and fieldwork conducted in Botswana between July and December 2006 as well as from research reports.
- 160 From interviews with local communities in Botswana between July and December 2006.
- 161 A law relating to a public resource such as wildlife, for instance one on wildlife damage, is essentially in the domain of public law.
- 162 As Roscoe Pound, an eminent legal scholar, rightly observes, the function of law is social engineering as its work is to harmonise conflicting interests within society to ensure they exist with minimum friction and waste. See Harris, J.W. (1980). *Legal Philosophies*, at 251. In this vein therefore, having a law addressing the human-wildlife conflict fits in well with sociological jurisprudence which emphasises the social function of law. Indeed social engineering is not just for addressing conflicts between humans but between humans and other forms of life occurring in society, such as wildlife.
- 163 Rosencranz, A., Divan, S. and Noble, M.L. (1991). *Environmental Law and Policy in India: Cases and Statutes*, at 235. Bombay: N M Tripathi Pvt Ltd.
- 164 Sifuna and Mogere, *supra*, note 155.
- 165 Bolen and Robinson, *supra*, note 154, at 481.
- 166 These are the people living close to the resource and are key stakeholders in any conservation efforts.
- 167 Atiyah, P.S. (1983). *Law and Modern Society*, at 98. Oxford and New York: Oxford University Press.
- 168 Sifuna and Mogere, *supra*, note 155.
- 169 *Ibid.*, at 148.
- 170 High Court Civil Case No. 238 of 1999 (OS) (Nairobi) (Unreported).
- 171 This author is one of the lawyers representing the Ogiek in some of the cases that some members of the community have filed against the Kenya government to stop their eviction from the forest.
- 172 High Court Misc Civil Application No. 52 of 2000 (Lobatse) (Unreported). Judgement in this case was delivered in December 2006 while the author was in Botswana for fieldwork for this study. For the full text of the judgement, see http://www.survival-international.org/files/related_material/11_532_995_Bushmen%20Ruling.doc.
- 173 Sifuna and Mogere, *supra*, note 155, at 149.
- 174 Ojwang, J.B. (1988). "Law and the Public Interest: Some Introductory Remarks". In: Ojwang, J.B. and Kabeberi, J.W. (Eds). *Law and the Public Interest*, at 1. Occasional Paper No. 52. Nairobi: Institute of Development Studies (IDS), University of Nairobi.
- 175 The term policy refers to statements of ideals adopted by a government, and it is in this sense that this term is used in this work.
- 176 Atiyah, *supra*, note 167, at 80.
- 177 Ogolla, B.D. (1992). "Environmental Management Policy and Law". *Environmental Policy and Law* 22/3: 164–175, at 171.
- 178 WCNPA, *supra*, note 86.
- 179 Interviews conducted by the author in Botswana between July and December 2006.
- 180 Interviews with stakeholders in the wildlife sector in Botswana between July and December 2006.
- 181 From interviews by this author in Botswana between July and December 2006.
- 182 From this author's observations as well as interviews conducted in Botswana between July and December 2006.
- 183 From interviews with DWNP staff between July and December 2006.
- 184 Leakey, R. and Morell, V. (2001). *Wildlife Wars: My Fight to Save Africa's Natural Treasures*, at 63–65. New York: St Martin's Press.
- 185 Government of Botswana, *supra*, note 8, at 237. It has the responsibility for formulating, coordinating, developing and implementing policies and programmes for wildlife management.
- 186 The CBNRM model has also been incorporated into the WCNPA (Act No. 28 of 1992). The aim of this model is to strengthen the relationship between protected areas and adjacent communities. Apart from giving them direct benefits in the form of user rights, the policy also allows them to take part in the management of problem animals. This model also adopts an approach called the "Parks and People Strategy", through which the government facilitates regular communication between Park managers and adjacent communities, e.g., through formal surveys, suggestion boxes, participatory rural appraisal techniques and public fora, public wildlife awareness and education, and management collaboration where adjacent communities are involved in management and planning.
- 187 Government of Botswana. (2001). *Government Paper No. 1 of 2001: Community Based Natural Resources Management Policy*.
- 188 As regards elephants, a specific number of animals available for harvest is allocated to particular CBOs. Indeed, elephant hunting and viewing are the biggest tourist attraction in Botswana. The CBOs then utilise their user quotas or sublease their leases for profit. With such direct benefits being derived, the people see the elephant as an asset.
- 189 WCNPA, *supra*, note 86, Section 6(1).
- 190 Interviews with DWNP officials in Gaborone, 16 August 2006.
- 191 Ojwang, J.B. (1990). *Constitutional Development in Kenya: Institutional Adaptation and Social Change*, at 180.
- 192 State ownership does not necessarily guarantee its ownership on private land.
- 193 There are law reports on awards by the High Court and Court of Appeal.
- 194 The Botswana model of CBNRM is an evidentiary exhibit of this.
- 195 Many locals interviewed felt that the government should provide them with resources and expertise to protect their property and farms from attacks by wild animals.
- 196 Such abatement measures include: fencing their farms; guarding their properties; adopting land-use activities that are compatible with conservation; proper land-use planning to avoid having human activity on wildlife migration routes and dispersal areas; and avoiding accidental entry into protected areas.
- 197 See, for example, Sifuna, N. (2006). "Using Eminent Domain Powers to Acquire Private Lands for Protected Area Wildlife Conservation: A Survey under Kenyan Law". *LEAD Journal* (Law, Environment and Development Journal) 2(1): 86–104. <http://www.lead-journal.org/content/06084.pdf>. Last accessed on 16 March 2009.
- 198 Colchester, M. (1997). "Salvaging Nature: Indigenous Peoples and Protected Areas". In: Ghimire, K. and Pimbert, M.P. (Eds). *Social Change and Conservation*, at 116. London: Earthscan.

