

## Trophy Hunting: The Tuli Safari Circle in Zimbabwe

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**ABSTRACT** Trophy hunting is a controversial activity which takes place in a contested socio-economic and natural-wildlife environment. The contestations revolve around issues of development, conservation, sustainability, ownership and distribution of resources. An investigation of stakeholders' perceptions on these issues, within the developmental agenda of Zimbabwe, is the main aim of the study. Through a series of stakeholder interviews it is concluded that whilst local people prioritize the making of economic gains from their environmental resources, government officials and the National Parks authority are more concerned with environmental protection and sustainability. The game farmer or concession holder's priorities are mainly sustainability and profit and the clients' primary objective is to derive satisfaction from hunting down a worthy trophy. In practice, the differences and similarities in environmental perceptions of stakeholders in the Tuli Safari Circle affect decision making realities in light of economic, developmental and sustainability issues. Whilst common perceptions across stakeholders could lead to effective policy making and achieve sustainability, balancing the diverse interests of the various stakeholders to the satisfaction of all remains a difficult objective.

### INTRODUCTION

An investigation into the Tuli Hunting Safari Block (THSB) provides a good example of the environmental and developmental paths along which the trophy hunting industry has been bearing since the 2008 establishment of a unity government in Zimbabwe. The unity government marked a shift in paradigm in the way environmental and socio-economic issues are approached (Hanke 2008). It opened a new door for finding common ground between stakeholders' perceptions and concerns and seeking understanding and collaboration on these perceptions - which would become crucial to making effective policy for a sustainable hunting industry. Hitherto, the harsh socio-economic conditions which plagued Zimbabwe, manifesting in the lack of governmental capacity and hyperinflation, coupled with a tense political atmosphere, prevented finding common grounds on environmental issues (Morolo 2004). These dire socio-economic and political conditions began to change when Morgan Tsvangirai was sworn in as a prime minister and Tendai Biti became the

new finance minister under the unity government between Zimbabwe African National Union Patriotic Front (ZANU PF) and the Movement for Democratic Change (MDC) parties in 2008.

An examination of the perceptions and values of the stakeholders, as they contest socio-economic benefits with environmental sustainability motives, is the core aim of this research. The utilitarian (benefits for self) viewpoint and moral (obligation toward other and the environment) viewpoint are the dominant lenses through which such perceptual tensions are contested (Konchack and Pascual 2006). Differences in perceptions and values will for instance determine the extent to which, and how, the environment by way of stock of trophy animals is considered or utilized. In a country recovering from years of socio-political and economic instability it is expected that a heavy bias toward economic growth would exist thus leaving the environment marginalized. It is thus important to investigate the real-life tensions and compromises that determine the processes, and implications to society, economics and environment, of trophy hunting in Zimbabwe.

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### Objectives

The study thus seeks to establish the core contestants and the socio-economic, political and environment issues that constitute the contested agenda in the THSB; find out stakeholder perceptions on these matters; unravel how

decisions around trophy hunting are made and; establish the policy measures that affect the decision making processes. In order to achieve these goals the following research questions are pertinent:

- ♦ What are the effects of Zimbabwe's political changes on the hunting industry?
- ♦ Is there sufficient stakeholder participation in the hunting industry?
- ♦ What are the socio-economic and environmental perceptions of stakeholders towards the Tuli Hunting Safari Block?
- ♦ How are the tensions between environmental conservation objectives and desires for economic gains being managed?

The study area – the Tuli Hunting Safari Block - occupies a 416km<sup>2</sup> semi-circular piece of land that extends into Botswana from Zimbabwe (Fig. 1). The primary activity in the Tuli Safari Block is trophy hunting, whereby a client pays an agreed fee to hunt a specific 'trophy' – usually a lion. These clients hunt with a paid guide under the management of an 'operator' who is the concession holder responsible for marketing the hunts and managing his staff

(Lindsey et al. 2007). The concession is granted by the Zimbabwe National Parks Authority (ZNPA), who plays an oversight role (Baker 1997; Nelson et al. 2013).

There are four main groups of stakeholders whose vested interests are important to decisions relating to trophy hunting in the Tuli Safari Block. First are members of the Zimbabwe National Parks Wildlife Management (NPWM) who set the hunting quotas and manage the stock of animals. Second is the concession holder who manages the safari by marketing hunts to clients. The third group of stakeholders is the local people - mainly communal residents including local staff who work in the park. Finally are the clients or hunters, who pay to hunt and create the demand that keeps the system economically viable. Because all these stakeholders have relative vested interests in the Tuli Hunting Safari Block, the area becomes a contested domain in terms of the environment, sustainability, and economics.

The research report is presented in four parts. Part one is the literature review which discusses the various social and economic perceptions

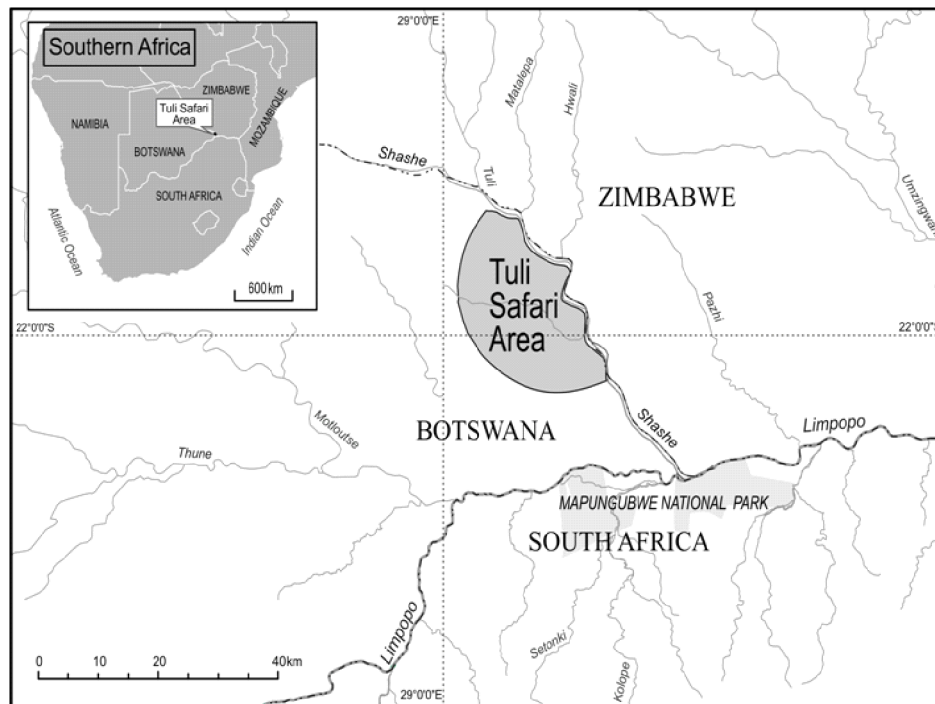


Fig. 1. The location of the Tuli Safari Area (adapted from: Google Earth 2008)]

that have emerged in the environmental discourse and the general paradigms in which these perceptions are couched. Such a review provides a basis for understanding the broader social and economic context of the research. Part two describes the study site and methodology employed and also identifies the key stakeholders in Tuli safari hunting business. Part three details the stakeholder perceptions, pointing out the similarities and differences in their perspectives to the hunting environment. Finally, after the relative perceptions of all the stakeholders are considered, conclusions and recommendations are made on promoting the interest of the stakeholders and ensuring environmental sustainability of the hunting industry in Zimbabwe.

### Literature Review

Tensions between socio-economic prioritization and environmental conservation measures have always attracted policy debates and resulted in explanatory paradigm shifts (Nelson et al. 2013; Lindsey et al. 2013). Rachel Carson's 1962 book 'Silent Spring' is arguably the seminal work on the environmental effects of human exploitation of natural resources (Carson 1962). Carson's contention was that the unregulated use of pesticides led to extreme negative effects on the environment, ecology and human health (Jegede 2001). Since then environmental issues have become a dominant part of economic, social and political policy making and implementation. At the heart of most of these environmental debates lie the tension between population and consumption on the one hand and resource conservation on the other (Jegede 2001).

Often, sustainable development takes an anthropocentric stance - a viewpoint which concentrates on the interconnectedness between nature and humans with humans playing an important role by primarily transforming nature through resource usage (Feris 2008). Such a view contrasts with the bio-centric one - whereby the environment has value in itself. Humans may not exploit these values except to satisfy basic needs (Feris 2008). With the current state of Zimbabwe, it is expected that economic issues would take precedence over the environment leading to a leaning towards an anthropocentric stance. Within the ambit of market liberalism, environmental sustainability could be achieved by combining development agenda

with strict environmental protection policy interventions (Pepper 1996). The 'Porter Hypothesis' which suggests that any hindrance to production that may occur as a result of compliance to environmental regulations can be compensated for by the innovations the policies may stimulate (Ambec et al. 2013; Kriechele and Ziesemer 2009) comes into play. Indeed, technology itself has proven to be essential in achieving environmental quality when combined with the human capacity to innovate (Konchack and Pascual 2006). Therefore policies themselves can form a catalyst for sustainability through innovation. Such a technocratic cum anthropocentric stance encourages the implementation of green technologies for the benefit of people (Ambec et al. 2013). This is in contrast to the 'limits to growth' paradigm which perceives technology as a generator of environmental problems (UNEP 2002).

Perceptions of the hunting industry in Africa vary considerably (Nelson et al. 2013). However, the world conservation union's view of trophy hunting as a sustainable wildlife utilization process (though not entirely hegemonic) appeals to many countries and communities. Within this framework it is understood that incentives for conservation can be achieved through managed recreational hunting (Mackay and Campbell 2004; Linsey et al. 2012). The rationale behind trophy hunting is that sustainability can be achieved through a low off-take and high prices (Lindsey et al. 2007).

A different perception is held by animal rights groups who consider hunting as unethical, unsustainable and merely an ego booster (McGreal 2001; Linsey et al. 2012). Evidence of the unsustainability of hunting is found in Botswana where trophy lions have decreased rapidly due to over utilization (Baker 1997). In many of the country's hunting safaris most of the trophy (usually quality mature male lions) has been shot, however hunting continues due to the high profits that accrue to hunting operators. From the animals' right perspective is the argument that revenues can be generated from a non-consumptive use of reserves, such as Tuli, by embarking on photographic ecotourism (Lindsey et al. 2007). A counter argument is that in many real life situations ecotourism is more damaging to the natural environment than hunting. High densities of photographic tourists leave a lasting impact on the animals and habitats. These im-

pacts such as car tracks, noise and human overpopulation are not felt in the hunting areas where low densities of tourists create more revenue than photographic ecotourism (Baldus 2009). Furthermore the hunting industry is more resistant to political instability and infrastructure inadequacies. For instance, during the peak of Zimbabwe's political turmoil and economic woes tourism fell by 75% compared to a mere 12.2% drop in the hunting sector (Baker 1997).

Opposed to the non-consumptive use perception is the conundrum that without hunting in Africa few animals would survive (Lindsey et al. 2007; Nelson et al. 2013). The large revenues generated by hunting provide the main incentive for wildlife conservation. In economic terms the conservation of a piece of land (without hunting) is outweighed by the opportunity cost of an alternative usage. Indeed it is argued that there is no alternative means to raise enough revenue for wildlife conservation except through hunting (Baldus 2009; Packer et al. 2011). Tanzania's thriving trophy hunting industry bears testimony to how trophy hunting could substantially contribute to lion conservation, depending on how it is managed (Packer et al. 2011). Hunting covers, on average, 90% of the income in the Selous National Park in Tanzania (Baldus 2009). As a result substantial revenues from hunting accrue to anti-poaching, conservation and community development and community engagement involves infrastructure building and skills development whilst surplus meat from the hunts is also distributed throughout adjacent communities.

A similar stance is in place in Zimbabwe through the communal areas management program for indigenous resources (CAMPFIRE). Established in the 1980s through a success story involving the Shangaans on the fringes of the Gonarezhou national park, local communities are permitted to sell hunting rights to private companies and derive direct economic benefit from conservation. Fifteen percent of the proceeds of hunting go towards rural district councils who decide on how to spend this money. The proceeds can be allocated to individual households or community projects such as schools and clinics. The revenue is also directed to local wildlife management (Mackay and Campbell 2004). As a result of these initiatives the once environmentally hostile communities have changed their attitudes to a more preser-

vationist stance because they could derive benefit from doing so (Mackay and Campbell 2004). Once again an anthropocentric perspective is taken whereby the sustainable utilization of natural resources is designed to benefit humans.

In the following section we take a brief look at the study site, the Tuli Safari Circle, and explain the methodology employed in soliciting the opinions and perceptions of stakeholders.

### STUDY SITE, STAKEHOLDERS AND STUDY METHODS

Tuli Hunting Safari Block (THSB), the study site, is in the South Western part of Zimbabwe (see Fig. 1). Its boundary was demarcated when the original settlers, known as the 'pioneers', fired cannon balls across Zimbabwe into Botswana resulting in the 16 kilometer semi-circular boundary of the safari reserve (Capesa 2010).

Key stakeholders who form the population of the study are the concession holders, national parks managers and rangers, the clients (hunters) and the local community. Representatives of these groups, based on convenience sampling, were selected and interviewed. Convenient and feasible, the non-randomness of the sample does not preclude generalization of the results (McBurney 2001). The mainly open-ended questions were formulated to solicit the categorization of stakeholder perceptions on environmental and socio-economic issues relating to hunting in the Tuli Safari Circle. Furthermore detailed unstructured discussions were held with the stakeholder representatives on the related issues. In all of these the environmental laws and regulations of the hunting industry in Zimbabwe were taken into account. For instance Section (4) of the Zimbabwean Environmental Management Act (Ch 20: 27) No. 13 of 2002, which outlines environmental rights stipulates the right of local communities to participate in the implementation of legislation and policies to ensure equity and environmental quality (ZELA 2003). Such important bottom-up policy intensions were taken into consideration in analyzing perceptions and synthesizing the discussions.

### Hunting Quotas and Stakeholders' Perceptions

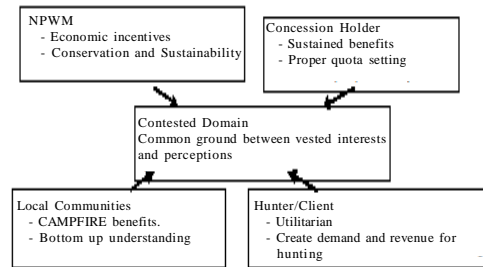
The central mechanism around which these stakeholders converge is the hunting quota system. According to Mr. Capesa (senior ranger),

the quota system is designed by the Zimbabwe national park and wildlife management (NPWM), with the intension of flexibly accommodating the changing animal populations in order to achieve sustainability within the hunting industry (Capesa 2010). The rules of the quota system are however set internationally by the convention on international trade in endangered species (CITES). As a signatory to CITES and in line with section 87-96 of the country's national environmental plans (ZELA 2003), Zimbabwe allows the CITES secretariat to approve hunting quotas and to award tags for export purposes (Capesa 2010). The CITES secretariat grants hunting quotas on the basis that the hunting off-take of a certain species will not be to the detriment of the long term survival of that species (Baker 1997). In adopting a system of utilization without affecting the natural ecosystem, CITES encourages an eco-centric approach (Lindenmayer and Burgman 2005). Both Mr Nyamtora (manager of the quota system) and Mr Strydom, (concession holder) concur with CITES - pointing out that the role of the concession holder includes the identification of old non-productive males of a species to be hunted by their clients (Nyamtora 2010; Strydom 2010).

Quotas are set based on a number of parameters including trophy quality, trophy size, length of time it takes to hunt a particular species, latest animal population trends and also animal population growth rates (Nyamtora 2010). Research into animal population is conducted by the scientific services unit of the parks and wildlife management board. According to Mr Bope, a manager of the NPWM, sometimes aerial surveys conducted by the World Wildlife Fund (WWF) in conjunction with animal sighting reports by park rangers assists in establishing population trends (Bope 2010). Finally the utilization office issues quotas to the concession owners only after the quota has been approved by the chief ecologist of the scientific services (Nyamtora 2010).

The mechanism for setting quotas provides room for stakeholder engagement. The NPWM holds annual workshops in local areas where the safari operator (concession holder), local community and the rural district councils (RDC) provide information (from the perspective of their relative vested interests) into the quota system (Bope 2010). Firstly the safari operator will present information about the trophy size, tro-

phy quality and the duration of hunts and suggest an appropriate quota level. Secondly the local community will bring information on problem animals in the area. For example, elephants that trample subsistence crops or lions that threaten human safety in the area will be considered problem animals. If these problem animals are on the increase then there is a corresponding increase in the quota for these animals. Thirdly the rural district councils which keep record of animal population trends and the status of the environment will present these at the workshop (Bope 2010).



**Fig. 2. Stakeholder perceptions and environmental contestations in the THSB**

Clearly, it is important to distinguish and delineate between the stakeholders and their relative environmental perceptions in order to establish common grounds essential for democratic policy making. Figure 2 illustrates how the various stakeholder perceptions lead to a contested environmental domain.

In the following section the views, roles and contestations of the main stakeholders - the parks and wildlife management, the concession holder, the local community and the clients - are described. Also their positions on environment and conservation as well as their priorities, which stem from vested interests, are explored.

### **National Parks and Wildlife Management (NPWM)**

Interviews with three staff members of the NPWM namely: Mr. Nyamtora, the manger of the quota system at the park; Mr Capesa, the senior ranger and; Mr. Bope, the Manager of the CAMPFIRE program, together with information from the national parks and wildlife management documents represent the views of the NPWM on the trophy hunting system at Tuli.

The NPWM documents state the vision of the organization as becoming a world leader in sustainable conservation by managing efficiently and profitably the Zimbabwean wildlife heritage for present and future stakeholders through sustainable utilization and delivery of quality services (ZPWM 2005). The mission statement explicitly incentivizes conservation. Unlike preservation which endeavors to maintain areas of nature that are untouched by humans as they are believed to hold intrinsic value independent of human and economic valuation (Hanley and Buchdahl 2002), the main objective of conservation is to ensure that the benefits of biodiversity that accrue to humans is fair and equitable both for present and future people (Lindenmayer and Burgman 2005). This is consistent with the Bruntland Commission which conceived sustainable development as development that meets the needs of the present and future generations ethically (UNEP 2002).

Though the NPWM holds that the benefits of the environment can persist into the future if ethically managed, the result of the 15<sup>th</sup> CITES conference of the parties held in Doha, Qatar concluded that Zimbabwe needed rigorous adoption strategies to ensure sustainable utilization and conservation of biodiversity (CITES 2009). This urge by the CITES COP15 was in light of the unrestrained rhino poaching activities across the country. A state of affairs which has jeopardized Zimbabwe's position on CITES lists (Larson 2009). Therefore the NPWM mission statement cannot be assumed to have full credibility as it has many challenges. Being that as it may, the senior NPWM ranger at the Tuli safari circle who oversees the management of the area's conservation believes that the NPWM's mission statement can be achieved through efficient management (Capesa 2010).

The senior ranger at Tuli hunting safari block who represents the national parks and wildlife management board highlights the cultural value of the area as an added incentive for its conservation (Capesa 2010). The Tuli block contains various historical sites dating from the early European settlers. These include the pioneer cemetery, the Fort Tuli, Simala ruins, over two thousand year old baobab trees with pioneer signatures and the ruins of the British South African Police camp including a prison (Capesa 2010). These cultural remnants are considered worthy of conserving even though they are not

strictly part of the natural ecosystem. As observed by Soliva and Hunziker (2007), heritage conservation acknowledges the historical milieu of the landscape. Therefore within the THSB an incentive for heritage orientated conservation exists due to the presence of these historical sites.

Furthermore, the parks and wildlife management board advertises these cultural attractions on their website (ZPWM 2005) and hence the incentive to conserve these historic sites may be owed to the economic benefits they generate via tourism. Heritage orientated conservation can therefore have an economic rationale which interests the NPWM stakeholders. Being that as it may, hunting remains the high revenue generator, contributing 65% of the parks revenue. These economic incentives over the natural environment, however, can be distorted if loose control allows for the over-exploitation of wildlife resources by well-resourced hunters (Nyamtora 2010).

Hunting also benefits the local community - in line with the view of the manager of the CAMPFIRE programme that local communities as custodians of natural resources should be the primary beneficiaries of revenues generated from these resources. In practice, 55% of CAMPFIRE hunting revenues go to local communities (Bope 2010). However, Nyamtora, the manager of the quota system points to the mismanagement of funds allocated to the rural district councils through the CAMPFIRE program as a threat to the sustainability of the area (Nyamtora 2010). He also considers members of the RDC responsible for poaching and urges for stricter control in line with the COP15 position (CITES 2009). Contrarily the Manager of the CAMPFIRE program is of the opinion that environmental problems were caused by ownership issues stemming from strict controls. Prior to the CAMPFIRE programme in Zimbabwe, all wildlife belonged to the state leaving local agencies and communities with a diminished role as environmental actions required authorization from the top. CAMPFIRE eased conflict and created incentives for local agencies and people engaged in sustainable utilization and conservation of the natural resources (Bope 2010).

### *Concession Holder*

The main role of the concession holder or safari operator is to market trophy hunting tours

to international clients. Often done at international hunting conventions, the concession holder advertises large trophy animals such as old elephant bulls that are set on quota to potential clients (Lindsey et al. 2007). The concession holder at the Tuli safari reserve (Mr. Strydom), is of the view that 'in marketing hunting future generations must be considered as part-beneficiaries of wildlife' (Strydom 2010) – a view consistent with the ideology of sustainable development. He however holds that the desire for possible short term monetary gains is fueled by the short five-year-lease that concession holders have on safari areas in Zimbabwe. He therefore suggests that longer leases be introduced so that one could invest more into the sustainability of the area by, for example, building dams and boreholes. These together with long term job security of staff would create greater, long term incentives for sustainability (Strydom 2010). On the contrary, the manager of the quota system at the NPWM head office perceives the 5 year lease to be long enough to induce incentives for sustainability (Nyamdora 2010). This illustrates another perceptual difference between these stakeholders.

Even sharper are the differences when it comes to quota setting. Whilst the concession holder insists that there are no lions in the Tuli safari block, the parks management had, on quota, two lions to be hunted (in the 2008 hunting season). At the end of the hunting season the concession holder must pay a 30% concession fee based on the quota issued for that season even if the animals are not hunted – implying that the concession holder must pay the concession fee for the two lions on quota even though they may not exist within the safari area (Nyamtora 2010; Strydom 2010).

This illustrates how vested interests and monetary incentives play a role in conservation. In this particular case the concession holder contested the presence of the two lions on quota, leading to the Limpopo predator research group conducting a lion survey through the use of call up stations. No lions were detected at any of these points within the THSB (Funston et al. 2009). The research group concluded that no lion hunting should occur until populations recover to at least 20 in the greater Mapungubwe Conservation area - providing an example of 'source and sink' whereby animals repopulate before they are considered for hunting (Fun-

ston et al. 2009). Lions were thus taken off the THSB hunting quota for a moratorium period (Capesa 2010) which suited the concession holder as the future benefits of lion hunting now seem more likely (Strydom 2010).

Photographic safaris were suggested as an alternative to hunting, however the concession holder pointed out that photography could not generate adequate revenue to meet the needs of all stakeholders including those of conservation (Strydom 2010). Indeed national parks in Africa are mostly underfunded, with tourism contributing about 30% of the required funds (Balduz 2009). The NPWM also indicated that with Zimbabwe's current situation of declining tourist numbers, the hunting industry is vital for conservation to fund itself (Nyamtora 2010). Moreover, advocates of trophy hunting as a means to conservation agree that hunting imposes less damage on the environment and generates higher revenues as fewer hunters, than photographic tourists who pay less per entry into the wild, leave it more natural (Baker 1997). Other advantages that hunting has over photographic tourism are that a hunter is worth 100 tourists to the local economy due to the high prices of trophy hunts. Also some areas unreachable or unsuitable for photographic tourism are ideal for trophy hunting which can increase revenue, benefit local communities and control population of some species that overpopulate and damage the environment (Baker 1997).

### *Local Community*

It has become common practice in many countries to involve local people and integrate local concerns and interest in environmental decision making (Martello and Jasanoff 2004; Nelson et al. 2013). Such a bottom-up approach would, in terms of the Tuli Safari Circle, involve the rural, local community adjacent to the THSB who fall under the CAMPFIRE hunting system, as well as staff members who live and work on a daily basis within the case study area. Integrating the interests of the local community requires an understanding of local perceptions of trophy hunting in the Tuli reserve.

Cloud, a local community member, blames government for neglecting people in the rural areas in crafting and implementing environmental management policy. However he also high-

lights overcrowding due to the cultural extended family system as leading to environmental degradation (Cloud 2010). For an example he points to the situation whereby rural people around Tuli would cut trees indiscriminately and drag firewood along the ground worsening erosion. Some local community members, as stakeholders, also have issues with the CAMPFIRE program. While some perceive it to be a success, others hold that governmental mismanagement has allowed problem animals such as elephants to destroy crop farms and provoke antagonism towards environmental conservation.

A local tracker (Ngibe) also fears that some of the game in the THSB (such as large antelopes) will soon run short because of over demand. Ngibe (2010) points to incorrect marketing of animals which stems from the incentive of generating revenue as the reason for the reduction in the number of species such as Sable, Eland and Kudu. 'Even though the numbers are reducing drastically normal quota setting continues because some people are still making money', claims Ngibe (2010). Clearly, local stakeholders also identify with the problem of mismanagement of game hunting. However, as pointed out by the tracker some members of the local community are sometimes part of the problem. He pointed to locals who would rather poach wild game, and make a profit even after paying a poaching fine, if caught (Ngibe 2010). The camp manager on the other hand sympathizes with the local people with the claim that the context of the Zimbabwean economy causes environmental problems especially in areas such as THSB, where rural people are marginalized by the economy and are left with no other choice but to exploit the natural resources available which create unsustainable conditions (Van Schalkwyk 2010).

### *Hunter / Client*

The hunters or clients are the people who create the demand for the hunting system. In line with Baker (1997), they advocate a consumptive use value for wildlife instead of preserving it in a way unbeneficial to community and country. Two clients, Hay from Missouri and Whitley from Texas, provide insights of how the hunters perceive the industry with its associated opportunities and threats.

Hay comes annually to hunt at THSB which 'offers a quality experience with plenty of hunt-

ing opportunities' because of the 'relative abundance of wildlife compared to other hunting areas in Zimbabwe'. He thinks that the major threat to the environment comes from local communities who due to poverty and survival needs poach and use the environment unsustainably. 'For many, day to day survival takes precedence over long term environmental concerns' (Hay 2010). He further suggests that the management of wildlife should be done in such a way as to achieve an expanding resource base. He likened this to an example in his home state of Missouri where little or no deer existed due to poor management of hunting in the 1950s and 1960s. Effective, self-financed repopulation strategies and better management of hunting changed the situation and today abundant wildlife exists together with a thriving hunting industry (Hay 2010). This was achieved through the USA's environmental regulations and the willingness of large corporations to self-impose environmental regulations over and above those that have been set out by the Environmental Protection Agency (EPA) – what Eisner (2004) describes as 'corporate environmentalism'. Hay further opines that expanding the resource base is only achievable through a strict application of operational laws. As is the case in the developed world where the local municipalities are empowered to enforce environmental laws through punishment and reward so should it be in Zimbabwe with the rural development councils given authority to punish any lawbreakers on behalf of the state – which owns all wildlife (Hay 2010). Appropriate application of these laws could lead to the repopulation of hunting areas, increasing hunting quotas and boosting the economy. Moreover, if greater numbers of wildlife can be hunted sustainably it could increase overall revenue through elasticity of demand. On the contrary, if only one lion is set on quota due to dwindling numbers, a high price is placed on the hunt. Therefore, if this lion is poached or migrates all stakeholders will lose a relatively large amount of revenue and utility value. However, if an expanding resource base is achieved then more lions can be set on quota annually with less risk per lion hunt.

Whitley, who is a client from Texas, USA comes to hunt in Africa 'because it offers the ultimate hunting experience with its thrill and challenge'. He perceives his hunting efforts as not only offering personal satisfaction but also con-



tributing to the local economy and to conservation. He sees his hunting payments as contributions to these ends though he admits that he does not fully understand how the hunting quota system works in Zimbabwe (Whitley 2010). He also claims that by 'hunting only older trophy males of the chosen species [he] helps in ensuring a role in the ecosystem for stronger and younger males'. These older trophy animals are picked by the concession holder based on their perceived suitability for hunting as they offer a consumptive use value. The system of hunting only older game has allowed some species populations to grow even whilst being hunted in a specific area (Baker 1997).

Whitley suggests that environmental problems are caused through commercialization and greed. However, through state and private management together with well-meaning leadership, quality hunting can be achieved. He based his opinion on the hunting trends he experienced in Texas, throughout his life, where strong legislation and high standards led to sustainability - especially in the case of the popular white-tailed-deer (Whitley 2010).

#### **Finding Common Grounds in Stakeholder Perceptions: Theory and Practice**

Mismanagement of the hunting quota system, leading to environmental issues, is highlighted by all stakeholders. The quota system aims for sustainability of trophy hunting yet, it provides incentives for unsustainable social and environmental behaviour in the Tuli area (Capesa 2010; Strydom 2010; Ngibe 2010). For example, it is easier and cheaper to poach for survival and profit even after paying a poaching fine; the fine for rhino poaching is approximately US\$120 000, however this is not an effective poaching disincentive as the profit from a pair of rhino horns offsets this cost (African Hunter 2010). Though international pressure resulted in the re-instatement of a five year obligatory jail term for poachers, in practice the application of this law is influenced by politics - with some claiming that the length of jail term imposed depends on the political party of the poacher (African Hunter 2010).

Stakeholders commonly hold the conservationist view that sustainability can be achieved through the effective management and enforcement of the hunting quota system. By giving

economic value to the animals to be hunted, this anthropocentric point of view, suggests that the likelihood of humans destroying the environment is reduced by the economic incentive to maintain the ecosystems (Badenhorst 2004). The contrary preservationist school of thought assumes that all human actions inevitably harm the environment; therefore the environment needs to be protected from human interference (Marsh 2002). But as pointed out by Badenhorst (2004) the preservationist point of view does not offer solid solutions to environmental issues within the underdeveloped African social, economic and environmental context. It appears that the stakeholders are well aware of the impracticability of the preservationist perspective particularly in light of the dire socio-economic conditions of rural Zimbabwe.

The common view that wildlife has a useful function is a utilitarian view (Badenhorst 2004). This falls within the economic framework of the hunting quota system as incentives exist for the usage and consumption of this resource. For example, the suggestion that the area be utilized for photographic safari, preservation viewpoint, did not materialize because the stakeholders all have a conservationist perception (Strydom 2010; Capesa 2010; Nyamtora 2010). A perceptions fuelled by the rational economic incentives that underlie the hunting quota system. For example, the concession holder of the THSB understands that if the area was a photographic safari area it would not generate enough revenue leading to the loss of social, economic and environmental sustainability (Strydom 2010). The NPWM also relies on the hunting industry for 65% of the revenue needed to achieve its conservation goals (Nyamtora 2010).

Baldus (2009) asserts that wildlife in Africa can survive without hunting, however, not without money. By advocating for a market liberal approach, the stakeholders are pragmatically opting for the most effective approach to achieving social, economic and environmental stability (Strydom 2010; Capesa 2010; Nyamtora 2010). The market approach to wildlife management could establish maximum sustainable yields of animal populations by considering the vital statistics of species' population such as net productive rates, survivorship rates, fecundity rates, death rates and carrying capacity, which are acquired from field observations, to calculate the population growth rates (Gibbs, undated). This

information will indicate how many individuals of a certain species can be harvested without reducing the overall population growth rates and therefore becomes vital in quota setting. The consideration of these fundamental ecosystem processes within the quota setting system has been identified by the local tracker who identifies population dynamics as the most important element pertinent to quota setting (Ngibe 2010). Thus liberal market oriented measures and policy processes should take into account population dynamics and ecosystem processes in order to achieve sustainability.

Within this case study it is important to consider the economic context in which Zimbabwe finds itself especially when considering the common economic incentives of the stakeholders. The new development regime in Zimbabwe has created incentives for industrialization (Time 2009). Some market liberal perspectives would encourage a 'grow first, clean up later approach'. This perception understands that environmental quality will initially deteriorate with economic growth and industrialization until per capita income reaches a certain level. Thereafter environmental quality will improve as people have higher incomes to pay for environmental quality (Galeotti 2007; McPherson and Nieswiadomy 2005). Based on the priority given to economic incentives by all the stakeholders in the Tuli trophy hunting case study coupled with the economic context of redeveloping Zimbabwe, it is expected that economic growth will precede environmental sustainability. However environmental sustainability is only achievable with effective environmental policies and under good management as advocated by the stakeholders (Strydom 2010; Capesa 2010; Nyamtora 2010).

Indeed the perceptions and perspectives on trophy hunting by stakeholders need to be couched not only within the economic context of Zimbabwe but also in light of the environmental laws of the country. The Environmental Management Act (Ch 20:27) No. 13 of 2002 was produced by the Zimbabwe environmental law association (ZELA). The principal objective of this law is to achieve equitable and just use of natural resources and to conserve the environment (ZELA 2003). Furthermore the Act holds an anthropocentric view which prioritizes meeting people's needs as the primary objective of environmental conservation. It thus advocates for the sustainable utilization of species and ec-

osystems (Section 87 – 96) (ZELA 2003). Evidently policies do exist in Zimbabwe for the sustainable utilization of environmental resources. Yet there are serious mismanagement issues as pointed out by all stakeholders. Suffice to say that effective enforcement of policies could ensure sustainability of the nation's environment in general and the hunting industry in particular.

## CONCLUSION

Political and economic changes such as the formation of unity government and dollarization of currency offer new opportunities for collaboration, stakeholder involvement, and effective public participation in Zimbabwe. Development, as defined by improvement of living standards through increased social, economic and institutional processes is vital within the Zimbabwean context. In line with this, the qualitative assessment of the environmental perceptions of stakeholders in the Tuli Safari area reveals a common conservationist perspective with a strong inclination towards economic and utilitarian incentives as the propellants of sustainability. However issues of mismanagement are commonly acknowledged by stakeholders as rendering environmental policies ineffective. As a result short term monetary incentives tend to encourage over-utilization of the country's natural resources.

It is encouraging when stakeholders show a good understanding of how the ecosystem works -with the local tracker for example, affirming that all the animals on and outside the hunting quota system are eco-systemically interconnected. Clearly the stakeholders regard the ecosystem as the base on which all of the benefits derived from hunting depend. The quota system therefore needs to bear in mind all of these aspects and processes as they contain economic and environmental values that need to persist into the future. Yet setting quotas to meet these goals would require the application of precautionary principles which are difficult to apply in light of current socio-economic realities.

## RECOMMENDATIONS

Trophy hunting has the potential of ensuring conservation of wildlife and sustaining the viability of Zimbabwe's environmental resources. For this to happen however it is important

that appropriate policies be put in place and effectively implemented. Effective implementation is only possible if corruption is curbed and environmental governance enhanced. Key criterion for an effectively governed trophy hunting system is one that has a clear, transparent and competitive system of quota allocation. Local participation is crucial in all these processes. Furthermore, the bulk of revenue arising from trophy hunting should go to local owners of the environmental resources – without compromising the ability of the system to be self-sustaining. Indeed effective stakeholder participation could translate into a common, bottom-up understanding and guide to social, economic and environmental decision making - leading to sustainability of the hunting industry.

It is also in the interest of the industry to promote types of hunting that ensure conservation. This could be done by integrating development of wildlife-based land uses with land reform on the basis that prohibiting hunting does not assure effective conservation. Wildlife is perceived by all stakeholders as having an economic value therefore market orientated measures should be taken to achieve sustainability within the hunting industry. Finally the role of CITES and other international regulatory mechanisms in synergizing trophy hunting and conservation should be recognized and encouraged.

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