

**WILDLIFE AND TOURISM IN ECONOMIC DEVELOPMENT FOR  
SOUTHERN AFRICA**

**By**

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## WILDLIFE

Wildlife represents an important economic, social and cultural resource of the southern Africa region. The combination of wildlife particularly the 'Big Five', unique and spectacular landscapes, ancient cultures and other attractions, support a vibrant tourism industry, which contributes substantially to the national economies. Though wildlife resources are critical to the region's economies, its full economic potential has not been fully exploited because of numerous challenges the sector faces.

### Wildlife status in southern Africa

Southern African savannahs are home to a rich diversity of wildlife resources. **Figure 1** provides estimates of the number of species of large mammals, birds, reptiles and amphibians in the region's countries. According to the Southern African Development Community (SADC 1997), the region hosts 72 of the continent's 90 large herbivores and in excess of a thousand bird species.

This wealth in wildlife diversity is mainly due to the abundance of habitat types represented in the region ranging from lowland to montane evergreen forests through savannah woodlands and grasslands, wetlands, deserts, freshwater and marine systems to the botanically mega-diverse fynbos and succulent karoo biomes of south western South Africa. All of which are home to different species. Examples of dominant fauna in these habitats are given in **Table 2**. This wealth in wildlife diversity and the fact that much of it exists in largely pristine wilderness, makes the region one of the most popular tourist destinations in Africa (Jansen 1990).

The 'Big five' (elephant, Buffalo, Lion, Leopard and Rhino), which are found in most of the prime National Parks of the region such as Kruger in South Africa, South Luangwa in Zambia, Hwange in Zimbabwe and Chobe in Botswana, are the major tourist draw card. In addition, in other countries such as Botswana and Zambia, less common species such as Sitatunga are an added attraction.

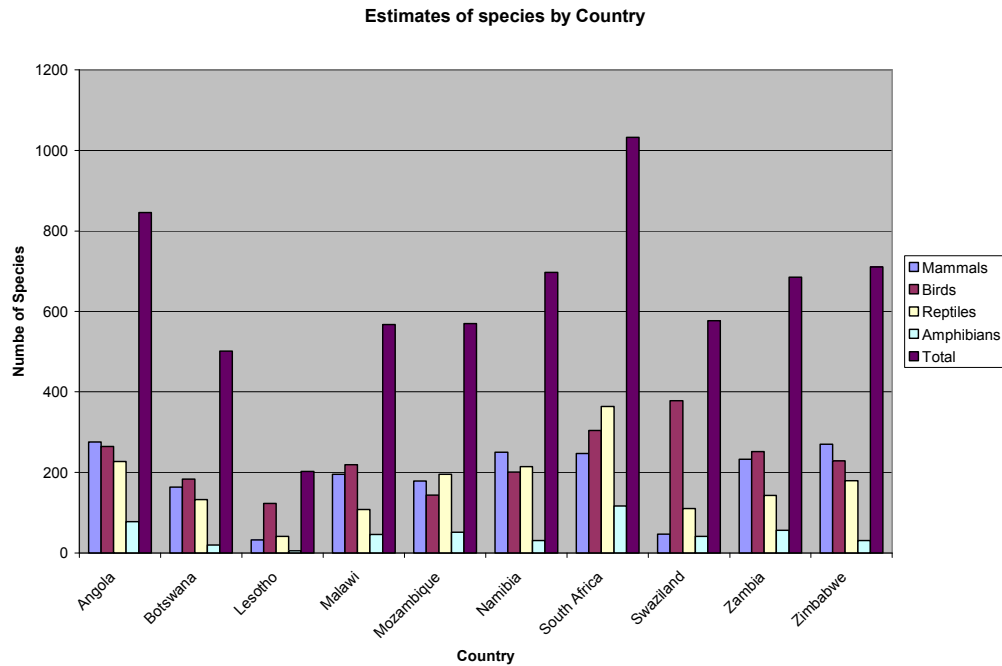
Table 1: Estimated Species Richness of Some Taxa in southern Africa

Country	Mammals	Birds	Reptiles	Amphibians	Total
Angola	276	265	227	78	846
Botswana	164	184	133	20	501
Lesotho	33	123	41	6	203
Malawi	195	219	108	46	568
Mozambique	179	144	195	52	570
Namibia	250	201	215	31	697
South Africa	247	304	364	117	1032

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Swaziland	47	378	111	41	577
Zambia	233	252	143	57	685
Zimbabwe	270	229	180	31	710

Source: <http://earthtrends.wri.org>



Ecological values of wildlife are manifested in the role of protected areas and other wildlife estates in which most of the wildlife is found. Although, historically most were specifically designated for wildlife protection, they provide numerous benefits to human and ecosystem wellbeing. In addition to being havens for wildlife, protected habitats play an important role in watershed functioning and nutrient recycling.

**Table 2: Examples of Common Animal Species by Habitat in Southern Africa**

Habitat	Dominant Species			
Savanna	Grazers	Mixed Feeders	Browsers	Carnivores
	White rhino		Giraffe	Lion
	Eland		Black rhino	Hyena
	Zebra		Kudu	Cheetah
	Waterbuck		Dikdik	Wild Dog
	Oryx			Jackal
	Topi			Bushy-tailed mongoose
	Wildebeest			Bat-eared Fox

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	Impala			
	Gazelle			
	Buffalo			
Forest		Gorilla	Elephant	Leopard
		Baboon	Nyala	Serval
		Chimpanzee	Bongo	Large spotted Genet
		Colobus Monkey	Bushbuck	
		Lemurs	Duiker	
Wetlands	Hippopotamus			Crocodile
	Sitatunga			

Source Modified from Boitani *et al.*, (1999)

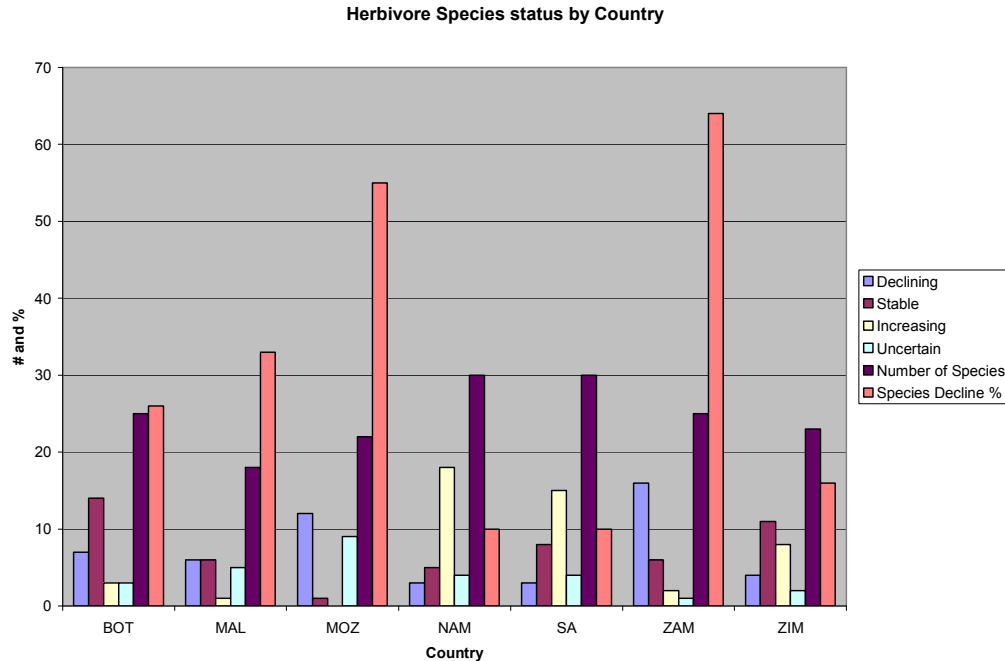
Conservation status of mammals in Southern Africa since the early establishment of protected areas has been very successful as far as avoiding extinctions of large mammals at the regional level. So far no large mammal or small mammal species as far as is known has become extinct in the region. However, trends in number and distribution of species are a good indicator of the effectiveness of protected areas and other conservation efforts in conserving wildlife and in giving an indication of the status of the wildlife. As shown in Table 3, a broad assessment of recent trends in a range of large mammal species at a national level reveals alarming levels of population declines in Southern Africa (Cumming 2004). Unless the effectiveness of current wildlife management systems are improved, these trends may continue and the wildlife populations will be reduced to demographically and genetically unviable populations with serious ecological and economic repercussions.

Table 3: Status of Large herbivore species in selected Southern Africa Countries

SPECIES STATUS	BOT	MAL	MOZ	NAM	SA	ZAM	ZIM
Declining	7	6	12	3	3	16	4
Stable	14	6	1	5	8	6	11
Increasing	3	1	0	18	15	2	8
Uncertain	3	5	9	4	4	1	2
Number of Species	25	18	22	30	30	25	23
Species Decline %	26	33	55	10	10	64	16

Source: Cummings (2004)

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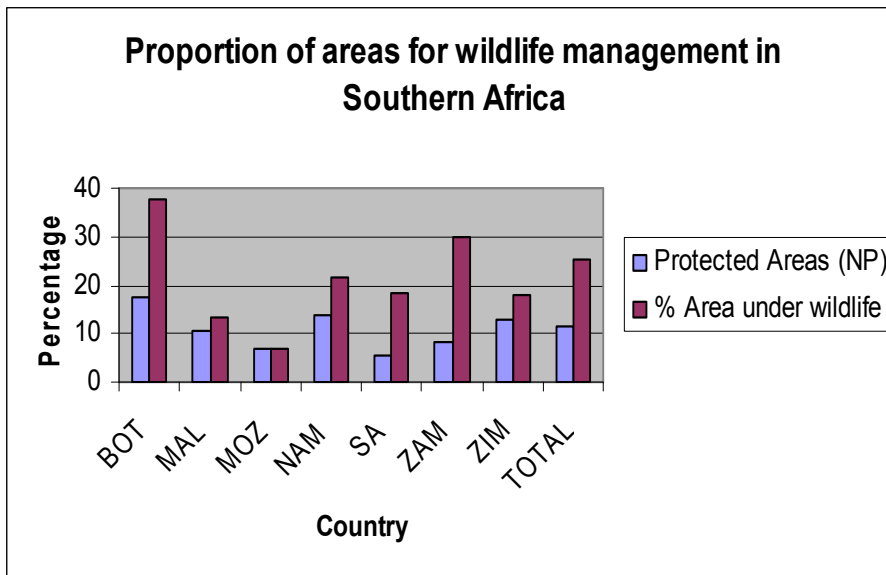


These wildlife resources constitute an important economic, social and cultural resource of the region and combines well with some great landscapes, cultures and other attractions to support a vibrant tourism industry, whose contribution to the national economies is substantial. In recognition of the important roles wildlife play and the need to conserve it, the region has over the years, established one of the most extensive networks of wildlife conservation areas. As given in Table 4, well over 25% of the region’s total land area is allocated to National parks, reserves and game management areas and private wildlife estates for the conservation and utilization of wildlife resources. In Africa as a whole, Over 1200 national parks, wild reserves and other protected areas while National Parks and wild reserves covers more than 2 million square kilometres (9% of total land).

**Table 4: State Protected Areas, Game / wildlife management areas and freehold areas under wildlife in Southern Africa**

Category of Wildlife	BOT	MAL	MOZ	NAM	SA	ZAM	ZIM	TOTAL
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Area								
Protected Areas (NP)	17.3	10.7	6.7	13.8	5.4	8.4	12.7	11.66
% Area under wildlife	37.5	13.4	6.7	21.5	18.5	30.1	17.8	25.28



### WILDLIFE UTILIZATION IN TOURISM

The rich wildlife resources of Southern Africa play an important role in the economies of the countries of the region through various wildlife utilization types. Common forms of consumptive wildlife utilization include live game sales, safari and subsistence hunting, and culling/cropping.

In Zambia for example, tourism is the third pillar of the country's economy and the single most important pillar of the country's tourism is the wildlife sector. In 2003 tourism receipts amounted to US\$148.8 million and increased to USD152.8 million in 2004. Recent rough estimates of the tourism economic potential of wildlife resources in Zambia puts it at approximately USD one billion per annum if an estimated investment of US\$150 million over a 10 year period is invested in the effective management and development of the sector (MTENR 2004).

Africa needs to increase its tourism earning from the current 4% of total world tourism earnings by investing in the sector and the key attraction, which is wild and wildlife resources.

### **Wildlife-based tourism**

#### *Ecotourism:*

The most common and widespread use of wildlife in Southern Africa is non-consumptive tourism, which takes place in areas where densities of wildlife are high. In such areas photographic tourism is preferred to safari hunting as a means of wildlife utilization. It is dominated by photographic tourism where foreign tourists come to view game in its natural habitats. There are a number of activities that fall under this category. These include mobile photographic safaris, wildlife film industry, educational and research tours and walking safaris. Photographic tourism brings in income earned from lease fees for wildlife areas and tourism development areas. It contributes to job creation in rural areas, promotes investment and acts as an engine for development in the rural areas where other land use options are not competitive or are less viable.

In most of the southern African countries, wildlife utilization inside Protected areas is restricted to non-consumptive uses (mainly photographic tourism and research). However, the scenario is different in South Africa where both consumptive (safari hunting) and non-consumptive (photographic) take place in designated zones of the Protected Areas. In South Africa, photographic tourism takes place in the tourism development zone and low impact recreation zones designated within the Protected Areas. The tourism development zones are designated away from the safari hunting zones to ensure that there is no conflict of use with safari hunting and other consumptive use activities.

Non-consumptive use of wildlife includes activities such as game viewing and other forms of tourism, e.g., educational visits, research tours, walking safaris, etc., which are common in areas where densities of wildlife are high. Viewing wildlife in protected areas in Southern Africa attracts millions of international tourists annually. The tourist numbers indicate the volume of the overall tourism market of which wildlife-viewing tourism is only a part.

Considered to be the fastest developing sector in Southern Africa, tourism has been growing at a rate of 7% per year during the late 1990s (SADC 2000). Much of this growth is attributed to the region's rich biodiversity. Exact data on the share of wildlife-based tourism in the market is unavailable because national statistics do not differentiate between different forms of tourism. However, estimates based on surveys indicate that wildlife viewing in Southern Africa appears to account for at least 70% of the overseas visitor

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market. In most Southern African countries, wildlife-based tourism ranks among the top 3 contributors to nation's Gross Domestic Product (GDP), thereby supporting hundreds of thousands of jobs, earning urgently needed foreign exchange, and contributing to economic development. That tourist numbers increased steadily over the past years, indicating a growing demand for tourism in the region, suggests that if nurtured, tourism could contribute more not only to wildlife conservation, but also socio-economic development than is presently the case. Mass tourism, however, may not be sustainable in Southern Africa as it is vulnerable to external factors such as air-travel safety. Therefore, the most practical and profitable uses of wildlife lie in exclusive ecotourism<sup>1</sup> and sport hunting.

Another form of non-consumptive use of wildlife is photographic safari, which generates income from lease fees in wildlife and tourism development areas. It also contributes to job creation, promotes investment and acts as an engine for development in the rural areas where other land-use options are not competitive or less viable.

### **Safari Hunting**

One of the major strengths of wildlife as a resource is the diversity of uses, which it can support. Wildlife utilization practices in southern Africa are largely based on the region's wildlife management policies outlined above which include the concept of low volume, high value tourism. Wildlife utilisation in southern Africa includes consumptive and non-consumptive, subsistence and commercial uses.

Safari hunting is the main income generating form of consumptive wildlife utilization. It involves the off-take of mature male animals using scientifically set quotas that ensures the maintenance of a high trophy quality. This makes safari hunting an economically and ecologically efficient use of wildlife consistent with the current globally desire for high quality and low-density tourism policies. Big game trophies in Africa are highly sought after by foreign clients, mostly from the developed countries of the west. It is against this background that safari hunting has become an increasingly important and profitable form of land use southern Africa (Taylor 1990).

For example, average auction prices for live game in South Africa range from USD 75 for a Grey Duiker to USD25, 000 for a White rhinoceros (Damm 2001) Table 5).

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<sup>1</sup> Ecotourism is tourism to ecologically and culturally sensitive areas; it reflects the integrity of national and socio-cultural environments, contributes to environmental conservation, provides enlightening and meaningful experiences for tourists, and brings long-term benefits to the tourism industry and the local economy (Mannion 1997)



Table 5: Average Prices from Different Auctions of Live Game (2000)

Species	Price (USD)	Species	Price (USD)
Blesbok	142	Nyala	1700
Blue Wildebeest	450	White Rhino	25,000
Buffalo	16,700	Mountain Reedbuck	500
Bushbuck	1,	Roan antelope	14,200
Eland	2,170	Impala	150
Grey Duiker	75	Red Hartebeest	700
Gemsbok	600	Springbuck	670
Giraffe	2,700	Sable	10,300
Hippopotamus	4,000	Waterbuck	1,000
Klipspringer	930	Zebra	580
Kudu	370		

Source Damm (2001) and <http://www.thabatshimo.com>

Safari hunting in South Africa takes place in designated hunting zones. An appointed Professional hunter, who hunts, does this for or with the international visitors for good value trophies. Live sale of game to Game - farms is another source of income for Protected areas in the region. This involves capture and sale of live game to Game-farms and other conservation estates, which may require restocking.

### **Threats to wildlife-based tourism**

#### *Inadequate funding of Wildlife Management Areas*

Lack of Sustainable Financing for Wildlife Protected Areas is one of the underlying causes for declining wildlife populations of some wildlife species and this impacts on the sustainability of the region's predominantly wildlife based tourism.

There is inadequate allocation of financial resources in national budgets while there is also incommensurate funding from the development and international community to wildlife protected areas management. Given the high dependence of the region's tourism, it appears that while governments and the international community have prioritised tourism in national and regional development, there is no commensurate funding to the wildlife sector the very pillar of the prioritised economic sector (Tourism). Given the poor funding to wildlife management, the wildlife numbers will continue to decline and as they do the visitor appeal of the region will decline further and so will tourist arrivals and receipts. This is a simple fact of reaping what you sow and getting what you pay for - 2 Corinthians 9: 6 says, 'Remember this, whoever sows sparingly will also reap sparingly and whosoever sows

generously will also reap generously.’ If you invest little in wildlife management you are bound to have less wildlife. Similarly, if you invest sparingly in tourism development, you get less returns.

Funding of wildlife management areas is currently inadequate. In Africa as whole, investment in Wildlife management is currently in the range of USD\$90 million per annum while the estimated requirement is US\$300 million per annum. There is need to find resources to meet the shortfall of US\$210 million rest the tourism potential of the region and Africa as a whole will forevermore remain a potential but declining as days go by.

The direct impact of inadequate funding is poor wildlife management resulting from inability of wildlife management institutions to effectively carry out their mandates. There is no capacity to undertake law enforcement resulting into illegal off-take of wildlife resources, there is no research undertaken to provide sound scientific information for effective planning of management interventions and many other key functions of these institutions can simply not be adequately executed. This is leading to declining wildlife resources and consequently impacting on the wildlife based tourism.

#### *Export and import Leakages of tourism revenues*

The foreign domination of wildlife based photographic tourism in southern Africa often leads to externalization of large proportions of tourism generated revenues to market source areas and foreign investor origins. This is a result of the creation of “all inclusive” vacation and tour packages, which are advertised, sold and paid for overseas.

While most of the required inputs for development of tourist infrastructure and consumables may be sourced locally, a relatively large proportion of such have to be imported from elsewhere leading to leakage of revenues. Similarly, Multinational corporations and large foreign businesses have substantial shares in the export leakage as they tend to possess the necessary capita for investment in the tourism sector and externalize huge sums of profits to their countries of the origin. As a result, tourism revenue retention remains low making it more difficult for Wildlife Protected Areas to pay for their management. Some measures need to be established for improving revenue retention that benefits the region from its wildlife resources. Having more revenues retained in the region will help in improving wildlife conservation and management given the current limited funding of the sector by governments.

#### *Political Instability*

The question of political instability in the region is a key threat to wildlife management and its utilization as a tourist attraction. A good example of such instability is the case of Zimbabwe in the last two years following the Fast Track Land reform which led to a drastic reduction in the number of tourists coming to Zimbabwe for game viewing and safari hunting. Such politically motivated disruptions will always lead to threats to the sustainability of wildlife utilisation especially from a tourism point of view.

These are some of the key threats and future challenges to wildlife management in the region. Only concerted efforts through collaboration and partnerships among all stakeholders will help overcome these challenges and ensure sustainable wildlife management and tourism in Southern Africa and Africa as a whole.

### **Conclusions and Recommendations**

This chapter set out to describe the importance of wildlife and key management issues in southern Africa. It has been established that wildlife is ecologically and economically important to the region as it contributes to both biodiversity conservation and economic development through tourism. Wildlife remains the most viable land use type in the agriculturally marginal areas along the major River Basins where most of the wildlife is found and has the potential to improve rural livelihoods.

While the region has set aside a broad network of protected areas and other wildlife estates for wildlife management, the full potential of contribution of wildlife to regional economy is limited by a host of threats and challenges to its management. Various threats to the sustainable management and utilisation of wildlife exist and pose key challenges to the realisation of the full potential of wildlife as a land use option for livelihood improvement and economic development. Inadequate funding remains a major constraint. As the wildlife numbers decline, the tourism potential of the region is also eroded with adverse impacts on economic development and poverty reduction. There is therefore need to address the funding gap by first identifying the current expenditures and the shortfall at national level. Governments should link directly tourism development master plans to wildlife management investment if we are to realise the full potential of tourism to economic development in this region.

The leakages of revenues need to be minimised in order to increase tourism benefits to local economies and the wildlife resources.

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# Overview of Protected Area Costs in Africa

Workshop on financing protected areas in Africa

Nairobi, Kenya

1 February, 2005 Aaron Bruner

Conservation International

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