GAME FARMS AS SUSTAINABLE ECOTOURISM ATTRACTIONS

Petrus van der Merwe
Magisters Artium

Thesis submitted in the fulfilment of the requirements for the degree Philosophia Doctor within the School for Entrepreneurship, Marketing- and Tourism management at the North-West University – Potchefstroom Campus

Promoter Prof. Dr. M Saayman

May 2004
Potchefstroom

Statements and suggestions made in this thesis are those of the author and should not be regarded as those of the North-West University (Potchefstroom Campus)

RECOGNITIONS

I wish to express my sincere thanks and gratitude to the following people and organisations:

- My Heavenly Father who gave me the strength, willpower and wisdom to complete this thesis.
- Professor Melville Saayman for his contribution, leadership, and encouragement. Without his leadership and his passion for ecotourism, this thesis would not have been completed.
- My wife Madelein and my son Armand for their support and love. Without you this would not have been possible.
- My family and friends, especially my mother, for her love and support from the first day I set foot at the university and who believed in me during my study career.
- My father who passed away in October 2003 I wish he could have been here as well today but the Lord knows best and took him to be with Him.
- Mrs. Elmarie Slabbert for the technical layout of this thesis.
- The North-West University, which granted me the opportunity to complete this study.
- Mrs. Cecilia van der Walt for the language editing.
- Miss Lee-Allen McCarthy who helped processing the questionnaires.
- Dr. Suria Ellis for her assistance with the statistical layout and discussion of the questionnaire.
- My other colleagues at the School of Entrepreneurship, Marketing and Tourism Management for their support.
- All the Game Farmers Associations/Organisations for there support especially the Northern Game Farmers Organisation.

SUMMARY

It is clear that tourism, especially ecotourism, in South Africa is growing at a rapid pace. Each year more and more tourists travel to South Africa with their main aim to visit places that are based on the natural environment. Tourists want to interact with nature and learn about the environment that they are visiting. The main goal of the thesis was to determine aspects that will contribute to the sustainable ecotourism development of game farms.

The method of research consisted firstly of a literature study which included theses, articles and sources on wildlife, hunting, ecotourism-related literature and sustainable development-related literature. Secondly, an empirical research of which the survey sample, consisting of all the active members of the South African Game Farmers Organisation. This adds up to a total of 1244 members of whom 50% (N = 622) were randomly sampled for the research. A questionnaire was sent to each of the selected respondents via e-mail, fax or by postage. Some of the selected members were also visited in person during various workshops that were held by the South African Game Farmers Organisation.

The main conclusion of the research was that the majority of game farms in South Africa that formed part of the survey are developed as sustainable ecotourism attractions when looking at the natural/conservational/environmental side as well implementing cultural aspects such as learning local languages. This included aspects such as: respect for and acknowledgement of the dignity of people in the development, marketing and promotion of tourism; to promote a sound and proud service ethic among all participants; to avoid damaging the environmental quality; to minimise environmental impact and to reduce energy requirements for lighting and to educate tourists to learn about and respect the local culture. When considering the community/stakeholders relationship one tends to find that these aspects of sustainable development are not completely met. These are aspects such as working closely with the local community to develop new products; developing partnerships and joint ventures in which the community has a significant stake; fostering the development of community-based tourism products by providing marketing and mentoring support and considering using local entrepreneurs in developing community initiatives.

The contribution of this research into game farm tourism is firstly that a criterion for sustainable ecotourism development was compiled that will assist game farm owners in developing their game farms sustainably from an ecotourism point of view. Secondly, this research was one of the first in South Africa that to study sustainable ecotourism development of game farms; therefore, through these results a theoretical model has been developed to indicate the role of

game farms as part of ecotourism. Thirdly, the statistical analysis of the results of the study has also indicated and weighed the most important aspects of sustainable ecotourism development. Fourthly, aspects that still need attention and are neglected by game farm owners were also identified.

SAMEVATTING

Dit is duidelik dat toerisme, veral ekotoerisme, in Suid-Afrika teen 'n snelle pas aan die toeneem is. Elke jaar reis meer en meer toeriste na Suid-Afrika met die hoofdoel om plekke te besoek wat binne die natuuromgewing geleë is. Toeriste wil graag met die natuur in wisselwerking tree en meer te wete kom in verband met die omgewing wat hulle besoek. Die hoofdoel van die onderhawige proefskrif was om aspekte te bepaal wat sal bydra tot die volhoubare ontwikkeling van ekotoerisme met betrekking tot wildplase.

Die ondersoekmetode het eerstens uit 'n literatuurstudie bestaan wat proefskrif, artikels en bronne oor die wildlewe, die jag, sowel as literatuur wat verband hou met ekotoerisme en volgehoue ontwikkeling ingesluit het. Tweedens was dit 'n empiriese ondersoek wat al die aktiewe lede van die Suid-Afrikaanse Wildboere-organisasies ingesluit het. In totaal dus 1 244 lede van wie 50% (N=622) onwillekeurig gekies is met die oog op die navorsing. 'n Vraelys is aan elkeen van die geselekteerde respondente per e-pos, per faks of oor die pos gestuur. Sommige van die geselekteerde lede is ook persoonlik besoek gedurende verskillende werkswinkels wat deur die Suid-Afrikaanse Wildboere-organisasie gereël is.

Die belangrikste gevolgtrekking van die navorsing is dat die meerderheid wildplase in Suid-Afrika wat deel uitgemaak het van die ondersoek, ontwikkel is as volhoubare ekotoerisme-aantreklikhede as die natuurlike/bewarings-/omgewingsaspek sowel as die toepassing van kultuurfaktore soos die aanleer van die plaaslike tale in ag geneem word. Dit sluit aspekte in soos agting vir en erkenning van die waardigheid van die mense betrokke by die ontwikkeling; die bemarking en bekendstelling van toerisme; die bevordering van 'n stewige en trotse diensetiek onder die deelnemers; die voorkoming van skade aan die omgewing, om die uitwerking op die omgewing tot die minimum te beperk, en om behoeftes aan brandstof vir beligting te beperk; om die toeriste op te voed om die plaaslike kultuur te leer ken en te respekteer. Wanneer daar gekyk word na die verhouding tussen ontwikkelaars en die inheemse bevolking, word dit duidelik dat dié sy van volhoubare ontwikkeling nie genoeg aandag geniet nie. Dit sluit in aspekte soos noue samewerking met die plaaslike gemeenskap om nuwe produkte te lewer; om vennootskappe en gesamentlike ondernemings te ontwikkel waarin die gemeenskap 'n betekenisvolle aandeel het; om die ontwikkeling van gemeenskap gebaseerde toerismeprodukte te bevorder deur bemarking en voorligting te steun en om pogings te oorweeg om plaaslike ondernemers aan te wend om gemeenskapsinisiatiewe te ontwikkel.

Die bydrae van hierdie navorsing tot wildplaastoerisme is eerstens dat 'n kriterium vir volhoubare ekotoerisme-ontwikkeling vasgestel is wat wildplaaseienaars sal help om die volhoubaarheid van hul wildplase vanuit die oogpunt van ekotoerisme te ontwikkel. Tweedens:

hierdie ondersoek is een van die eerstes in Suid-Afrika wat volhoubare ekotoerisme-ontwikkeling van wildplase onderneem het. Gevolglik kon deur die bevindinge 'n teoretiese model ontwikkel word om die rol van wildplase as deel van ekotoerisme aan te toon. Derdens: die statistiese ontleding van die bevindinge van die studie het ook die belangrikste aspekte van die volhoubare ontwikkeling van ekotoerisme aangetoon en opgeweeg. In die vierde plek is aspekte wat nog aandag moet geniet en deur wildplaaseienaars verwaarloos word, bepaal.

INDEX

CHAPTER 1

INTRODUCTION AND PROBLEM STATEMENT

1.1 INTRODUCTION **1**

1.2 PROBLEM STATEMENT **2**

1.3 GOAL AND OBJECTIVES **5**

1.3.1 Goal 5

1.3.2 Objectives 5

1.4 RESEARCH METHOD **5**

1.4.1 Literature study 5

1.4.2 Empirical research 5

1.5 DEFINITIONS OF TERMS **6**

1.5.1 Tourism 7

1.5.2 Ecotourism 7

1.5.3 Sustainable tourism development 8

1.5.4 Game farm 9

1.5.5 Conservation Biology 11

1.6 CHAPTER LAYOUT **12**

CHAPTER 2

THEORETICAL ANALYSIS OF ECOTOURISM AND SUSTAINABLE ECOTOURISM DEVELOPMENT

2.1 INTRODUCTION **13**

2.2 THEORETICAL ANALYSIS OF THE CONCEPT ECOTOURISM **14**

2.2.1 What is ecotourism? 15

2.2.2 Mass tourism, nature-based tourism and ecotourism 21

2.2.3 Principles and characteristics of ecotourism 27

2.2.3.1 Nature-based 28
2.2.3.2 Ecologically sustainable 28
2.2.3.3 Environmental educative 28
2.2.3.4 Locally beneficial 29
2.2.3.5 Tourist satisfaction 29
2.2.4 Important aspects for game farms as ecotourism attractions 30
2.2.4.1 Appropriate ecotourism 30
2.2.4.2 Characteristics of the provider 30
2.2.4.3 Quality of the location 30
2.2.4.4 Appropriateness of land use 31

2.3 THEORETICAL ANALYSIS OF THE CONCEPT SUSTAINABLE ECOTOURISM DEVELOPMENT 31

2.3.1 Criteria for sustainable tourism development 40
2.3.2 Managing environmental impact 44
2.3.3 White Paper on Conservation and Sustainable use 49
2.3.3.1 Identifying important components of biodiversity and threatening processes 51
2.3.3.2 Maintaining and strengthening existing arrangements to conserve South Africa's indigenous biodiversity, both in and out of protected areas 52
2.3.3.3 Establish and manage efficiently a representative and effective system of protected areas 52
2.3.3.4 Promoting environmentally sound and sustainable development in areas adjacent to or within protected areas 55
2.3.3.5 Restoring and rehabilitating degraded ecosystems, and strengthening and further developing species recovery plans where appropriate 56
2.3.3.6 Controlling, eradicating and preventing the introduction of harmful alien species which threaten biodiversity 56
2.3.3.7 Regulate the transfer, handling, use and release of genetically modified organisms in order to minimise the potential risks to biodiversity and human health 57
2.3.3.8 Support, complement and enhance in situ conservation through strengthening measures for the ex situ conservation of components of biological diversity 58
2.3.4 World Summit on Sustainable Development 58

2.4 SYNTHESIS OF THE CONCEPTS ECOTOURISM, GAME FARM TOURISM AND SUSTAINABLE TOURISM DEVELOPMENT 59

2.5 CONCLUSION 63

CHAPTER 3

AN ANALYSIS OF GAME FARM TOURISM

3.1 INTRODUCTION 64

3.2 GAME FARM TOURISM: WHERE DID IT ALL START? 65

3.2.1 Historic background of game farms in South Africa 65

3.2.1.1 Stage 1: 1652 up until 19th century 65

3.2.1.2 Stage 2: Post Anglo-Boer War up until 1960 66

3.2.1.3 Stage 3: 1960 up to the present 67

3.2.2 The rising importance of ecotourism in game farm tourism 68

3.3 TRENDS TOWARDS GAME FARM TOURISM 69

3.3.1 The problems of traditional livestock farming 69

3.3.1.1 The deregulation of the farming sector 70

3.3.1.2 The loss of political leverage 70

3.3.1.3 The impact of new labour legislation 70

3.3.1.4 The impact of aids and malaria 71

3.3.1.5 Stock theft 71

3.3.1.6 Bush encroachment 71

3.3.1.7 Livestock diseases 71

3.3.1.8 Global warming 72

3.4 THE FOUR PILLARS OF GAME FARM TOURISM 73

3.4.1 Breeding game and rare/endangered game 73

3.4.1.1 Advantages 73

3.4.1.2 Disadvantages 73

3.4.2 Hunting 74

3.4.2.1 Advantages 74

3.4.2.2 Disadvantages 74

3.4.3 Game farm tourism as an ecotourism attraction 74

3.4.3.1 Advantages 75

3.4.3.2 Disadvantages 75

3.4.4 Processed game products 75
3.4.4.1 Advantages 76
3.4.4.2 Disadvantages 76

3.5 GROWTH IN THE GAME FARM INDUSTRY 77
3.5.1 Breeding game 78
3.5.2 Hunting 81
3.5.2.1 Trophy hunting 81
3.5.2.2 Biltong hunting 83
3.5.3 Processed game products 84
3.5.4 Ecotourism expenditure 85

3.6 CONSTRAINTS EXPERIENCED AND SOLUTION IN GAME FARM TOURISM 86
3.6.1 Constraints within game farm tourism 87

3.7 DIFFERENT OPPORTUNITIES AND STRATEGIES FOR GAME FARMS 91
3.7.1 Identify and analyse your product 93
3.7.1.1 Size 93
3.7.1.2 Infrastructure 93
3.7.1.3 Special features 94
3.7.1.4 Location 94
3.7.1.5 Different game species 94
3.7.2 Unique aspects of your product or unusual attractions 94
3.7.3 Package an ecotourism product 94
3.7.3.1 Conservancies 95
3.7.3.1.1 The ecological characteristics of a conservancy 95
3.7.3.1.2 The economic characteristics of a conservancy 96
3.7.3.1.3 The legal characteristics of a conservancy 96
3.7.3.1.4 Involvement of the local community in a conservancy 97
3.7.3.2 Sectoral approach 98
3.7.4 Identify your market 99
3.7.5 Promotional strategies 99

3.8 CONCLUSION 100

CHAPTER 4

RESULTS OF EMPIRICAL RESEARCH

4.1	**INTRODUCTION**	**101**
4.2	**DEVELOPMENTAL ASPECTS OF GAME FARM TOURISM**	**102**
4.2.1	Province	102
4.2.2	Farm size and provinces	102
4.2.3	Method of acquiring game farm	103
4.2.4	Size of existing game farms	104
4.2.5	Number of game farms with specific game specie	105
4.2.6	Importance of activities	108
4.2.7	Number of years managed as a game farm	110
4.3	**SUSTAINABLE ECOTOURISM DEVELOPMENT ASPECTS**	**110**
4.3.1	Economic impact assessment	110
4.3.2	Community involvement	111
4.3.3	Social and cultural diversity	112
4.3.4	Sensitive to host cultures	113
4.3.5	Environmental impact assessment	114
4.3.6	Making sustainable use of local resources	115
4.3.7	Maintain and encourage natural diversity	117
4.3.8	Sustainable ecotourism development issues answered "no" to by respondents, but are rated as important	117
4.4	**CONTINGENCY TABLES (TWO WAY TABLES)**	**121**
4.4.1	Contingency table of game farm size and sustainable ecotourism development	122
4.4.2	Contingency table for game farm size and importance of sustainable ecotourism development	125
4.4.2.1	Ensure that communities are involved in and benefit from tourism	125
4.4.2.2	Maintain and encourage social and cultural diversity	126
4.4.2.3	Be sensitive to the host culture	126
4.4.2.4	Assess environmental impact as a prerequisite for developing tourism	126
4.4.2.5	Use local resources sustainably, avoid waste and over-consumption	127
4.4.2.6	Maintain and encourage natural diversity	127

4.4.3 Contingency table regarding game farm size and activities 133
4.4.3.1 To breed with rare/endangered species 133
4.4.3.2 To offer green safaris 133
4.4.3.3 To offer bow hunting 134
4.4.3.4 To provide 4x4 trails 134
4.4.3.5 To provide horse trails 134

4.5 FACTOR ANALYSIS (CHRONBACH ALPHA) 137

4.6 CONCLUSION 141

CHAPTER 5

RECOMMENDATIONS AND CONCLUSIONS

5.1 INTRODUCTION 144

5.2 CONTRIBUTION OF THE STUDY 145

5.3 CONCLUSIONS 145
5.3.1 What is ecotourism? 145
5.3.2 Game farms: part of ecotourism 146
5.3.3 Sustainable ecotourism development 147
5.3.4 Growth of game farm tourism 148
5.3.5 Main conclusions regarding survey 149

5.4 RECOMMENDATIONS 151

5.5 RECOMMENDATIONS REGARDING FUTHER RESEARCH 152

LIST OF FIGURES

Figure 2.1:	The three pillars of ecotourism	18
Figure 2.2:	Ecotourism: The key elements	20
Figure 2.3:	An ecotourism framework	20
Figure 2.4:	Alternative tourism	21
Figure 2.5:	An overview of tourism	22
Figure 2.6:	Nature-based tourism	23
Figure 2.7:	Wildlife-based tourism	26
Figure 2.8:	Analysis of sustainable tourism	37
Figure 2.9:	Synthesis of game farm tourism, ecotourism and sustainability	60
Figure 3.1:	Four pillars of game farm tourism	73
Figure 3.2:	The process of developing a strategy	93
Figure 4.1:	Game farm sizes	104
Figure 4.2:	Game farm size seen as sustainable	104
Figure 4.3:	Number of years managed as a game farm	110

LIST OF TABLES

Table 1.1:	Hunting statistics from foreign hunters	4
Table 2.1:	Definitions of ecotourism and nature-based tourism	24
Table 2.2:	Sustainable versus non-sustainable tourism development	38
Table 2.3:	Criteria for sustainable ecotourism development	40
Table 2.4:	Managing negative impacts in protected areas	47
Table 2.5:	IUCN Protected area categories	53
Table 2.6:	The management of protected areas in South Africa	54
Table 2.7:	The contribution of the four pillars to ecotourism	60
Table 3.1:	Exempted game farms in South Africa	77
Table 3.2:	Auctions sales over past ten years	78
Table 3.3:	Percentage price increase (+) or decrease (-) in average auctioned game prices over the past ten years	80
Table 3.4:	Trophy hunting statistics 2001	81
Table 3.5	Trophy hunting statistics 2002	82
Table 3.6:	Income from foreign trophy hunters	82
Table 3.7:	Income: trophy hunting and accommodation	83
Table 3.8:	Biltong hunting expenditure	84
Table 3.9:	Tourist spending	86
Table 4.1:	Provinces	102
Table 4.2:	Farm sizes and provinces	103
Table 4.3:	Method of acquiring game farm	103
Table 4.4:	Number of game farms with specific species	105
Table 4.5:	Distribution of game species according to provinces	106
Table 4.6:	Activities according to scale of importance	108
Table 4.7:	Economic impact assessment	111
Table 4.8:	Community involvement	111
Table 4.9:	Social and cultural diversity	113
Table 4.10:	Sensitive to host cultures	114
Table 4.11:	Environmental impact assessment	115
Table 4.12:	Making sustainable use of local resources	116
Table 4.13:	Maintain and encourage natural diversity	117
Table 4.14:	Sustainable ecotourism development issues answered no to by respondents, but are seen as important	119
Table 4.15:	Contingency table of game farm size and sustainable ecotourism development	123

Table 4.16:	Contiguous table for game farm size and importance of sustainable ecotourism development	128
Table 4.17:	Contingency table: game farm size and activities	135
Table 4.18:	Factor analysis	137
Table 4.19:	Standard deviation of factors	141
Table 4.20:	Most implemented sustainable ecotourism development aspects	142
Table 5.1:	Neglected sustainable ecotourism development aspects	150

MAP

Map 3.1:	Pilanesberg National Park: a sectoral approach	99

APPENDIX

Appendix 1:	Questionnaire	



CHAPTER 1

INTRODUCTION AND PROBLEM STATEMENT

"When the last individual of a race of living things breathes no more, another heaven and another earth must pass before such a one can be again"

William Beebe

1.1 INTRODUCTION

The first democratic election of South Africa (1994) opened up a whole new world for tourism. It started a process of rebuilding, which includes the rebuilding process of international competitiveness (**Msimang, 1995:29**). The election related to a more favourable political climate and has led to the movement of foreign tourists in and out of South Africa (**Hicks, 1996:7; Saayman, 2000**). Tourism has been accepted by the South African government, business and labour as one of the key drivers for the creation of wealth and economic empowerment (**GCIS, 1999:149**).

Internationally, tourism is accepted as one of the world's fastest-growing industries (**Shaw & Williams, 1994:174; Cooper *et al.*, 1993:1; Kerzner, 1995; Satour, 1998**). The World Tourism Organisation (WTO) indicated that tourist arrivals in 1998 grew by 2,4% world-wide **(WTO, 1998a).** The WTO forecasts that the number of people travelling internationally will increase from 613 million in 1997 to 1.6 billion by the year 2020 (**World Bank, 1998; WTO, 1998a; WTO, 2001a**). According to the United Nations (UN), these 613 million tourists who travelled the world will spend more than US$ 440 billion per year on tourism. It is estimated that this will grow in the next twenty years to almost US$ 2 000 billion a year (**Van Zyl, 2000a:30**).

The African continent can triple the size of its tourism industry by 2020 if proper efforts are made. This will result in tourist arrival forecasts that can reach 77.3 million of which South Africa attracts the most overseas tourists. This makes this industry one of the largest in South Africa (**WTO, 2001b**). Research indicates that tourism in South Africa contributes 4.6% to the

Gross Domestic Product (GDP) (**GCIS, 1998:146**). **Fraser (1999:6)** forecasts that South Africa's tourism industry will grow more than 5.5% between 1998 and 2010, which is better than the predicted 4.1% of the global market. It is also estimated that arrivals will increase from 6 million in 2000 to 30.5 million in 2020 (**WTO, 2001b**). In 2002 tourism arrivals in South Africa increased by 16%, ranking it one of the highest growth rates in the world (**Thornton & Feinstein, 2002:49; GCIS, 1998:146**).

For the overseas as well as local tourists, scenic beauty and wildlife remain the major tourism attractions that South Africa has to offer (**GCIS, 1998:147; GCIS, 1999:150**). Ecotourism is responsible for 20% of the world's total tourism expenditure – according to the WTO any form of tourism in an unspoilt nature area is the fastest growing sector of all tourism sectors (**Van Zyl, 1999:30**). Southern Africa also shows an interesting growth in the awareness of the importance of wildlife for humanity as well as the economic advantages of well-conserved wildlife. This shows that ecotourism is an important product for South Africa and a drawcard for international as well as local tourists.

The aim of this chapter is to formulate the problem statement, determine the goal and objectives of the thesis, discuss the method of research and clarify related terms.

1.2 PROBLEM STATEMENT

Its is well known fact that 80% of nature conservation in South Africa is taking place on privately owned land such as game farms (**Eloff, 2000; Fox & Du Plessis, 2000:46**), and according to **Bothma (2002a:24)** there was a 2,5% increase in land utilised for game farming from 1998 to 1999. The latter translates into a 300 000 ha per year increase. **Flack (2002b:77)** states that it is estimated that the conversion rate from cattle to game farming in 2002 was nearly 500 000 ha, which is 200 000 ha more than the 1998 to 1999 increase.

In 2000 it was estimated that there were approximately 7000 privately owned game farms in South Africa with a total surface area of 16 million ha (**Ebedes, 2002**), of which 5061 were exempted game farms, with a surface area of 10 364 154 hectares (**Erasmus, 2000:21**). Research conducted in 1993 indicated that the surface area of exempted game farms constituted 8,5% of the total agricultural land in South Africa, which increased to 12,5% in 2000, with a total of 1,7 million head of game (**Eloff, 2002a:78; Erasmus, 2000:21**). Statistics of 2002 showed that 13,3% of the agricultural land was used for game farming, while national and provincial game reserves only covered 6% or 6,1 million ha of land in South Africa (**Flack, 2002a:29; Van der Walt, 2002**). If one adds up the total land used for wildlife tourism it comprises almost 20% of South Africa's total surface area.

Regardless of the fact that game farm tourism is growing, which includes the number of game farms, many of these game farms are struggling to survive and are not always managed as sustainable and economic viable units (**Pretorius, 1998:16; Erasmus, 2000:3**). Sustainable tourism development can be seen as tourism development which is carefully planned and managed. It is the exact opposite of tourism that has been developed for short-term gains **(Myburgh & Saayman, 1999)**. To achieve true sustainable ecotourism development, one must find a delicate balance between conflicting economic efficiency, environmental conservation and social equity objectives. The resulting economic growth must be distributed equably, and the environmental impacts of these actions must be minimized. In theory it may sound easy to balance the "three E's" of sustainability (environment, economy and social equity), but in the real life this might not be so easy **(Ioannidis, 2001:57; Coccossis *et al.*, 1996:9).**

According to **Van der Merwe and Saayman (2002b),** game farms are based on four pillars, namely ecotourism; breeding game and rare/endangered game species; processed game products and hunting. These researchers indicated that an integrated approach with regard to the four pillars can lead to a significant increase in income. However, this is based on certain requirements, which include that the size of the game farm determines the activities. At the end of the day, all four pillars will be measured according to there contribution to the "three E's" of sustainable ecotourism development to determine the sustainability of game farms.

It is important that money generated from consumptive use (fore example hunting) of wildlife is ploughed back into ecotourism, local communities and nature conservation. South Africa has in fact experienced a sharp increase in the supply of game over the past decade because of the growth in game farms and private reserves. The game farm industry in South Africa differs considerable from the rest of the world in the sense that game farm tourism is practised with indigenous species that are privately owned. In addition, it seems that game farm tourism in South Africa is well controlled and regulated **(Fox & Du Plessis, 2000:46)**.

Hunting and game sales are the two pillars that showed a constant growth over the past few years. Analysis of game auctions over the past ten years revealed an average increase of 9% per year over an 11-year period. The turnover per year grew from almost R9 million in 1991 to R105 million in 2002 with an average growth rate of R38 million per year in 12 years. It was also found that there is an active and growing demand, especially for rare/endangered game species **(Bothma, 2002a:23)**.

Statistics made available by Professional Hunters Association of South Africa (PHASA) (therefore they are PHASA registered outfitters) of only tourists who participate in trophy hunting indicates the following growth from 1996 to 2003 (Table 1.1).

Table 1.1: Hunting statistics from foreign hunters

YEAR	AMOUNT GENERATED
1996: 4000 (Hunters and Non-hunters)	R 117,653,190 (Daily rates and trophy fees)
1997: 7500 (Hunters and Non-hunters)	R 175,063,050 (Daily rates and trophy fees)
1998: 7500 (Hunters and Non-hunters)	R 156.871.650 (Daily rates and trophy fees)
1999: 8604 (Hunters and Non-hunters)	R 238,158,000 (Daily rates and trophy fees)
2000: 4020 (Hunters and Non-hunters)	R 316,851,825 (Daily rates and trophy fees)
2001: 5304 (Hunters and Non-hunters)	R 532,000,000 (Daily rates and trophy fees)

These statistics are hunters and non-hunters (spouse or friend coming along but do not hunt) combined (Table 1.1). Table 1.1 shows a steady growth of foreign hunting tourists from 1996 to 2003. It is important to note that it is only for trophy hunting and does not include South Africans biltong hunting **(PHASA, 2003).** In countries where hunting is conducted such as Botswana, ten times more money is distributed among the communities than in areas without hunting, making trophy hunting a vital component in the rural economies of remote areas. Apart from this, the distribution of meat from hunted animals forms a vital component of food security, which is not available through any other ecotourism-related economic activity **(Damm, 2003:12).** If this is compared with photographic safaris, the figures for hunting indicate that a much higher portion of funds firstly are paid and collected and secondly remain in the local community. It was found that hunters spend more than the normal ecotourist, and most importantly, the average photographic tourist's total expense is for "pre-paid package deals", which includes airfare and accommodation of which very little reaches the local level **(Damm, 2003:12).** The coexistence of both photographic safaris and hunting is desirable and achievable with careful spatial planning and zoning **(Damm, 2003:12**). **Baldus (2003)** added by saying photographic safaris are sometimes great money-spinners at many places, opposed to other situations where they aren't. Often so-called "consumptive" and "non-consumptive" tourism can go hand in hand if well planned and managed.

The challenge for game farm owners would be to sustain the current growth of game farm tourism, because of the expected continuing growth of ecotourism, therefore also an increase in the number of tourists, an increase in the number of game farms and an increase in the supply of game (**McIntosh *et al.*, 1995:388**). The problem that arises from the above mentioned is: what are the aspects that will contribute to sustainable ecotourism development of game farms, seen in the context of the four pillars?

1.3 GOAL AND OBJECTIVES

The following are the main goal and the objectives of the study:

1.3.1 Goal

- To determine aspects that will contribute to the sustainable ecotourism development of game farms.

1.3.2 Objectives

- To indicate how game farms form part of ecotourism.
- To do a theoretical analysis of ecotourism and sustainable tourism development.
- To determine where game farm tourism originated.
- To determine the average size of game farms.
- To determine the number of years game farms exist in South Africa.
- What activities are provided on game farms for visitors?
- Which sustainable ecotourism development aspects are important to game farm owners.

1.4 RESEARCH METHOD

The following research methods will be used:

1.4.1 Literature study

A qualitative literature study, which includes theses, articles, and sources on wildlife, hunting and other ecotourism-related literature, was conducted. The literature search utilised the following search engines: General; Library databases; Repertoruim (SA magazines); Sport Discus; Multimedia; Social Science Index of the Faculty of Arts; Humanitus Index and World Wide Web. Keywords included: ecotourism attractions, game farm development, wildlife tourism, tourists, hunting, marketing, marketing and market segmentation. The literature study also includes the analysis of literature on sustainability, ecotourism, marketing and game farming.

1.4.2 Empirical research

The empirical research was conducted from June 2003 until March 2004. The survey sample consists of all the active members of the South African Game Farmers Organisation as indicate below:

- Northern Game Farmers Organisation with 645 members (Gauteng, North West, Limpopo, and Mpumalanga).
- Free State Game Organisation with 250 members.
- Northern Cape Game Organisation with 109 members.
- Natal Game Ranchers Association with 120 members.
- Western Cape Game Management Association with 20 members.
- Eastern Cape Game Management Association with 100 members.

This adds up to a total of 1 244 members of which 50% (N = 622) were randomly sampled for the research. A questionnaire was sent to each of the selected respondents via e-mail, fax or snail mail. Some of the selected members were also visited in person during various workshops that were held by the South African Game Farmers Organisation. A total of 97 questionnaires were received from the selected 622 members. The reason for receiving only 97 questionnaires was the fact that game farm owners are not willing to fill out questionnaires. To increase the return rate of questionnaires, many follow-up phone calls were made, and e-mails sent to the different game farmers associations and respondents to request them to return as many questionnaires as possible.

The main objectives of the survey were as follows:

- To analysis the development aspects of game farms such as size, years in operation, species combination and ecotourism activities provided.
- To identify and categorise the sustainable ecotourism development aspects such as the assessment of economic impacts, the involvement of communities, maintain and encouraging social and cultural diversity, to mention just a few.

A pilot study was conducted that consisted of ten (10) questionnaires to the above-mentioned members to identify possible constraints and problems. Modifications were then made for the final randomly selected survey sample. The results were processed by the Statistical Services of the North-West University (Potchefstroom Campus). The statistical analysis included statistical processes such as Cronbach Alpha (factor analysis) and effect sizes for the relationship in contingency tables (Phi Coefficient).

1.5 DEFINITION OF TERMS

For the purpose of this study, the following definitions and terms will be discussed:

- Tourism.
- Ecotourism.
- Sustainable tourism development.

- Game farm tourism.
- Conservation biology.

1.5.1 Tourism

The late twentieth century and the new millennium have witnessed the continued growth of the leisure society where people value the significance of holidays, travel and the experience of going to see new societies and their cultures **(Page & Dowling, 2002:6).**

McIntosh *et al.* (1995:15) define the tourism industry as an industry that embraces transportation, lodging, food services and other activities relating to serve the traveller. **Weaver and Oppermann (2000:3)** add by saying that tourism can be defined as the sum of the phenomena and relationships arising from the interaction among tourists, business suppliers, host governments, host communities, country of origin governments, universities, community colleges and non-governmental organisations in the process of attracting, transporting, hosting and managing these tourists and other visitors.

Middleton and Hawkins (1998:50) said that tourism comprises the activities of people travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes. From the just-mentioned definitions one can conclude that the term tourism relates to *transportation, accommodation (lodging), food service, relationship between host community and tourist and people that are away from home for not more than one consecutive year.*

1.5.2 Ecotourism

Fauna, geology and ecosystems of an area are important role players in the nature based aspect of ecotourism **(Wearing & Neil, 1999:xv).** **Landman (1993:13)** indicates that ecotourism can be seen more as the attitude of a tourist or visitor: the ethic is not to invade the natural environment. Ecotourists prefer to travel to protected, undisturbed areas and also to experience the local cultures of the different ethnic groups that form an integral part of such areas. **Van Wyk (1995:8**) defined ecotourism as: 'an enlightening nature travel experience that contributes to conservation of the ecosystem, while respecting the integrity of the host communities.'

The father of ecotourism Ceballos-Lascurain first defined ecotourism as "responsible travel to relatively undisturbed natural areas, with the objective of studying, admiring and enjoying the natural landscape and its wild plants and animals, as well as existing cultural manifestations (both present and past) found in these areas". Ceballos-Lascurain later changed it to ecotourism as "environmentally responsible travel and visitation to enjoy and appreciate nature

(and any accompanying cultural features) that promotes conservation and sustainable development, has low visitor impact, and provides for beneficial active socio-economic involvement of local populations". The word ecotourism thus had its origins in conservation **(Van der Merwe, 1996)**.

According to **Shackley (1996:12)** ecotourism is defined as: responsible travel that conserves the natural environment and sustains the well-being of local people. Seen from this definition, it includes a spectrum of activities that do not involve watching wildlife. Very often ecotourism is used simply as a marketing tool. In theory it should be economically and socially sound means to conserve biodiversity and provide revenue to improve the lives of people living in or near biologically important areas.

Robinson (1993:7) defines ecotourism as: "responsible tourism which is sustainable and thus requires the protection of living and non-living natural resources and the promotion of appropriate and environmentally sympathetic development. It contributes to the goals of achieving social justice and enhancing quality communities in the immediate vicinity of the protected area". Robinson further emphasised responsible and sustainable tourism as well as the contribution of tourism to the local community. The definition is extended by **Steenkamp (1994)** and brings in the whole debate of the tourist who is experiencing nature and culture through active participation. **Steenkamp (1994)** says ecotourism as activity "involves travelling to destinations with the main purpose of experiencing firsthand the attractive and well-managed natural environment and cultural heritage of a specific area, without having a negative impact on culture and nature. Ecotourism is an enlightening experience about local communities and natural ecosystems, in which the tourist actively participates. It works in the other direction too, bringing both economic and social benefits to local communities, and ensuring the conservation of the natural and cultural resources".

1.5.3 Sustainable tourism development

Swarbrooke (1999:14) gives the following definition of sustainable tourism development: Forms of tourism that meet the needs of tourists, the tourism industry and host communities today without compromising the ability of future generations to meet their own needs. Because of the fact that the environment does play an important role, the definition was changed to the following: tourism that is economically viable but does not destroy the resources on which the future of tourism will depend, notably the physical environment and the social fabric of the host community **(Swarbrooke, 1999:14)**.

Briassoulis (2002:1065) says that sustainable tourism development revolves around a central issue of how to *manage the natural, built, and sociocultural resources of host communities in*

order to meet the fundamental criteria of promoting their economic well-being, preserving their natural and sociocultural capital achieving intra- and intergenerational equity in distribution of costs and benefits, securing their self-sufficiency, and satisfying the needs of tourists.

The Manila Declaration of the World Tourism Organisation as in **Swarbrooke (1999:14)** states that sustainable tourism is:
The protection, enhancement and improvement of the various components of man's environment, are among the fundamental conditions for the harmonious development of tourism. Similarly, rational management of tourism may contribute to a large extend to protecting and developing the physical environment and the heritage, as well as improving the quality-of-life. This declaration pointed out the importance of a relationship between the environment and the tourism industry, which reads as follows:

- An unspoilt natural and human environment is a fundamental condition for the development of tourism. Moreover, rational management of tourism may contribute significantly to the protection and development of the physical environment and the cultural heritage, as well as to improving the quality of life **(Inskeep, 1991:33)**.

According to **Murphy (1985),** tourism's interest in sustainable development is logical; this is one industry that sells the environment, both physical and human, as its "product". Tourism is environmentally dependent and the environment is vulnerable to the impact of tourism. "Tourism is, to a large degree, a resource-based activity, interacting with natural systems and with the capacity to initiate far-reaching changes on the environment." **(Pigram, 1995:208.)** Sustainable tourism development embodies the interdependence among environmental, social and economic issues and politics. For successful sustainable tourism development, this interdependence should be taken into consideration **(Myburgh & Saayman, 1999:18)**.

1.5.4 Game farm

Ever since farms formed part of the wildlife industry in South Africa, there have been different perspectives on its terminology. Some product owners and training institutions use the term game/wildlife ranching and others make use of the term game farming or game farms. This is why it is important for this study to clarify this issue and use the most suitable term for the thesis.

Bothma and Teer (1995) define wildlife ranching as follows: Wildlife ranching is to manage *extensive production* of free-ranging wildlife *on large, fenced or unfenced private or communal land for recreational hunting, wildlife products, tourism, live sales of wildlife to restock other areas, and for other non-consumptive uses.* **Bothma (1995)** also indicated that game farming can be extensive or in-extensive. *Extensive game farming,* includes aspects such as

management aspects, extensive production of free ranching game on large fenced or unfenced private or communal land that is normally used for hunting as well as game products, tourism, the sale of live game and other non-consumptive uses. In-extensive game farming on the other hand includes management aspects, intensive production of game in a small pen or on farms on private or communal land, normally for the production of market products such as meat or other game products.

Wildlife farming can be defined as the managed and *intensive* production of wildlife in small fenced enclosures on private or communal land for the production of marketable products and live animal sales **(Bothma & Teer, 1995).**

A different term is wildlife herding, and according to **Bothma (2002b:25),** herding of wildlife is done mainly with cervids in the northern latitudes. It is a first step towards the domestication of wildlife, but the animals are not enclosed in pens. Indigenous wildlife that has become habituated to being herded at times, but still remain free-ranging for the rest of the year, are loosely managed on open ranges. This practice is usually applied on unfenced land that may be leased from private owners or from the state. The primary purpose of wildlife herding is to produce marketable products such as meat, antlers and velvet.

Wildlife culling functions primarily as a management tool to reduce or alter wildlife populations in a given area. It may be done as a management tool in national parks and nature reserves, such as the culling of elephants in the Kruger National Park at times, or it may be done to reduce herbivore pressure on the plant resources of nature reserves and wildlife ranches **(Bothma, 2002b:5)**.

Furstenburg and Van Niekerk (2004:31) define *game ranching* as intensive game production with the emphasis on the conservation of the productive soil substrate. *Game farming* is defined as extensive game production with the emphasis on the conservation of habitats and productive plant growth, meaning that any given game specie must be able to survive on its own in a given natural habitat.

To assist in the search for the best related term, the Reader's Digest and the Oxford Dictionary was consulted and they define farm and ranch as follows:
Ranch, a very large farm on which a particular crop or kind of animal is raised (**Reader's Digest Universal Dictionary, 1988:1270**). The **Oxford Dictionary of English (2003:744)** adds by saying it is a cattle breading establishment, especially in Canada and the United States.

A *farm* is defined *as* any land or water area developed for raising, breeding or producing a specified type of animal or vegetable (**Reader's Digest Universal Dictionary, 1988:1270).** From the just-mentioned, it is clear that a ranch is associated with large areas of land that is fenced or unfenced. It is also clear that it is an American or Canadian expression. Both farm and ranch indicate the production of animals or crops. Seen from a South African point of view "farm" is a more suitable expression than "ranch" and the reason is that the English that is spoken in South Africa is more British related than American and therefore is more suitable for South African conditions. Another reason is that most game farms in South Africa are not that big (average size 2047 ha). It is only areas such as the Northern Cape and Karoo where one tends to find larger game farms that excel average size. Looking at the areas where the game farm industry is doing well such as the Limpopo Province and Eastern Cape Province the average size is not that big (1412 he / 1339 he respectively) and most farms are fenced **(Eloff, 2002a)**. However, it is ideal to have large range areas for game, but in South Africa this is a problem because the quest for land is increasing, especially under the new act for land reform. Therefore, in this thesis such an area will be referred to as "game farm" and not game ranch.

A game farm therefore can be defined as land which is adequately fenced, that carries a variety of game species that can be used for either hunting, meat production, live game sales and provides infra and supra structures for ecotourists **(Van der Merwe & Saayman, 2002a).**

1.5.5 Conservation Biology

World-wide, conservation problems are based on the same aspects, such as habitat destruction, intensive agriculture, overgrazing, undergrazing, nutrient enrichment, pollution, hydrologic changes, changes in fire regimes, overexploitation, introduced predators and introduced competitors. On the other hand, there are similarly universal solutions: set priorities, plan, monitor, detect problems, diagnose problems, then bring about changes of specie management, habitat management, legislation, education, public awareness and integrating development and conservation **(Sutherland, 2000:1).**

Conservation can be defined as "the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations" **(Krynauw, 2001b:26)**. **Primack (1993:5)** prefers the term conservation biology and adds by saying that conservation biology has two main goals, firstly, to investigate how humans impact biological diversity, and secondly, to develop practical approaches to prevent the extinction of species. In many cases this leads to developing compromises between conservation priorities and human needs. Conservation biology complements the applied disciplines and provides a more general theoretical approach to the protection of biological diversity.

According to **Cox (1997:2),** conservation biology is the scientific study of biodiversity and its management for sustainable human welfare. It seeks to understand how the rich variety of plant and animal life arose, how it has been maintained by natural processes and how one can utilise these resources sustainably. The uniqueness of it is that it is focusing on the interaction of humans with the biodiversity, seeking to reveal the aspects of this interaction that are significant to human interest, and striving to answer questions on how these aspects can be managed for sustainable human benefit. Conservation biology views all of nature's diversity of being important and having inherent value. This management is directed toward stewardship of the world's biodiversity and natural ecosystems, rather than toward single species (**Meffe & Carroll, 1994:4).**

1.6 CHAPTER LAYOUT

In Chapter one an introduction is given regarding game farm tourism. The problem statement will be given, as well as the objectives of the study together with the research method. In chapter two, the theoretical analysis of ecotourism and sustainable ecotourism development, will be looked at. Chapter three will focus on the analysis of game farm tourism. Chapter four will discuss the survey results, and the conclusions and recommendations of the study will be given in Chapter five.



CHAPTER 2

THEORETICAL ANALYSIS OF ECOTOURISM AND SUSTAINABLE ECOTOURISM DEVELOPMENT

"In the end we will conserve only what we love, we will love only what we understand and we will understand only what we are taught"

Baba Dioum

2.1 INTRODUCTION

According to **Wearing and Neil (1999:xiv),** ecological travel is the new buzzword; the happiest way to travel is to backpack off the beaten track to experience nature up close and personal - a tourism industry marketing exercise that effectively packages nature for affluent urban dwellers to experience a romantic world now lost to us moderns. Historical bushveld, open savannah plains of the Free State, semi-desert Kalahari dunes - these are some of the hottest ecotourism destinations in South Africa (while they last). Conservation issues are now the forefront of public opinion. The decline of natural rainforest, loss of endangered species, global warming and land degradation have enhanced public support for conservation. But can one even speak of nature in a world that has less of it than ever before in human history? Does a suicidal society need nature to justify its travel? Is it an escape, an excuse, or simply a distraction? Or is it something more profound?

Tourism can be seen as a major burden pressing down on protected areas (game farms) and communities living next door **(Goodwin, 2001:1)**. Why? Nature is calling and tourists are responding tremendously. And guess who is leading the race? Ecotourists **(Wearing & Neil, 1999:xiv)**. Leaving the beaten track sometimes means that the track soon becomes a road, or even a highway. The beautiful wild places sought by ecotourists are often extremely fragile and sensitive to human impact, but still tourists are poring in without thinking of it. One thing is certain: the increased global interest and exponential growth in ecotourism cannot simply be explained as yet another in a long line of recreational trends. Instead it reflects a fundamental shift in the way human beings view and engage with nature **(Wearing & Neil, 1999:xiv).**

The quality of the natural environment does play an important role in attracting tourists to specific destinations. Therefore management of environment issues has become central to tourism planning either whether it's for developing or developed countries, or whether it is a basic foundation for sustainability **(Wahab, 1997)**. For some visitors environmental quality may actually be a determinant of demand, rather than a bonus, and this is particularly so for those "wildlife tourists" seeking an experience which will enable them to explor, no matter for how short a time, a new ecosystem and all its inhabitants. Not all tourists have the same motivations. Some may be seriously interested in the conservation of endangered species, the maintenance of biodiversity or scientific research in a particular habitat. Others may wish to photograph wildlife and some will have the desire to hunt it. Some tourists are lifelong wildlife enthusiasts and others merely take, a day-trip to a wilderness area from a luxury hotel base. Many such tourists seek to be informed and educated (this is the typical characteristic of an ecotourist) and others primarily wish to be entertained. In the end nature must be able to maintain itself from the continuous impact of tourists. That is why sustainable ecotourism development has become an important buzzword **(Shackley, 1996:xvi)** - so much so that sustainable tourism has become the focus of widespread attention and research **(Pigram & Wahab, 1997:3).**

Based on the above, the aim of this chapter is to do a theoretical analysis of ecotourism and sustainable tourism to enable game farm owners and readers to understand the close relationship of these two concepts to each other. It is not the purpose of this thesis to develop new definitions for ecotourism and sustainability, rather to give game farm owners an overview of ecotourism and sustainability and to assist them in understanding these concepts and to change their "mindset" for future ecotourism development. A literature study will be conducted in order to be able to discuss the two terms thoroughly and there relation to each other.

2.2 THEORETICAL ANALYSIS OF THE CONCEPT ECOTOURISM

A number of descriptions have been used for ecotourism products: ecotour, ecotravel, ecosafari's, eco(ad)ventures, ecovacation and ecocruise. These eco-labels became attachments to a number of tourism products. This term has mainly been used in environmentally friendly travel, some form of alternative tourism, soft tourism, low impact tourism, "green" tourism or in a harder form, ethical travel. It is clear that the industry is lacking a firm definition and that the word "eco" has been abused and debased in some of the important originating markets **(Goodwin, 2001:2)**.

There are still a number of people who believe that not enough is done in order to conserve our environment. As new doors opened for South Africa in the international arena, the country become a signatory of a variety of international agreements relating to the conservation of the environment and a participant in a host of international conferences relating to this sphere of endeavour. To separate a tourism experience in South Africa from a nature experience is almost impossible. South Africa is so rich in scenic beauty and wildlife, that these facets remain the strongest drawcard for overseas tourists to South Africa **(Rhodes & Saayman, 1998).**

The aspiration of ecotourism is to find a means of securing a sustainable yield for conservation from the tourist and the tourism industry for which those protected or conserved areas are major attractions. For local communities around these protected areas those attractions are often an important economic resource, or in other words, a form of natural capital from which they may be able to secure a benefit **(Goodwin, 2001:1).**

To truly understand the meaning of ecotourism one first must specify what is ecotourism not about. The reason is that many people have a misperception of ecotourism, even people with tourism-related businesses. The following are aspects that do not form part of ecotourism:

- It is not only for the elite.
- It is not part of mass tourism.
- It is not just about the fauna and flora.
- It is not just about community involvement.
- It is not just concerned with the scale of operation.
- It does not only imply conservation, but rather a mixture of conservation, culture, people, to name but a few.

Under 2.2.1 ecotourism will be theoretically analysed to enable readers to understand the concept *"ecotourism"*.

2.2.1 What is ecotourism?

Today ecotourism is seen as a "buzz word", like eco-friendly, eco-development, even economics, but in fact the phenomenon has been with us for a long time. The author Ernest Hemingway and his generation would have called it going on safari, which is still the case with many Europeans and Americans. Others, again, would have gone hiking in the Black Forest, but none of them would have described themselves as ecotourists **(Myburgh & Saayman, 1999:6)**. According to **Van der Merwe (1996**), as in **Myburgh & Saayman (1999:7),** it is stated that the concept ecotourism was first used by the Mexican, Hector Ceballos- Lascurain, who used the term in 1983 when he was lobbying for the conservation of wetlands. The difference between tourism and ecotourism lies in an approach or philosophy in the sense that ecotourism

remains a part of tourism. Some authors believe it is two totally different things. The problem is that if ecotourism is just a philosophy, it is not measurable, and one cannot build an industry merely on a philosophy **(Myburgh & Saayman, 1999:6)**.

Many tourism organisations are currently busy adapting the term ecotourism, whether their activity is driven by value of conservation and preservation or not **(Reid, 1999:29).** The following section deals with different definitions of ecotourism.

The father of ecotourism, Ceballos-Lascurain, first defined ecotourism as "responsible travel to relatively **undisturbed natural areas**, with the object of **studying, admiring and enjoying** the natural landscape and its wild plants and animals, as well as existing cultural manifestations (both present and past) found in these areas" **(Van der Merwe, 1996)**. The following writers defined ecotourism as follows:

- **Wearing and Neil (1999:xv)** state that ecotourism involves travelling to relatively ***undisturbed or protected areas***, *fostering understanding, appreciation and* ***conservation of the flora, fauna, geology and ecosystems*** *of an area.*
- **Van Wyk (1995:8)** defines ecotourism as *an* ***enlightening nature travel*** *experience that contributes to* ***conservation of the ecosystem***, while respecting the integrity of the host communities.

Ceballos-Lascurain later made some adjustments to his first definition and adds that ecotourism is *environmentally responsible travel and visitation to enjoy and appreciate nature (****and any accompanying cultural features****), that promotes conservation and* ***sustainable development***, has low visitor impact, and provides for beneficial active socio-economic involvement of local populations **(Van der Merwe, 1996)**. The following authors used the same point of departure.

- **Landman (1993:13)** indicates that ecotourism can be seen more as the *attitude of a tourist or visitor: the ethic not to invade the* ***natural environment***. Ecotourists prefer travelling to **a protected, undisturbed area** and also *experiencing the* ***local cultures of the different ethnic groups*** that form an integral part of such areas.
- **Page and Dowling (2002:61)** indicated that ecotourism is a form of tourism inspired primarily by the ***natural history of an area***, including its **indigenous culture**. Ecotourists visit relatively undeveloped areas to appreciate and participates in a spirit of sensitivity to the natural area. The ecotourist participate in the ***non-consumptive use of wildlife*** *and* ***natural recourses*** *and* ***contributes*** *to the visited area* ***through labour or financial means***. Ecotourism is aimed at conservation and the economic well-being of the local residents and is ethically managed to be low-impact, non-consumptive, and locally-orientated (benefits, control and profits). **Page and Dowling (2002:61)** also indicated that ecotourism *implies a* ***managed approach*** *by the host country or area.*

Management must be committed to establish and ***maintain*** *the site with the participation of the local residents.* Marketing should be done appropriately, enforcing regulations and using the proceeds of the enterprises to fund the area's land management and community development programmes. **Page and Dowling (2002:63)** also add to the definition the aspect of **sustainability and the fact that ecotourism must provide a learning experience concerning nature.**

- **Steenkamp (1994)** introduces in the debate of the tourist who is experiencing nature and culture through **active participation**. **Steenkamp (1994)** says that ecotourism as an activity "involves travelling to destinations with the main purpose of experiencing firsthand the **attractive and well-managed natural environment** and **cultural heritage** of a specific area, ***without having a negative impact on culture- and nature environment***. Ecotourism is an enlightening experience about local communities and natural ecosystems, in which the tourist actively participates. It works in the other direction too, bringing both economic and social benefits to local communities, and ensuring the conservation of the natural and cultural resources". Ecotourism also includes travelling to relatively undisturbed natural areas aimed at **admiring, studying and enjoying** the scenery and its **fauna and flora**, as well as any **cultural features** found there. It implies a *scientific, aesthetic and philosophical dimension.*
- **Shackley (1996:12)** defines ecotourism as **responsible travel** that conserves the natural environment and **sustains** the well-being of **local people**.
- **Robinson (1993:7)** defines ecotourism as "**responsible tourism** which is **sustainable** and thus requires the **protection of living and non-living natural resources** and the promotion of appropriate and environmentally sympathetic development". It contributes to the goals of achieving social justice and **enhancing quality communities** in the immediate vicinity of the protected area. **Robinson (1993:7)** further emphasises *responsible and sustainable tourism as well as the contribution of tourism to the local community*
- Ecotourism comprises ***stewardship*** *for the land and its* ***indigenous people.*** Ecotourism is not about exploiting local people or their culture, or even changing it in order to accommodate the tourist. Instead, ecotourism is about preserving the natural environment for generations to come and giving the local people a chance for fair employment **(Zeiger & McDonald, 1997:85)**.

Ecotourism leads to the empowerment of the local population so that they can take an active role in environmental programmes. In turn, it is important for ecotourists to "take only pictures and leave only footprints" at the environment that they explored. In the case of ecotourism, a visitor has a social responsibility towards the people of the area **(Zeiger & McDonald, 1997:85)**. It is also expected from ecotourism to provide alternative employment and income

opportunities **(Goodwin, 2001:2)**. The tourism industry in general has already destroyed numerous irreplaceable environmental areas and assets, for example coral reefs and forests, and the reason is that the tourist's demands for luxury when travelling are considered to be more important than nature itself. Ecotourism does recognise the adverse effects of such tourism and strives to minimise the impact on natural areas to the minimum. Therefore *ecotourism tends to attract people who wish to interact and actively participate in nature* **(Van der Merwe, 1996)**.

Ecotourists have the opportunity of submerging themselves in nature in a way impossible in a routine, urban existence. Eventually this will lead to acquiring an awareness and knowledge of the natural environment, together with its cultural aspects that will convert them to a keen involvement in conservation issues. It is clear that the original definition that was given touches on a number of aspects of what is seen as ecotourism today, but an aspect that emerges at a later stage is the subject of "*sustainable ecotourism development*".

From the just-mentioned definitions, ecotourism depends on the following three pillars (Figure 2.1), namely the promotion and enhancement of the natural and cultural environment as a tourism USF (Unique Selling Feature); the effective planning and management of the environment to ensure sustainability; and ensuring that the local population, as part of the environment, shares in the benefits accruing from the first two provisions.

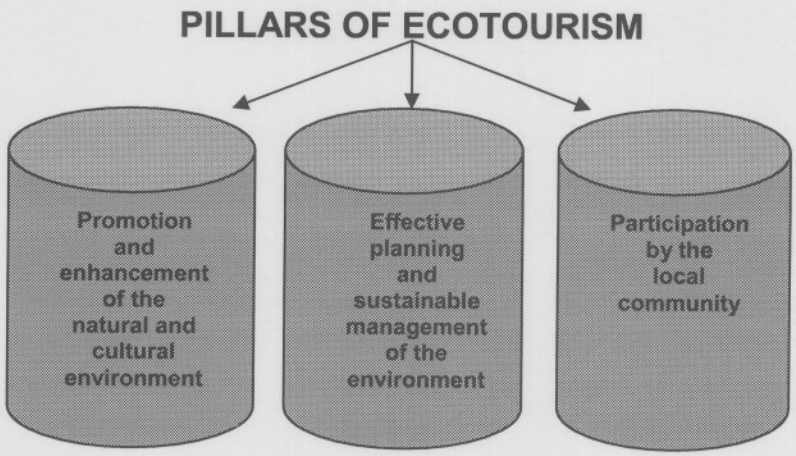


Figure 2.1: The three pillars of ecotourism (Source: Myburgh & Saayman, 1999:8)

Promotion and enhancement of the natural and cultural environment involves marketing ecotourism attractions and that the participation of tourist in the area will lead to the upliftment of the natural and cultural environment, meaning that the community will benefit from tourists visiting natural areas (game farm). This *ecotourism attraction must be planned and managed as sustainable ecotourism attractions*. For example, game farm owners normally start without

planning for ecotourism and do things they think are right. This leads to numerous problems in later stages of the development process **(Van der Merwe & Saayman, 2002c)**.

Most of the mentioned definitions indicate that ecotourism *must have minimum impact* on the environment and the host communities that *contribute to conservation* of the natural resources should generate appreciation of the natural environment by providing a *educational component or participation* that maximise revenues and benefits to the local cultures **(Page & Dowling, 2002:59; Goodwin, 2001:3)**.

From the different definitions of ecotourism it becomes obvious that it is important for any tourism product (game farm) to include the following key concerns:

- **Undisturbed or protected areas**, fostering understanding, appreciation and conservation of the flora, fauna and geology.
- **Experience** the **local cultures** of the different ethnic groups.
- Must include the **natural history** of an area.
- Contribute to the visited area through labour or financial means.
- Implies a **managed approach** by the host country or area in order to establish and maintain the site with the participation of the local residents.
- Participants must **experience and learn** about nature.
- **Environmentally responsible travel** and visitation to enjoy and appreciate nature that promotes conservation and **sustainable development.**
- Must include a scientific, aesthetic and philosophical dimension.
- **Stewardship** for the land and its indigenous people.
- Ecotourism tends to attract people who wish to **interact and actively participate in nature.**
- **Educational** component or learning through participation.

In conclusion, the variety of ecotourism definitions show that ecotourism is tourism that is based on the natural environment, seeks to minimise negative impacts on the environment, provides a learning opportunity, contributes to the local community and must be sustainable (Figure 2.2). **Page & Dowling (2002:62)** add by saying that many definitions concentrate on minimising impacts. Instead, what is needed, is an ecotourism industry that assists in moving ecotourists from a *minimal passive* to a more *active contribution* to the sustainability of eco-attractions.

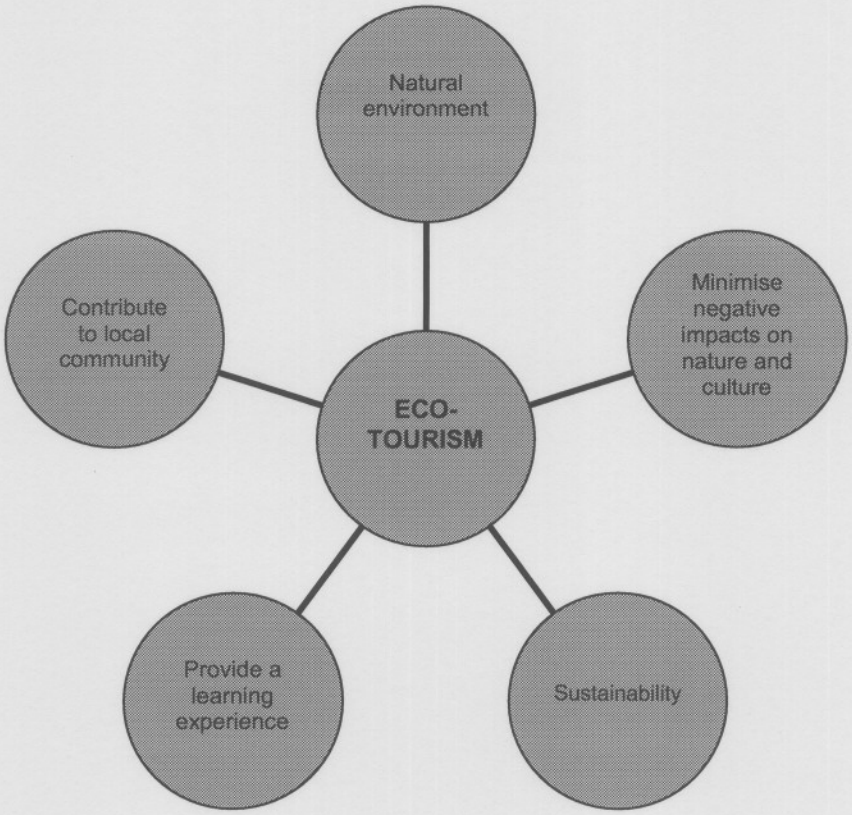


Figure 2.2: Ecotourism: The key elements

An ecotourism framework by **Buckley (1994:661)** refers to similar aspects that were only just-mentioned in Figure 2.2. These aspects are illustrated in Figure 2.3.

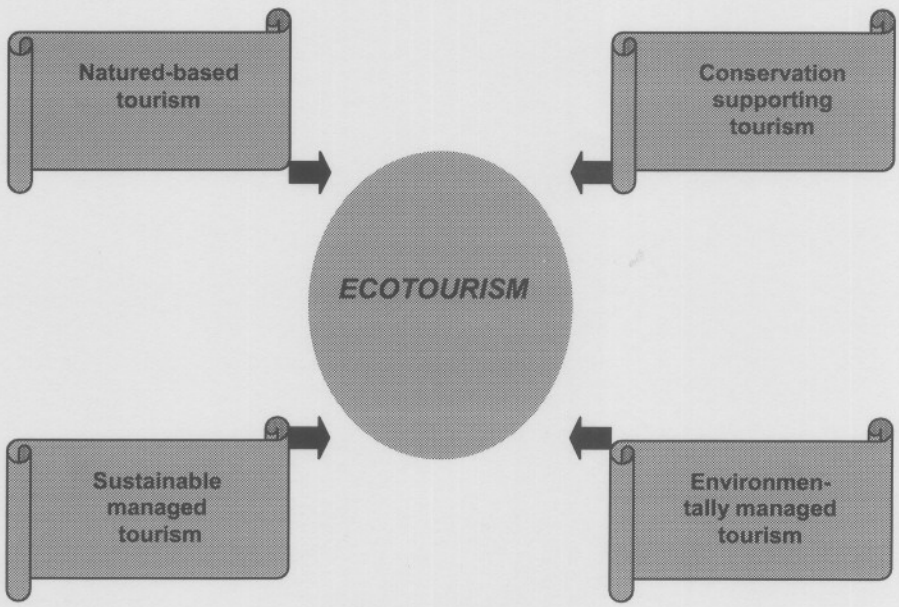


Figure 2.3: An ecotourism framework (Source: Buckley, 1994:661)

2.2.2 *Mass tourism, nature-based tourism and ecotourism*

It is difficult to put forward one holistic definition of ecotourism. Not surprisingly, the question of semantics now appears to be occupying a significant portion of the research agenda as researchers seek to debate its meaning and value and a number of studies have debated this term. Further confusion results from the use of related terms such as sustainable tourism, nature-based tourism and ecotourism, to name only three of the more prominent ecotourism affiliates. All three terms are neither synonymous nor mutually exclusive. All tourism comprises either of mass tourism or alternative tourism.

Mass tourism as perceived from its name, includes vast numbers of tourists to an area, going for more feet. It is areas such as cities, beachfronts, amusement parks and other areas where the sustainability of tourism is dependent on the number of dependent feet passing through. It includes people who seek replication of their own culture in institutionalised settings with little cultural or environmental interaction in authentic settings. The success of mass tourism lies in the intervenes between the tourists and their destination in order to free them from as many obligations as possible. Mass tourism does not seem to adapt to their destination. Instead they appear to want their destination to adapt to them **(Page & Dowling, 2002:23; Wearing & Neil, 1999:3).**

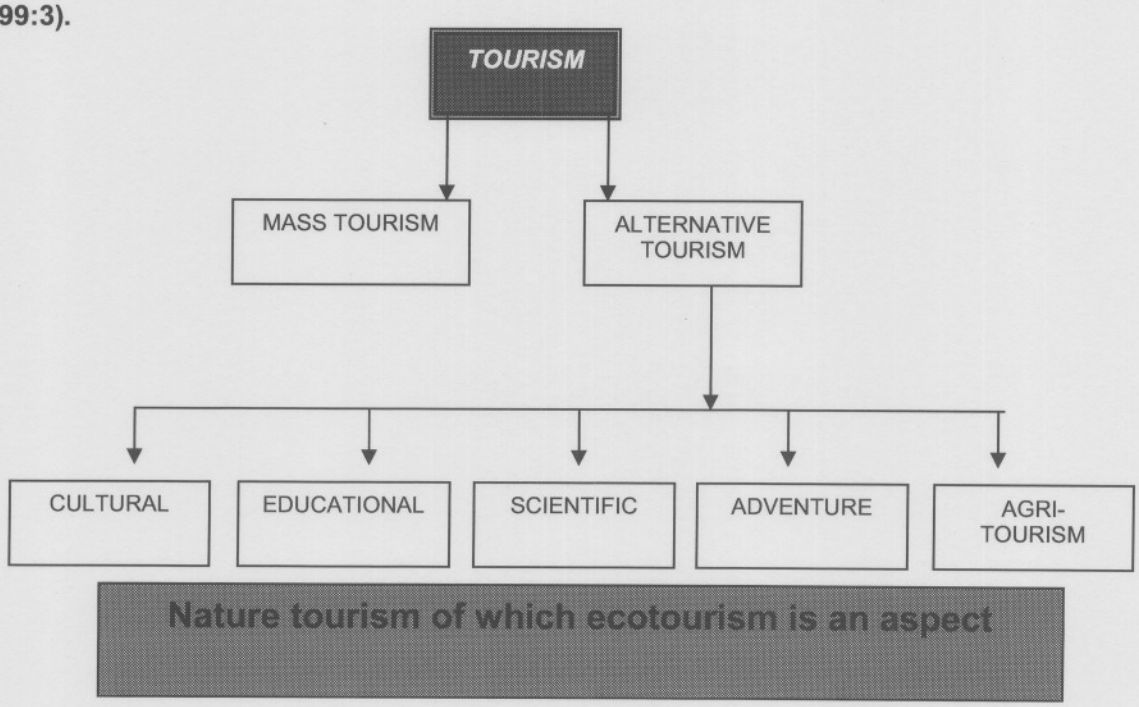


Figure 2.4: Alternative tourism (Source: Wearing & Neil, 1999:3)

Alternative tourism (Figure 2.4), on the other hand, is tourism that setout to be consistent with natural, social and community values and which allows both hosts and guests to enjoy positive and worthwhile interaction and shared experiences **(Wearing & Neil, 1999:3).**

Ecotourism which falls under alternative tourism, concentrates on fewer numbers of tourist but a better quality of experience where tourists can learn more about nature, for example a guided walking safari where tourists can learn about and experience nature better.

According to Figure 2.4 ecotourism forms part of alternative tourism. Features of alternative tourism include the following:

- Preservation, protection and enhancement of the quality of the resource base that is fundamental to tourism.
- Tourism that attempts to minimise its impact on the environment.
- An emphasis on not only ecological sustainability but also cultural sustainability.
- The endorsement of infrastructure, hence economic growth, when and where it improves local conditions and not where it is destructive or exceeds the carrying capacity of the natural environment.
- The foresting and active promotion of development that roots in local conditions and development that complement local attributers.
- Responsible tourism.
- Low impact tourism **(Wearing & Neil, 1999:3; Shackley, 1996:12)**.

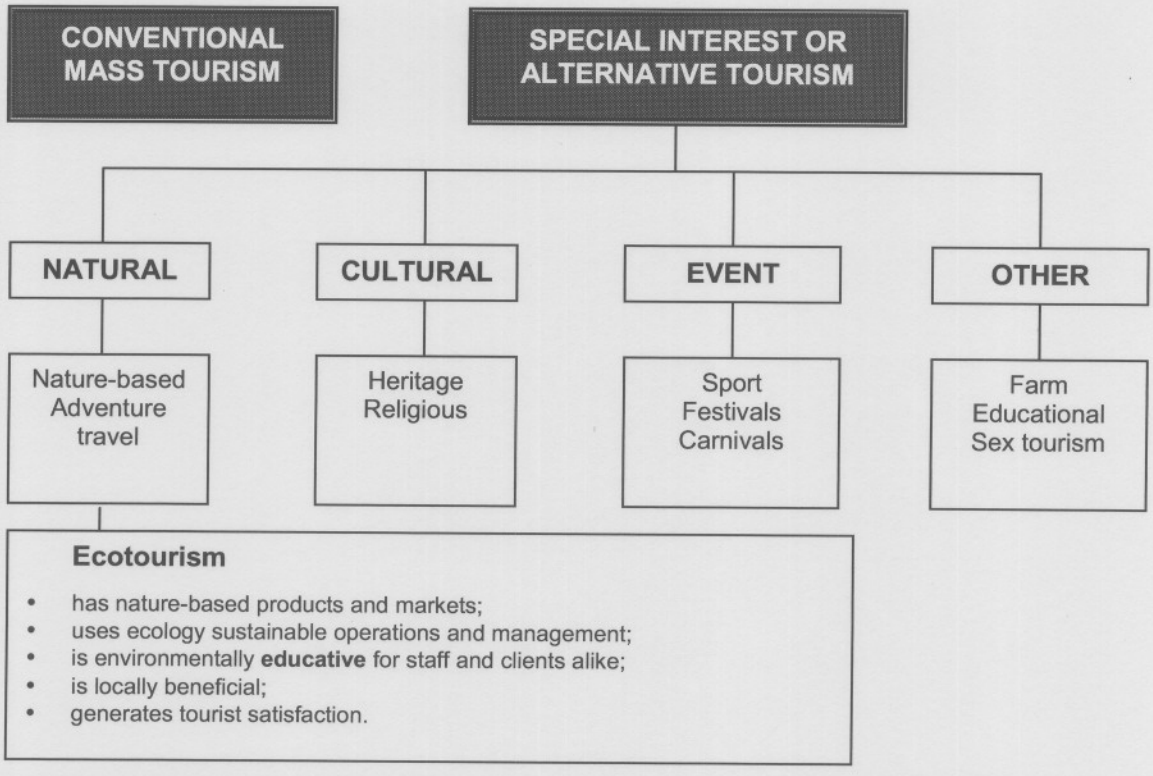


Figure 2.5: An overview of tourism (Source: Page & Dowling, 2002:23)

According to **Wearing and Neil (1999:3), c**ultural, educational, scientific, adventure and agri-tourism all form port of nature tourism, or as they indicated, ecotourism as long as the number

of visitors is limited. **Page and Dowling (2002:24)** agree with some aspects, but list ecotourism only under the natural environment (Figure 2.5). It's important that nature-based tourism will not be seen as ecotourism, but rather that ecotourism is one of the products of nature-based tourism, the reason is that vast numbers of tourists can still visit natural areas like the Kruger National Park which remains nature-based tourism. Higher levels of the environment consciousness in the western society are primary factors in higher demand for nature-based tourism. At the same time, the scarcity of pristine environments in densely populated areas means that travel is necessary to reach high quality sites.

The world's media, and most specifically film and television, present quality nature programmes on these areas to a world-wide audience. All these factors contribute to the fact that people want to travel to natural areas **(Myburgh & Saayman, 1999:11).**

Nature-based tourism rest on the desire of people to experience nature in their leisure time. **Eagles (1996)** proposed that nature-based tourism has at least four sub markets (car camping, adventure travel, wilderness travel and ecotourism), differentiated according to the travel motives of the travellers (Figure 2.6). *Ecotourism* involves travel for discovering and learning about natural environments. *Wilderness travel* involves personal recreation through primitive travel in natural environments devoid of human disturbance. *Adventure travels* are personal accomplishments through the thrills of mastering dangerous environments. *Car camping* is safe family travel in the interface between the wild and the civilised.

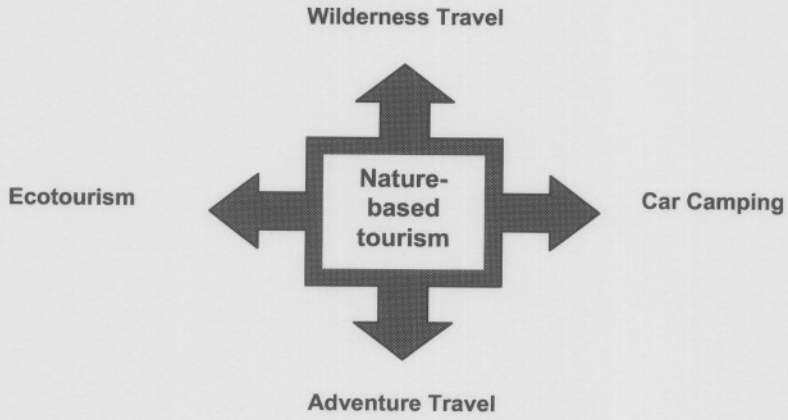


Figure 2.6: Nature-based tourism (Source: Myburgh & Saayman, 1999:11)

Ecotourism, as the rest of the tourism industry, needs to generate an income and be profitable, but only in an environmentally sustainable manner and the profit must be ploughed back into the community and the environment. Sometimes it is more important to educate tourists than to generate a profit from ecotourism **(Myburgh & Saayman, 1999:11)**. **Page and Dowling**

(2002:60) add to this: Low impacted nature tourism that contributes to the maintenance of species and habitats, either directly through a contribution to conservation and/or indirectly by providing revenue to the local community sufficient for local people to value, and therefore protect their wildlife area as a source of income. Some major features that distinguish ecotourism from nature-based tourism is that ecotourism is educative, sustainable and has a minimum impact on the natural component and on the ethical nature of the tourism experience provided. Therefore ecotourism has an important role to play in the following:

- Regional development.
- Wildlife management.
- Increasing community awareness of environmental issues **(Myburgh & Saayman, 1999)**.

Ecotourism is not concerned with bringing in throngs of tourists. Instead, it offers purposeful travel to natural areas for a limited number of tourists. It is better if one tourist spends R100 than if ten tourists spend R10 each **(Myburgh & Saayman, 1999)**. It aims at maintaining a balance between community, conservation, tourism and culture, and tries to balance the economy and the ecology.

To add to the just-mentioned, **Dawson (2001:41)** used an adapted (Table 2.1) definition to underline the difference between ecotourism and nature-based tourism that reads as follows:

Table 2.1: Definitions of ecotourism and nature-based tourism

DEFINITIONS COMPONENTS	ECOTOURISM	NATURE-BASED TOURISM
Management goals	Preservation and protection of resources	Conservation and resource management
Primary resource use	Natural resource and natural history of the area, including its indigenous cultures	Natural resources, natural history, and the present and historic cultures of the area
Primary tourists motivation	Visit an ecosystem or undeveloped natural area for appreciation and to experience the environmental conditions	Visit an undeveloped area for appreciation and to directly experience the environmental conditions, or indirectly as a consumptive or non-consumptive recreational experience
Recreational activities	Non-consumptive appreciation and study of wildlife and natural resources	Non-consumptive appreciation and study, and consumptive use of wildlife and natural resources
Economic contribution of tourism to area	Directly and indirectly contributes to the visited area which supports the protection or preservation of the site and the economic well-being of local residents	Directly and indirectly contributes to the visited area which supports the conservation of the site and the health of the local economy

Visitor appreciation	The visit should strengthen the tourist's appreciation and dedication to preservation and protection issues at the visited area and in general	The visit should strengthen the tourist's appreciation of and dedication to conservation issues at the visited area and in general
Management of the public/private area	Implies a managed approach by the host country or region which commits to establishing and maintaining the area with the participation of local residents, marketing it appropriately, enforcing regulations, and using the economic benefits to fund the area's land management as well as community development	Implies a managed approach by the public and private sectors which commit to establishing and maintaining the area, marketing it appropriately, enforcing regulations, and using the economic benefits to fund the area's land management

According to Table 2.1, there are a number of differences between the ecotourism and nature-based tourism concepts. One difference that needs to be discussed further is the issues of consumptive and non-consumptive wildlife usages. Seen in a South African context, ecotourism in a non-consumptive form may not be a reality and is the consumptive use of nature unavoidable. Hunting is taking a prominent position on game farms and is a big money spinner. The reason why hunting cannot be separated from game farms is due to the fact that most game farms in South Africa are fenced in. This means that one needs to look at the carrying capacity of that area. At a certain stage animal numbers will exceed the carrying capacity and this will necessitate controlling the numbers.

But still, people can argue that game farm owners can sell their game at game auctions. Again, it won't be long before the market will be over stocked. One solution to the problem is to allow hunting. Mostly, hunters are nature lovers and do want to learn about nature, which is taken into account when conducting a hunt. During the hunt people are constantly engaged with nature and learn a lot about the environment. In most cases hunting safaris consists of small groups (1-3 persons) with little to no impact on nature, except for the fact that they are conducting a hunt, which is necessary to maintain the carrying capacity of the area. This also contributes to the local community and is a relatively good economic booster to the local economy of the area **(Saayman & O'Kelly, 2003). Goodwin (2002:4)** adds by saying that one of the characteristics of ecotourism is that tourists travel to the factory (game farm) to consume the product, which means that the impact on the factory needs to be carefully managed. This correlates well with the theory of sustainable consumptive use of renewable natural resources by the Worldwide Fund for Nature-South Africa (WWF-SA), which is based on the following two assumptions, namely:

- that all natural systems are currently impacted by the activities of humans; and

- that the existence of the human population is dependent on the use of natural resources **(WWF-SA, 2003:14).**

It is important that game farm owners must understand and manage the rates of consumptive use of renewable natural resources to ensure the sustainability of these biological resources. The following guidelines are used by the WWF-SA for sustainable use of resources:

- Activities which involve the sustainable consumptive use of natural resources should focus on the management of renewable natural resources.
- Non-renewable resources must be treated as irreplaceable and therefore game farm owners must use strategies involving minimal and optimal efficient use of these resources with the aim to find alternatives.
- The levels of consumptive use of renewable resources must ensure no decline in future stocks of those resources.

The fundamental requirement then, for sustainable use, is to manage resources responsibly. The species are normally the unit of biodiversity conservation, the unit for monitoring sustainable use should be the subspecies, not only threatened species must be emphasised, but also abundant species so as to determine and evaluate use levels and to pre-empt declines of species **(WWF-SA, 2003:14).**

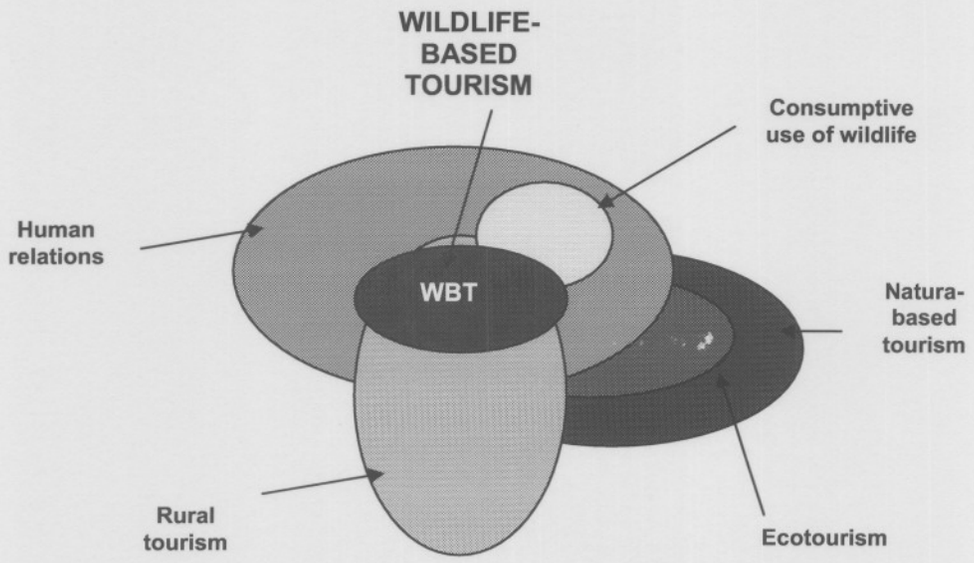


Figure 2.7: Wildlife-based tourism (Source: Page & Dowling, 2002:83)

In South Africa this was the case where game farms were managed in such a way, during the past 20 years, that there is more game today than 50 years ago **(Pretorius, 1996:10).**

Another term that has also been used often is wildlife tourism. **Page and Dowling (2002:82)** give the following definition of wildlife tourism: wildlife tourism (WT) may be defined as *'an area of overlap between nature-based tourism, ecotourism, consumptive use of wildlife, rural tourism, and human relations with animals'* which is shown in Figure 2.7.

As seen in Figure 2.7, aspects that make wildlife tourism different to ecotourism alone is the fact that wildlife tourism (wildlife-based tourism (WBT)) has a wide range of activities within its boundaries, apparently catering for a wider range of needs and in a variety of ways. Some forms of wildlife tourism are a more attractive to the general public than others, but again sustainable environmental practices are of major importance **(Page & Dowling, 2002:83)**. Wildlife-based tourism can be seen as a different word from, but with a same meaning as nature-based tourism, of which ecotourism is a pristine product.

The positive environmental effects of ecotourism may include encouraging the use of marginal agricultural areas for nature conservation through which natural vegetation cover can be retained. It also promotes conservation by demonstrating the importance of natural areas for generating tourist income, stimulating investment in the infrastructure and effective management of protected areas. One must be aware of inappropriate development of mass tourism that can degrade protected areas and destroy local communities. To practise successful ecotourism, it is important to find the balance between visitors' enjoyment and conservation needs. One will find that tourism in general is not always so much concerned about the environment and its conservation, but rather seems to give more attention to the economic and social benefits **(Dawson, 2001:41)**.

The attention that is currently drawn by ecotourism in South Africa is aimed at contributing towards the solution of two serious problems. Firstly, the socio-economic development of the people in the country is one of the biggest challenges facing the tourism industry. Secondly, one has to accept that the tourism industry should become financially more sustainable due to the fact that money will rather be spent on socio-economic upliftment than on sustainable development of the environment **(Myburgh & Saayman, 1999:10)**.

To assist game farm owners further in the developing process of their ecotourism products, they need to be informed about the principles and characteristics of ecotourism.

2.2.3 Principles and characteristics of ecotourism

For game farm owners to develop sustainable ecotourism attractions, it is fundamental that they should be aware of the characteristics of ecotourism. These characteristics are as follows:

- It is tourism that is conducted in natural areas or destinations.

- It must minimise the negative impact to the environment and the local people and to build environmental awareness.
- It must increase the awareness and understanding of natural areas, cultural systems, and the involvement of visitors and their influence on the systems.
- It must contribute to the conservation and management of protected areas and other natural areas such as game farms.
- It must maximise the early and long-term participation of local people in the decision-making process.
- It must support human rights and democratic movement for local people.
- It must direct economic and other benefits to local people that complement rather than overwhelm or replace traditional practices (respect local culture) (farming, fishing and social systems) **(Page & Dowling, 2002:64).**

Apart from the characteristics, there are five core principles that are fundamental to ecotourism, that it is namely, nature-based, ecologically sustainable, environmentally educative and locally beneficial and that it generates tourist satisfaction. The first three principles are essential for a product to be labelled "ecotourism" while the other two are viewed as being desirable for all forms of tourism.

2.2.3.1 Nature-based

Ecotourism is based on the natural environment that focuses on the biological, physical and cultural features of the area. Ecotourism occurs in and depends on a natural setting - in this case a game farm.

2.2.3.2 Ecologically sustainable

All tourism should be sustainable – economically, socially and environmentally, whereas ecotourism should sustain the just-mentioned in a natural environment without letting the natural environment be degraded.

2.2.3.3 Environmental educative

This is the key element that distinguishes ecotourism from other forms of nature-based tourism. Environmental education and interpretation are important tools in creating an enjoyable and meaningful ecotourism experience. This means that game farm owners must provide tourists at their game farms with the opportunity to learn more about nature. This is easy to implement on game farms where one tends to operate with small groups at a time which enhances the learning experience with limited environmental impact.

2.2.3.4 Locally beneficial

The involvement of the local community leads to a situation where the local communities not only benefit, but also improve the quality of the tourists' experience. Local communities can be involved in ecotourism operations by means of the following; provision of knowledge (animal behaviour, tracking, guiding), services (catering, cleaning) facilities (management) and products (wood grafts, souvenirs, bead work). These benefits must outweigh the normal farming activities so that they will support ecotourism.

2.2.3.5 Tourist satisfaction

Ecotourists who are satisfied with the ecotourism experience provided by the game farm, are essential for the long-term viability of the ecotourism industry. Indeed, this incorporates elements of the concept of the visitor's experience and the need to recognise the complexity of what constitutes the ecotourism experience in a marketing, experiential and satisfaction context **(Page & Dowling, 2002:69).**

To conclude the theoretical analysis of ecotourism, the following can be argued regarding the reason why game farms form part of ecotourism:

- *Game farms contribute to the conservation of fauna and flora*

  As indicated in Chapter 1, 80% of nature conservation in South Africa is taking place on privately owned land such as game farms. In 2000 it was estimated that there were 7 000 privately owned game farms in South Africa with a total surface area of 16 million ha of which only 5 061 were exempted game farms, with a surface area of 10 364 154 hectares. Twelve and a half percent of the total agricultural land in South Africa in 2000 was covered by game farms. On the contrary, national and provincial game reserves only covered 6% of the agricultural land in South Africa.
- *Game farms provide tourists with a unique and outstanding experience and the opportunity to learn from nature*

  The reason is that game farms mostly receive small groups, which makes it possible to provide them with a unique nature experience (walking safaris, personally guided game drives, and the feeling that they own the place because it's only them on the farm) as a result of the personal attention they receive. Guided game drives and walking safaris provide tourists with an educational opportunity by which they can learn more about nature.
- *Game farms provide economic opportunities and employment to local communities*

  Tourists who visit game farms spend money during their stay on the farm and visits in the surrounding community which leads to new developments, jobs and opportunities.

2.2.4 *Important aspects for game farms as ecotourism attractions*

The following aspects are important for game farms as ecotourism attractions:

1. Appropriate ecotourism.
2. Characteristics of provider.
3. Quality of the location.
4. Appropriateness of land use practices **(Bryan, 1991:79)**.

2.2.4.1 Appropriate ecotourism

Ecotourism on game farms can be a wonderful economic opportunity with positive and wide ranging social, political, and environmental benefits. There are a number of prerequisites for making ecotourism profitable and beneficial in the long run. Firstly, would-be operators must decide whether offering the service is an appropriate endeavour for them, given personal traits, economic needs and state of facilities. Secondly, the farm must provide visitors with appropriate recreational and educational opportunities. And thirdly, ecotourism must be practised in a manner appropriate to the land and overall natural environment in which the enterprise takes place.

2.2.4.2 Characteristics of the provider

The game farm owner must package his/her own experience on the farm that will generate revenues. The success of this packaging is very much dependent on the personality of the game farm owner. This must be clearly understood by potential game farm owners if their business is to be enjoyable and successful. In deciding whether a hospitality operation is appropriate for the game farm owner, the potential provider (farmer) should also consider whether the new economic activity will complement existing farm operations when stock or cattle farming is combined with game farming, or hinders it. Potential customers probably will have certain perspectives and opinions on issues such as meat, animals, hunting, basic farming activities and the environment. Therefore it will be essential for game farm owners to understand and acknowledge these perspectives.

One must also consider the neighbours – how will they feel about the new venture and will they be involved? If strong, positive interaction with strangers is not their forte potential game farm owners should reconsider entering into the ecotourism industry.

2.2.4.3 Quality of the location

For game farm owners to be successful, the owner must invest time and money, learn what ecotourists want and expect from a game farm, and then make sure that they provide for these needs. It is important to supply the basic needs of the tourist such as clean water, cleanliness,

privacy and good beds. This, however, will depend on the type of facility, namely whether it is only for biltong hunting, trophy hunting recreation tourists or five star Mala Mala type of accommodation. Wildlife and beautiful scenery, as well as opportunities to hike, ride and partake in other recreational activities are important to ecotourists as well as for the product (game farm). Proximity to historical sites, natural areas or cultural attractions is also important to visitors.

2.2.4.4 Appropriateness of land use

Ecotourists see game farm owners as land stewards, therefore it is important for game farm owners to practice sustainable and environmentally sound farming and ecotourism activities. Game farm owners must consider issues such as toxins, the concept of carrying capacity, conservation and soil conservation. Many of the potential ecotourists see themselves as environmentalists. This is also the case with most game farmers. The problem, however, is that in practice each applies his/her own version of environmentalism differently. Therefore it is important for game farm owners to communicate their doings on the farm to ecotourists so that they will understand how the game farm is operated **(Bryan, 1991:79)**.

2.3 THEORETICAL ANALYSIS OF THE CONCEPT SUSTAINABLE ECOTOURISM DEVELOPMENT

The search for sustainable development and environment friendly behaviour is a primary challenge for all governments, companies and individuals **(Davis, 1991:4)**. Tourism has become a critically important source of foreign revenue for a number of developing countries, such as South Africa. In some, the industry is facing environmental problems that could constrict future growth. This has resulted in a number of discussions about sustainable development **(Clayton, 2002:61)**. There are at least three different meanings that relate directly to the notion of sustainable tourism that are used in the literature **(McCool & Moisey, 2001:5)**. These meanings reflect a continuum of world-views, from those that are industry centred to those that are more broadly socially centred, and are as follows:

Firstly, to maintain the tourism industry in the long run. Here the primary task is to build and manage tourism businesses in such a manner that they can maintain themselves over a long period. This view is narrow in the sense that the objective of sustainable tourism is the tourism (and recreation) industry and included business firms. Maintaining the health of individual businesses may be viewed as a worthy social goal, but this perspective does not necessarily recognise tourism as a tool to enhance economic opportunity, protect a community's cultural and natural heritage and maintain a desired quality of life. From this point of view, sustainable tourism would place great emphasis on maintaining promotional programmes that ensure that

the number of tourists visiting an area continues to rise. In this context of sustainable tourism, the more tourists, the better. This view, of course, does not recognise tourism as an input as a method of enhancing social and economic welfare.

Secondly, a kinder, gentler form of tourism that is generally limited in scale, sensitive to cultural and environmental impact and respects the involvement of local people in policy decisions. This view argues that there are restricted biophysical and social limits to tourism development. This view recognises that tourism, as any other economic activity, can overwhelm a community with negative social and environmental impacts. Therefore, sustainable tourism closely benefits local peoples and communities, and protect resources on which the tourism industry rests. Some still suggest that sustainable tourism represents the conduct of individual tourists, while others maintain that it is ethical behaviour on the part of tourism-based businesses, and still others suggest that it focuses on the amount of social and environmental impact. Much of the globe's tourism may qualify as mass tourism, but the central question of sustainability concerns the way in which the negative social and economic impacts of human activity can be reduced. Given that most forms of tourism will probably be defined as mass tourism, of which the greatest progress would be to reduce impacts of mass tourism and not ignore it.

Thirdly, according to this view tourism is seen as a tool of social and economic development, as a method to enhance economic opportunity not as an end in itself. What should be sustained? In a natural resource management context the primary focus is on various ecosystem characteristics. In this sense, tourism is integrated with broader economic and social development programmes and can be viewed as a method – similar to many definitions of ecotourism – to protect the natural and social capital upon which the industry is built. By asking this question, tourism is viewed as a tool, which at times may be important to a community and at other times not so important. In this sense one is not speaking of protecting cultures for their value to the tourism industry, but because of their value to their peoples. It may be possible according to this view that tourism is not sustained over a long period, but is used as a method to accumulate income and government revenue that can be used later for other development tools. Tourism would be viewed as part of a larger policy framework designed to achieve a sustainable society. In addition, the type of tourism according to this view may not necessarily be limited in scale **(McCool & Moisey, 2001:5).**

From the above-mentioned views, the most unlike one to be used in the context of a game farm, is the first. What is more needed is a sustainable development view where both the natural and the financial sides benefit from ecotourism. The emphasis of game farms should be aimed more on conservation for future generations, protecting the local community's culture and natural heritage and maintaining a desired quality of life. This results in using a combination of

the last two views with the emphasis on restricted biophysical and social tourism development, where sustainable tourism closely benefits local peoples and communities in which the tourism industry is conducted as well as the game farm owner.

Bryan (1991:79) indicates that there are a number of prerequisites for enabling ecotourism to be profitable and beneficial in the long run. Firstly, would-be operators must decide whether offering the service is an appropriate endeavour for them, given personal traits, economic needs, state of facilities, and so forth. Secondly, the site must provide opportunities for visitors. And thirdly, ecotourism must be practised in a manner appropriate to the land and overall natural environment in which the enterprise takes place.

As a result of a growing tourism industry, the impact it had on the environment became a major concern, since tourism depends on – and consumes – local natural and cultural resources. The impacts of tourism occur mainly in four broad categories:

- On natural ecosystems and resources – soil, fauna, flora.
- On the built environment.
- On local societies – culture, values and attitudes.
- On local, regional and national economics **(Coccossis *et al.*, 1996:3)**.

The status of the world environment, a growing, even accelerating concern that initially triggered publications such as Rachel Carson's "*Silent Spring*" were combined by the Brundtland Commission's "*Our Common Future*". Here it is argued that the survival of the human species depends on a new adopted paradigm of economic development termed "sustainable development" **(Aronsson, 2000:32; McCool & Moisey, 2001:1)**. This paradigm was somewhat different from previous paradigms in the sense that it calls for environmental protection and economic progress since it represented a combination of both, while attending to quality-of-life needs.

Clearly, sustainable tourism development must have in mind the environment and economic growth. **Swarbrooke (1999:14)** and the **I.E.A. (2001:13)** give the following definition of sustainable tourism development: *Forms of tourism that meet the needs of tourists, the tourism industry, and host communities today without compromising the ability of future generations to meet their own needs* **(Hobson & Essex, 2001:133; Pigram & Wahab, 1997:3)**.

Because of the fact that the environment plays an important role, the definition changed to the following: *tourism that is economically viable but does not destroy the resources on which the future of tourism will depend, notably the physical environment and the social fabric of the host community* **(Swarbrooke, 1999:14)**. **Goodwin (2002:3)** agrees by saying it is responsible

travel to natural areas that conserves the environment and sustains the well-being of local people. According to **Goodwin (2002:3)** there are three primary requirements for sustainable tourism. Firstly, it must meet the needs of the host community in terms of standards of living (short and long term); secondly, it must satisfy the demands of increasing tourism numbers and continue to attract them in order to achieve an improved standard of living; and thirdly, it must safeguard the environment for this purpose.

Briassoulis (2002:1065) states that sustainable tourism development revolves around a central issue of how to *manage the natural, built, and socio-cultural resources of host communities in order to meet the fundamental criteria of promoting their economic well-being, preserving their natural and socio-cultural capital achieving intra- and intergenerational equity in distribution of costs and benefits, securing their self-sufficiency, and satisfying the needs of tourists.*

The Manila Declaration of the World Tourism Organisation, as in **Swarbrooke (1999:14) and Inskeep (1991:33),** states that sustainable tourism is:
The protection, enhancement and improvement of the various components of man's environment, are among the fundamental conditions for the harmonious development of tourism. Similarly, rational management of tourism may contribute to a large extent to protecting and developing the physical environment and the heritage, as well as improving the quality-of-life.

This declaration pointed out the importance of a relationship between the environment and the tourism industry, which reads as follows:

- An unspoilt natural and human environment is a fundamental condition for the development of tourism. Moreover rational management of tourism may contribute significantly to the protection and development of the physical environment and the cultural heritage, as well as to improving the quality of life **(Inskeep, 1991:33)**.

According to **Murphy (1985:274),** tourism's interest in sustainable development is logical; this is one industry that sells the environment, both physically and humanly, as its "product". Tourism is environmentally dependent and the environment is vulnerable to the impact of tourism. "Tourism is to a large degree, a resource-based activity, interacting with natural systems and with the capacity to initiate far-reaching changes in the environment" **(Pigram, 1995:208)**. Sustainable tourism development embodies the interdependence of environmental, social and economic issues and politics. For successful sustainable tourism development, this interdependence should be taken into consideration **(Myburgh & Saayman, 1999:18)**.

Sustainable tourism that is different from sustainable tourism development can be described as the survival of a product in the long-term within a destination. This may sound a bit confusing, but one can easily argue that tourism can be seen as sustainable in an area where the tourist numbers and spending show a steady growth pattern over a period of time **(Ioannides, 2001:59)**. For example the Cango Caves, which maintained its potential to attract tourists over a long period of time. If closer investigated, one finds that the environment has suffered a great deal. Here it is clear that tourists impact on the physical environment. This is a comprehensible warning to game farm owners to keep the environment, future generations and community in mind during the planning and development process of their game farms.

Conversely, tourism within the context of sustainable development is far more complex. It can be defined as the type of tourism that is developed and maintained in an area (community, environment) in such a manner and at such a scale that it remains viable over an indefinite period and does not degrade or alter the (host) environment to such an extent that it prohibits the successful development and well-being of other activities and processes. This means that it is acknowledged that tourism is not taking place in a vacuum **(Ioannides, 2001:59)**.

Nevertheless, despite the increasing popularity of the term, its transformation into action was thus far not yet completely successful **(Ioannides, 2001:57)**. **Ioannides (2001:57)** further states that the main stumbling block that prevents a true sustainable development is the fact that sustainable development does have a different meaning for different groups. **McCool and Moisey (2001:2)** add by saying that the meanings attached to sustainable tourism development have varied significantly, with little apparent consensus among authors and government institutions. **Ioannides (2001:57)** says that, to achieve a true sustainable development, communities must find a delicate balance between conflicting economic, environmental, and socially equitable objectives. The resulting economic growth is distributed equably, and the environmental impacts of these actions are minimized. In theory it may sound easy to balance the "three E's" of sustainability (environment, economy and equity).

Despite widespread recognition of the need to seek strategies for sustainable tourism, there seems to be a very wide margin of interpretation and perspective. Following, are four interpretations of sustainable tourism:

- Firstly, sustainable tourism can be interpreted from a sectoral point of view where the basic goal is the viability of tourist activity which is more in the line of economic sustainability of tourism. Here the focus of concern is the tourist activity. The emphasis of such a strategy would imply strengthening, upgrading and even differentiation of the tourist product that often relies on organisational and technological solutions and innovations. Investment in infrastructure to increase capacity and improve services,

'resort beautification' programmes, the provision of new facilities, for example water parks, is one policy tool used in this context.

- The second interpretation is mostly based on ecology as a socio-cultural and political view that strongly emphasises the need for ecologically sustainable tourism. This forms a conservationist approach that prioritises the protection of natural resources and ecosystems. In the context of environmental management, some tourism activities, usually identified as the 'soft' types, are acceptable as complementary and non-disturbing for the natural environment.
- The third interpretation can be approached from a slightly different angle than from sustainable tourist development, or the need to ensure the long-term viability of the tourist activity, recognising the need to protect certain aspects of the environment. The third approach is based essentially on an economic perspective that recognises environmental quality as an important factor of competitiveness and as such it should be protected. Protection includes aspects or dimensions of environmental quality that are directly involved in the development and marketing of the tourist product, usually aesthetics, monuments, cleanliness of beaches, traffic regulation and creation of reserved areas.
- The forth approach is based on ecologically sustainable economic development by which tourism is part of a strategy for sustainable development and in which sustainability is defined on the basis of the entire human/environment system. Seen from this perspective, environmental conservation is a goal of equal importance to economic efficiency and social equity. Tourism policies are integrated with social, economic and environmental policies but do not come first. This constitutes a more balanced and integrated approach, closer to contemporary thinking on tourism.

The just-mentioned can better be explained by a triangle that represents policy. Each vertex portrays an imaginary situation in which policy is exclusively dominated by one goal, economic efficiency, social equity or environmental conservation (Figure 2.8).

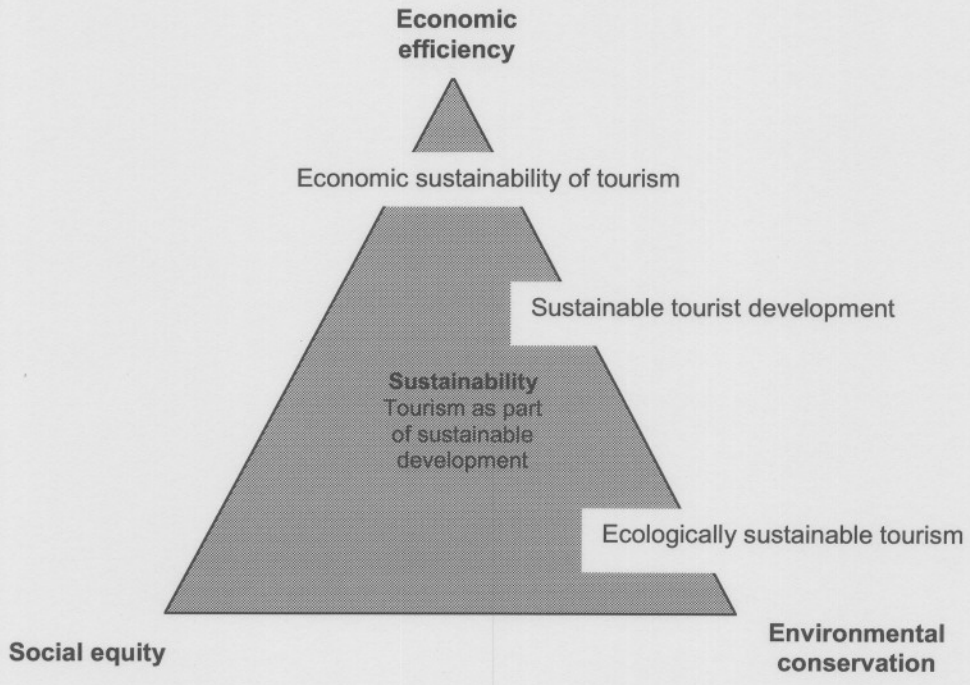


Figure 2.8: Analysis of sustainable tourism (Adapted from Coccossis et al., 1996)

The first analysis of sustainable tourism can be identified as the policy area near the vertex corresponding with economic efficiency. The second analysis, ecologically sustainable tourism, can be identified near the vertex corresponding with environmental conservation. The third is really a combination of economic efficiency and environmental conservation policies and can be identified somewhere along the side connecting these two vertices of the triangle. The last one seems to fit better in the centre of the triangle. There is no one, ideal tourism strategy. The above-mentioned approaches reflect different priorities of which each one has its own merits and could be appropriate for different cases and settings, whether mature or emerging destinations, in growth or decline, natural areas or developed resorts **(Coccossis, *et al.*, 1996:9)**. In the search for a wider perspective on tourism and the environment, the strategies toward sustainable development would involve the following:

- To link a development policy with environmental management. The first step would be to review the project plans and programmes from an environmental point of view.
- To have regional-level environmental management schemes that can provide a framework for guiding local environmental management programmes.
- To integrate tourism development and environmental management policies at local, regional and national level.
- To increase the local capacity to cope with environmental issues, particularly in rapidly developing tourist destination areas **(Coccossis *et al.*, 1996: 9)**.

This simply implies that current and future generations must strive to achieve a decent standard of living for all people and live within the limits of their natural systems. This may sound easy but it is difficult to get consensus on how sustainable development must be implemented due to the different views from different stakeholders **(Ioannides, 2001:57)**. For those whose main priority it is to maintain economic growth, one tends to find short-term goals opposed to those that may give preference to less tangible social justice and environmental protection goals. In a tourism context, this means that those who are more concerned about a fast reward from their investment will not be extremely concerned about the environment or social ramifications of their actions. Similarly, it may be impossible to convince people from a poor country in a remote area to buy into a long-term development process to protect their natural environment, especially if they pursue rapid economic growth as is the case with people living in the rural areas. Moreover, sustainable development is seen by developing countries as yet another attempt of Western industrialised societies to oppose their own agendas on poorer nations.

Small-scale entrepreneurs whose business is bound by the different seasons of a country are more concerned about their next pay cheque than the impact that their business might have on the environment and the local culture. This relates well with game farm tourism, which in most cases, are small or medium enterprises and seasonally bound. This must serve as a warning that, without the natural environment, game farm tourism can't exist and therefore game farm owners need to protect their natural environment.

Table 2.2 clearly indicates the difference between sustainable tourism development and non-sustainable tourism development **(Swarbrooke, 1999:15)**.

Table 2.2: Sustainable versus non-sustainable tourism development

SUSTAINABLE	NON-SUSTAINABLE
General concepts	
• Slow development • Controlled development • Appropriate scale • Long term • Qualitative • Local control	• Rapid development • Uncontrolled development • Inappropriate scale • Short term • Quantitative • Remote control
Development strategies	
• Plan, then develop • Concept-led schemes • Landscapes concerned	• Develop without planning • Project-led schemes • Concentrating on 'honey-pots'

• Pressure and benefits diffused • Local developers • Locally employed • Vernacular architecture	• Increase capacity • Outside developers • Imported labour • Non-vernacular architecture
Tourist behaviour	
• Some mental preparation • Learning local language • Tactful and sensitive • Quiet • Repeat visits	• Little or no mental preparation • No learning of local language • Intensive and insensitive • Loud • Unlikely to return

Adapted from Swarbrooke (1999:15)

According to **Inskeep (1991:461),** the goals of sustainable tourism are:

- To develop a greater awareness and understanding of the significant contributions that tourism can make to the environment, the people and the economy.
- To promote equity in development.
- To improve the quality of life of the host community.
- To provide a high quality of experience for the visitor.
- To maintain the quality of the environment on which the foregoing goals depend.

Advantages of sustainable ecotourism:

- Brings satisfaction and enrichment to visitors.
- Strengthens the respect for natural and built heritage.
- Promotes an understanding of and appreciation for other communities and cultures.
- Supports the maintenance and improvement of heritage.
- Acts as catalyst for clearance of eyesores and dereliction.
- Creates jobs and wealth.
- Diversified narrowly-based rural economies.
- Improves the quality of community life.
- Supports businesses and services that might close down, had it not been for ecotourism.

Disadvantages that make ecotourism unsustainable:

- Overcrowding.
- Traffic congestion.
- Wear and tear.
- Inappropriate development.
- Conflicts with the local community (**Selman, 1996:55).**

One important aspect of sustainable development to be successful, is to involve the youth of the world (South Africa) to partake in sustainable development. This can be done by education programmes that will increase their responsibility toward wildlife conservation and sustainable use **(CIC, 2003:4)**.

2.3.1 Criteria for sustainable tourism development

For any game farm owner, it is important to determine what a sustainable destination looks like. The following criteria can be used in order to ensure the sustainable development of a destination (Table 2.3).

Table 2.3: Criteria for sustainable ecotourism development

CRITERIA FOR SUSTAINABLE ECOTOURISM DEVELOPMENT	YES	NO
Is the supply of attractions and accommodation adequate to meet the needs of visitors without losing the character of the site (area)?		
Does an authentic body of cultural, historic, and other place-defining sites and attractions exist and is it the basis for an entertaining, educational visitor experience?		
Does networking between communities exist from which civic-mindedness, community pride, responsibility for one another and the community and a shared vision for the present and future can emerge?		
Is professionalism the watchword of the tourism industry?		
Do business profits and employment opportunities accrue to the residents of the region?		
Is hospitality the prevalent attitude of the residents?		
Are market-driven visitor experiences organised, promoted, and made easily accessible and do they provide the opportunity for both small and large products to be competitive in the tourism marketplace, and help curtail over-visitation?		
Are visitor-safety and convenience paramount concerns?		
Is the regional economy diverse and stable, and is the contribution of tourism recognised and valued?		
Is a unique sense of locality characterised by tradition (social, religious, civic, and culture) and cherished by all. Is it considered by residents, businesses, and public officials to be the (economic and human) lifeblood of the area?		
Did the farm adopt energy saving technology and programmes?		
Do the farms make use of alternative energy sources (e.g. wind and sun)?		
Is noise emission controlled by the game farm owner?		
Is development sensitive to the conservation of environmentally protected or		

threatened areas, species and scenic aesthetics, achieving landscape enhancement where possible?		
Are the following identified and minimised: product and operational environmental problems disruption of the natural environment of the construction site?		
Is the establishment treating, controlling and re-using their waste, water and sewage?		
Are environmentally friendly product purchasing policies adopted?		
Are environments hardened to withstand increased usage, without deterioration?		
Did you make sure that the employed construction company is practising working ethics that minimise site disruption?		
Do developed environmental guidelines exist for construction firms?		
Are there fines to ensure that builders adhere to practices designed to minimise waste as well as the re-use and recycle thereof?		
Is energy saved and used effectively (reducing production)?		
Is fresh water resources quality safeguarded, and is water misuse avoided?		
Is drainage water purified and are seepage reduced?		
Are environmentally dangerous substances replaced?		
Transport – avoid harmful pollution and other impacts on the environment.		
Are there land plans that look after and prevent the uglification of the landscape?		
Are local employees, customers and receivers involved?		
Is the local history or religion respected and does it form part of he objects of the farm?		
Are products and techniques designed so that they are more efficient, less polluting, locally appropriate and globally available?		
Is there cooperation with the local communities, tourists, small enterprises, sectoral bodies, the local councils and the government?		
Raising awareness of the traveller prior to departure is a vital element		
A meaningful and satisfying experience should be provided by the tourism industry.		
Is tourism reducing its impact on the wider environment in terms of depletion of natural resources and pollution?		
Is tourism respectful towards the character of the local environment and does it operate within the capacity to regenerate it?		
Is equity kept in mind, with the idea of a fair distribution of benefits and costs among tourism promoters and host people and areas --- now and in the future?		
Are ethical principles followed that respect the culture and environment of the host area, the economy and traditional way of living, the indigenous behaviour, and the local leadership and political patterns?		
Does development involve the local population in planning, proceed only with their approval, provide for a degree of local control; and pace of development must be controlled?		
Are criteria developed for territorial zoning including low and medium-impact areas?		
Are tourists trained and informed to raise awareness levels for nature?		

Are tourists recommended on what may and may not be done?		

(Hobson & Essex, 2001:134; Mohasi, 1999:29; Harris & Leiper, 1995:xxiii; Myburgh & Saayman, 1999; Milne, 1998:44, Yunis, 2001)

In addition to the criteria, some basic guidelines follow to ensure contribution to the protection of natural areas on game farms:

Zoning – Zones with different uses and use intensity should be defined. This issue will be discussed further in Chapter three.

Tourism demand management – Global tourism demand for a nature area to be managed. The following instruments can be use:

- Determine total number of tourists, meaning tourists carrying capacity of the farm.
- Establish a price in line with number of tourist allowed per day.
- Define marketing, distribution and promotion policies in line with price per day and demand numbers.

Design for tourism management – Design facilities for the use of tourists. Use local building styles and building materials. Also make use of environmental friendly technology. Harden intensive-use areas.

Crowd management – Design routes that enable management to manage tourist's movements. Provide signposts and set up timing and sequencing programmes.

Monitor impacts continuously – Determine which areas and species on the farm are of great interest to the tourists and undertake regular ecological audits to measure the impacts.

Behavioural management – Set up roles and codes of practice for tourists. Educate communities, staff and tourists on the importance of conservation.

Profit sharing for local conservation and improvement – Ensure that part of the profits are reinvested in the area that is used to generate the profit **(Yunis, 2001:3).**

An essential element in any type of development is maintaining the unique sense of the historic, cultural and community identity of each area (product).

The three main principles of sustainable development are:

- Ecological sustainability ensures that development is compatible with the maintenance of essential ecological processes, biological diversity and biological resources.
- Social and cultural sustainability ensure that development increases people's control of their lives, is compatible with the culture and values of people affected by it, and maintains and strengthens community identity.
- Economic sustainability ensures that development is economically efficient and that resources are managed so that they can support future generations **(McNeely *et al.*, 1992:10)**.

Swarbrooke (1999:14) adds the following principles for sustainable tourism management:

- Policy, planning and management can be seen as appropriate and indeed essential responses to the problems of natural and human resource misuse in tourism.
- It should be initiated with the help of the broader community and they should maintain and manage it.
- Sustainable tourism development is generally not anti-growth, but it emphasizes that there are limitations to growth and that tourism must be managed within these limits.
- One would rather have long-term thinking than short-term thinking.
- The concerns of sustainable tourism management are not just environmental, but also economic, social, cultural, political and managerial.
- Sustainable tourism development emphasizes the importance of satisfying human needs and aspirations, which entails a prominent concern for equity and fairness.
- All stakeholders need to be consulted and empowered in tourism decision-making, and they also need to be informed about sustainable development issues.
- While sustainable development should be the goal for all policies and actions, putting the ideas of sustainable tourism into practice means recognizing that, in reality, there are often limits to what will be achieved in the short and medium term.
- One must have an understanding of the following: market economies operations, cultures and management procedures of private sector businesses and public and voluntary sector organisations, and the values and attitudes of the public are necessary in order to turn good intentions into practical measures.
- Frequently, conflicts of interest emerge regarding the use of resources, which means that, in practice, trade-offs and compromises may by necessary.
- Ecotourism should provide quality employment to residents.
- Education and training programmes must be supplied to help improve the management of natural and heritage resources.

- A code of conduct should be established for tourism at all levels **(Walter & Noble, 2000; Myburgh & Saayman, 1999)**.

Balancing costs and benefits in decisions on different courses of action must extend to considering how many different individuals and groups will gain or lose. Sustainable development embodies the interdependency of environmental, social, and economic issues and policies. This interdependency should be taken into consideration for sustainable tourism development to be successful. Sustainable tourism development should be considered to be a planning process that integrates tourism with other economic development initiatives in an attempt to achieve sustainable development. The goals of sustainable tourism are:

- To develop a greater awareness and understanding of the significant contributions that tourism can make to the environment, people and the economy.
- To promote equity in development.
- To improve the quality of life of the host community.
- To provide a high quality of experience for the visitor.
- To maintain the quality of the environment with the foregoing goals in mind **(Myburgh & Saayman, 1999)**.

It is all very well to have neat theoretical definitions of sustainable tourism but in the end it needs to be managed in order to obtain results. The following section will touch on some of the environmental impacts that need to be management.

2.3.2 Managing environmental impact

A close relationship exists between tourism and the environment regarding a number of aspects. Quite a number of features of the natural and built environment are attractions for tourists, and tourism can help achieve the protection of the environment. Tourist facilities and infrastructure constitute one element of the built environment, and tourism development and tourist use of an area can generate both positive and negative environmental impacts. Finally, the overall rank of environmental quality of the tourism area is important for both game farm owners and tourists.

Many types of environmental impacts on game farms can be generated by tourism development and tourist use of the environment. If tourism is well planned, developed and managed, the impacts can be positive. The following aspects contribute to a positive side of tourism development.

Appropriate ecotourism development:

- Helps justify and pay for the conservation of important natural areas and wildlife such as on game farms.

- Helps justify and pay for the conservation of archaeological and historic sites because these are attractions for ecotourists.
- Helps improve the overall environmental quality of areas because tourists like to visit places that are attractive, clean and not polluted. The improvement of infrastructure for tourism does contribute to better environmental quality.
- Helps to increase local environmental awareness as residents observe tourists' interest in conservation and realise that protecting the environment does pay off.

If ecotourism is not well planned, developed and managed, it can generate several types of negative environmental impacts. These impacts include the following:

- Water pollution resulting from improper waste management of sewage and solid waste systems of lodges (accommodation sites on game farms) and other tourist facilities.
- Air pollution resulting from excessive use of internal combustion vehicles.
- Noise pollution resulting from tourist activities and tourist vehicles including aircraft movements.
- Vehicular congestion at good sites on a game farm caused by tourists at polar sites on a game farm for example at a leopard kill.
- Unattractive landscapes (visual pollution) resulting from several factors: poor design of lodges and tourist facilities; badly planned layout of facilities (poor land use and site planning); inadequate landscaping of tourist facilities; use of large and ugly advertising signs; and obstruction of scenic views by tourism development.
- Littering of the game farm by tourists and defacing of features by graffiti and vandalism.
- Ecological disruption of natural areas and disturbance of wildlife by overuse and misuse by tourists and inappropriate tourism development. Mountain and desert environments, all important types of tourism areas, are particularly vulnerable to ecological damage.
- Damage to archaeological and historic sites by overuse and misuse by tourists and inappropriate tourism development.
- Environmental hazards such as erosion, land slippage, damage from floods, earthquakes and land use problems resulting from poor planning, sitting and engineering of tourist facilities **(WTO, 1998b).**

Other environmental protection measures that were referred to and should be integrated with game farm planning, development and management process include the following:

- Develop properly designed utility (infrastructure) systems of water supply, electric power, waste management and drainage for tourist facilities. Energy saving techniques such as use of solar energy and conservation of water use should be incorporated with tourist facility development.

- Ensure that visitor load is spread thinly enough across the entire farm. This will keep the pressure on any one point low.
- Restrict access during certain critical times (breeding time).
- Provide additional attractions to draw the bulk of tourists away from the sensitive areas.
- Environmentally harden an area to withstand greater pressure, for example build hides at water points to carry more traffic.
- Develop adequate road and other transportation systems; with emphasis on use of non-polluting public transport systems.
- Apply environmentally suitable land use and site planning principles, zoning regulations, development standards and architectural design in tourism areas. Control advertising signs in order to maintain an attractive environment.
- Provide open space and environmentally suitable landscaping in tourism areas and game farms.
- Carefully manage visitor flows at tourist attention features. At fragile sites on a game farm the number of visitors may need to be limited or completely prohibited at certain times, or even year-round.
- Prohibit tourists from cutting flowers or trees in camping and trekking areas or from collecting rare plant and animal species, and control the disturbance of wildlife on game farms. Hunting and fishing should be allowed only under carefully controlled conditions so that the animal populations are maintained at sustainable levels appropriate to their habitats.
- In deserts, off-road recreational vehicle use should be limited to a few specified areas or completely prohibited.
- Maximise income and other benefits for local communities.
- Make the case for conservation particularly to domestic visitors who have the opportunity to influence government policy.
- Provide a quality experiences that will encourage visitors to market you're product by means of "word of mouth". This will create sustainable business by receiving return visits and knew visits **(WTO, 1998b; Goodwin, 2001:7; Clayton, 2002:62).**

Following, are guidelines for improving the tourism-environmental relationship on a game farm:

1. Environmental considerations should be fully incorporated in tourism development plans, especially with respect to air and water (potable and recreational), quality, soil conservation, the protection of natural and cultural heritage and the quality of human settlements.
2. Tourism goals should be based on the carrying capacity of game farms and environmental sustainability and be compatible with regional development, social concerns, and land use planning.

3. Decisions should be made on the fullest available information with respect to their environmental implications. Environmental impact assessment (EIA) should be applied to propose major developments, to evaluate the potential damage to the environment in light of forecasted tourism growth and peak demand. Alternative sites for development should be considered, taking into account local constraints and carrying capacity. This capacity includes physical, ecological, social, cultural and psychological factors.
4. Adequate environmental measures at all levels should be defined and implemented. In particular, attention should be paid to peak level of sewage, solid waste disposal, noise pollution and traffic density control. In the most endangered zones, comprehensive improvement programmes should be formulated and implemented.
5. Incentive schemes should be applied in both the public and the private sectors to spread tourism demand over time and space in order to make optimal use of accommodation.
6. Regulatory power should be used to limit developments in sensitive areas, and legislation should be drawn up to protect rare, endangered and sensitive environments.
7. Direct negotiations with representatives of indigenous peoples before undertaking any developments which would affect their land or way of living **(WTO, 1998b).**

In Table 2.4 indicate the aspects that must be managing to prevent a negative impact in protected areas.

Table 2.4: Managing negative impacts in protected areas

FACTOR INVOLVED	NEGATIVE IMPACT ON ENVIRONMENTAL QUALITY	POSSIBLE IMPROVEMENT OR CORRECTIVE ACTION
Overcrowding	• environmental stress on humans • changes in animal behaviour in wildlife areas	• limit visitor access • expand carrying capacity
Over development	• creation of rural slums • habitat loss • destruction of vegetation • land scars and watershed interference • aesthetic impact of power lines	• disperse visitors to other areas and attractions • upgrade and rehabilitate • apply land use planning zoning regulations
Noise pollution	• irritation to wildlife, local residents and visitors • Limit visitor access	• conduct awareness campaign • establish regulations
Litter	• wildlife depends upon garbage • aesthetic clutter • health hazards	• conduct awareness campaign • establish regulations • provide litter containers at appropriate places

Vandalism	• mutilation and destruction of facilities • loss of irreplaceable historic and cultural treasures	• conduct awareness campaigns • establish regulations • increase surveillance
Airport noise	• environmental stress to humans and animals	• consider altering take-off and landing patterns • establish land use controls near airports.
Overcrowded roads	• environmental stress to humans and animals	• increase availability of public transportation
Off-road driving	• soil vegetation and wildlife damage	• limit access • establish or improve enforcement regulations
Powerboats	• disturbance of wildlife, especially during nesting season • noise pollution	• restrict access and use • implement environmental education programme
Fishing and hunting	• competition with natural predators • resource depletion	• restrict access • implement environmental education programme
Foot safaris	• disturbance of wildlife • trail erosion	• install or modify trails • restrict access and use • implement environmental education programme
Souvenir collection	• removal of endangered natural items such as coral, shells, horns, rare plants • disruption of natural processes	• environmental education programme and awareness campaign • legal restrictions
Firewood collection	• habitat destruction • mortality and small wildlife	• environmental education programme and awareness campaign • use alternative fuels
Unauthorized feeding of wildlife	• behavioural changes and dependency	• environmental education programme and awareness campaign
Construction of billboards	• spoils the view	• establish regulations

The aspects that can be selected from Table 2.4 and that are relevant to game farm tourism can be summarised as follows:

- *Overcrowding*: this can cause environmental stress to humans and can change animal behaviour.

- *Noise pollution*: If a farm is in close proximity to provincial roads, it can cause some irritation to residents and visitors.
- *Litter and unauthorized feeding of wildlife*: Tourists who dump litter on a game farm can cause problems, and dump sites in the protected areas can lead to the dependence of some animals on garbage.
- *Off-road driving:* If not controlled properly, off-road driving can lead to soil, vegetation and wildlife damage.
- *Fishing and hunting:* Competition with natural predators.
- *Food safaris:* Disturbance of wildlife during the safaris on game farms.
- *Souvenir collection and firewood collection:* Tourists on game farms collect natural items such as horns, small animals and plants that leads to the disruption of natural process.

To conclude, tourism can only be sustainable if the natural and cultural assets that it is based on are protected from degradation. This is particularly true in South Africa, which is marketed as a nature, wildlife, resort and cultural heritage destination **(Christie & Crompton, 2001).** The South African government overall supports sustainable development, especially when development is taking place in a natural area. Section 2.3.3 will discuss the White Paper on Conservation and Sustainable Development 1997.

2.3.3 White Paper on Conservation and Sustainable use

By the year 2025, 83% of the expected global population of 8.5 billion will be living in developing countries. Yet the capacity of available resources and technologies to satisfy the demands of this growing population for food and other agricultural commodities remains uncertain. The priority must be on maintaining and improving the capacity of the higher potential agricultural lands to support an expanding population. However, *conserving and rehabilitating* the natural resources on *lower potential lands* in order to maintain sustainable man/land ratios is also necessary **(Agenda 21, 2003).** This means that land that is not suitable for cattle or crop farming must rather be developed for a different need such as game farm tourism.

The **White Paper on Conservation and Sustainable Use (1997)** highlights the following aspects (objectives) as important for conserving the biodiversity.

The South African Government has three overriding priorities:

- The eradication of poverty.
- The ***sustainable development*** of its economy.
- The social development of its people.

These priorities, together with the national environmental policy presently being formulated, provide the context within which consideration will be given to achieving the three objectives of the Convention on Biological Diversity:

- The conservation of biological diversity.
- The **sustainable use** of biological resources.
- The fair and equitable sharing of benefits arising from the use of genetic resources.

To fulfil these objectives, Government has a biodiversity policy and strategy that will promote the reconstruction and development of South Africa through:

- Ensuring that the essential ecosystem services and biological resources required to meet basic human needs are *protected and maintained*.
- Not restricting economic development unnecessarily, and ensuring that such **development is sustainable.**
- Enhancing the provision of jobs related to the conservation of biodiversity and sustainable use of biological resources.
- Ensuring that opportunities derived from the conservation of biodiversity and sustainable use of biological resources favour the poor.
- Enhancing the development of human resources necessary to conserve biodiversity and use biological resources sustainably.
- Increasing participation in the institutions of civil society engaged in conserving and using biodiversity.

South Africa's approach to conserving its remarkable diversity of *landscapes, ecosystems, habitats, communities, populations, species and genes* in the country, has eight main components:

1. Identifying important *components of biodiversity* and threatening processes.
2. *Maintaining* and *strengthening* existing arrangements to conserve South Africa's indigenous biodiversity, both in and out of protected areas.
3. *Establishing and managing* efficiently a representative and effective system of *protected areas.*
4. *Promoting environmentally sound and* ***sustainable development*** in areas adjacent to or within protected areas.
5. *Restoring and rehabilitating* degraded ecosystems, and strengthening and further developing species recovery plans where appropriate.
6. *Controlling, eradicating and preventing* the introduction of *harmful alien species* which threaten biodiversity.
7. *Regulating* the transfer, handling, use and release of *genetically modified organisms.*

8. *Strengthening measures* for the conservation of biological *diversity outside natural* habitats (ex-situ conservation).

In pursuing this approach, Government recognises:

- that biological diversity is best conserved in the wild (in-situ), through the conservation and restoration of ecosystems and natural habitats, and the maintenance and recovery of viable populations of species in their natural surroundings;
- that ex-situ measures will be implemented primarily for the purpose of complementing in-situ measures;
- that an integrative approach will be the primary framework for action to address threats to biological diversity, and to establish priorities for its conservation. This means that conservation efforts will focus not only on relatively "natural" landscapes, but will include areas modified by human activities, and will seek to enhance the contribution that biodiversity makes to human welfare.

For the purpose of this study, only aspects relevant to game farm tourism will be taken from the White Paper on the Conservation and Sustainable use and discussed.

2.3.3.1 Identifying important components of biodiversity and threatening processes

1. By using biological, social and economic criteria, identify components of biodiversity that are important for its conservation and sustainable use. These components will include:

    - Ecosystems and habitats that contain high diversity; that contain large numbers of endemic or threatened species; that are relatively "pristine"; that are important nursery or spawning areas; that are under particular threat; that are important for endangered or migratory species; that adjoin conserved ecosystems and habitats; that are of social, economic, cultural or scientific importance; or that are unique, representative of or associated with key evolutionary, biological or other life-supporting processes.
    - Species and communities that are rare or threatened; that are of medicinal agricultural, or other economic value, that are wild relatives of domesticated or cultivated species; that are directly used for subsistence purposes (fore example fuel wood, building materials); that have social, scientific or cultural importance; or that are important for research on the conservation and sustainable use of biodiversity, such as indicator species.
    - Described genomes and genes of social, scientific or economic importance.

2.3.3.2 *Maintaining and strengthening existing arrangements to conserve South Africa's indigenous biodiversity, both in and out of protected areas*

To achieve this objective, Government, in collaboration with interested and affected parties, will:

1. (a) Conserve components of biodiversity through a variety of mechanisms such as legislation, planning controls, guidelines, and protected area designations, giving priority to components of biodiversity requiring urgent protective measures.

   (b) Consolidate, coordinate and improve existing legislation and regulations wherever possible and appropriate in order to eliminate duplication, and to avoid conflicting interpretations and implementation.

   (c) Introduce legal measures and incentives to conserve important ecosystems, habitats, and landscapes outside protected areas, including rangelands and their associated vegetation and indigenous wildlife resources.

   (d) Promote an ecological management approach to planning, whereby conservation is proactively incorporated with land-use plans as a specific land use.

   (e) Facilitate the development of appropriate legislation to achieve uniform legal coverage for the protection of threatened species and the regulation of trade of all CITES-listed species, in addition to threatened species listed nationally and provincially.

2. Promote and support measures to manage conflict arising from the conservation and use of biological resources.

2.3.3.3 *Establish and manage efficiently a representative and effective system of protected areas*

Protected Areas in South Africa

A "protected area", as defined by the Convention is "*a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives*". Within this definition, the purposes for which protected areas are managed vary considerably, and different classification systems apply in different countries. Of these South Africa presently contains 21 types of protected areas. They are grouped under six internationally recognised management categories (Table 2.5).

Table 2.5: IUCN protected area categories

Category	Name	Management objective	South African legal or other equivalent category[Z]
Category Ia	Scientific Reserves	Managed mainly for scientific research and monitoring	Special nature reserves - Wilderness areas
Category 1b	Wilderness Area	Managed mainly for wilderness protection, subsistence, and recreation	Special nature reserves - Wilderness areas
Category II	National Parks and Equivalent Reserves	Managed mainly for ecosystem protection and recreation	National parks - Provincial parks and nature reserves - Indigenous state forests
Category III	Natural Monuments and Areas of Cultural Significance	Managed mainly for conservation of specific natural or cultural features	Natural monuments. Monuments Botanical gardens Zoological gardens Natural heritage sites. Sites of conservation significance
Category IV	Habitat and Wildlife Management Areas	Managed mainly for conservation through management intervention	Provincial, local, and private nature reserves Conservancies
Category V	Protected Land and Seascapes	Managed mainly for land and seascape conservation and recreation	Protected natural environments Natural resource areas Scenic landscapes Urban landscapes
Category VI	Managed Resource Protected Area	Managed mainly for the sustainable use of natural ecosystems	Mountain catchment areas

These areas are administered by the SANParks; the Department of Water Affairs and Forestry; the Department of Environmental Affairs and Tourism (DEAT); the South African National Defence Force; the National Botanical Institute; provincial conservation agencies; numerous local authorities; and an assortment of private and public landowners who subscribe to various conservation schemes. Ten Acts of Parliament and 13 provincial Ordinances and Acts control protected areas in South Africa (Table 2.6).

Table 2.6: The management of protected areas in South Africa

Type of protected area	Legislation	Administration
National park	National Parks Act, No. 57 of 1976	National Parks Board
Lake area	Lake Areas Development Act, No. 39 of 1975	National Parks Board
Mountain catchment area	Mountain Catchment Areas Act, No. 63 of 1970	Assigned to provinces
Protected natural environment	Environment Conservation Act, No. 73 of 1989	Assigned to provinces
Special nature reserve	Environment Conservation Act, No. 73 of 1989	Assigned to provinces
Limited development area	Environment Conservation Act, No. 73 of 1989	Delegated to local authority/government institution
National botanical garden	Forest Amendment Act, 1991	National Botanical Institute
State forest	Forest Act, No. 122 of 1984	DWAF: delegated to provinces
Forest nature reserve and wilderness area	Forest Act, No. 122 of 1984	DWAF: delegated to provinces
National monument	National Monuments Act, No. 28 of 1969	National Monuments Council and provinces
Conservation area	National Monuments Act, No. 28 of 1969	National Monuments Council and provinces
Defence area	Defence Act, No. 44 of 1957	South African National Defence Force
Marine reserve	Sea Fishery Act, No. 12 of 1988	DEAT: Directorate of Sea Fisheries; provinces in respect of coastal zone and specified resources
Restricted area	Sea Fishery Act, No. 12 of 1988	DEAT: Directorate of Sea Fisheries; provinces in respect of coastal zone and specified resources
Most South African islands	Sea Birds and Seals Protection Act, No. 46 of 1973	DEAT: delegated to provinces in respect of sea birds
Provincial, local and private nature reserves	Various provincial ordinances	Nine provincial administrations, numerous local authorities, private landowners
Ramsar site	No legal status (proposed Wetland Conservation Act)	DEAT and conservation authorities
Private conservancies	***No legal status***	***Farmers***
Biosphere reserves	***No legal status***	***Conservation authority/neighbours***
Sites of conservation significance	***No legal status***	***Private landowners***
Natural heritage sites	***Not legally enforceable***	***Private landowners***

Terrestrial Protected Areas

South Africa's system of terrestrial protected areas is well developed, and it is in such areas that biodiversity conservation has been focused. Furthermore, many of the existing protected areas are small (such as game farms), often isolated from one another, and separated by large areas of mostly transformed land.

2.3.3.4 Promoting environmentally sound and sustainable development in areas adjacent to or within protected areas

Such initiatives will be encourage be government, and in collaboration with interested and affected groups will:

1. Develop and introduce appropriate strategies, mechanisms and incentives to integrate protected areas within the broader ecological and social landscape, and encourage conservation in adjacent private and communal areas. This may include the establishment of biosphere reserves; buffer zones; community-based wildlife management schemes; multiple use areas; tourism plans; development projects; or the introduction of conservation grants and other economic incentives.
2. Support and promote activities adjacent to protected areas that are compatible with and which complement the objectives of the protected area.
3. Support the development of community-based wildlife management initiatives as part of a broader set of approaches to land-use planning and developing local sustainable development strategies.
4. Promote the development of partnerships between conservation agencies, community organisations, NGOs, and private entrepreneurs for purposes of planning and managing the use of resources within and outside protected areas, and optimising benefits for local people.
5. Enhance the capacity of communities residing in or adjacent to protected areas to participate in protected area management by providing appropriate training and education, and by recognising local expertise and traditional institutions.
6. Take steps to avoid or minimise damage caused to people and property by wildlife.
7. Seek innovative ways of improving benefit flows to people in and around protected areas by:
    a. promoting local and social development (e.g. using local producers and labour as far as possible, facilitating joint venture schemes, providing community services, providing environmental education and opportunities within protected areas, promoting community management and co-management of protected areas).
    b. designating areas for sustainable resource use.

c. facilitating where appropriate the development of compensation agreements with those who have lost access to resources or who have suffered damage caused by wildlife.

2.3.3.5 Restoring and rehabilitating degraded ecosystems, and strengthening and further developing species recovery plans where appropriate

South Africa's landscapes have changed dramatically over the past few centuries, because of human settlement and associated activities. This led to the degradation or loss of ecosystems, and in some instances, to the extinction of species. Our recent history of apartheid planning led to particularly marked effects in the former homelands, through creating densely populated pockets of land, which are now sites of severe soil erosion, overgrazing and resource depletion. The previous policies also encouraged unsustainable land-use practices by providing subsidies to farmers occupying marginal lands.

Over the years there have been various private and public sector efforts to rehabilitate degraded areas, primarily to restore the productivity of agriculturally degraded lands on large commercial farms, but also to rehabilitate previously mined areas. Within protected areas, efforts to reintroduce threatened species and promote their recovery have been considerable, with off-site conservation approaches such as captive breeding and plant propagation being successfully wed to increase populations of threatened species.

However, to date there has been no overall national approach to rehabilitation which aims to restore ecosystem functioning and biodiversity.

2.3.3.6 Controlling, eradicating and preventing the introduction of harmful alien species which threaten biodiversity

Alien organisms are plants, animals and micro organisms which do not naturally occur in an area, and which are deliberately or accidentally introduced by humans to ecosystems outside their natural range. Many alien plant and animal species have been introduced into South Africa over the years. Some of them have been deliberate, for purposes of agriculture, forestry, or even conservation.

Introduced animals have also reduced South Africa's biodiversity, for example the Himalayan thar and the European starling. Some of the most drastic impacts of invasive animal species have been recorded in South African rivers, where alien fish, and to a lesser extent invertebrate and reptile species, have altered habitats and successfully out compete native fauna.

The following are some of the methods of controlling these alien species:

- Review, streamline, and if necessary, strengthen existing legislation to control the introduction and spread of potentially harmful alien organisms.
- Develop a regulatory procedure for the introduction of alien organisms into South Africa
- Develop control and eradication programmes, and provide ongoing support to existing programmes based on a priority-rating system and in relation to costs and resources.
- Prevent wherever feasible the unintentional introduction of alien organisms into South Africa.
- Develop a national policy on the inter- and intra-provincial translocation and inter-basin transfer of species, including the updating of lists of prohibited and approved taxa.
- Promote the use of local, indigenous species in rehabilitation and re-vegetation schemes.
- Provide incentives to landowners to control or eradicate alien organisms.
- Strengthen, support and coordinate the efforts of existing institutions and programmes to detect the early establishment of invasive alien organisms.
- Support and strengthen the development of biological and other control methods for alien organisms that threaten biodiversity.
- Improve public education and awareness concerning the risks posed by planting or illegally importing alien species.
- Improve capacity among implementing agencies to regulate the introduction, control and eradication of alien organisms that threaten biodiversity.

Negotiate and liaise with neighbouring countries to maximise commonalities and minimise conflicts between policies, legislation, and practices relating to alien organisms that threaten biodiversity **(White Paper on Conservation and Sustainable use, 1997)**.

2.3.3.7 Regulate the transfer, handling, use and release of genetically modified organisms in order to minimise the potential risks to biodiversity and human health

For centuries living organisms have been manipulated using traditional techniques such as fermentation, classical plant breeding and artificial insemination to produce new breeds, food, medicines, or other products. Although these and other newer techniques are still practised, methods have become increasingly sophisticated during the past twenty years, with the development of a wide range of novel molecular biotechnologies.

2.3.3.8 Support, complement and enhance in-situ conservation through strengthening measures for the ex-situ conservation of components of biological diversity

What is Ex-Situ Conservation?

Ex-situ conservation concerns the conservation of genetic resources and of wild and domesticated animals, plants, fungi, and micro organisms off-site, or outside their natural habitats. In contrast, *in-situ* conservation means the conservation of biodiversity in the wild through the conservation of ecosystems and natural habitats, and the maintenance and recovery of viable populations of species in their natural surroundings.

In-situ conservation is recognised by Government to be the cornerstone of its strategy to conserve South Africa's biodiversity, but *ex-situ* conservation, and the techniques and facilities used for *ex-situ* conservation, are considered to be essential measures to support, complement and enhance in-situ conservation. Some important steps have already been taken in this regard, and well-established *ex-situ* facilities exist in the country, but Government acknowledges the need for additional attention, especially with regard to the management and coordination of gene banks **(White Paper on Conservation and Sustainable use, 1997)**.

2.3.4 World Summit on Sustainable Development

The World Summit on Sustainable Development (Johannesburg 2002) emphasised changing unsustainable consumption and production that are of importance to game farm tourism.

It is the duty of all countries to promote sustainable consumption and production. Governments, relevant international organisations, the private sector and all major groups should play an active role in changing unsustainable consumption and production patterns. It is important to encourage and promote development of a 10-year framework in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production to promote social and economic development within the carrying capacity of ecosystems by addressing and, where appropriate, de-linking economic growth and environmental degradation by improving efficiency and sustainability in the use of resources and production processes and reducing resource degradation, pollution and waste.

All countries should take action, with developed countries taking the lead, taking into account the development needs and capabilities of developing countries through mobilization, from all sources, of financial and technical assistance and capacity-building for developing countries. This would require actions at all levels to:

- Adopt and implement policies and measures aimed at promoting sustainable patterns of production and consumption; and
- Develop awareness-raising programmes on the importance of sustainable production and consumption patterns, particularly among the youth and the relevant segments in all countries, especially in developed countries.

Encourage relevant authorities at all levels to take sustainable development issues into account during decision-making, investment in infrastructure, business development and public procurement that will include the use of environmental impact assessment procedures. Prevent and minimise waste and maximise reuse, recycling and use of environmentally friendly alternative materials, with the participation of government authorities and all stakeholders in order to minimise adverse effects on the environment and improve resource efficiency with financial, technical and other assistance for developing countries. This would include actions at all levels to:

- Develop waste management systems on natural areas such as game farms,
- Promote waste prevention and minimization by encouraging production of reusable consumer goods and biodegradable products and developing the infrastructure required.

2.4 SYNTHESIS OF THE CONCEPTS ECOTOURISM, GAME FARM TOURISM AND SUSTAINABLE TOURISM DEVELOPMENT

To enable game farm owners and readers to understand the relation between the three concepts, namely ecotourism, game farm tourism and sustainable tourism development, Table 2.4 and Figure 2.9 will be used as framework for discussion.

Van der Merwe and Saayman (2002b) indicated that game farm tourism is based on four pillars, namely breeding of game and rare/endangered game, hunting, ecotourism attractions and processed game products (Figure 2.9). Each of these four pillars contributes to an ecotourism product that must be sustainable. If a game farm only concentrates on the first and last pillar of Figure 2.9, namely the breeding of game and game products it is not part of ecotourism. However, it becomes part of ecotourism as soon as it is used as a tourism attraction for example when a farmer does breed with sable antelope and also uses it as a tourism attraction to his visitors. In Table 2.6 the inside column indicates activities that form part of ecotourism that lead to sustainable ecotourism products. In Table 2.7 the pillars of game farm tourism are used to explain the contribution of each pillar to a sustainable ecotourism product.

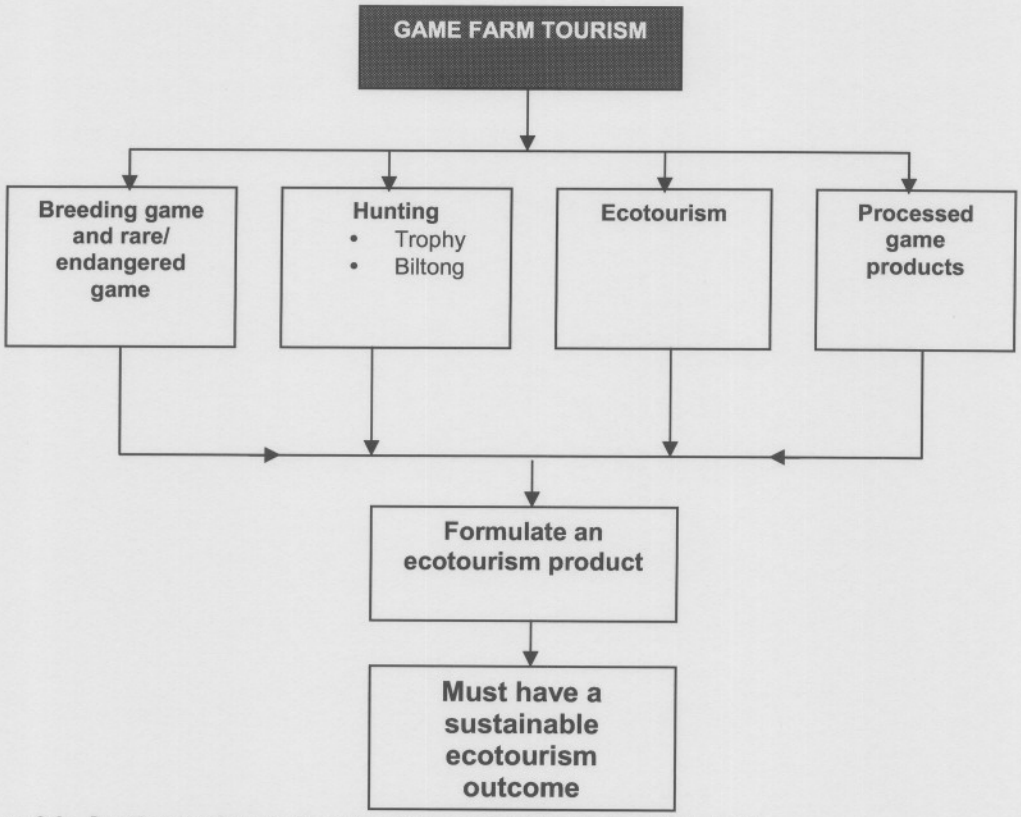


Figure 2.9: Synthesis of game farm tourism, ecotourism and sustainability

Table 2.7: The contribution of the four pillars to ecotourism

FOUR PILLARS OF GAME FARM TOURISM	ECOTOURISM ASPECTS
Breeding game and rare/endangered game	• It is a learning experience when visitors visit and learn about species. • **Appreciation and study** of wildlife and natural resources. • Implies a managed approach by the game farm owner, which commits to **establishing and maintaining** the area (game farm) • It is about conserving fauna and flora • It includes the **interaction between the tourist and nature**

FOUR PILLARS OF GAME FARM TOURISM	ECOTOURISM ASPECTS
Hunting	• The **consumptive use** of wildlife products must be managed • Gives the tourist a unique and **outstanding experience** • It is a **learning experience** • It is about conserving fauna and flora through consumptive use • It includes the **interaction between the tourist, nature and culture** • Strengthens the **economic well-being** of local residents • Participation of **local residents** • Enforcing regulations
Processed game products	• Using the **economic benefits to fund the area's land** management as well as community development through money generated from game products served on farm • Implies a **managed approach** which commits to establishing and maintaining the area
Game farming as ecotourism attraction	• It is **responsible tourism** • It is a **learning experience** • It is about **conserving fauna and flora** as well as culture meaning maintaining the quality of the environment. • **Undeveloped natural** areas for the tourists to appreciate and experience the environment • Appreciation and **study of wildlife** and **natural resources** • Directly and indirectly contributes to the visited area

	• Strengthens the **economic well-being** of local residents • Strengthens the tourists appreciation and dedication to preservation and protection issues • Implies a **managed approach:** which commits to establishing and maintaining the area • There is participation of **local residents** • Game farm tourism products are market appropriately • Game farm tourism does contribute to the enforcement of regulations • Uses the **economic benefits to fund the area's land** management as well as community development • It includes the interaction between the tourist, nature and culture and is a tool for conservation	

The above-mentioned pillars of game farm tourism need to be develop in sequence with sustainable tourism development and therefore product owners need to plan their development taking into consideration the following aspects of sustainable tourism development as it was mentioned earlier. The following is a summary of the most important sustainable tourism development aspects that form part of game farm tourism:

- ***General concepts***
  - Development must be slow so that resources will not be overused.
  - Development must be done in a controlled manner.
  - The scale must be appropriate to the area of development.
  - Development must plan for the longer term.
  - Planning must be qualitative.
  - It must be locally controlled.
- ***Development strategies***
  - Plan before starting to develop the product.
  - When building, take into consideration the landscape in which the lodge will be developed.
  - Make use of local developers, locally employed, and architecture design that forms part of the South African culture.
- ***Tourist behaviour***
  - Tourists must be educated regarding ecotourism.
  - Tourists must try to learn something about the local language, for example how to say "hello" or "thank you" in Afrikaans, Tswana or Xhosa.

- Tourists must always be tactful and sensitive to the local community and environment.
- Tourists must be quiet and not loud in nature.

2.5 CONCLUSION

From Chapter 2 it is obvious that game farm tourism does form part of ecotourism and that game farms contribute significantly to nature conservation. If one takes a look at the most important aspects of ecotourism, namely low impact on nature, less tourists but a higher price, providing opportunities to learn about nature, providing a nature based experience, conserving natural resources and sustainable development one can clearly see a perfect fit for game farms. One can not emphasise enough the fact that game farms that only concentrate on breeding and game products alone are not part of the tourism industry.

One aspect that is very important world-wide today is the concept of sustainable development. For any game farm owner, sustainable development is very important for long-term survival. Unfortunately, different people view sustainable development from different perspectives. One perspective of sustainable development is that it must be profitable and financially viable. The problem here is that some game farm owners will do anything to make a profit, even tamper with nature such as the breeding of hybrids of blue wildebeest and black wildebeest. The most import aspect for this study is that the sustainable development regarding game farms must maintain a delicate balance between protecting the natural environment and being financially profitable.

In both ecotourism and sustainable tourism development the involvement of the local community is a priority, and that they must benefit from these developments.



CHAPTER 3

AN ANALYSIS OF GAME FARM TOURISM

"In a civilized and cultivated country, wild animals only continue to exist at all when preserved by sportsmen. The excellent people who protest against all hunting and consider sportsmen as enemies of wildlife are ignorant of the fact that in reality the genuine sportsman is, by all odds, the most important factor in keeping the larger and more valuable wild creatures from total extermination"

President Theodore Roosevelt

3.1 INTRODUCTION

Since the beginning of mankind humans have used wild animals as a means of survival **(Van der Merwe & Saayman, 2002b; Conroy, 2001:20)**. Wild animals were used as food source, clothing, ornamentation and as a trading commodity. The growth in agriculture activities can directly be link with the growth of the human population, this leads to the growth of domestic animals production. This in the end resulted in a demand for space to live in, and the encroachment of wildlife habitat. The allocation of land from the wild to the realm of our economics, and the associated population so generated, is as commonly known, the greatest threat to the existence of all wildlife **(Conroy, 2001:20)**.

However, not all wildlife tourism can be considered to be ecotourism, although most is non-extractive. Hunting, and fishing are all leisure activities involving wildlife but they would not be considered to be ecologically friendly **(Shackley, 1996:xvi)**. As indicated in Chapter 2, most game farms are fenced, if not all. Even most national and provincial parks are fenced in South Africa. This makes it unavoidable to implement hunting in order to maintain the carrying capacity of an area. Hunting is also responsible for bringing in vast amounts of capital that again can be used for conservation (more about hunting later in this chapter) **(Van der Merwe & Saayman, 2003)**. However, research suggests that even the best-intentioned wildlife watcher produces a discernible impact on the animals and its habitat that he or she is watching, with the severity of the impact being directly related to visitor numbers **(Shackley, 1996:xvi)**.

Protected areas such as national parks, game reserves and game farms are crucial in attracting ecotourists but few such areas are managed to the mutual benefit of all parties concerned

(community, game farm owner and environment). Successfully protected area management requires co-operation between government, private sector, visitor and local people but management plans are easier to formulate than they are to implement or to police. Pressures on wildlife must be considered within a framework of the development of conservation and planning legislation. It is impossible to divorce the environmental impacts of tourism from the need to control population pressure and develop community involvement in resource management. Issues, including the need to perceive wild animals are earning their keep, ensuring that local communities will receive long term rewards from sustainable tourism rather than short term benefits from their own hunting activities **(Shackley, 1996:xvi)**.

The aim of this chapter is to indicate where game farm tourism started and what it comprises of. Topics that will be discussed are the history of game farms, growth of game farm tourism, the four pillars that game farms are based on and a new approach to game farm tourism.

3.2 GAME FARM TOURISM: WHERE DID IT ALL START?

In Chapter 1 the term/definition *"game farm tourism"* was argued against other terms that are known in the industry. But where, how and when did it all start?

3.2.1 Historic background of game farms in South Africa

The history of game farms can be divided into three stages from way back when the first Europeans set foot in South Africa up to the present, namely:

- Stage 1: 1652 until the end of the 19th century.
- Stage 2: post Anglo-Boer war until 1960.
- Stage 3: 1960 up to the present **(Du Plessis, 1997:12)**.

3.2.1.1 Stage 1: 1652 until the end of the 19th century

South Africa was described by early explorers as a sub-continent inhabited by vast numbers of wildlife **(Grossman *et al.*, 1999:261)**. According to **Carruthers (1989:21),** it is untrue that the early permanent residents of the time, were responsible for the culling of large numbers of game. The reason is that the weapons in those days were not capable of or too primitive to cause such decline in game numbers. The influence of humans on nature however increased in the course of time and the following can be seen as the cause of the dwindling game numbers during that time:

- The development of the muzzleloader that improved the success rate of hunters.
- Increased numbers of hunters caused by the romantic stories of Africa hunting safaris.
- Europeans and their domestic livestock.
- The profitability of trade in wildlife products.

- The discovery of diamonds and gold, which increase the need for food that was grown on crop and cattle farms that were not capable of providing in the need of the new comers. This led to an increase in hunting activities.
- The outbreak of naga-illness and runderpest that led to the culling of vast numbers of game.
- The Anglo-Boer War brought normal farming to a stop. This gave wildlife time to increase **(Grossman *et al.*, 1992:15 as in Du Plessis, 1997:14; Harris, 1939 as in Du Plessis, 1997:14; Carruthers, 1988:35; Grossman *et al.*, 1999:262)**.

Dwindling game numbers laid the foundation for legislation of hunting during 1874. Legislation of the time stated that hunters do need hunting licenses to enable them to hunt during the open season, normally being during the winter months. On request of the farmers, legislation was changed and the farmers received ownership of game on their farms. Paul Kruger, president of the Transvaal at the time, also promoted the idea that game must be conserved for future generations, which led to the proclamation of the Kruger National Park **(Du Plessis, 1997:17).**

3.2.1.2 Stage 2: Post Anglo-Boer War until 1960

After the Anglo-Boer War the British government was in favour of protecting and regulating game. The outbreak of naga-illness caused by the tsetse fly changed it all; thousands of game were culled in order to protect live stock from this disease **(Du Plessis, 1997:21)**. Wildlife was seen as undesirable competitors for domestic animals. This led to wildlife receiving a status while they had no monetary value. Farms were even advertised in the Western Cape as land without any wildlife **(Bothma, 2002a:23)**. A second factor that contributed to the decline of game numbers during the time was the draught of 1932 to 1934. Game numbers stayed low and it was only during the Second World War that there was a slight increase in game numbers. But soon after the war, improved weapons led to another onslaught on game numbers. In conjunction with the fact that South Africa was criss-crossed by millions of kilometres of livestock fences in the 1950 led to a situation where wildlife was no more able to migrate as in the past **(Bothma, 2002a:23; Du Plessis, 1997:21)**.

The previous two stages in the history of game were identified by the following characteristics:

- The initial over-use of game species.
- The increase of game during war periods.
- Renewed uncontrolled use of natural resources **(Krynauw, 2001a; Du Plessis, 1997:21)**.

3.2.1.3 Stage 3: 1960 up to the present

All the above-mentioned led to a time where South Africa was left with only a small number of game species such as 19 bontebok, fewer than 2000 blesbok, fewer that 30 white rhinoceroses, and fewer than 90 Cape mountain zebras. Only three farms in the Free State had some black wildebeest. During the 1990s, the demand for an African Safari experience grew rapidly. As tourism started booming, protected areas sought to capitalize on it, and the private sector increasingly converted land from livestock uses to game viewing, that led to a demand in live game for stocking purposes **(Scriven & Eloff, 2003:247).**

The following aspects contributed to a change in the history of game:

- The change in attitude of hunters becoming prepared to pay for their hunting trip and game because they realised how privileged they were to participate in such events.
- The idea was sold among farmers that game would benefit them better in certain areas than cattle or crop farming.
- The public started to realising the importance of nature and of the growth in the number of hunters.
- In those days National parks served as marketing material of the African wildlife and more people developed the need to interact with nature.
- Farmers were triggered to conserve and this led to the fact that farmers wished to increase the proportion of game on their farms. This evolved in the growth of demand and supply of game species.
- During this period a number of African countries received their independence that led to unstable governments, which caused overseas hunters to focus on South Africa as a new destination.
- Lastly the fact that farmers were entitled to the ownership of their game **(Du Plessis, 1997:22; Swanevelder, 1997:15; Krynauw, 2001a:11; Bothma, 2002a:23)**.

From the just-mentioned one can see the tremendous changes in the history of game and game farm tourism. Initially game had "NO" value in South Africa and was hunted for food and killed for the pest that it brought to commercial farming. This changed and the importance of game and wildlife was realised. Whereas game was once used for hunting only, ecotourism together with the breeding of game to supply in the demand of farmers, changed into a major role player in ecotourism and conservation.

The financing of conservation is an increasing concern to those who have an interest in ensuring a sustainable level of global biodiversity and that it is maintained. Land that is used for conservation is in continual competition with other economic uses of the same land. Coupled

with this, conservation budgets of the state are under constant pressure, with funds being reallocated to departments of higher political priority. This is typical of a developing country where matters such as poverty, job creation and health are of greater urgency.

Conservation budgets are not only being increasingly restricted, but conservation is also put under pressure to actually make money. "Sustainable use" is the strategy for the twenty-first century, and society now demands that nature pays its way – at least to a certain extent. Previously protected areas that were traditionally seen as the only means of conserving, are now perceived to be only one piece of the puzzle. The remainder of the puzzle must be made up of innovative mechanisms to utilize – and still conserve – natural resources **(Scriven & Eloff, 2003:247).**

3.2.2 The rising importance of ecotourism in game farm tourism

Although South Africa is a dry country, there used to be vast numbers of game during previous centuries. Wildlife, which is better adapted to the African environment than cattle farming, can play an important role in years to come in ecotourism, which is likely to be one of the better economic performers as well as a potentially large earner of foreign exchange. Game farming tourism is also far less dependent on unskilled labour than livestock farming, and in addition, game is more difficult to steal than cattle and sheep. The promotion of wildlife is politically attractive in the sense that it supports the international goal of achieving a "sustainable living planet". Ecotourism also creates more job opportunities for skilled and semi-skilled labour. It is not surprising that many farmers are currently actively busy restoring their cultivated land to planted pastures (grass), or leaving it to return naturally to a habitat for game through the process of plant succession.

It is estimated that land that has been transferred back to nature is close to 20 million hectares. This contributes enormously to the game industry with a growing demand for both hunting and game viewing. In order to ensure that game farm tourism is of a sufficient size, increasing numbers of farmers are considering the creation of conservancies. This will be discussed later in this chapter **(ABSA, 2003:4)**.

Natural predators, such as lion and leopard, are not only good and relatively cheap "game wardens", but are also particularly attractive to ecotourists. In terms of economics, the value of game farms can be summarised as follows:

- Game farm tourism works essentially on four pillars. The first pillar is hunting trips; the second pillar is game breeding and the sale of live game at auctions; the third pillar is the processing of animal products; and the fourth pillar is the provision of ecotourism products. These pillars will be discussed under 3.4.

- The ecotourism industry accounts for at least R1 billion in value added. Its indirect multiplier effect (in industries such as airlines, taxidermy, 4×4 trails, outdoor equipment and hotels) is of a roughly similar size, which implies that the total turnover in this market segment is about R2 billion. This area holds a huge potential for future growth in ecotourism on game farms, mainly because its market share of the total tourism industry is relatively small in South Africa.
- There is a large percentage difference in income from auctions, hunting and ecotourism (game viewing or leisure tourists) between the different regions. A big role player here is the distance from the big cities and the availability of the Big Five.
- South Africa does receive thousands of trophy hunters annually, of which the majority are from the USA, followed by South America, Germany and Spain. Today, some 85% of all Africa's trophy exports come from South Africa. Trophy hunters normally do hunting trips of seven to ten or fourteen days, depending on the number and type of game they want to hunt **(ABSA, 2003:4)**.

3.3 TRENDS TOWARDS GAME FARM TOURISM

A number of trends created a favoured climate for game farm tourism, namely:

3.3.1 The problems of traditional livestock farming

Among the poorest agricultural regions in the world is the Sub-Saharan Africa region. It is estimated that the total value of agricultural output per hectare is $69 compared to the world average of $266 per hectare. Live stock farmers were not only confronted with poor soil and low rainfall but also with sweeping structural challenges for more than a decade. Following are a few of the more resent visible changes **(ABSA, 2003:4)**:

- The deregulation of the agricultural sector resulting in lower, but also more competitive prices.
- A decline in farmers' political power base in Parliament since the early 1990s.
- The number of land claims that increased.
- Increased live stock losses owing to cattle theft in the past decades.
- The impact of aids and malaria as the latter re-emerged.
- Bush encroachment that increased (which often resulted from overgrazing which, in turn, reduced the frequency of veldfires).
- To control cattle, diseases had become an expensive operation.
- Last, but not least; the impact of global warming.

All these changes are largely of a structural nature. This implies that farming communities had to make fundamental adjustments. With the case of cyclical changes, farmers may cope by

relying on their capital reserves, diversifying their risk exposure and taking a long-term view. On the other hand, structural changes may require a total reconsideration of current livestock production methods and weighing up alternatives. This helps to show the way for game farm tourism to be implemented as an economic alternative for livestock farmers, especially in savannah areas. A number of reasons why farmers had to review their traditional business, particularly those with marginally profitable business, are as follows:

3.3.1.1 The deregulation of the farming sector

The agricultural sector is increasingly being subjected to free market forces which is in line with world trends towards liberalising markets. The WTO (World Trade Organisation) had set their aim on a drastic reduction of all export subsidies and import levies for agricultural products. Clearly, time is needed to achieve this aim, but it is obvious that pressure is applied to the agricultural sector world-wide to improve productivity and to become less dependent on government support in its various forms. South Africa is no exception and the current government is strictly following this trend. Consequently, the real input and output prices of the agricultural sector are adjusting structurally **(ABSA, 2003:4)**.

3.3.1.2 The loss of political leverage

In the past, the agricultural sector in South Africa possessed considerable power in Parliament; this was obtained through its rural vote. After the 1994 democratic election, this political leverage was wiped out suddenly and completely. This led to the fact that the government not only became fully representative, but that the constituency-based voting system was replaced by a proportional representation system. Before the elections in 1994, the agricultural lobby used to be backed by almost a third of the members of Parliament (today less than 10%). Coupled with this, there is an increase in the number of successful land claims prosecuted through the courts. This gives only one reflection of the new political winds of change that are blowing through the countryside.

3.3.1.3 The impact of new labour legislation

When organised agriculture in South Africa started off in the 17th century, labour was cheap. This made it easy far farmers to farm with sheep and cattle because they had little to no labour expenses. This made agricultural production viable in the past, but labour relations have changed rapidly and fundamentally. Now issues such as dismissals, sick leave and maternity leave, paid holidays and retirement provisions are regulated in terms of the Basic Conditions of Employment Act (No. 75 of 1997). This has brought about a fundamental change in the way business is conducted on farms.

3.3.1.4 The impact of aids and malaria

Like most of South Africa's northern neighbours, the agricultural sector is being badly affected by HIV/Aids. The cost of the pandemic is felt in areas such as:

- HIV-infected farm workers providing a lower productivity.
- A loss in skilled labour.
- Increased non-attendance.
- Long-term sick leave for Aids patients.
- Increased leave for burials.
- Less buying power in the rural communities.

Besides HIV/Aids, malaria also played its role. Malaria once again emerged as a major natural disease. Malaria not only affects the local population but also discourages foreign tourists from visiting South Africa.

3.3.1.5 Stock theft

The South African Police Service is battling to maintain law and order in rural areas. Together with poverty, unemployment and a large influx of illegal immigrants from neighbouring countries led to an increase in theft among cattle and sheep in certain areas. Farmers no longer are willing to graze their animals along the major roads or near the borders of neighbouring countries because of the possible danger of stock theft **(ABSA, 2003:4)**.

3.3.1.6 Bush encroachment

In areas where farmers tend to overgraze, it results in the degradation of the veld and denser bush in certain areas. The severe drought of the past has also contributed to this phenomenon. As a result of bush encroachment, the economic carrying capacity of cattle farms, in particular the smaller farms, has declined. Fortunately for game farms, bush encroachment has lesser impact than on cattle farming: cattle are grazers whereas game species include grazers, mixed feeders and browsers.

3.3.1.7 Livestock diseases

Livestock, especially cattle, in the Bushveld and Lowveld areas are exposed to a large number of diseases, often tick borne. To control diseases such as foot-and-mouth, is a costly exercise in many cases. This no longer makes cattle farming as profitable as it used to be. Another factor that plays a major role is global competition and reduced subsidies that forced livestock farmers to race to the market. In fact, cattle cannot easily digest proteins beyond the tiny amounts consumed by microbes in their first stomach. Yet, for the sake of rapid weight gain, cattle are given steroids and fed with overdoses of protein, including, until recently, processed animal offal. This can lead to bloating, chronic diarrhoea and acidosis, which disrupts their

immune systems. If no more veterinary interventions and large amounts of antibiotics exist, cattle in feedlots will soon die of these diseases. Mad cow disease (Bovine Spongiform Encephalopathy or BSE) is only one consequence of feeding animal proteins to herbivores. Beside BSE, there are other dangerous illnesses such as foot-and-mouth disease, swine fever and bovine tuberculosis. The problem with domestic animals is that they have been shaped by human selection with little to no natural resistance to the elements of nature. Leaving farmers with one of two choices when cattle are sick; to either give even more drugs or to resort to immediate slaughter.

Wildlife however, has a far higher resistance to diseases, owing to natural selection. Instead of breeding health back into the equation, today's government policy for foot-and-mouth disease still comes down to culling. This led to a major cutback in the consumer's meat consumption. It is still an open question as to what extent it is possible to depend on factory farming techniques without becoming a factory consumer.

It is impossible for food to be cheap, local, green, safe and varied all at the same time. The current increase of higher fish consumption is only temporary, as the oceans are already heavily over-fished. More organic farming techniques world-wide (with lower yields at higher costs) and the transformation of more cattle farms into game farmers in Southern Africa could be partial solutions to these problems **(ABSA, 2003:4)**.

3.3.1.8 Global warming

In the rest of the world, areas that receive less than 500 mm of rain per annum are considered to be semi-arid or arid. In South Africa, more than 60% of the total land receives less than 500 mm of rain, with about 20% receiving even less than 200 mm per annum. The effect of global warming will probably increase the unpredictability of localised wet and dry periods. On average, farmers can harvest 2,3 tons of maize per hectare in the favourable parts of the Free State, compared to 7,9 tons in the United States of America. Alternatively, in the best natural cattle-grazing areas of South Africa, one large stock unit (LSU) which is the equivalent of a steer of 450 kg, needs at least 4 hectares of grazing land per year on a sustainable basis. This compares with 1,5 LSUs per hectare (or 0,67 ha/LSU) in, for example, New Zealand. To conclude, the dry and unpredictable climate, large areas with sandy infertile soils (sourveld) and tick-borne diseases, make it difficult for South African livestock farmers, without subsidies and import protection, to compete with farmers abroad **(ABSA, 2003:4)**.

3.4 THE FOUR PILLARS OF GAME FARM TOURISM

Game farms tourism, as previously indicated, is based on four pillars, namely: breeding game and rare/endangered game species, hunting, ecotourism and processed game products (Figure 3.1). These pillars will be discussed subsequently:

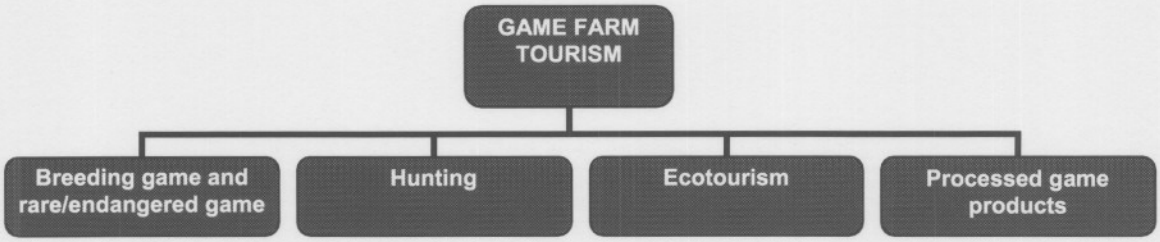


Figure 3.1: Four pillars of game farm tourism

3.4.1 Breeding game and rare/endangered game

Eloff (1999a:23) divided the breeding of game into two categories. Firstly, breeding your normal not endangered or rare game species such as kudu, springbok and impala. Secondly breeding endangered and rare game species such as sable antelope, black rhino and roan antelope. In the two situations above the emphasis is on the production of game species to be auctioned to game farmers. Breeding game holds the following advantages and disadvantages.

3.4.1.1 Advantages

- Farm does not need scenic beauty, only sufficient grazing for game.
- Stopover and slaughter facilities are not necessary.
- It is labour intensive.

3.4.1.2 Disadvantages

- Farm requires knowledgeable managerial input with regard to supplementary feeding, animal diseases, medicine, drugs, animal behaviour patterns and habitat preferences.
- Requires large capital outlay with regard to expensive game and electrified fences.
- According to speculation, prices of rare/endangered game have reached relatively high price levels, and price increases can be slow in the future.
- As a result of the large capital outlay in game is it a risk in terms of the outbreak of game diseases.

3.4.2 Hunting

Game is hunted either for biltong or for trophy purposes. This includes the following types of hunting: bird hunting, bow hunting, biltong hunting, trophy hunting, "green hunting" and/or "darting safaris".

3.4.2.1 Advantages

- Easier to handle than game farm tourism as an ecotourism attraction.
- Biltong hunting can take place with stock farming although it is not the ideal.
- Prices for trophy hunting are indicated in American dollars.
- Well-established biltong-hunting market in South Africa.
- Venison is a secondary resource of income with trophy hunting and can be sold to local butcheries (**Leo-Smith, 1993:101; Eloff, 1999a:23; Glen-Leary; 1987:12).**

3.4.2.2 Disadvantages

- This farm requires large capital outlay that is not always fully utilised.
- Game reproduces slowly because of the many male animals required by hunters.
- Biltong hunters are not prepared to pay very high prices and usually make use of cheaper accommodation.
- Biltong hunting normally takes place over weekends or holidays and consequently the bed occupation figures during the week are low.
- A stronger rand can also influence trophy hunting **(Leo-Smith, 1993:101; (Eloff, 1999a:22)**.

3.4.3 Game farm tourism as an ecotourism attraction

Game farm tourism as an ecotourism attraction implies the following activities:

- Hiking-trails combined with game and bird watching.
- Photographic safaris.
- Farm holidays.
- Conference facilities.
- 4x4 trails, canoeing and abseiling for the more adventurous type of tourist.
- Promotion of unusual attractions, like caves, bushmen paintings, waterfalls and ruins of previous civilisations.
- Different types of accommodation, rest camps, tented chalets, chalets, luxury lodges, campsites, old farmhouses with an interesting character.
- Horse safaris, walking safaris, mountain bike trails and donkey cart trips.

- Educational tours where the tourist can learn more about nature - it does not have to include the "Big Five".
- Curio shops where local people of the area can sell their products.
- Provision of traditional cooking opportunities.

3.4.3.1 Advantages

- Better utilisation of farm facilities and infrastructure.
- More effective utilisation of the above produces a bigger income and results in a bigger profit margin.
- Better utilisation of labour throughout the year.
- Better-trained labourers can be employed because labour can be applied effectively.

3.4.3.2 Disadvantages

- Better and more management inputs are required.
- Bigger capital outlay with regard to facilities.
- More labourers who set more demands regarding management (**Eloff, 1999a:23; Leo-Smith, 1993:102; Houston, 1996:214**).

3.4.4 Processed game products

A question that can be asked, is how much South African consumers and international consumers (tourists) know about game meat or game products. On the other hand, one can also ask how much the game meat industry knows about the South African consumer and the international consumer (tourist). **(Hoffman, 2003:7).**

Research conducted by **Hoffman (2003:7)** reported that South African consumers indicated an increase in the awareness of food issues and trends. The food retail industry is focusing consumers' attention on "organic" and "natural" products. The meat trends currently advise consumers to buy lean meat cuts and species that are naturally lower in fat. *Game meat is low in fat and can be considered to be organic and natural.* Of all game meat processed in plants in South Africa, only 8% of the meat is sold locally.

Hoffman (2003:7) further indicated that 73% (of 300 questionnaires) among local consumers indicated that they have eaten game meat before. A total of 67% of the consumers said they would eat game meat again. The International consumers (tourists) (75%) to South Africa indicated that game meat is their most favoured meat to order in a restaurant during their stay. The main reason for consumers to eat game meat is for its healthiness and leanness. The price

and availability of game meat was seen to be the negative attributes of game meat. It is interesting to note that 91% will order game meat in South Africa and 88% will also order game meat in Europe. This shows that tourists do not only eat game meat in South Africa because it is part of an "African" experience, but also because they enjoy it. This strengthens the potential for exporting South African game meat to overseas markets. The species of game that most tourists have eaten includes warthog, springbok and kudu. Sixty percent of the tourists were not aware of any game meat promotions in South Africa. This shows that more needs to be done to market game meat internationally. This was confirmed by the respondents. Marketing does not only involve promotions, but it also involves identifying target consumers, manufacturing products that consumers want, and promoting it so that consumers will buy it.

The availability of game meat is still surrounded by many contradictions. Consumers did not see game meat as a meat type that is readily available, and indicated that game meat is "sometimes" available during summer. It is apparent that consumers still have the idea that winter (traditional hunting season) is the only time of the year that game meat is supposed to be available. With night cropping (harvesting) on exempted game farms, meat availability should not be restricted to the winter months of the year.

Surplus game, usually females, which were not hunted during the season, can be used for supplying processed game products to exclusive markets overseas and in South Africa. It is important to make these products exotic for the customer. Promoting game meat in South Africa can further strengthen the game meat export market, as overseas tourists will then also become more aware of game meat.

Game meat has the following advantages and disadvantages:

3.3.4.1 Advantages:

- Consumers eat game meat for health reasons.
- Tourists from overseas like to eat game meat during their stay in South Africa.
- It is not available in the winter only.
- The meat trends currently advise consumers to buy lean meat cuts and species that are naturally lower in fat.
- There is a market for game meat.

3.3.4.2 Disadvantages:

- Perceptions that game meat is only available in the wintertime.
- The relative high price of game meat.

- Not enough marketing has been done regarding game meat.
- Most of the game meat is currently exported and not much remains for the local market.
- Consumers are ill-informed regarding game meat and will buy game meat if they are better informed **(Hoffman, 2003:8; Gouws, 1999:16; Brits & Herselman, 1988:19; Glen-Leary, 1987:12).**

3.5 GROWTH IN THE GAME FARM INDUSTRY

As indicated by **Bothma (2002a:24),** there was a 2,5% increase of land utilised for game farming from 1998 to 1999. The latter translates in a 300 000 ha per year increase for the purpose of game farming tourism. **Flack (2002a:29)** states that it is estimated that the conversion rate from cattle to game farming in 2002 was nearly 500 000 ha, which is 200 000 ha more than 1998 to 1999 increase.

From Table 3.1 it is clear that the Limpopo Province has the most game farms (2484) with Northern Cape Province (986) and Eastern Cape Province (624) second and third, respectively. The Limpopo Province comprises 49% of all the game farms in South Africa put together, with an average game farm size of 1340 ha. When considering the total surface area that is exempted (exempted in this context implies that these game farm fences are suitable for the game kept on the farm) the Northern Cape Province outperforms the other provinces with 4 852 053 ha.

Table 3.1: Exempted game farms in South Africa

Province (Year 2000)	Number of exempted game farms	Surface area of exempted farms	% of exempted farms	% of exempted farms according to hectares.
Free State	180	147 743	3.56%	1.43%
Limpopo	2482	3 325 652	49.04%	32.10%
North West	340	364 935	6.72%	3.51%
Mpumalanga	205	276 016	4.05%	2.66%
Gauteng	72	82 076	1.42%	0.79%
Kwa Zulu-Natal	90	168 841	1.78%	1.63%
Eastern Cape	624	881 633	12.33%	8.51%
Northern Cape	986	4 852 053	19.48%	46.81%
Western Cape	82	265 205	1.62%	2.56%
Total	**5061**	**10 364 154**	**100%**	**100%**

(Source: Eloff, 2002a)

The reason why the Northern Cape outperforms the other provinces is that its carrying capacity is lower. Therefore more land is needed for the same head of game as in the Eastern Cape Province, for example.

In 2000 it was estimated that there were 7 000 privately owned game farms in South Africa with a total surface area of 16 million ha **(Ebedes, 2002).** Of this only 5061 are exempted game farms with a surface area of 10 364 154 hectare **(Erasmus, 2000:21)**. Research conducted in 1993, indicated that the surface area of exempted game farms constituted 8.5% of the total agricultural land in South Africa, which increased to 12.5% in 2000 with a total of 1.7 million head of game **(Eloff 2002a:78; Erasmus, 2000:21)**. Statistics of 2002 showed that 13.3% of the agricultural land was used for game farming, while national and provincial game reserves only covered 6% or 6.1 million ha, of land in South Africa **(Flack, 2002b:76; Van der Walt, 2002)**. If one adds up the total land used for wildlife tourism, it is almost 20% of South Africa's total surface area.

Earlier in this chapter it was indicated that game farms are based on four pillars, namely hunting, breeding of game, processed game products and ecotourism **(Van der Merwe & Saayman (2002b)**. For purposes of this thesis it is important to look at the growth of the four pillars and the contribution of each pillar to game farm tourism.

3.5.1 Breeding game

Live game sales and the breeding of rare/endangered species is the second biggest generator of revenue for game farm tourism. During the 2000 season live game sales generated R180 million of the gross income of the South African game farm industry **(Eloff, 2002a:83, Eloff 2003:21)**. This represents a total of game sales and not only sales at auctions. Analysis of game auctions over the past ten years revealed an average increase of 8.3% per year over an 12-year period. The turnover per year grew from almost R9 million in 1991 to R105 million in 2002 with an average growth rate of R38.4 million per year over 12 years (Table 2.3).

Table 3.2: Auction sales over the past ten years

YEAR	NUMBER OF GAME SOLD	% CHANGE FROM PREVIOUS YEAR	TURNOVER (TAX EXCLUDED)	% CHANGE FROM PREVIOUS YEAR IN TERMS OF TURNOVER
1991	8,292		8,999,871	
1992	9,546	(+)15%	10,059,969	(+)20.66%
1993	11,499	(+)19.93%	11,732,596	(+)8.04%
1994	11,096	(-)3.08%	11,705,605	(-)0.23%
1995	9,171	(-)17.35%	14,335,894	(+)22.47%
1996	11,340	(+)23.65%	26,559,557	(+)85.26%
1997	12,077	(+)6.5%	28,526,052	(+)7.4%
1998	14,354	(+)18.85%	40,017,964	(+)40.29%
1999	15,455	(+)7.67%	53,705,823	(+)34.2%
2000	17,702	(+)14.54%	62,960,451	(+)17.23%
2001	17,282	(-)2.37%	87,000,473	(+)38.18%
2002	20,022	(+)15.85%	105,192,180	(+)20.91%

(Source: Eloff, 2003:21)

Live game sales stabilised during the 2001 season but there is an active and growing demand, especially for the rare game species. The more common species did show signs of price maturity, although new record prices were recorded **(Bothma, 2002a:23)**.

The fact that the demand for rare game species is still on the increase, leads to an encouraging intensive production system of such animals. It is interesting to note that the price of male animals is generally lower than that of females. The reason is simply that the latter can be used better for breeding purposes, unless they are of exceptional trophy value. As the number of rare animals increase, it will eventually lead to a lower market price but they will still have a higher trophy value, which is much higher than their meat value **(Eloff, 2002b:21; Eloff, 2002a:81)**. Table 3.3 indicates the average price increase or decrease of the different game species over the past ten years.

Table 3.3: Percentage price increase (+) or decrease (-) in average auctioned game prices over the past ten years

SPECIES	% PRICE INCREASE IN TEN YEARS	AVERAGE % PRICE INCREASE PER YEAR IN TEN YEARS	% INCREASE (+) OR DECREASE (-) IN 2000 COMPARED WITH 1999
Roan antelope	408,12%	40,81%	8,2%(-)
Tsessebe	210,76%	21,08%	49,25%(+)
Blesbok: White	134,78%	13,48%	19,50%(-)
Common	150,37%	15,04%	3,84%(+)
Blue wildebeest	199,19%	19,92%	0,98%(-)
Bontebok	215,9%	21,59%	15,9%(+)
Bushbuck	284,9%	28,49%	23,92%(+)
Buffalo/disease free	296,52%	29,65%	53,13%(+)
Duiker	187,25%	18,73%	32,07%(+)
Eland/cape	105,8%	10,58%	13,44%(+)
Gemsbok	164,02%	16,40%	4,74%(+)
Giraffe	91,04%	9,10%	13,79%(+)
Klipspringer	143,48%	14,35%	6,45%(-)
Kudu 142,51%	14,25%	16,11%(+)	
Lion 5,42%(-)	0,54%(-)	54,86%(-)	
Nyala 210,32%	21,03%	80,33%(+)	
Reedbuck	492,33%	49,23%	49,65%(+)
Impala	198%	19,8%	5,11%(+)
Red hartebeest	157,17%	15,72%	8,74%(+)
Mountain reedbuck	298,80%	29,88%	22,14%(+)
Burchell's zebra	81,82%	8,18%	18,97%(+)
Springok: Common	223,73%	22,37%	6,83%(-)
Heartwater	74%	7,4%	30,64%(+)
Black	203%	20,3%	13,47%(+)
White	384,38%	38,44%	155,2%(+)
Steenbok	233,40%	22,34%	53,61%(+)
Black rhinoceros	53,06%	5,31%	69,68%(+)
Black wildebeest	499,78%	49,98%	5,1%(+)
Sable antelope	111,90%	11,19%	9,85%(+)
Fallow deer	288,28%	28,83%	1,64%(+)
Grey rhebuck	826,83%	82,68%	12,72%(-)
Warthog	112,36%	11,24%	8,7%(-)
Ostrich	105,82%	10,58%	39,46%(+)
Waterbuck	129,90%	12,00%	36,5%(+)
White rhinoceros	303,66%	30,37%	39,67%(+)
Total game	**113,53%**	**11,35%**	**14,54%(+)**
Total turnover	**600,18%**	**60,02%**	**17,23%(+)**

(Source: Eloff, 2002a:81)

Flack (2002b) indicates that in 1992 there were only 9 auctions per year with 9 546 game auctioned. This grew to an outstanding 48 auctions in 2000 (17 702 game were auctioned). The latter increased by a further 38% in 2001. In 2002 it again increased by nearly 21% with a total of 20 022 game auctioned (Table 3.2). The five game species that had the biggest increase in sales in 2000-2001 were as follows; tsessebe (60.9%), springbok (31.2%), sable antelope (24.2%), nyala (20.2%) and Burchell's zebra (13.9%) **(Eloff, 2002a:83)** (Table 3.3).

3.5.2 Hunting

Hunting is one of the oldest ways of using natural resources and as such has an influence on animal and plant species as well as on ecosystems **(Forstner *et al.*, 2001:5).** Hunting is the biggest generator of income for game farms and can be divided into two segments, namely trophy hunting and biltong hunting.

3.5.2.1 Trophy hunting

According to Table 3.4, there were 2 671 active hunting outfitters/operators and 3 589 active professional hunters (PH) registered with nature conservation during the 2000 and 2001 season. During the same period South Africa received a total of 5 304 trophy hunters (excluding biltong hunters) which is 1284 more than the 1999 season (4 020 trophy hunters).

Table 3.4: Trophy hunting statistics 2001

CATEGORY	EC	NC	FS	KZN	NW	GP	LM	MP	Total
Active Hunting Outfitters	99	33	250	113	99	32	1972	73	2671
Active Professional Hunters	229	179	250	287	261	155	1972	256	3589
Clients	**1183**	537	688	588	465	62	**1644**	137	5304
Total Animals	**8941**	4034	3143	2531	2696	185	**10287**	429	32246
Animals per client	7.56	7.51	4.57	4.3	5.8	2.98	6.26	3.13	6.08
Clients per Hunting Outfitter	11.95	16.27	2.75	5.2	4.7	1.94	0.83	1.88	
Clients per Professional Hunter	5.17	3	2.75	2.05	1.78	0.4	0.83	0.54	
Total hunting days	**9223**	**4134**	**4425**	**3017**	**3024**	**165**	**28432**	**1112**	**53532**
Av. Length hunt	**7.8**	**7.7**	**6.43**	**5.13**	**6.5**	**2.66**	**17.29**	**8.12**	**10.09**

WC=Western Cape; EC=Eastern Cape; NC=Northern Cape; FS=Free State; KZN=KwaZulu-Natal; NW=North-West; GP=Gauteng; LM=Limpopo; MP=Mpumalanga **(Source: PHASA, 2001)**

Table 3.7: Income: trophy hunting and accommodation

YEAR	HUNTING DAYS SOLD	DAILY RATE (EXCLUDING TROPHY PRICE)	TOTAL US$	TOTAL ANIMALS AND ACCOMMODATION
2000	32 652	US$ 350	11 428 200	30 818 710
2001	53 532	US$ 350	18 736 200	44 325 965
2002	59 779	US$ 350	20 922 650	

It is interesting to note that the number of trophy hunters and non-hunters (those who accompany the hunter but do not hunt) (7 500) remains the same in 1997 and 1998, although the amount spent was less in 1998. The reason can be that the price of game increased from 1997 to 1998. The amount generated in 1998 has increased from R156 871 650 to R 238 158 000 in 1999. It is also important to take into account that the rand weakened against the dollar during this period and only PHASA outfitters were recorded **(PHASA, 2000)**.

During the season of 2001, trophy hunters hunted a total of 32 246 animals with a total of 53 532 hunting days sold (Table 3.7). When the average daily rate of $350 is taken and multiplied by the number of hunting days sold (53 532), it adds up to almost R225 million. The total for accommodation and hunted species combined adds up to R532 million (Table 3.7) **(PHASA, 2002)**. The high demand by foreign trophy hunters to hunt in South Africa might be so, owing to a favourable valuta exchange rate as well as an increase in the wildlife population following the establishment of well-managed game farms. 37% of all Rowland Ward hunting records are recorded in South African since 1975 as well as 92.9% of Safari Club International records **(Van Rooyen & Van Rooyen, 2002:513)**.

3.5.2.2 Biltong hunting

Biltong hunting was practised in South Africa for centuries before the creation of the national parks, reserves and game farms, and would probably have resulted in the killing of many more animals for the purpose of food and for the protection of crops rather than for revenue generation and hunter satisfaction. It is true that the off-take most probably would have been less selective than in trophy (sport) hunting as practised today (**International Conservation Series White River, 2003**). According to **Radder *et al.* (2000),** biltong hunters tend to spend the following amounts when visiting game farms in the Eastern Cape (Table 3.8).

Table 3.8: Biltong hunting expenditure

CATEGORY	AMOUNT SPEND
Accommodation, meals refreshments per trip	R 200.00
Accommodation expenses per trip considered reasonable	R 200.00
Transport costs per trip considered to be reasonable (Total costs per trip)	R 200.00
Daily tariffs considered to be reasonable per trip	R 300.00
Game prices per hunting trip considered to be reasonable	R 1,100.00
Licence expenses considered to be reasonable	R 22.50

Radder *et al.* (2000) indicated that the average length of stay of biltong hunters is two days and the size of a group comprises of four hunters. Table 3.8 clearly illustrates that most money spent on a hunting trip is on game (R1100.00) followed by accommodation and refreshments (R 200.00). Hunters tend to spend R300.00 on daily tariffs and R200.00 for transport per biltong hunting trip. This gives a total of R2022.50 per biltong hunter per hunting trip **(Radder *et al.*, 2000)**.

Based on the fact that there are 18 000 registered members at South African Hunters and Game Conservation Association, the total amount generated by them for one hunting trip per year is approximately R36 million. This is just the tip of the iceberg and the reason being that most of the biltong hunters in South Africa are not yet registered and each province also has its own hunting association apart from the one just-mentioned. Therefore much research still needs to be done to determine the real economic value of biltong hunters to game farm tourism in South Africa **(Van Dyk, 2003)**.

3.5.3 Processed game products

During 2002, 80 000 animals were harvested in South Africa by professional culling teams, registered with the state veterinary authorities. This excludes animals that were hunted by trophy hunters. Game meat is healthy and has a low fat, sodium, cholesterol index. These products are exported from three local abattoirs registered with the European Union. Increasingly, game meat is found in local butcher shops, delicatessen and restaurants. Although the meat production industry is growing, South Africa's game meat production is a drop in the ocean when compared to other countries such as New Zealand's, which exported over 504000 red deer in 2001, that earned more than 1 billion Rand in foreign exchange. In

Germany annually about 1.3 million roe deer are culled, in fact, there are more deer killed annually on the German roads than all of the Springbok that are annually culled and hunted in South Africa **(Flack, 2003:5)**.

The potential for the production of processed game products as a legitimate form of wildlife utilisation, especially in the more arid regions of Africa, has been recognised for a long time **(Bothma, 2002a:23)**. Surplus game, usually females, which were not hunted during the season, can be used for supplying processed game products to exclusive markets overseas and in South Africa. It is important to make these products exotic for the customer. The fact that there is a movement among humans to live healthier can be an important marketing factor to help sell venison, because venison has a very low fat factor. Smoked and fresh processed game products are sold to restaurants and hotels **(Gouws, 1999:16; Brits & Herselman, 1988:19)**.

When game is compared with domestic herbivores for meat production, they cannot compete because domesticated herbivores have been genetically bred and selected for many centuries specifically for meat production. The advantage that game has over domestic herbivores is the fact that they offer a wider diversity of products. There are at least 45 types of wild herbivore in Southern Africa. Many of these more or less occur in the same ecosystem **(Bothma, 2002a:23)**. Meat production also generated the lowest income of all the pillars on which game farm tourism is based. The gross income for meat production sales was estimated at R20 million in 2000 **(Eloff, 2002a:83).**

3.5.4 Ecotourism expenditure

The literature study confirmed that little research has been done on ecotourism expenditure in relation to game farm tourism. It is therefore difficult to determine the economic value of ecotourism on game farms. However, a pilot study done in the North West Province revealed the following spending of tourists to game farms.

The research done in the North West Province indicated that the group size travelling/visiting game farms consists of 3 persons and they tend to stay for 3 days. The spending patterns of tourists visiting game farms were as follows (Table 3.9):

Table 3.9: Tourist spending

CATEGORY	AMOUNT SPEND
Accommodation	R1699.38
Entrance fee	R18.21
Restaurants	R408.36
Food	R335.77
Beverages	R171.63
Tobacco products	R15.30
Clothing and Shoes	R44.00
Transport	R411.00
Recreation	R81.00
Medicine	R1.80
Toiletry	R 6.20
Total	R3192.65

It is clear that most of the money spent by tourists was on accommodation (R1699.38) and transport (R411.00) per hunting group, per trip. The least money was spent on clothing (R44.00), tobacco (R15.30), medicine (R1.80), toiletry (R6.20) and recreation activities (R81.00). The reason being that game farms tend not to have tourist shops or curio shops where visitors can spend. Recreation spending is also low and it was found that only a few game farms made provision for recreational activities (Table 3.9) **(Van der Merwe & Saayman: 2003)**. This phenomenon was also reported in research conducted by the Institute for Tourism and Leisure Studies. **(Saayman & Van der Merwe: 2003)** for SANParks.

The average spending per group (3 persons) for three days is R3192.65. Each person would then roughly spend R1064.21 per trip. Hence one person spends R354.73 per day over a three-day period and if 100 000 tourists undertake one trip to a game farm during the year and spend R1064.21 per trip it adds up to approximately R106 million. This clearly indicates the economic value of ecotourism to game farm tourism.

3.6 CONSTRAINTS EXPERIENCED AND SOLUTION IN GAME FARM TOURISM

Since 1995 South Africa has been a signatory to the International Convention of Biological Diversity and other multilateral agreements, which implies, among other things, that our country subscribes to principles such as the maintenance of natural processes and biological diversity, the sustainable utilization of natural resources, the specie conservation within their natural area of distribution, effective communication of the conservation message, and the formation of partnerships with all role-players and user groups **(Hamman *et al.*, 2003:3)**.

Hamman *et al.* (2003:3) further state that hunting and game farming subscribe to the above principles and that the industry's long-term sustainability is dependent on making an important contribution to nature conservation and sound environmental management. South Africa, with all its experience in the game industry should be an example to the rest of the world, and especially, to the rest of the African continent. But there are a number of constrains that are hampering the growth of game farm tourism.

3.6.1 Constraints within game farm tourism

To be able to develop a different approach and strategy for game farm tourism for future trends, it is important to identify the constraints in the game farm industry. The following are some of the major constraints in this sector **(Eloff, 2001:9; Eloff, 1999b:9; Du Plessis, 2000:9; Saayman, 2000; Hamman *et al.*, 2003:4; Schack, 2004:22)**.

The most important constraints that need to be addressed, are as follows:

- Still very young industry and vulnerable.
- Needs to learn more in fulfilling its role as conservationist tool.
- Current institutions are holding back the industry with its bureaucratic red tape.
- Game farm owners **provide a service and product that they think is important** and not necessarily what tourists are looking for. Products should be based on tourists' needs; otherwise it can lead to bad service and tariffs that are too high or too low. Game farm owners also do not have the necessary marketing skills and knowledge to target the right market. This is because they have been schooled in the farming industry, which is totally different from tourism.
- A misperception also prevails among tourists that **game farms are not safe** to go to because of farm attacks.
- **South Africa's crime situation** discourages visits from tourists and hunters from abroad, although some markets are more influenced by crime than others.
- **A decrease in discretionary income** of the local tourist and hunter as a result of higher fuel prices, tax increases, higher medical costs, inflation and higher educational cost, to name a few. This contributes to a decline in the number of people travelling.
- **Decreased profitability of stock and crop farming**, which encouraged newcomers to the industry as a result of its extraordinary growth to this stage.
- A shortage in skilled people and knowledge of the industry among farmers.
- **Possible surplus of game in future** if all game farms reach their full potential, will lead to a decrease in prices.
- **Stricter legislation** for firearms that may discourage new entrants to the game farm industry, especially hunters.

- Game farm owners who use **gross game auction prices** instead of net prices as a guide line for determining their prices. Game farm owners lose sight of the fact that prices obtained at auction are not the net prices. One must still subtract the capturing costs and transport costs from the price achieved at an auction. After these expenses, the price is not that much higher than the hunting price.
- **Diseases** such as foot-and-mouth, cholera, aids and malaria in Africa can have a negative impact on ecotourists, hunters and game farms.
- **Availability of information**: limited information is available on the state of hunting and game farming in the country as a whole. A comprehensive survey on, among other things, the diversity of game, numbers, origin of breeding herds and forms of utilization (including hunting) is essential for good game management. A lack of statistics (records) of the total amount of game farms in South Africa, as well as the size of this industry creates confusion about the real economic value of this industry.
- The average **game farm is too small** (2047 ha) to implement zoning that will enable game farm owners to host all four pillars of the game farms industry. Farms that are too small are not economically viable.
- **Lack of game farmers working together** to create a better product for the tourists.
- Game farmers do not utilise all four segments of game farming (hunting, live sales, ecotourism and processing of game products) to its full potential, because the average game farm is too small.
- **A lack of involvement and disinterest** among game farm owners. Game farm owners do not form part of regional or national organisations. As a result they are unaware of the latest developments in the industry.
- **Poor growth** of the tax base and the constitutional duty of the government to meet the health, welfare and educational needs of a rapidly growing population, together with other administrative problems. Without effective regulations and service standards, a decline in foreign visitors can occur.
- **Cross-breeding or** hybridization of closely related game species such as the bontebok and blesbok endanger the genetic purity of both, but naturally poses a greater threat to the rare bontebok. It is sad that the financial gain remains an important motivator for these actions. Such hybrids are sometimes offered to uninformed trophy hunters and tourists as thoroughbred bontebok at highly inflated prices. These types of cross-breeding threaten the genetic purity of both subspecies. Cross-breeding or hybridization of different species and subspecies is in conflict with conservation principles and offers no long-term benefit to anyone.
- **Freak animals:** Serious concern prevails in nature conservation circles regarding the increase in manmade "freak animals" that are deliberately being bred and offered as hunting trophies or tourist attractions. Colour variations or recessive colour variations

that occur in practically all forms of life, have become sought after among game farmers and trophy hunters. This has developed into a very lucrative industry. Well-known examples are black impala, black and white blesbok, red wildebeest, as well as deliberately cross-bred blesbok and bontebok, kudu and eland, black and blue wildebeest and several others. The just-mentioned practices are earmarked as practices that do not contribute to nature conservation or the long-term survival of these animal species.

- **Breeding of rare game varieties:** There are no problems with game farm owners that posses the knowledge to breed with such species and apply the correct breeding techniques of rare game species. There is, however, a concern regarding the breeding of rare game such as roan, sable antelope and bontebok for trophy purposes by breeders without the necessary expertise that can lead to undesirable levels of inbreeding which makes no contribution to the conservation of the species or to nature conservation. Breeding must be done according to acceptable and co-ordinated zoological principles as part of an approved programme which is managed by nature conservation.
- **Game wrongly relocated:** This may lead to competition, hybridization, inbreeding, destruction of the habitat, or even abnormal defects. Examples of problems that occur regularly are, for instance, that of springbok that is kept in the southern parts of the West Coast, where they have not occurred historically. These springbok regularly contract foot-rot due to the more humid conditions. Another example is the *"langklou"* problem which occurs among Cape Mountain zebra in the Saldanha dune fields, also outside their natural distribution range. The unnatural hoof growth observed here is being attributed to the sandy substrate which does not sufficiently wear away the hooves of the animals.
- **Impact on the habitat:** The Himalayan tahr is an example of undesirable invasive alien species that may have serious negative influences on the natural environment, which ultimately results in the costly extermination of such animals. Animals indigenous to Africa are alien (to South Africa?) and often invasive if introduced to natural vegetation outside their natural distribution ranges.
- The growing interest in game farming lead to certain farmers **converting veld, for example, natural fynbos in the Western Cape into grassland**, with regular burning or by cutting down the natural veld with a bush cutter. This is done so that it will be possible for them to temporarily keep a larger variety of game species alien to this area and vegetation type. What needs to be taken into account, however, is the fact that fynbos soil types are basically nutrient poor and that these animals will ultimately be dependent on supplementary feeding for their survival. Again, this is undesirable from a conservation point of view.

- **Unregulated relocation of animals:** Conservation authorities are acutely aware of the fact that game is sometimes moved or translocated without the required permits and/or without the cooperation of the responsible conservation bodies. This has lead to a very negative image in conservation circles of the game farmer. Naturally, not everyone is guilty, but everybody is indeed eager to do business under the conservation banner.
- **Conduct of professional hunters:** Irregularities and unacceptable conduct by certain professional hunters and professional outfitters in the country are currently being investigated by conservation authorities, and it seems that the problem is likely to be bigger than originally anticipated.

The following are some solutions to the constraints experienced in game farm tourism:

- **Consistent management guidelines** must be applied for the translocation and introduction of game species. This will reduce and eventually eliminate the introduction of game species outside their natural distribution ranges. A practical solution must be found here with the full cooperation of the industry. Good news is that conservation bodies at both provincial and national level are currently working on a draft national game translocation policy.
- **Uniform national policy** is needed to spell out clear guide lines to all role-players regarding undesirable practices mentioned such as the cross-breeding or hybridization of subspecies.
- **Partnerships** must be established between conservation authorities and all facets of the game industry. Effective communication is important for these partnerships to discourage undesirable practices.
- Game farms and facilities for keeping animals **could be classified according** to a SABS (South Africa Bureau of Standards) system, and accredited according to certain nature conservation and tourism requirements. The categories can range from private nature reserve status to lower categories such as zoological gardens or breeding facilities with educational and commercial value, but with little or no conservation value. Prospective trophy hunters or tourists could then be assured that accepted norms and standards are being maintained in the game farm industry.
- It is inspiring that at the latest meeting of the CHASA (Confederation of Hunters Associations of South Africa) it was documented that a hunting trophy only qualifies if it comes from an indigenous game species which "was hunted under normal circumstances according to ethical norms in its natural area of distribution", and where all constitutional requirements have been met. Such an action would ultimately bring an end to the freak hunting trophies that currently seriously threaten the ethics of the game industry.
- There are a number of development opportunities that are still waiting to be explored.
- To sell what the industry has learned to fellow African countries to help develop the industry in other African countries.

- It is important to develop an expansive marketing network across the world as "Products of Africa" **(Hamman *et al.*, 2003:7; Schack, 2004:23)**.

3.7 DIFFERENT OPPORTUNITIES AND STRATEGIES FOR GAME FARMS

To develop a different approach (new strategies) to make game farms more economically and financially viable, it is important to list all the possible opportunities in this industry.

The first opportunity is a **paradigm shift** in the tourism travel patterns and motivation, where tourists are more educated, more informed, more "green" and know what they want. There is a movement away from the typical traditional approach of "Sun, Sea, Sand and Sex" tourism to a tendency where tourists want to interact with nature and the environment. Tourists do not want to just sit in a mini bus or bus and do game viewing. They want to interact where possible and learn about nature and culture. Therefore the total experience implies an interpretative and educational experience. Game farmers must also interact with tour operators to combine their product with those of the tour operators.

The second important opportunity is the phenomenon that most game farms do not understand the needs of tourists, as highlighted above. This implies that game farm owners themselves have to be more innovative. As one television advertisement put it: "you can stay as you are for the rest of your life or you can change to ..." whatever it is you want.

Researchers in the field identified opportunities **(Eloff, 1999b:9; Van Zyl, 2000b:22; Saayman, 2000; Schack, 2004:23)**:
The following are opportunities from a more economic perspective towards game farms:

- A rand value that is weaker than the Euro, Dollar and Pound makes South Africa attractive to overseas markets.
- Game farms provide a wide economic base to owners and potential owners.
- From an ecological point of view, it does make sense.
- Internationally South Africa does provide a unique industry that is part of the country fauna and flora to the international market.
- The worldwide shift to healthier lifestyles provides prospects of game meat exports to foreign countries. Game meat is free from any medical treatment and has a low cholesterol level.
- World tendency to conserve. There should be more emphasis on ecotourism, to educate tourists about the possibilities of hunting.
- Authority function. This becomes a limiting factor for provincial nature and environment affairs and it decreases the competition of the authorities in the game industry.

- Economic advantages that game farming offers.
- Rich nature conservation for a game farmer and his family to fulfil their calling in God's unspoilt nature.
- Enormous culling of a game farmer without regard for posterity.
- Tourism that is seen as a secondary product of game farms still possesses numerous opportunities and needs to be developed more.
- It can also be an advantage for farmers in the new Nepad-driven partnerships program.

Other opportunities in game farm tourism are based on the four pillars of game tourism, namely breeding game (rare/endangered species), hunting, ecotourism and processed game products.

A) Breeding game and rare/endangered species of game

- To breed disease-free buffalo, sable antelope, roan antelope and white and black rhino.

B) Hunting

- Wing shooting.
- Bow hunting, biltong hunting, trophy hunting and "green hunting" or "darting safaris".
- Fishing trips if farm is situated close to a water source.

C) Ecotourism

- Hiking trails combined with game and bird watching, photographic safaris, farm holidays.
- Providing conference facilities for the corporate market.
- Adventure activities such as 4x4 trails, canoeing and abseiling for more adventurous tourists.
- Promotion of unusual attractions, such as caves, bushmen paintings, waterfalls, ruins of previous civilisations.
- Providing different types of accommodation for different markets such as bush camps, tented chalets, chalets, luxury lodges, campsites and old farmhouses with an interesting character as Gora Lodge in Addo Elephant Park.
- Other activities such as horse safaris, walking safaris, mountain bike trails and donkey cart trips that can be used as educational tours where the tourist can learn more about nature and there is no need to include the Big Five, but it would be a bonus.
- Curio shops where local people of the area can sell there products and provide traditional cooking opportunities.

D) Processed game products

- The possibility of processed game products for the local and overseas markets **(Van Zyl, 2000b:22).**

The list of opportunities is endless, but the game farmer must decide where to start. This implies that strategies will have to be developed. The following section will deal with such potential strategies.

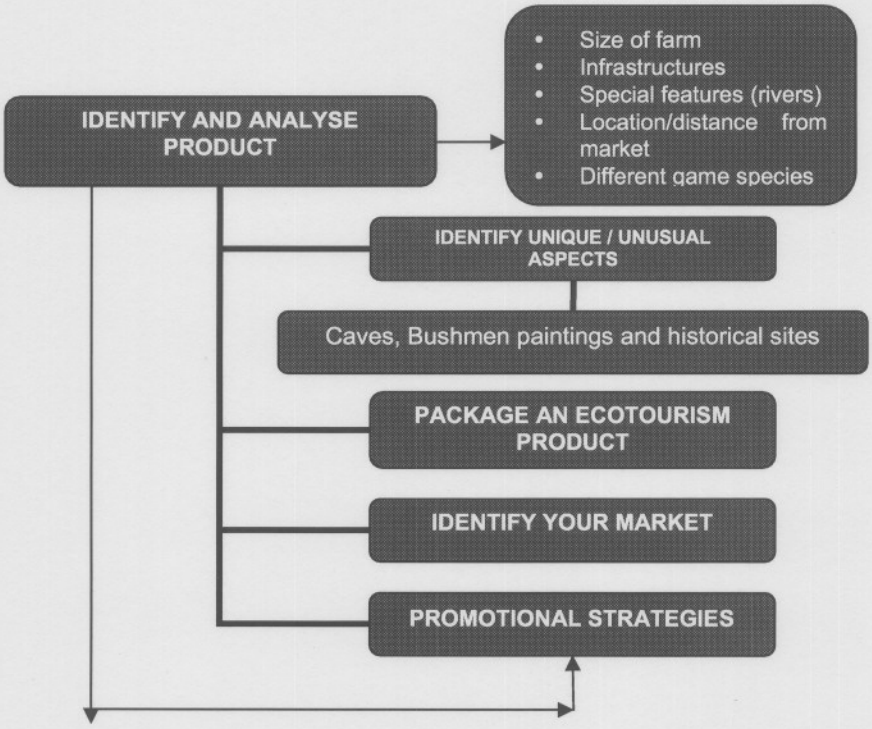


Figure 3.2: The process of developing a strategy

3.7.1 Identify and analyse your product

The first step in the process will be to identify and analyse one's product. The most important aspects are as follows (Figure 3.2):

3.7.1.1 Size

The size of a game farm must be taken into consideration before starting a game farm. Larger game farms are more likely to offer a better tourism product to ecotourists than smaller game farms.

3.7.1.2 Infrastructure

The infrastructure of a game farm also plays an important role. It is important to identify the type of buildings and facilities that are available to tourists. Examples of these may be tented chalets, chalets, farmhouses, bush camps, luxury lodges, huts, swimming pools, lapas, hide-outs for game viewing, restaurants, curio shops, tennis courts, roads, landing strips and fences.

3.7.1.3 Special features

These may be rivers, mountains and fauna and flora that are not found on other game farms. These special features can be used as a pulling force to sell your game farm.

3.7.1.4 Location

The further a farm is located from the target market the more expensive it becomes to travel to it. This is cause to impact on the package price. One must bear in mind that South Africa is viewed as a long-haul destination.

3.7.1.5 Different game species

A variety of species of game is important if one is catering for tourists. With hunting it is more important to have a good supply of one species than a wide variety of many different species. This is why the size of a game farm is so important: it should be able to carry a significant number of game.

3.7.2 Unique aspects of your product or unusual attractions

The second step would be to identify unique aspects or unusual attractions on a game farm. This can be anything from caves, Bushmen paintings, warm water fountains, other fountains, historical sites and archaeological sites. These are aspects that make one's game farm unique, compared to other game farms. These unique selling features of your product are essential in tourism marketing.

3.7.3 Package an ecotourism product

Step three is to develop an ecotourism product that provides an ecotourism experience to tourists. To be able to provide tourists with such an experience, it is important to choose the correct combination of ecotourism activities, as mentioned above. As indicated in this chapter, a big constraint is that too many of the game farms are too small to actually provide an ecotourism experience. Firstly, one strategy to cope with this problem would be to form a conservancy where farmers put their farms together to form a larger protected area. A good example of this is the Vredefort Dome close to Parys bordering the Free State and North West Province. This is a unique site along the Vaal River, but to have a bigger impact on the tourist market the farmers combined their resources and developed a bevaria. This allows them to have more land and a better product to offer the tourist. This method, and the registration of game farms with the right organisations such as PHASA (Professional Hunter Association of South Africa) and SATOUR (South African Tourism), can make a difference in the end **(ABSA, 2003:31; Krynauw, 2001a:17).**

Secondly, conservancies can develop in order to provide a bigger and better product:

3.7.3.1 Conservancies

Few potential game farm owners have enough cash to develop a large game farm from scratch (involving a capital outlay in excess of +/- R10 million), or have inherited land that can carry more than 1 000 head of game. Because of this enormous capital outlay, co-operation among game farmers is often the only possible way to increase profitability and land size. Such cooperation could also embrace a formal legal structure for the mutual management of the consolidated sections of land belonging to various farmers. If a number of farmers decide to combine their farms and resources with the ultimate aim of conserving and maintaining the well-being of wildlife in that particular area without removing their bordering fences, this combined effort is usually called a "conservancy". When their border fences are removed it is called collaborative reserve. A conservancy can be defined as follows: *land that is legally owned and/or occupied by one or more owner with the express purpose of achieving a communal conservation goal*.

The success of a conservancy is highly dependent on the effectiveness of the co-operation agreement. An important part of this agreement is the management plan, which *inter alia* sets out how the land is going to be managed and how profits that are being generated are going to be divided among the various farmers. If "good fences make for good neighbours", removing these fences requires other structures to ensure peace among neighbours. To be more specific; appropriate legal structures are required that deal upfront with potential frictions. A conservancy has various dimensions. The three most important ones are ecological, economic and legal dimensions and are as follows:

3.7.3.1.1 The ecological characteristics of a conservancy

When a game farm is enlarging by removing the fences between various farms, it has several important ecological advantages. The most important advantages are the following:

- The bigger the conservancy, the stronger the "African bush atmosphere". Things that destroy this atmosphere are inside fences, power lines and buildings and accordingly they have a negative effect on the ecotourism potential of the area.
- One can provide ecotourist with a larger variety of game on a larger area.
- Chances are better with larger animals such as buffalo, rhino, elephant or lion.
- Various habitats can be combined, which results in greater biodiversity.
- A conservancy has a better ecotourism potential, and also improves the possibilities of hunting.
- Owners also have better control over poaching, veld fires and stray dogs, and there is less chance of rabies outbreaks.
- Game becomes tamer and is more readily seen.

- Landowners become more wildlife conscious.

Seen from an ecological viewpoint, a conservancy only has advantages and no disadvantages. In fact, the bigger the conservancy, the better.

3.7.3.1.2 The economic characteristics of a conservancy

The economic advantages of a conservancy nearly all relate to the benefits of economies of scale. The following are worth mentioning:

- The management of the conservancy can be broken down into three distinct classes or sub companies, namely the *landowners*, the *game company* and the *ecotourism* company. *Landowners represent* the major shareholders who supply the capital to develop a conservancy; the *game company* uses it's skills to manage the fauna and flora, and the *ecotourism company* normally specialises in issues such as accommodation, catering and entertainment.
- The financial burden gets evenly distributed among the owners.
- Landowners situated adjacent to the conservancy are allowed to buy themselves in, according to the rules and regulations of the constitution of the conservancy (usually on a cost per hectare basis).
- Better fences and patrolling will result in a decrease in stock thefts.
- Management costs of a conservancy will decrease as the conservancy grows larger.
- There is no need for landowners to be permanent residents on the game farm, as professional staff will manage the total area.
- Cattle farming can easily be combined with game farming on a conservancy. There is no need for a cattle farmer to switch to game farming straight away. He can convert gradually.
- Land inside the conservancy can be sold separately from other farming interests, which usually leads to an increase in the land price.
- Property values on a conservancy are bound to increase.

One disadvantage of a cooperation (conservancy) is that one's vote as shareholder decreases as the number of conservancy stakeholders increase. This may imply that a individual's vote may not carry the weight he/she desires.

3.7.3.1.3 The legal characteristics of a conservancy

The backbone of the conservancy is its legal structure (or constitution). This constitution ensures that all participants know their rights and obligations. The provincial parks board or SANParks can also be helpful with establishing a conservancy. Generally, constitutions address similar issues such as:

- *The mission statement* that is in lines with the aim, "to manage and maintain the natural resources and ecological processes within its boundaries by allowing sustainable utilisation of the resources by individual owners".
- *The objectives*. This can be a long list of specific goals arising from the mission statement.
- *The membership requirements* ensure that the right people form part of the conservancy.
- *The voting rights*. This is in accordance with the proportion of capital invested.
- *The rights and privileges of members* that ensure that the desires of individual members are catered for.
- *The responsibilities and duties of members*, such as paying the annual membership fees and complying with the objectives of the conservancy.
- *The management of the conservancy*, which involves issues such as appointments of general management and annual meetings of members.
- *The funding of the activities of the conservancy*, which focuses mainly on the game company and the eco-tourism company.
- *Dissolving the conservancy* in case it outlives its useful commercial life.

A conservancy, in contrast to a game farm, has official backing in the sense that it is proclaimed in the *Provincial Gazette*, This implies that the provincial parks boards do support and associate themselves with the conservation aims of a conservancy **(ABSA, 2003:31).**

3.7.3.1.4 Involvement of the local community in a conservancy

It is very difficult or virtually impossible for small farmers to compete against large commercial farms or foreign producers. Local rural communities that farm often do not have the required working capital to develop and maintain competitive farms. The result is that subsistence farming takes root, which is usually not sustainable in the medium term.

To help local rural communities to overcome these financial problems, local communities that have valid land claims should try to obtain the capital backing of entrepreneurs. Becoming involved in a wildlife conservancy is one possible way of doing so. Local communities could transform their land claims into shareholding a conservancy. An example of such a development is the proposed Highveld National Park close to Potchefstroom, where the Baralongs (local community with land) are willing to incorporate their land in the park.

Some of the advantages of such an arrangement include not only better cooperation or the avoidance of sub-economic farming units, but also higher returns on the land of these local communities as well as better employment opportunities. Through ecotourism and all its

indirect economic effects (such as curio crafts) can create more employment opportunities for local communities than subsistence farming **(ABSA, 2003:31)**.

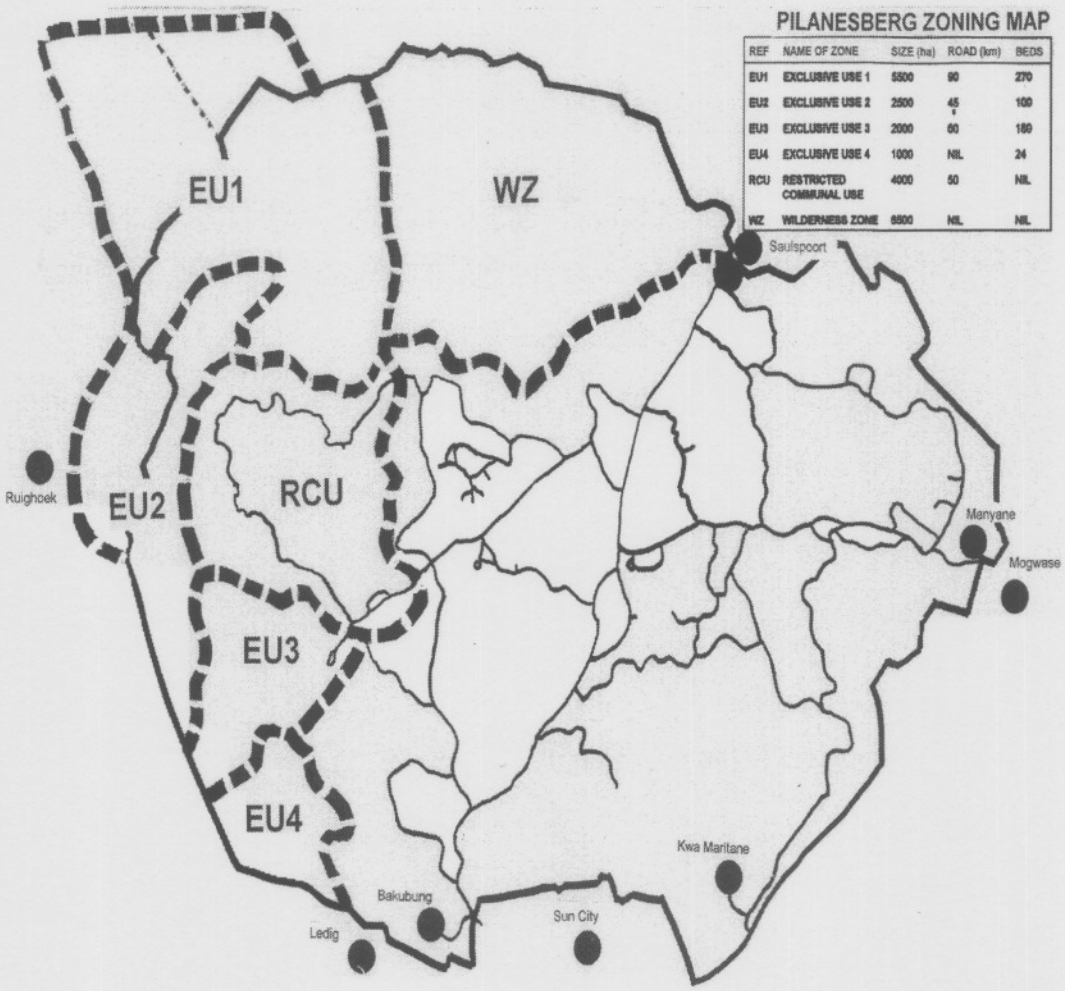
Thirdly, one can use the sectoral approach, as with Pilanesberg National Park. This is suitable for game farms that already have enough space.

3.7.3.2 Sectoral approach

The North West Parks and Tourism Board divided the reserve into sectors. The different sectors are as follows (Map 3.1) **(Contour, 1999:26):**

- **Wilderness sectors**: These are sectors set aside for the conservation of the natural ecosystem, with limited outside interference.
- **Wildlife touring sectors**: The largest sector in a game farm is set aside for access to the general public as a high-density, self-guided and guided wildlife touring sector.
- **Exclusive use sectors:** These are sectors in the immediate environments of a lodge. Generally the size of this sector will be affected by the number of beds and the size of the lodge(s).
- **Restricted communal sectors:** These areas are central or unique areas or features of a game farm that are preserved for use by all concessionaires on an equal basis.
- **Intensive visitor use sectors:** These are areas with intensive facilities and activities for educational and interpretative purpose and may allow self-guided trails.
- **Hunting:** Areas periodically identified for hunting under strictly controlled conditions, with consideration of other visitor activities.
- **Other resource use:** Areas reserved for resource use such as wood collection, thatch harvesting etc.

Each sector has a specific function and creates a situation where hunting can take place or where people can do game viewing or wilderness area excursions. At the same time there are also areas for lodge development. The greatest advantage of this setup is that all these activities can take place simultaneously, while one consumer is not aware of the rest.



Map 3.1: Pilanesberg National Park: a sectoral approach

3.7.4 Identify your market

It is important to identify your target market and to know their likes and dislikes. The entire planning process of a game farm will depend on the target market.

3.7.5 Promotional strategies

After deciding on the target market, it is important to sell the product. This can only be done effectively if the promotion strategy is effective. Some of the most effective ways are to develop a website (this must be linked to appropriate websites); to publish good quality brochures, and to attend national or international shows such as Indaba or the Getaway Show to sell products. However, it is important to remember that people sell to people. Therefore direct contact with potential tourists is very important. Game farm owners must furthermore sell an ecotourism experience to potential tourists. It is also important for game farm owners to link up with tour operators of that region and to develop a combined product that includes their game farms **(Van der Merwe & Saayman, 2002a:216).**

3.8 CONCLUSION

As indicated in the chapter, game farm tourism grew from something that was almost non-existent in the mid nineteen's, to an industry that contributes to 80% of the land that is used for nature conservation. The growth in game farms was stimulated by various factors such as the discontinuation of stock or crop farming subsidies, cattle theft, dry climate in certain areas, new labour law and the tremendous growth in tourism, especially ecotourism. Today game farms mainly rest on four pillars, namely hunting that contributes the most economy-wise (R532 million in 2001 per year), breeding game and rare/endangered game (R105 million in 2001 per year), ecotourism and game products. More research needs to be done on the biltong hunters and ecotourism contribution in this industry. It is important for a game farm owner to implement as many of these four pillars as possible to enable him to run a sustainable business.

Constraints also occur in this industry, of which the fact that most game farms are too small, is the biggest. The solution to this problem, that will also improve sustainable development, is the development of conservancies and the zonation thereof of game farms that are large enough.

The author does believe that effective communication and good cooperation between all role-players will be the key to the solution of current problems in the game farm industry. One must realize that the possible solutions as outlined in this thesis are not enforceable and are primarily dependent on the positive cooperation of the role-players. Furthermore, I believe that practically achievable goals will offer a workable alternative to render this industry sustainable as well as beneficial to nature conservation.



CHAPTER 4
RESULTS OF EMPIRICAL RESEARCH

"There is nothing in which the birds differ more from man than the way in which they can build and yet leave a landscape as it was before"

Robert Lynd

4.1 INTRODUCTION

In Chapter 2 ecotourism was defined by most writers as; *environmentally responsible travel to visit, enjoy and appreciate nature (and any accompanying cultural features), that promotes conservation and sustainable development, has low visitor impact, and provides for beneficial active socio-economic involvement of local populations.* Sustainable tourism which forms an integral part of ecotourism was defined as; *forms of tourism that meet the needs of tourists, the tourism industry, and host communities today without compromising the ability of future generations to meet their own needs.*

In Chapter 1 the goal of this study was stated, being to determine aspects that will contribute to the sustainable ecotourism development of game farms. Therefore the aim of Chapter 4 is to link with the overall goal of the research in the form of a survey regarding sustainable ecotourism development. The questionnaire consisted of two sections of which section one measured the developmental aspects of game farms, such as how the game farm was acquired; number of years existing, the size therefore different types of game species and activities provided by owners. Section two measured sustainable ecotourism development and includes aspects, such as economic impact assessment, community involvement, maintaining social and cultural diversity, sensitivity towards host community/culture, environmental impacts assessment, using local resources sustainably and maintaining natural diversity. The term community was sometimes misinterpreted by some respondents who saw it as only the black community in the area, rather than the total community (for example the municipality boundaries of a town).

Chapter 4 will be divided into four categories, namely the discussion of the descriptive data, effect size for the relationship in contingency tables, factor analysis (Chronbach Alpha) and conclusion.

4.2 DEVELOPMENTAL ASPECTS OF GAME FARM TOURISM

Developmental aspects that formed part of the questionnaire were the following: province in which game farm is situated, size of game farm, size recommended by owner, method of acquiring game farm, number of years the property exists, species found on game farm and the type of activities provided by owner.

4.2.1 Province

According to Table 4.1, 46% of the respondents were from the Limpopo Province, 21% from Northern Cape and 11% from the North-West Province. Some of the reasons why the Limpopo Province had the most represented are firstly, it hosts the most game farms (2482 exempted game farms) of all the provinces **(Eloff, 2002a; Erasmus, 2000)** and secondly, they have the largest game farmers association, namely the "Northern Game Farmers Association", when considering membership numbers (645 members).

Table 4.1: Provinces

PROVINCE	PERCENTAGE
Eastern Cape	5.3
Free State	4.2
Gauteng	2.1
Kwa-Zulu Natal	7.4
Mpumalanga	2.1
North West	11.5
Northern Cape	21.1
Limpopo	46.3
Total	**100**

4.2.2 Farm size and provinces

Table 4.2 indicates that 80% and 100% of the Eastern Cape and Free State respectively fall under the category 1001to5000ha. As seen from Table 4.2, the majority of the respondents are also in this category of 1001 to 5000ha. Previous research done by **Eloff (2002a:79)** and **Erasmus (2000)** indicate that the average game farm in South Africa was 2047ha. Their research also indicated that the Limpopo Province hosted the biggest percentage (49%) of game farms; this was proven to be the same in this research with 46% in the Limpopo Province. This shows that research is

consistent. **Erasmus (2000)** indicated that the average game farm size of the Limpopo Province was 1340 ha (Chapter 3). Provinces that are more evenly spread over two or three categories are Gauteng (50% = 0 to1 000 ha; 50%= 1 001-5 000 ha), KwaZulu-Natal (57% = 1001-5000ha; 43% = 5001-10000ha) and Mpumalanga (50% = 1 001-5 000 ha; 50% = 10 001 ha and more).

Table 4.2: Farm sizes and provinces

0 – 1 000 ha 1 001 – 5 000 ha 5 001 - 10 000 ha 10 001 ha and more	%	%	%	%
PROVINCE				
Eastern Cape	0	20	**80**	0
Free State	0	0	**100**	0
Gauteng	0	0	**50**	**50**
Kwa-Zulu-Natal	0	43	**57**	0
Mpumalanga	**50**	0	**50**	0
North-West	9	0	**58**	33
Northern Cape	20	25	**45**	10
Limpopo	5	5	**65**	25

4.2.3 Method of acquiring game farm

It is interesting to see in Table 4.3, that 56% of the game farms that form part of the research are cattle or crop farms that were bought and then converted into game farms. 16% of the respondents bought existing game farms or inherited cattle/crop farms and then converted them into game farms. In total, 72% of the game farms that formed part of the research were converted into game farms with only 17% that were already existing game farms. This shows that there is a tendency among farmers to change from cattle/crop farming to game farming. The reasons, as indicated in Chapter 3 are aspects such as cattle theft in some areas, landscape not allowing for anything else and crop farming in areas that were not suitable for it. This explains the continuous growth of game auctions and the growing demand for game (see Table 3.2 Chapter 3).

Table 4.3: Method of acquiring the game farm

CATEGORIES	%
Bought cattle or crop farm and converted it into game farm	56
Bought already existing game farm	16
Inherited cattle or crop farm and converted it into game farm	16
Inherited already-existing game farm	1
Other	11

4.2.4 *Size of existing game farms*

Game farms were categorised in different sizes as indicated in Figure 4.1. 61% of all game farms are between 1 001 to 5000 hectares, with 17% between 0 to 1000 hectares and 12% between 5 001 and 10 000 hectares. Only 10% were 10 001 hectares and more.

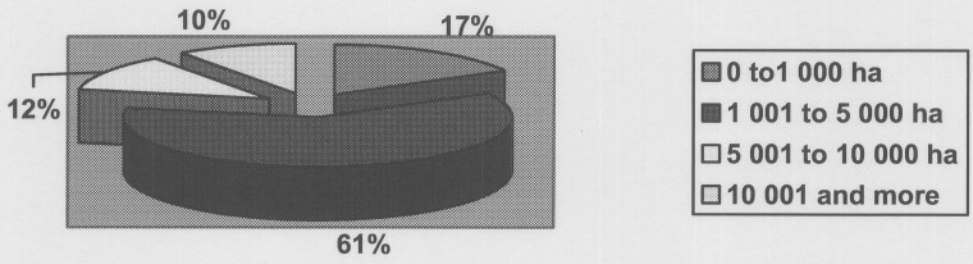


Figure 4.1: Game farm sizes

It is, however interesting to note that 27% of the respondents indicate that only 1 000ha is considered to be a sustainable size for a game farm and 55% of the respondents regard between 1 001 ha to 5 000 ha to be suitable for a game farm to be viable (Figure 4.2). It is important to remember, as indicated in Chapter 3, that one needs a bigger farm to host all four pillars of a game farm and to implement different zones to manage these pillars.

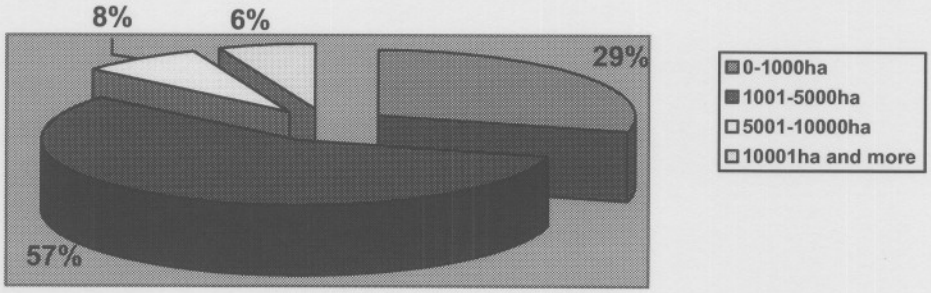


Figure 4.2: Game farm size seen as sustainable

4.2.5 *Number of game farms with specific game species*

From Table 4.4 it is clear that the top 10 species that are found on game farms are as follows: impala, kudu, springbok, duiker (common), warthog, wildebeest blue, waterbuck, eland, ostrich and gemsbok. These are also your more commonly found species in South Africa and therefore do make sense. It is clear that a smaller percentage of game farms have the more expensive species that consist of the following:

- Buffalo (22%)
- Sable (14%)
- Elephant (13%)
- White rhino (8%)
- Roan antelope (7%)
- Tsetsebe (7%)
- Wild dog (4%)
- Black rhino (2%)
- Cheetah (2%)

Table 4.4: Number of game farms with specific species

SPECIES	NUMBER OF GAME FARMS THAT HOST SPECIE	SPECIES	NUMBER OF GAME FARMS THAT HOST SPECIE
Blesbok - Common	55	Leopard	9
Blesbok – White	1	Lion	9
Bontebok	4	Mountain Reedbuck	35
Buffalo	22	Njala	40
Bushbuck	48	Oribi	3
Bushpig	41	Ostrich	63
Caracal	4	Red Hartebeest	62
Cheetah	2	Reedbuck (Southern)	24
Crocodile	2	Rhino Black	2
Damara Dik-dik	1	Rhino White	8
Duiker Blue	13	Roan Antelope	7
Duiker Common	75	Sable	14
Duiker Red	16	Springbok - Common	77
Eland	63	Springbok – White	2
Elephant	13	Steenbok	77
Gemsbok (oryx)	58	Suni	10
Giraffe	55	Tsetsebe	7

Grey Rhebok	7	Warthog	74
Grysbok (Cape)	8	Waterbuck	68
Grysbok (Sharpe's)	2	Wilddog	4
Hippopotamus	11	Wildebeest Black	13
Hyena Brown	4	Wildebeest Blue	70
Hyena Spotted	5	Zebra - Burchell's	49
Impala	77	Zebra – Mountain (Cape)	7
Impala Black	14	Zebra – Mountain (Hartman)	16
Klipspringer	32	Other	
Kudu	79	Fellow Dear	6
Lechwe	2	Barbary Sheep	1

It is, however, interesting to see that the Limpopo, Northern Cape, North-West Province and Kwa-Zulu-Natal Provinces are the four provinces that host the most game species found in South Africa (Table 4.5). When the different species are analysed, one tends to find that the following species are found in almost all the provinces in South Africa: blesbok, bushbuck, duiker common, eland, gemsbok, giraffe, impala, mountain reedbuck, ostrich, red hartebeest, springbok common, reedbuck, steenbok, warthog, waterbuck, blue wildebeest and burchell zebra. One would like to mention that the only province from which no response was received, was the Western Cape; therefore it is not listed in Table 4.5.

Table 4.5: Distribution of game species according to provinces

SPECIES	FS	LIM	NC	NW	GP	EC	MP	KZN
Blesbok – Common	X	X	X	X	X	X		X
Blesbok – White			X					
Bontebok			X	X		X		
Buffalo	X	X	X	X			X	X
Bushbuck		X	X	X	X	X	X	X
Bushpig		X	X	X		X	X	X
Caracal	X	X		X				
Cheetah				X				X
Crocodile		X						X
Damara Dik-dik		X						
Duiker Blue		X	X	X				X
Duiker Common	X	X	X	X	X	X	X	X
Duiker Red		X	X	X				X
Eland	X	X	X	X	X	X	X	
Elephant	X	X		X			X	X

Gemsbok (Oryx)	X	X	X	X	X	X		X
Giraffe	X	X	X	X	X	X	X	X
Grey Rhebok	X	X	X	X				
Grysbok (Cape)		X		X	X	X		X
Grysbok (Sharpe's)		X					X	
Hippopotamus	X	X	X	X			X	X
Hyena Brown		X		X				X
Hyena Spotted		X		X				X
Impala	X	X	X	X	X	X	X	X
Impala Black		X	X	X		X		X
Klipspringer	X	X	X	X			X	X
Kudu	X	X	X	X	X	X	X	X
Lechwe			X	X				
Leopard		X		X				X
Lion	X	X		X				
Mountain Reedbuck	X	X	X	X	X	X	X	X
Njala		X	X	X	X	X	X	X
Oribi		X			X		X	
Ostrich	X	X	X	X	X	X	X	X
Red Hartebeest	X	X	X	X	X	X	X	X
Reedbuck (Southern)	X	X	X	X	X		X	X
Rhino Black			X				X	
Rhino White	X	X	X	X			X	X
Roan Antelope	X	X	X			X		
Sable		X	X	X				
Springbok - Common	X	X	X	X	X	X		X
Springbok – White								
Springbok - Black			X					
Steenbok	X	X	X	X	X	X	X	X
Suni	X	X	X	X				X
Tsetsebe		X	X					
Warthog	X	X	X	X	X	X	X	X
Waterbuck	X	X	X	X	X	X	X	X
Wilddog	X	X		X				
Wildebeest Black	X		X	X	X			
Wildebeest Blue	X	X	X	X	X	X	X	X
Zebra - Burchell's	X	X	X	X	X	X	X	X
Zebra – Cape Mountain	X	X	X	X				
Zebra – Hartman Mountain	X	X	X	X				
Other • Fellow Deer • Barbary Sheep	X		X X	X				

4.2.6 *Importance of activities*

Respondents were asked which activities are seen as important for game farm tourism and which are of little or no importance. The following activities were rated as very important to extremely important by respondents (Table 4.6):

- To breed game species (69%).
- To offer trophy hunting (60%).
- To breed with rare/endangered species (47%).
- To hunt game for biltong (45%).
- To offer "green" safaris (39%).

Table 4.6: Activities according to scale of importance

5 – Extremely important 4 – Very important 3 – Important 2 – Less important 1 – Not important at all					
ACTIVITIES	**1**	**2**	**3**	**4**	**5**
To breed rare/endangered species	21	20	12	**20**	**27**
To breed game species	2	8	21	**29**	**40**
To offer trophy hunting	14	10	16	**24**	**36**
To hunt game for biltong	22	18	15	**23**	**22**
To offer bird hunting	**38**	**24**	19	8	11
To offer green safaris	29	12	20	**18**	**21**
To offer bow hunting	**26**	**18**	17	22	17
To offer fishing trips	**61**	**11**	10	13	5
To sell venison overseas	**44**	**16**	12	8	20
To sell venison to local market	**35**	**13**	22	17	13
To provide bird watching	13	17	25	**22**	**23**
To provide hiking trails	16	20	**26**	**20**	**18**
To offer photographic safaris	20	18	**31**	10	21
To provide 4 x 4 trails	**45**	**20**	16	11	8
To provide adventure activities	**33**	**22**	24	10	11
To provide hot air balloon safaris	**58**	**26**	10	3	3
To provide horse trails	**41**	**13**	21	12	13
To provide mountain bike trails	**44**	**20**	21	7	8
To provide educational walks	23	15	**30**	19	13
Other • Helicopter game views					

• Rhino and elephant walks • Canoe safaris • Game drives with ranger	

The following activities were seen as important by respondents (Table 4.6):

- To provide hiking trails (26%).
- To offer photographic safaris (31%).
- To provide educational walks (30%).

Activities that were regarded to be less important to not important at all are the following (Table 4.5):

- To provide hot air balloon safaris (84%).
- To offer fishing trips (72%).
- To provide 4x4 trails (65%).
- To provide mountain bike trails (64%).
- To cater for bird hunting (62%).
- To sell venison overseas (60%).
- To provide adventure activities (55%).
- To provide horse trails (54%).
- To sell venison to local markets (48%).

From the just-mentioned, one can see that all the "old traditional" activities on game farms are still seen as the most important. This indicates that game farm owners do not utilise all four pillars on which game farms are based to their full potential, namely; breeding game, hunting (trophy and/or biltong), game sales and selling of game products. A reason might be that game farms are too small to host all four pillars. Game farm owners are not that familiar with other types of ecotourism activities because game farm owners are not trained and educated in the field of tourism, as can be seen in Table 4.3 where most game farms are farms that were converted into game farms from cattle or crop farms. Indicating that owners were previous farmers whose management styles differ from game farming, seen from a tourism perspective. If one could apply the latter, the question could be raised as to whether game farms would not perhaps be more sustainable if all four pillars were to be used, combined with proper training in the field of tourism? Wouldn't this extend their season of productivity as well? There's still room to develop the ecotourism- and game meat pillars further.

4.2.7 *Number of years managed as a game farm*

Figure 4.3 clearly shows that the game farm industry is still very young, with 38% of game farms existing between 1-5 years. This correlates well with research conducted in the North-West Province and Mpumalanga that showed that most tourism products are still very young **(Saayman *et al.*, 2002; Saayman *et al.*, 2002)**. It all makes sense, considering that South Africa is a young democracy (10 years), which contributes enormously to the tourism growth in this country (**Msimang, 1995:29**).

26% of game farms are managed 6-10 years (leaving 64% younger than 10 years) and 21%, 11-15 years. Only 15% are managed longer than 15 years as game farms.

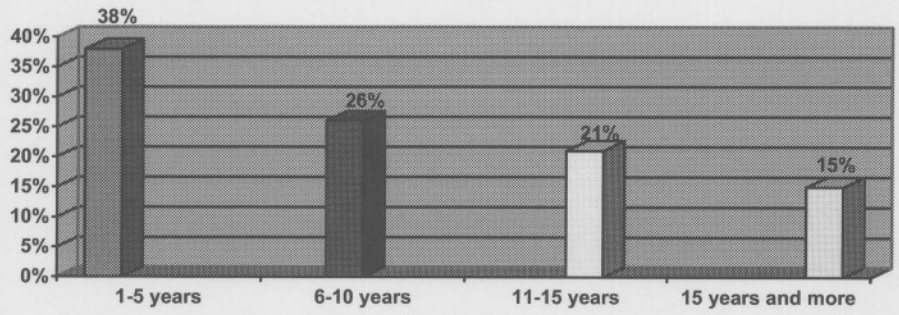


Figure 4.3: Number of years managed as a game farm

4.3 SUSTAINABLE ECOTOURISM DEVELOPMENT ASPECTS

Sustainable development today is more important than ever before and throughout the world it has become an important role player in any developmental aspect. As indicated in Chapter 1 game farms form part of ecotourism and therefore part of sustainable ecotourism development. The following aspects formed part of sustainable ecotourism development and respondents were tested regarding it.

4.3.1 *Economic impact assessment*

All respondents are in agreement that the economic impacts of game farms are important. As seen in Table 4.7, all respondents responded favourably to the above-mentioned categories with an overwhelming "yes" (above 60%). 81% of the respondents agree that tourism can create revenue from cultural heritage, traditional ways of life and wildlife. A further 70% say it is important to develop new products to be able to extend their tourism season.

Table 4.7: Economic impact assessment

Assess economic impacts as a prerequisite/requirement for developing game farms as ecotourism attractions	Yes	No
Extend the season of enterprises by developing new products to create better employment conditions.	70%	30%
Recognise that tourism can create revenue from cultural heritage, traditional ways of life, wildlife and habitats.	81%	19%
Encourage business relationships between foreign entrepreneurs and local and emerging entrepreneurs.	60%	40%

4.3.2 Community involvement

In Table 4.8 the working relationship between game farm owners and the community was evaluated. A community is referred to as all the inhabitants of a certain area, such as the municipality boundaries of an area. It was found that respondents sometimes made the connotation that community means the black people in the area. Aspects that scored a high percentage "yes" response were as follows:

- Encourage visitors to spend more money in the local economy (71%).
- Consider establishing targets to monitor progress in achieving objectives (62%).
- Be transparent when reporting community benefits (61%).
- Cooperation relationship with regard to local communities (65%), tourists (74%), local councils (58%) and the government (64%).

Table 4.8: Community involvement

Ensure that communities are involved in and benefit from tourism	Yes	No
Work closely with local community to develop new products that provide complementary products for tourism enterprises.	54%	46%
Develop partnerships and joint ventures in which the community has a significant stake.	34%	**66%**
Identify projects that the enterprise can support that will benefit the poor.	49%	51%
Assist in the development of the local community and emergent enterprises.	55%	45%
Foster the development of community-based tourism products by providing marketing and mentoring support.	53%	47%
Encourage visitors to spend more money in the local economy.	**71%**	29%
Encourage tour operators to be more innovative in their itineraries by, for example, including shebeens, local museums and arts and craft shops in their tour itineraries.	43%	**57%**
Consider using local entrepreneurs in developing community initiatives.	52%	48%
Be transparent when reporting community benefits.	**61%**	39%
Consider establishing targets to monitor progress in achieving objectives.	**62%**	38%
Cooperation relationship with regard to:		
Local communities.	**65%**	35%

Tourists.	**74%**	26%
Small enterprises sectoral bodies.	57%	43%
Local councils.	58%	42%
The government.	**64%**	36%

Aspects to which the majority of respondents answered "no" (Table 4.8) were as follows:

- Develop partnerships and joint ventures in which the community has a significant stake (66%).
- Encourage tour operators to be more innovative in their itineraries by, for example, including shebeens, local museums and arts and craft shops in their tour itineraries (57%).

4.3.3 Social and cultural diversity

In Table 4.9 respondents were asked whether they maintain and encourage social and cultural diversity. The respondents answered with an overwhelming "yes" to the following aspects:

- Is visitor safety a paramount concern (89%)?
- Is hospitality the prevalent attitude of employees (87%)?
- Development of "tourism with dignity and respect" and nurture local cultural (including religious) experiences (75%).
- Tourism development should not compromise respect for social and cultural and religious rights, or the essential human right of people to food, a safe and clean environment, work, health and education (74%).
- Encourage tourists to show respect by learning a few words of the local language and to learn about the host culture and traditions (74%).
- Give enterprises a local flavour by serving local dishes and sourcing soft furnishings, arts and crafts locally, developing them as sustainable tourist attractions (72%).
- Use tourism as a catalyst for human development, focusing on gender equality and career development (65%).
- Support visits by local school children to tourism sites that promote and display their heritage (62%).

Aspects that respondents answered no to, were aspects such as contributing to scholarships, local youth sport and community causes, with 50%. As indicated in Table 4.9, most respondents do support social and cultural diversity. This, again is a large contribution to sustainable ecotourism development and sustainable game farm tourism.

Table 4.9: Social and cultural diversity

Maintain and encourage social and cultural diversity	Yes	No
Development of "tourism with dignity and respect", and nurture local cultural (including religious) experiences.	**75%**	25%
Use tourism as a catalyst for human development, focusing on gender equality and career development.	**65%**	35%
Tourism development should not compromise respect for social and cultural and religious rights, or the essential human right of people to food, a safe and clean environment, work, health, and education.	**74%**	26%
Support visits by local school children to tourism sites that promote and display their heritage.	**62%**	38%
Consider what contributions the enterprise can make to scholarships, local youth sports teams and community causes.	50%	**50%**
Showcase local cultural artefacts in your enterprise and encourage the development thereof.	55%	45%
Encourage craftsmen and other cultural workers to maintain the authenticity and cultural values of their products.	58%	42%
Give enterprises a local flavour by serving local dishes and sourcing soft furnishings, arts and crafts locally, developing them as sustainable tourist attractions.	**72%**	28%
Identify resources of cultural heritage in local area and develop them as sustainable tourism attractions.	**68%**	32%
Encourage tourists to show respect by learning a few words of the local language and to learn about the host culture and traditions.	**74%**	26%
Draw the attention of ground handlers, the media and tour operators to complementary product opportunities in the local community.	54%	46%
Is hospitality the prevalent attitude of employees?	**87%**	13%
Is visitor safety a paramount concern?	**89%**	11%

4.3.4 Sensitive to host cultures

Table 4.10 tested the sensitivity of game farm owners to the host culture. An average of 80% was obtained for all "yes" answered questions and an average of 20% answered "no" to the questions. Aspects that were answered yes to, are as follows:

- Respect, develop and invest in local cultures.
- Respect indigenous intellectual property.
- Use local guides.
- Promote a sound, proud, service ethic.
- Educate tourists regarding local culture.
- Promote and ensure the respect and dignity of people.

Table 4.10: Sensitive to host cultures

Be sensitive to the host culture	Yes	No
Respect, develop and invest in local cultures and protect them from over-commercialisation and over-exploitation.	**65%**	35%
Respect indigenous intellectual property, especially when setting up contractual arrangements for the use of indigenous knowledge.	**70%**	30%
Use local guides, and support them so as to ensure that the community speaks for itself, and to increase the revenues going into the local community.	**77%**	23%
Develop a local social contract for interactions and behaviour between the local community and tourists.	**63%**	37%
Create opportunities for visitors to interact with locals in an unstructured, spontaneous manner.	58%	42%
In accordance with the Batho Pele principle, provide visitors with inclusive, honest and reliable information.	**88%**	12%
Promote a sound, proud, service ethic among all participants in the tourism sector.	**96%**	4%
Promote and ensure the respect and dignity of people in the development, marketing and promotion of tourism.	**97%**	3%
Ensure that tourism does not undermine the resource rights, traditional knowledge and skills of the local community.	**83%**	17%
Negative social and cultural impacts associated with tourism, such as increased crime, drug and alcohol abuse, and prostitution should be monitored and be proactively addressed in cooperation with the community.	**84%**	16%
Educate tourists regarding local culture and, where necessary, make them aware of how they should behave to respect it.	**87%**	13%
The exploitation of human beings in any form, particularly sexual, and when applied to women and children, should be energetically combated with the cooperation of all concerned.	**89%**	11%
AVERAGE	**80%**	20%

4.3.5 Environmental impact assessment

When a game farm is developed, it is important to do an EIA (Environmental Impact Assessment). Table 4.11 indicated areas that are of importance to the environment when developing a game farm. An astonishing 80% of the respondents answered yes to all the above questions in Table 4.11 and only 20% said no. Some of the aspects that were tested are as follows:

- Planning of developments in areas where the use of water and other resources would not affect the local community.
- Minimise environmental impact and reduce energy usage.
- Use local materials and architectural styles.
- Tell visitors what has been done to make the game farm more environmentally friendly.
- Conserving fresh water resources.

Table 4.11: Environmental impact assessment

Assess environmental impacts as a prerequisite for developing tourism	Yes	No
Plan new developments only in areas where the use of water and other natural resources for tourism will not conflict with the local community needs, now or in the foreseeable future.	**86%**	14%
Follow best practice guidelines to minimise environmental impact and to reduce energy requirements for lighting, cooling and heating.	**88%**	12%
Use local materials (where sustainable) and local architectural styles on a scale that does not create a negative aesthetic impact.	**82%**	18%
Avoid damaging the environmental quality of the enterprise's neighbourhood by noise or light pollution.	**92%**	8%
Design buildings with natural ventilation and actively plan to reduce resource use during the construction and operational phases.	**86%**	14%
Tell visitors what has been done to make the enterprise more environmentally friendly. Quantify the resources "saved".	**73%**	27%
Plan new developments to have the lowest possible ecological impact, particularly in environmentally sensitive areas.	**76%**	24%
When developing plans, include elements that contribute to the maintenance of biodiversity by planting local indigenous species.	**76%**	24%
An environmentally friendly product purchasing policy.	**76%**	24%
Environmentally friendly guidelines for construction firms.	**77%**	23%
Fines against contractors that do not keep within environmentally friendly development aims.	**71%**	29%
Replacement or avoidance of environmentally dangerous substances and products.	**80%**	20%
Conserving fresh water resources.	**76%**	24%
AVERAGE	**80%**	20%

4.3.6 Making sustainable use of local resources

Regarding the sustainable use of resources, all questions scored a 70% plus among the respondents (Table 4.12):

- Measure the quantity of water consumed and manage consumption and leakage so as to reduce water consumption.
- Encourage the use of environmentally friendly transport.
- Enterprises should assist conservation by investing in sustainable trails, hides and interpretation.
- Reduce "food miles" by using locally produced food.
- Install and showcase appropriate technology to reduce the consumption of natural resources and the production of waste.

- Set targets to increase the proportion of energy used from renewable resources – for example solar, wind, hydroelectric.
- Monitor the use of diesel, paraffin and petrol and set targets to reduce consumption and switch to less polluting fuels.
- Measure electricity consumption and introduce energy saving measures.
- Measure the quantity of water consumed and manage consumption and leakage so as to reduce water consumption.

The mentioned aspects in Table 4.12 are considered to be very important from a nature conservation point of view. If these aspects are common practice at all game farms in South Africa, they will then contribute enormously to the conservation of fauna and flora through sustainable ecotourism development.

Table 4.12: Making sustainable use of local resources

Use local resources sustainably, avoid waste and over-consumption	Yes	No
Measure the quantity of water consumed and manage consumption and leakage so as to reduce water consumption.	**70%**	30%
Measure electricity consumption and introduce energy saving measures.	**77%**	23%
Monitor the use of diesel, paraffin and petrol and set targets to reduce consumption and switch to less polluting fuels.	**71%**	29%
Set targets to increase the proportion of energy used from renewable resources, for example solar, wind, hydroelectric.	**73%**	27%
Install and showcase appropriate technology to reduce the consumption of natural resources and the production of waste.	**70%**	30%
Monitor the sewage system and demonstrate how pure the outflow back into the environment is.	66%	34%
Set percentage targets for low waste production, levels of recycling waste produced, levels of recycling and reuse of waste.	63%	37%
Work with suppliers to minimise the amount of packaging purchased with supplies.	62%	38%
Reduce "food miles" by using locally produced food.	**73%**	27%
Enterprises should assist conservation by investing in sustainable trails, hides and interpretation.	**71%**	29%
Encourage the use of environmentally friendly transport.	**70%**	30%

4.3.7 *Maintain and encourage natural diversity*

Table 4.13 indicated that an average of 77% of the respondents do maintain and encourage natural diversity and 23% average said "no" to the above aspects regarding natural diversity. Aspects that came out strongly are:

- Invest a percentage of profits or turnover in species conservation or habitat restoration and management (84%).
- Look for ways in which the enterprise and its guests can assist with the conservation of natural heritage (80%).
- Ensure that relevant members of staff are familiar with the issues and ways of avoiding environmental impact (79%).

Table 4.13: Maintain and encourage natural diversity

Maintain and encourage natural diversity	Yes	No
Encourage visitor behaviour that respects natural heritage and has a low impact upon it.	77%	23%
Discourage the purchase of products that exploit wildlife unsustainably or contribute to the destruction of species.	73%	27%
Look for ways in which the enterprise and its guests can assist with the conservation of natural heritage.	**80%**	20%
Invest a percentage of profits or turnover in species conservation or habitat restoration and management.	**84%**	16%
Avoid pollution by using environmentally friendly chemicals, and by using biodegradable soaps and detergents.	76%	24%
Work with conservation authorities to ensure that visitors are aware of the impact that they may have on the ecology.	74%	26%
Ensure that relevant members of staff are familiar with the issues and ways of avoiding environmental impact.	**79%**	21%
Do not market tourism resources to encourage tourists into ecologically sensitive areas which are vulnerable to irresponsible tourism practices. Particular sports or recreational uses discourage these activities (e.g. irresponsible 4x4 use).	72%	28%
Planning of attractions and accommodation to be adequate to meet the needs of visitors without losing the character of the area.	77%	23%

4.3.8 *Sustainable ecotourism development issues answered "no" to by respondents, but are rated as important*

The respondents answered no to the following sustainable ecotourism development issues, but rated it as important (only 60% and above were selected) (Table 4.14):

- ***Is hospitality the prevalent attitude of employees?*** 13% of the respondents answered no (Table 4.9), of which 80% still indicated that it is important. Showing that although respondents do not practice it as such, they recognise it as an important tourism issue.
- ***Plan new developments only in areas where the use of water and other natural resources for tourism will not conflict with the local community needs, now or in the foreseeable future.*** 14% of respondents answered no to this question in Table 4.10, of which 71% still see it as important. A possible reason is that the owner knew about it but there might have been insufficient developmental capital to conduct such a study prior to the development.
- ***Is visitor safety a paramount concern?*** Again only a small number of respondents answered no (11%) to the question (Table 4.8), of which 67% indicated that it is important. It may be the case that the respondents that answered no live in an area where safety is not seen as a problem and that they do not have to take special precautions regarding safety.
- ***An environmentally friendly product purchasing policy.*** Table 4.10 shows that 24% of the respondents do not have an environment friendly product purchasing policy, but 67% still see it as important.
- ***Work with suppliers to minimise the amount of packaging purchased with supplies.*** 38% respondents indicated that this aspect is not applicable to them (Table 4.11). It is therefore interesting to see that 65% of the respondents see it as important. A possible reason for respondents not to practice it may be due to the fact that some game farms are too small to really order large amounts of stock with an environmental friendly packaging.
- ***Work with conservation authorities to ensure that visitors are aware of the impact that they may have on the ecology.*** The possibility exists that the 26% of the respondents that answered no in Table 4.12 are game farmers who only make use of one pillar of the game farm industry, namely the breeding of game and therefore do not have visitors on a regular basis who can be taught in this regard.
- ***Enterprises should assist conservation by investing in sustainable trails, hides and interpretation.*** A small percentage answered no (29%) in Table 4.11 regarding sustainable trails, hides and interpretation, of which 63% still see it as important. Again this may be farmers who only breed with game.
- ***Environmental friendly guidelines for construction firms.*** In Table 4.10, 23% answered no, but still 62% see environment friendly guidelines as important. A reasonable explanation can be that game farm owners were not aware of such methods during the building process and therefore built without environmental guidelines. It is

often the case that game farm owners start developing without doing proper research. Research in this context implies seeking basic information.

- ***Replacement or avoidance of environmentally dangerous substances and products.*** 20% (Table 4.10) answered no, of which 60% indicated that it is important. Game farms are sometime remote and therefore it may be difficult to purchase these types of products that may only be found in bigger cities.

Table 4.14: Sustainable ecotourism development issues answered no to by respondents, but are seen as important

Very Important Important Not important	% % %	% % %	% % %
Assess economic impact as a prerequisite/requirement for developing game farms as ecotourism attractions	N	I	VI
Encourage business relationships between foreign entrepreneurs and local and emerging entrepreneurs.			
No	21	**50**	29
Ensure that communities are involved in and benefit from tourism			
Work closely with local community to develop new products that provide complementary products for tourism enterprises.	**N**	**I**	**VI**
No	34	**57**	9
Encourage visitors to spend more money in the local economy.	**N**	**I**	**VI**
No	36	55	9
Maintain and encourage social and cultural diversity			
Is hospitality the prevalent attitude of employees?	**N**	**I**	**VI**
No	20	**80**	0
Is visitor safety a paramount concern?	**N**	**I**	**VI**
No	33	**67**	0
Give enterprises a local flavour by serving local dishes and sourcing soft furnishings, arts and crafts locally and developing them as sustainable tourist attractions.	**N**	**I**	**VI**
	12	**50**	38
Identify resources of cultural heritage in local area and develop them as sustainable tourism attractions.	39	**54**	7
Be sensitive to the host culture			
Respect, develop and invest in local cultures and protect them from over-commercialisation and over-exploitation.	**N**	**I**	**VI**
No	36	**43**	21
Use local guides, and support them so as to ensure that the community speaks for itself, and to increase the revenues going into the local community.	**N**	**I**	**VI**

No	33	**44**	23
Assess environmental impacts as a prerequisite for developing tourism			
Follow best practice guidelines to minimise environmental impact and to reduce energy requirements for lighting, cooling and heating.	**N**	**I**	**VI**
No	25	**50**	25
Plan new developments only in areas where the use of water and other natural resources for tourism will not conflict with the local community needs, now or in the foreseeable future.	**N**	**I**	**VI**
No	0	**71**	29
Use local materials (where sustainable) and local architectural styles on a scale that does not create a negative aesthetic impact.	**N**	**I**	**VI**
No	33	**56**	11
When developing plans, include elements that contribute to the maintenance of biodiversity by planting local indigenous species.	**N**	**I**	**VI**
No	23	**46**	31
Replacement or avoidance of environmentally dangerous substances and products.	**N**	**I**	**VI**
No	20	**60**	20
Plan new developments to have the lowest possible ecological impact, particularly in environmentally sensitive areas.	**N**	**I**	**VI**
No	7	40	**53**
An environmental friendly product purchasing policy.	**N**	**I**	**VI**
No	13	**67**	20
Environmental friendly guidelines for construction firms.	**N**	**I**	**VI**
No	7	**62**	**31**
Fines against contractors that do not keep within environmental friendly development aims.	**N**	**I**	**VI**
No	13	**56**	31
Use local resources sustainable, avoid waste and over-consumption			
Monitor the use of diesel, paraffin and petrol and set targets to reduce consumption and switch to less polluting fuels.	**N**	**I**	**VI**
No	17	**50**	33
Measure the quantity of water consumed and manage consumption and leakage so as to reduce water consumption.	**N**	**I**	**VI**
No	10	37	**53**
Install and showcase appropriate technology to reduce consumption of natural resources and production of waste.	**N**	**I**	**VI**
No	10	**57**	33
Monitor the sewage system and demonstrate how pure the outflow back into the environment is.	**N**	**I**	**VI**
No	5	42	**53**
Set percentage targets for low waste production, levels of recycling waste	**N**	**I**	**VI**

produced, levels of recycling and reuse of waste.			
No	9	**48**	43
Work with suppliers to minimise the amount of packaging purchased with supplies.	**N**	**I**	**VI**
No	10	**65**	25
Reduce "food miles" by using locally produced food.	**N**	**I**	**VI**
No	25	**56**	19
Enterprises should assist conservation by investing in sustainable trails, hides and interpretation.	**N**	**I**	**VI**
No	6	**63**	31
Encourage the use of environmentally friendly transport.	**N**	**I**	**VI**
No	13	**56**	31
Maintain and encourage natural diversity			
Look for ways in which the enterprise and its guests can assist with the conservation of natural heritage.	**N**	**I**	**VI**
No	0	**55**	45
Avoid pollution by using environmental friendly chemicals, and by using biodegradable soaps and detergents.	**N**	**I**	**VI**
No	15	**54**	31
Work with conservation authorities to ensure that visitors are aware of the impact that they may have on the ecology.	**N**	**I**	**VI**
No	6	**63**	31
Ensure that relevant members of staff are familiar with the issues and ways of avoiding environmental impact.	**N**	**I**	**VI**
No	15	39	**46**
Do not market tourism resources to encourage tourists into ecologically sensitive areas which are vulnerable to irresponsible tourism practices. Particular sports or recreational uses discourage these activities (e.g. irresponsible 4x4 use).	**N**	**I**	**VI**
No	13	40	**47**
Planning of attractions and accommodation to be adequate to meet the needs of visitors without losing the character of the area.	**N**	**I**	**VI**
No	14	**43**	43

4.4 CONTINGENCY TABLES (TWO-WAY TABLES)

In this section the two-way relationship (effect size) was determined between game farm size and sustainable ecotourism development, game farm size and importance of sustainable ecotourism development and game farm size and activities provided on game farms. A factor analysis will also form part of this section (Chronbach Alpha).

Effect size for the relationship in contingency table

In the study it is important to know whether a relationship between two variables is practically significant, for example game farm size and activities provided. For random samples, the statistically significance of such relationships is determined with Chi-square tests, but actually one wants to know whether the relationship is large enough to be important.

In this case the effect size is given by $w = \sqrt{\frac{X^2}{n}}$, where X^2 is the usual Chi-square statistic for the contingency table and *n* is the sample size (**Steyn, 2000**). In the special case of a 2×2 table, the effect size (w) is given by the phi (ϕ) coefficient. Note that the effect size is again independent of sample size. **Ellis and Steyn (2003:51)** give the following guidelines for the interpretation of it in the current case:

(a) small effect: $w = 0.1$, (b) medium effect: $w = 0.3$, (c) large effect: $w = 0.5$.

A relationship with $w \geq 0.5$ is considered to be practically significant.

4.4.1 Contingency table of game farm size and sustainable ecotourism development

Table 4.15 measured the relationship between the size of game farms and the implementation of sustainable ecotourism related development issues. Only sustainable ecotourism development issues with a phi coefficient of 0.35 and above, indicating a medium to large effect size, were extracted from the data and only those above 0.40 were discussed and are as follows:

- ***Development of "tourism with dignity and respect", and nurture local cultural (including religious) experiences***. This had a **phi coefficient of 0.44** which indicates that there is a strong two-way relationship between land size and implementation/practice of the just-mentioned. All game farm owners above 1001ha answered convincebly yes to the above, whereas the majority (67%) said no in the category 0-1000ha.
- ***Support visits by local school children to tourism sites that promote and display their heritage.*** 83% of the farms smaller than 1001ha said no to visits of school children. A reason can be that smaller game farms do not have the capacity to provide a variety of activities on their premises and rather concentrate on hunting or game sales contributes better economically to the farm than visits from school children **(Phi coefficient of 0.44)**.
- ***Give enterprises a local flavour by serving local dishes and sourcing soft furnishings, arts and crafts locally, developing them as sustainable tourist attractions***. Larger game farms tested stronger **(phi coefficient of 0.52)** regarding the just-mentioned. The reason can be that larger farms have bigger budgets for implementing the just-mentioned.

- ***Ensure that tourism does not undermine the resource rights, traditional knowledge and skills of the local community.*** All four game farms size tested positively **(phi coefficient of 0.41)** to adhere to resource rights, traditional knowledge and skills of the local community. In Table 2.2, Chapter 2, making use of local labour, knowledge and skills are seen as part of development strategies that are regarded as important sustainable development aspects (Table 4.15). This can then be seen as one aspect of sustainable development that game farm owners do support.

Table 4.15: Contingency table of game farm size and sustainable ecotourism development

0 to 1 000 ha 1 001 to 5 000ha 5 001 to 10 000ha 10 001 ha and more	4	3	2	1
	%	%	%	%
ASSESS ECONOMIC IMPACTS AS A PREREQUISITE/ REQUIREMENT FOR DEVELOPING GAME FARMS AS ECOTOURISM ATTRACTIONS				
Encourage business relationships between foreign entrepreneurs and local and emerging entrepreneurs.	Phi coefficient 0.36			
Yes	88	100	58	33
No	12	0	42	67
ENSURE THAT COMMUNITIES ARE INVOLVED IN AND BENEFIT FROM TOURISM				
Be transparent when reporting community benefits.	Phi coefficient 0.35			
Yes	88	86	61	30
No	12	14	39	70
Cooperation relationship with regard to: local community.	Phi coefficient 0.37			
Yes	100	56	64	55
No	0	44	36	45
Cooperation relationship with regard to: tourists.	Phi coefficient 0.36			
Yes	100	89	72	58
No	0	11	28	42
MAINTAIN AND ENCOURAGE SOCIAL AND CULTURAL DIVERSITY				
Develop "tourism with dignity and respect", and nurture local cultural (including religious) experiences.	**Phi coefficient 0.44**			
Yes	88	63	85	33
No	12	37	15	67
Support visits by local school children to tourism sites that promote and display their heritage.	**Phi coefficient 0.44**			
Yes	75	50	72	17
No	25	50	28	83

Consider what contributions the enterprise can make to scholarships, local youth sports teams and community causes.	Phi coefficient 0.35			
Yes	88	56	51	21
No	12	44	49	79
Give enterprises a local flavour by serving local dishes and sourcing soft furnishings, arts and crafts locally, developing them as sustainable tourist attractions.	**Phi coefficient 0.52**			
Yes	88	100	78	23
No	12	0	22	77
BE SENSITIVE TO THE HOST CULTURE				
Respect, develop and invest in local cultures and protect them from over-commercialisation and over-exploitation.	Phi coefficient 0.35			
Yes	71	57	76	33
No	29	43	24	67
Promote and ensure the respect and dignity of people when developing, marketing and promoting tourism.	Phi coefficient 0.37			
Yes	100	100	100	83
No	0	0	0	17
Ensure that tourism does not undermine the resource rights, traditional knowledge and skills of the local community.	**Phi coefficient 0.41**			
Yes	75	50	93	60
No	25	50	7	40
Negative social and cultural impacts associated with tourism, such as increased crime, drug and alcohol abuse, and prostitution should be monitored and be proactively addressed in cooperation with the community.	Phi coefficient 0.36			
Yes	83	100	89	55
No	17	0	11	45
ASSESS ENVIRONMENTAL IMPACTS AS A PREREQUISITE TO DEVELOPING TOURISM				
Design buildings with natural ventilation and actively plan to reduce resource use during the construction and operational phases.	Phi coefficient 0.35			
Yes	71	71	96	69
No	29	29	4	31
Replacement or avoidance of environmentally dangerous substances and products.	Phi coefficient 0.38			
Yes	100	100	77	63
No	0	0	23	37

4.4.2 Contingency table for game farm size and importance of sustainable ecotourism development

Sustainable ecotourism development was divided into different categories and the following aspects, under each category, had a high phi coefficient (Table 4.16):

4.4.2.1 Ensure that communities are involved in and benefit from tourism

Aspects that respondents showed that they feel different about when referring to game farm size and sustainable ecotourism development are the following:

- *Work closely with local community to develop new products that provide complementary products for tourism enterprises* **(Phi coefficient 0.43).** Game farm owners sized of 0 to1 000 ha and 1 001 to 5 000 ha feel that this is important, whereas 50% of the owners of game farms sized 5 001 to 10 000 ha think it is important and the other 50% say it is not important. The category 10 001 ha and more indicated that it is very important.
- *Be transparent when reporting community benefits* **(Phi coefficient 0.50).** Owners of game farms sized 0 to 10 000 ha indicated that it is important and owners of game farms sized lager than 10 001 ha say it is very important.
- *Cooperation relationship with regard to: SMMEs* (Small, medium and macro enterprises) **(Phi coefficient 0.45).** Owners of game farms sized 0 to 10 000 ha indicated that it is important and owners of game farms larger than 10 001 ha say it is very important.
- *Cooperation relationship with regard to local council* **(Phi coefficient 0.58).** Owners of game farms sized smaller than 1 000 ha and between 5 001 and 10 000 ha indicated that it is important and game farms bigger than 10 001 ha say it is very important. The category 1 000 to 5 000 ha was evenly spread over all three categories of importance.
- *Cooperation relationship with regard to local government* **(Phi coefficient 0.46).** Owners of game farms sized between 0 to 10 000 ha indicated this as important, whereas owners of game farms larger then 10 001 ha showed that it is very important.

From the above, one tends to find that the owners of game farms larger (10 001 ha and more) indicated that the above aspects are very important, whereas owners of game farms smaller than 10 000 ha indicated to be important.

4.4.2.2 Maintain and encourage social and cultural diversity

Aspects that showed a strong two-way relationship under this category are as follows (Table 4.16):

- *Development of "tourism with dignity and respect", and nurture local cultural (including religious) experiences* **(Phi coefficient 0.44).** The owners of game farms of all sizes indicated this aspect to be important to very important.
- *Encourage tourists to show respect by learning a few words of the local language and to learn about the host culture and traditions* **(Phi coefficient 0.43).** Owners of game farms sized 0 to 5 000 ha feel that this aspect is important. Owners of game farms of the sizes of the category 10 001 ha and more feel it is not important.
- *Is visitor safety a paramount concern* **(Phi coefficient 0.48)?** The owners of game farms of all sizes indicated that this aspect is important to very important.
- *Is hospitality the prevalent attitude of employees* **(Phi coefficient 0.43)?** Owners of game farms of all sizes indicated this aspect to be important to very important.

4.4.2.3 Be sensitive to the host culture

Aspects that showed a strong two-way relationship for being sensitive to the host culture are as follows (Table 4.16):

- *Respect, develop and invest in local cultures and protect them from over-commercialisation and over-exploitation* **(Phi coefficient 0.43).** Owners of game farms of all sizes indicated this aspect to be important to very important.

4.4.2.4 Assess environmental impact as a prerequisite for developing tourism

Aspects that showed a strong two-way relationship to assess environmental impact as a prerequisite before starting the development of a tourism product (Table 4.16):

- *Use local materials (where sustainable) and local architectural styles on a scale that does not create a negative aesthetic impact* **(Phi coefficient 0.47).** Categories 0 to 1 000 ha and 5 001 to 10 000 ha feel it is important, whereas the other two groups indicate that it is very important.
- *Avoid damaging the environmental quality of the enterprise's neighbourhood by noise or light pollution* **(Phi coefficient 0.58).** Category 5 000 to 10 000 ha indicate that this aspect is important. All three the other categories indicated that it is very important.
- *Design buildings with natural ventilation and actively plan to reduce resource use during the construction and operational phases* **(Phi coefficient 0.46).** It was seen to be important by categories 0 to 1 000 ha and 5 001 ha. The other two categories feel it is very important.

- *Conserving fresh water resources* **(Phi coefficient 0.44).** The owners of game farms of all sizes indicated this aspect to be important to very important.

4.4.2.5 Use local resources sustainably, and avoid waste and over-consumption

Aspects that showed a strong two-way relationship to the sustainable use of local resources and over consumption are as follows (Table 4.16):

- Measure the quantity of water consumed, and manage consumption and leakage so as to reduce water consumption **(Phi coefficient 0.48).**
- Measure electricity consumption and introduce energy saving measures **(Phi coefficient 0.44).**
- Monitor the use of diesel, paraffin and petrol and set targets to reduce consumption and switch to less polluting fuels **(Phi coefficient 0.50).**

It seems from this that there is a strong urge to save water, fuel and electricity among game farmers. The latter are therefore concerned about the environment and its conservation.

4.4.2.6 Maintain and encourage natural diversity

Aspects that indicated a strong two-way relationship to maintain and encourage natural diversity (Table 4.16):

- *Planning of attractions and accommodation to be adequate to meet the needs of visitors without losing the character of the area* **(Phi coefficient 0.44).** Owners of game farms of all sizes indicated this aspect to be important to very important.
- *Discourage the purchase of products that exploit wildlife unsustainably or contribute to the destruction of species* **(Phi coefficient 0.43).** Owners of game farms from 0 to 10 000 ha indicate that this is important. Owners of farms larger than 10 000 ha feel it is very important.

The above categories with their different aspects discussed above, show that there is a strong tendency among game farm owners to cooperate and implement these sustainable ecotourism development aspects. A number of these aspects were also mentioned in Chapter 2, Table 2.3, which was seen by authors of sustainable ecotourism development literature as important aspects of sustainable ecotourism development.

Table 4.16: Contiguous table for game farm size and importance of sustainable ecotourism development

Very Important Important Not important	% N	% I	% VI
Assess economic impact as a prerequisite for developing game farms as Ecotourism attractions			
Extend the season of enterprises by developing new products to create better employment conditions. Phi coefficient 0.38	**N**	**I**	**VI**
0 to 1 000 ha	17	33	50
1 001 to 5 000 ha	5	45	50
5 001 to 10 000 ha	0	86	14
10 001 ha and more	25	50	25
Ensure that communities are involved in and benefit from tourism			
Work closely with local community to develop new products that provide complementary products for tourism enterprises. Phi coefficient 0.43	**N**	**I**	**VI**
0 to 1 000 ha	20	70	10
1 001 to 5 000 ha	13	65	22
5 001 to 10 000 ha	50	50	0
10 001 ha and more	25	25	50
Encourage tour operators to be more innovative in their itineraries by, for example, including shebeen's, local museums and arts and craft shops in their tour itineraries. Phi coefficient 0.38	**N**	**I**	**VI**
0 to 1 000 ha	38	38	24
1 001 to 5 000 ha	24	58	18
5 001 to 10 000 ha	57	29	14
10 001 ha and more	38	12	50
Be transparent when reporting community benefits. Phi coefficient 0.50	**N**	**I**	**VI**
0 to 1 000 ha	22	78	0
1 001 to 5 000 ha	21	57	22
5 001 to 10 000 ha	0	100	0
10 001 ha and more	13	25	62
Cooperation relationship with regard to local community. Phi coefficient 0.40	**N**	**I**	**VI**
0 to 1 000 ha	25	67	8
1 001 to 5 000 ha	37	31	32
5 001 to 10 000 ha	29	57	14
10 001 ha and more	13	25	62
Cooperation relationship with regard to SMMEs. Phi coefficient 0.45	**N**	**I**	**VI**
0 to 1 000 ha	25	58	17
1 001 to 5 000 ha	23	51	26
5 001 to 10 000 ha	0	100	0

10 001 ha and more	12	25	63
Cooperation relationship with regard to local council. Phi coefficient 0.58	**N**	**I**	**VI**
0 to 1 000 ha	25	67	8
1 001 to 5 000 ha	37	31	32
5 001 to 10 000 ha	29	57	14
10 001 ha and more	13	25	62
Cooperation relationship with regard to local government. Phi coefficient 0.46	**N**	**I**	**VI**
0 to 1 000 ha	10	80	10
1 001 to 5 000 ha	29	43	28
5 001 to 10 000 ha	17	50	33
10 001 ha and more	12	13	75
MAINTAIN AND ENCOURAGE SOCIAL AND CULTURAL DIVERSITY			
Development of "tourism with dignity and respect", and nurture local cultural (including religious) experiences. Phi coefficient 0.44	**N**	**I**	**VI**
0 to 1 000 ha	11	78	11
1 001 to 5 000 ha	5	34	61
5 001 to 10 000 ha	25	63	12
10 001 ha and more	12	38	50
Support visits by local school children to tourism sites that promote and display their heritage. Phi coefficient 0.38	**N**	**I**	**VI**
0 to 1 000 ha	20	50	30
1 001 to 5 000 ha	8	45	47
5 001 to 10 000 ha	38	50	12
10 001 ha and more	25	12	63
Give enterprises a local flavour by serving local dishes and sourcing soft furnishings, arts and crafts locally, developing them as sustainable tourist attractions. Phi coefficient 0.35	**N**	**I**	**VI**
0 to 1 000 ha	11	67	22
1 001 to 5 000 ha	3	53	44
5 001 to 10 000 ha	14	86	0
10 001 ha and more	0	57	43
Encourage tourists to show respect by learning a few words of the local language and learning about the host culture and traditions. Phi coefficient 0.43	**N**	**I**	**VI**
0 to 1 000 ha	9	55	36
1 001 to 5 000 ha	11	50	39
5 001 to 10 000 ha	43	57	0
10 001 ha and more	50	25	25
Draw the attention of ground handlers, the media and tour operators to complementary product opportunities in the local community. Phi coefficient 0.36	**N**	**I**	**VI**

0 to 1 000 ha	10	70	20
1 001 to 5 000 ha	14	50	36
5 001 to 10 000 ha	43	57	0
10 001 ha and more	14	72	14
Is hospitality the prevalent attitude of employees? Phi coefficient 0.43	**N**	**I**	**VI**
0 to 1 000 ha	0	55	45
1 001 to 5 000 ha	0	33	67
5 001 to 10 000 ha	17	17	66
10 001 ha and more	0	29	71
Is visitor safety a paramount concern? Phi coefficient 0.48	**N**	**I**	**VI**
0 to 1 000 ha	0	40	60
1 001 to 5 000 ha	5	12	83
5 001 to 10 000 ha	33	17	50
10 001 ha and more	0	0	100
BE SENSITIVE TO THE HOST CULTURE			
Respect, develop and invest in local cultures and protect them from over-commercialisation and over-exploitation. Phi coefficient 0.43	**N**	**I**	**VI**
0 to 1 000 ha	10	80	10
1 001 to 5 000 ha	6	66	28
5 001 to 10 000 ha	33	67	0
10 001 ha and more	14	29	57
Respect indigenous intellectual property, especially when setting up contractual arrangements for the use of indigenous knowledge. Phi coefficient 0.35	**N**	**I**	**VI**
0 to 1 000 ha	18	82	0
1 001 to 5 000 ha	19	56	25
5 001 to 10 000 ha	29	71	0
10 001 ha and more	14	43	43
ASSESS ENVIRONMENTAL IMPACT AS A PREREQUISITE FOR DEVELOPING TOURISM			
Use local materials (where sustainable) and local architectural styles on a scale that does not create a negative aesthetic impact. Phi coefficient 0.47	**N**	**I**	**VI**
0 to 1 000 ha	8	75	17
1 001 to 5 000 ha	4	28	68
5 001 to 10 000 ha	0	83	17
10 001 ha and more	0	43	57
Avoid damaging the environmental quality of the enterprise's neighbourhood by noise or light pollution. Phi coefficient 0.58	**N**	**I**	**VI**
0 to 1 000 ha	8	38	54
1 001 to 5 000 ha	0	21	79
5 001 to 10 000 ha	33	67	0
10 001 ha and more	0	29	71
Design buildings with natural ventilation and actively plan to reduce	**N**	**I**	**VI**

resource use during the construction and operational phases. Phi coefficient 0.46			
0 to 1 000 ha	8	54	38
1 001 to 5 000 ha	2	37	61
5 001 to 10 000 ha	33	67	0
10 001 ha and more	0	43	57
Tell visitors what has been done to make the enterprise more environmentally friendly. Quantify the resources "saved". Phi coefficient 0.38	**N**	**I**	**VI**
0 to 1 000 ha	15	54	31
1 001 to 5 000 ha	13	41	46
5 001 to 10 000 ha	50	33	17
10 001 ha and more	0	29	71
When developing plans, include elements that contribute to the maintenance of biodiversity by planting local indigenous species. Phi coefficient 0.35	**N**	**I**	**VI**
0 to 1 000 ha	8	69	23
1 001 to 5 000 ha	8	31	61
5 001 to 10 000 ha	13	50	37
10 001 ha and more	0	29	71
Replacement or avoidance of environmentally dangerous substances and products. Phi coefficient 0.38	**N**	**I**	**VI**
0 to 1 000 ha	18	64	18
1 001 to 5 000 ha	8	28	64
5 001 to 10 000 ha	0	43	57
10 001 ha and more	0	29	71
Conserving fresh water resources. Phi coefficient 0.44	**N**	**I**	**VI**
0 to 1 000 ha	8	54	38
1 001 to 5 000 ha	3	11	86
5 001 to 10 000 ha	0	25	75
10 001 ha and more	0	14	86
USE LOCAL RESOURCES SUSTAINABLY, AVOID WASTE AND OVER-CONSUMPTION			
Measure the quantity of water consumed and manage consumption and leakage so as to reduce water consumption. Phi coefficient 0.48	**N**	**I**	**VI**
0 to 1 000 ha	21	43	36
1 001 to 5 000 ha	0	26	74
5 001 to 10 000 ha	0	43	57
10 001 ha and more	0	14	86
Measure electricity consumption and introduce energy saving measures. Phi coefficient 0.44	**N**	**I**	**VI**
0 to 1 000 ha	33	33	34
1 001 to 5 000 ha	10	36	54
5 001 to 10 000 ha	0	72	28
10 001 ha and more	0	14	86

Monitor the use of diesel, paraffin and petrol and set targets to reduce consumption and switch to less polluting fuels. Phi coefficient 0.50	**N**	**I**	**VI**
0 to 1 000 ha	27	55	18
1 001 to 5 000 ha	2	42	56
5 001 to 10 000 ha	0	86	14
10 001 ha and more	0	43	57
Work with suppliers to minimise the amount of packaging purchased with supplies. Phi coefficient 0.38	**N**	**I**	**VI**
0 to 1 000 ha	20	70	10
1 001 to 5 000 ha	13	47	40
5 001 to 10 000 ha	29	71	0
10 001 ha and more	0	43	57
Enterprises should assist conservation by investing in sustainable trails, hides and interpretation. Phi coefficient 0.37	**N**	**I**	**VI**
0 to 1 000 ha	8	84	8
1 001 to 5 000 ha	8	45	47
5 001 to 10 000 ha	12	38	50
10 001 ha and more	0	43	57
MAINTAIN AND ENCOURAGE NATURAL DIVERSITY			
Discourage the purchase of products that exploit wildlife unsustainably or contribute to the destruction of species. Phi coefficient 0.43	**N**	**I**	**VI**
0 to 1 000 ha	0	69	31
1 001 to 5 000 ha	8	30	62
5 001 to 10 000 ha	0	43	57
10 001 ha and more	0	0	100
Avoid pollution by using environment friendly chemicals, and by using biodegradable soaps and detergents. Phi coefficient 0.40	**N**	**I**	**VI**
0 to 1 000 ha	8	75	17
1 001 to 5 000 ha	10	37	53
5 001 to 10 000 ha	0	75	25
10 001 ha and more	14	14	72
Work with conservation authorities to ensure that visitors are aware of the impact that they may have on the ecology Phi coefficient 0.37	**N**	**I**	**VI**
0 to 1 000 ha	8	75	17
1 001 to 5 000 ha	5	36	59
5 001 to 10 000 ha	17	50	33
10 001 ha and more	14	29	57
Ensure that relevant members of staff are familiar with the issues and ways of avoiding environmental impact. Phi coefficient 0.42	**N**	**I**	**VI**
0 to 1 000 ha	8	75	17
1 001 to 5 000 ha	7	31	62
5 001 to 10 000 ha	0	67	33

10 001 ha and more	14	14	72
Do not market tourism resources to encourage tourists into ecologically sensitive areas which are vulnerable to irresponsible tourism practices. Particular sports or recreational uses discourage these activities (e.g. irresponsible 4x4 use). Phi coefficient 0.38	**N**	**I**	**VI**
0 to 1 000 ha	13	54	33
1 001 to 5 000 ha	3	40	57
5 001 to 10 000 ha	0	40	60
10 001 ha and more	0	0	100
Planning of attractions and accommodation to be adequate to meet the needs of visitors without losing the character of the area. Phi coefficient 0.44	**N**	**I**	**VI**
0 to 1 000 ha	13	47	40
1 001 to 5 000 ha	0	30	70
5 001 to 10 000 ha	20	20	60
10 001 ha and more	0	0	

4.4.3 Contingency table regarding game farm size and activities

Table 4.17 indicates the two-way relationship between game farm size and activities that tested strongly, meaning that the phi coefficient measured high, are as follows:

4.4.3.1 To breed with rare/endangered species (phi coefficient 0.43)

Owners of game farms between 1 001 and 5 000 ha and 10 0001 ha and more indicated that to breed with rare/endangered species is important to extremely important to them (66% and 63%, respectively). One would like to highlight the fact that most game farms (61%) fall in the category 1 001 to 5 000 ha and therefore carry considerable weight regarding this issue. A possible reason why bigger game farms breed with rare/endangered species can be that smaller farms do not have the financial means to host these species due to there high market price, as indicated in Chapter 3. The average game farm size of this research matches previous research done by **Eloff (2002a:79)** which indicates that the average game farm in South Africa is 2 047 ha.

4.4.3.2 To offer green safaris (phi coefficient 0.46)

The owners of game farms of all sizes, except category 1 001 to 5 000 ha, indicated that green safaris are not at all important to them. Therefore one could say that most owners of game farms regard this matter to be an important activity to provide to visitors. It may be due to the fact that the expenses can be higher for conducting a "green" or "darting" safari than a normal hunting safari. The reason is that one needs the services of a veterinarian for the duration of the hunt that influences the price. This then makes it difficult for game farm owners to implement because one tends to find one veterinarian who services a whole area.

4.4.3.3 To offer bow hunting (phi coefficient 0.58)

Owners of game farms larger than 5 001 hectares indicated that bow hunting is not at all important, and therefore not a high priority on their activity list. In the case of farms smaller than 5 000 hectares it was rated as an important activity, again indicating hunting as an important contributor to game farm tourism for farms less then 5 000 hectares.

4.4.3.4 To provide 4x4 trails (phi coefficient 0.47)

Only owners of game farms that are smaller than a 1 000 ha indicated that 4x4 trails and horse trails are important to very important (53%). All other game farm sizes tested negatively to this activity, indicating that it's not seen to be important at all. From this, one can conclude by saying this activity is not provided at the majority of game farms. This may be an activity that could be considered for future development (Table 4.17).

4.4.3.5 To provide horse trails (phi coefficient 0.45)

35% of the respondents in the category 0 to 1 000 ha indicate that it is not at all important to them. Category 5 001 to 10 000 ha was evenly spread between not at all important (33%), important (33%) and extremely important (34%). Categories 1 001 to 5 000 ha and 10 001 ha and more indicated that it is not at all important (39% and 72% respectively).

The main findings from Table 4.17 are that adventure types of tourism is not seen as all that important, therefore one can say that these types of products are not offered at game farms, again indicating that game farm owners do not utilise all four pillars or options. An aspect that adds to this, as indicated under 3.6 (Constraints experienced) in Chapter 3, is the fact that game farm owners are not trained and educated in the tourism industry (ecotourism).

Game meat sales are also rated as a low priority, which correlates well with what is happening in the industry were the game meat industry is still struggling to take off. The main constraint hampering the industry is that consumers do not see game meat as a meat type that is readily available, and that game is regarded by them as being meat "sometimes" available during summer. It is apparent that consumers still have the idea that winter (traditional hunting season) is the only time of the year that game meat is supposed to be available, coupled with the fact that not enough marketing has been done regarding game meat. Consumers are ill informed regarding game meat and will buy it if they are better informed **(Hoffman, 2003:8; Gouws, 1999:16; Brits & Herselman, 1988:19; Glen-Leary, 1987:12).**

Table 4.17: Contingency table: game farm size and activities

Extremely important / Very important / Important / Less important / Not at all important	%	%	%	%	%	
T o breed rare/endangered species						
	40	12	12	12	24	0 to 1 000 ha
	14	20	14	25	27	1 001 to 5 000 ha
	22	56	0	0	22	5 001 to 10 000 ha
Phi Coefficient 0.43	25	0	12	25	38	10 001 ha and more
To breed game species						
	6	6	18	35	35	0 to 1 000 ha
	2	11	16	26	45	1 001 to 5 000 ha
	0	0	44	12	44	5 001 to 10 000 ha
Phi Coefficient 0.36	0	0	38	50	12	10 001 ha and more
To offer bird hunting						
	60	13	0	13	14	0 to 1 000 ha
	29	25	25	10	11	1 001 to 5 000 ha
	33	33	22	0	12	5 001 to 10 000 ha
Phi Coefficient 0.38	63	25	12	0	0	10 001 ha and more
To offer green safaris						
	41	0	6	35	18	0 to 1 000 ha
	21	15	29	12	23	1 001 to 5 000 ha
	50	25	0	12	13	5 001 to 10 000 ha
Phi Coefficient 0.46	38	0	12	25	25	10 001 ha and more
To offer bow hunting						
	19	13	5	25	38	0 to 1 000 ha
	17	17	26	26	14	1 001 to 5 000 ha
	67	33	0	0	0	5 001 to 10 000 ha
Phi Coefficient 0.58	63	25	0	12	0	10 001 ha and more
To sell venison overseas						
	60	0	13	13	14	0 to 1 000 ha
	39	22	9	7	23	1 001 to 5 000 ha
	22	22	22	12	22	5 001 to 10 000 ha
Phi Coefficient 0.38	75	0	0	12	13	10 001 ha and more
To sell venison to local market						
	56	6	13	19	6	0 to 1 000 ha
	25	18	27	16	14	1 001 to 5 000 ha

	33	11	33	11	12	5 001 to 10 000 ha
Phi Coefficient 0.37	50	0	0	25	25	10 001 ha and more
To provide bird watching						
	22	17	11	39	11	0 to 1 000 ha
	11	17	32	19	21	1 001 to 5 000 ha
	12	22	22	11	33	5 001 to 10 000 ha
Phi Coefficient 0.37	11	13	13	13	50	10 001 ha and more
To provide 4 x 4 trails						
	40	0	20	33	7	0 to 1 000 ha
	39	28	17	8	8	1 001 to 5 000 ha
	56	22	11	0	11	5 001 to 10 000 ha
Phi Coefficient 0.47	75	0	13	0	12	10 001 ha and more
To provide adventure activities						
	31	6	31	19	13	0 to 1 000 ha
	26	30	22	11	11	1 001 to 5 000 ha
	44	22	22	1	11	5 001 to 10 000 ha
Phi Coefficient 0.36	63	0	25	0	12	10 001 ha and more
To provide hot air balloon safaris						
	69	6	13	12	0	0 to 1 000 ha
	55	32	8	2	3	1 001 to 5 000 ha
	44	33	23	0	0	5 001 to 10 000 ha
Phi Coefficient 0.42	75	13	0	0	12	10 001 ha and more
To provide horse trails						
	35	0	18	29	18	0 to 1 000 ha
	39	19	22	11	9	1 001 to 5 000 ha
	33	0	33	0	34	5 001 to 10 000 ha
Phi Coefficient 0.45	72	14	0	0	14	10 001 ha and more
To provide mountain bike trails						
	50	13	25	6	6	0 to 1 000 ha
	34	23	26	8	9	1 001 to 5 000 ha
	78	11	0	0	11	5 001 to 10 000 ha
Phi Coefficient 0.37	63	25	0	12	0	10 001 ha and more
To provide educational walks						
	24	11	18	41	6	0 to 1 000 ha
	24	15	33	14	14	1 001 to 5 000 ha
	22	12	44	22	0	5 001 to 10 000 ha
Phi Coefficient 0.42	25	25	12	0	38	10 001 ha and more

4.5 FACTOR ANALYSIS (CHRONBACH ALPHA)

A factor analysis was conducted regarding the questions of sustainable ecotourism development. Six factors were identified as can be seen in Table 4.18. 75.5% of the total variance in the data was explained by the six factors. All factor loadings above 0.4 were obtained from the data (Table 4.18).

Table 4.18: Factor analysis

	Factor 1: Conservation and resources	Factor loading		Factor 2: Local culture / architectural	Factor loading
B7DD	Invest profit in **habitat**	0.80	B5DD	Avoid noise or light pollution	0.85
B7AA	Encourage visitors respect – **nature**	0.79	B3DD	Visits by **local school**	0.82
B7GG	Personnel informed – **environment impact**	0.77	B5EE	Buildings with **natural** ventilation	0.72
B6CC	Switch to less **polluting** fuels.	0.76	B3MM	Visitor safety	0.70
B7EE	Use **environmental friendly** chemicals	0.74	B3AA	Respect **nurture, local culture**	0.70
B4GG	Proud service among participants	0.73	B3LL	**Hospitality**	0.69
B6AA	Measure **water quantity** and consumed	0.73	B3HH	**Local flavour**	0.68
B7FF	Work with **conservation authorities**	0.72	B3JJ	Tourists **learning a few words**	0.67
B4HH	Ensure respect and dignity of people	0.72	B4AA	**Commercialisation** and over-exploitation.	0.62
B6BB	**Measure electricity** usage/ saving	0.68	B711	**Keep local character**	0.61
B5GG	Lowest possible **ecological impact**	0.68	B5FF	Tell visitors about environment friendly conduct	0.55
B4II	Ensure that tourism does not undermine local **resources**	0.60	B3FF	Showcase **local cultural artefacts**	0.53
B7BB	No purchase that **exploit wildlife**	0.56	B4BB	Respect **local culture**	0.52
B7CC	Enterprise and guests **assist in conservation**	0.55	B3EE	Scholarships	0.49
B4CC	Use local guides	0.49			
B6JJ	**Assist conservation** sustainable trails	0.41			

	Factor 3: Involvement: tourists/host community	Factor loading		Factor 4: Environment friendly products	Factor loading
B2KKCC	Cooperation relationship: businesses sector	0.84	B6HH	Minimise **packaging**	0.84
B2KKDD	Cooperation relationship: **local government**	0.82	B6EE	**Reduce consumption** of natural resources	0.80
B2KKEE	Cooperation relationship: **government**	0.79	B6GG	**Recycling waste** produced	0.79
B4EE	Visitors to **interact** with local culture	0.73	B6II	**Reduce** "food miles"	0.78
B2KKBB	Cooperation relationship: tourists	0.72	B6DD	Energy used from **renewable sources**	0.74
B4DD	Interaction local community and tourists	0.63	B6KK	Environment **friendly transport**.	0.72
B2KKAA	Cooperation relationship: **local community**	0.60	B4JJ	Negative **cultural impacts - monitored**	0.64
B2JJ	Monitor progress in achieving objectives.	0.59	B6FF	Monitor **sewage**	0.61
B4KK	**Educate** tourists about local culture	0.58	B5AA	**Plan new** developments	0.49
B1BB	Create revenue from cultural heritage	0.56			
B3KK	Complementary product opportunities	0.55			
B4FF	Provide visitors with **reliable information**	0.52			
B1AA	Extend the season	0.48			
	Factor 5: Local community	Factor loading		Factor 6: Environment issues	Factor loading
B2EE	**Community-based** tourism	0.81	B5II	Minimise **environmental impact**	0.72
B2II	Be transparent **- community benefits**	0.72	**B5BB**	**Environment** friendly products	0.72
B2HH	Use **local entrepreneurs**	0.69	**B5JJ**	**Environment friendly** guidelines for construction firms	0.71
B2BB	Partnerships with **community**	0.69	B5HH	Planting local **indigenous species**	0.65

B2FF	Visitors to spend more money - **local economy**.	0.65	B5CC	Local materials	0.64
B2AA	Local **community products**.	0.64	B3BB	Tourism - catalyst for human development	0.63
B2CC	Identify projects - **benefit the poor**	0.62	**B5KK**	**Fines** –contractors	0.59
B2DD	Development of the **local community**	0.61	B7HH	No tourists into **ecologically sensitive** areas	0.59
B5MM	Conserving fresh water resources.	0.58	B3CC	Respect for social /cultural/religious rights	0.41
B2GG	Including **shebeens museums** and arts/craft	0.57			
B5LL	Avoidance environmentally dangerous substances	0.53			
B3II	**Cultural history** - local community	0.49			
B3GG	Maintain the **authenticity and cultural** values	0.45			

The factor analysis revealed the following information (Table 4.18):

- Factor one revealed the importance of ***conservation and resources.*** This includes aspects such as invest profit in habitat, encourage visitors to respect nature, inform personnel about environmental impact, switch to less polluting fuels and use environment friendly chemicals.

  As indicated in Chapter 1, game farms constituted approximately 12.5% of the total agricultural land in South Africa in 2000. With a total of 1,7 million head of game, this increased in 2002 to 13,3%, while national and provincial game reserves only covered 6% or 6,1 million ha of land in South Africa (**Eloff, 2002a:78; Erasmus, 2000:21**; **Flack, 2002a:29; Van der Walt, 2002**). Therefore it is clear that game farms do contribute enormously to conservation in South Africa.
- Factor two revealed the importance of ***local culture and architect*** that included aspects such as visits by local schools, buildings with natural ventilation, respect nature and local culture, local flavour, keep local character and to learn a few words of local culture. Local culture and local architecture were listed in Table 2.3 (Chapter 2) as aspects that form part of the criteria for sustainable ecotourism development **(Hobson & Essex, 2001:134; Mohasi, 1999:29; Harris & Leiper, 1995:xxiii; Myburgh & Saayman, 1999; Milne, 1998:44, Yunis, 2001)**.

- Factor three revealed the ***involvement of tourists and host community***. Aspects that form part of factor three were cooperation with local government, national government, visitors to interact with local culture, cooperation relationship with local community and educate tourists regarding there local culture. This factor is supported by Chapter 2 where it was indicated that sustainable tourism is tourism that meets the needs of tourists and the tourism industry and host communities today without compromising the ability of future generations to meet their own needs **(Hobson & Essex, 2001:133; Pigram & Wahab, 1997:3)**.
- Factor four revealed the use of ***environment friendly products***. Important aspects were to minimise packaging that can harm nature, reduce the consumption of natural resources, recycle waste, reduce food miles and monitor sewage and energy from non-renewable resources. **Swarbrooke (1999:14)** agrees by stating the following: sustainable tourism is tourism that is economically viable but does not destroy the resources on which the future of tourism will depend, notably the physical environment and the social fabric of the host community **(Swarbrooke, 1999:14)**.
- Factor five indicated the ***local community*** and the following aspects had a high loading factor: community based tourism, use local entrepreneurs, partnership with local community, visitors to spend more money in local community, buy local community products and visit shebeens and local museums.
- Factor six touches on environmental issues, such as minimise environmental impacts, environment friendly products, local indigenous species and no tourists to ecologically sensitive areas. **Swarbrooke (1999:14) and Inskeep (1991:33)** state that sustainable tourism is: The protection, enhancement and improvement of the various components of man's environment, are among the fundamental conditions for the harmonious development of tourism.

Table 4.19 shows the ***mean and standard deviation,*** indicating that all factors are seen to be important to very important, considering the scale that was used in the questionnaire, namely 1 = not important, 2 = important and 3 = very important or as can be seen in columns six and seven of Table 4.19, where the minimum was one and the maximum three. Column five (Table 4.19) "Coefficient of variation" shows that there is no big difference, percentage-wise, between the answers of each factor. Factors that respondents regard as very important are factor one (conservation and resources), factor two (local culture/architecture) and factor six (environmental issues). Factor five (local community) was seen to be not as important as the other factors.

Table 4.19: Standard deviation of factors

Factor	N	Mean	Standard Deviation	Coefficient of variation	Minimum	Maximum
1	75	2.44	0.45	18%	1	3
2	77	2.33	0.46	19%	1	3
3	82	2.20	0.44	20%	1	3
4	74	2.26	0.53	23%	1	3
5	81	2.11	0.51	24%	1	3
6	78	2.37	0.39	16%	1	3

4.6 CONCLUSION

In conclusion the research showed that the majority (61%) of game farms that formed part of the research are between 1 001 and 5 000 ha in size with most game farms situated in the Limpopo Province (46.3%). The majority of game farms (56%) were converted from stock/cattle farms to game farms and are managed as game farms between 1 and 10 years (64%). The high conversions lead to a situation where the majority of game farm owners were not trained and educated in the tourism field. Previous farmers, now game farmers, are familiar with normal farming aspects such as carrying capacity, feeding of game and game capturing, to name just a few, but tourism related aspects are unfamiliar to them. This was proven were questioned on the types of activities that they thought were important for game farms.

Activities that were rated as very to extremely important are as follows:

- Breeding of rare/endangered game.
- Breeding of game.
- Trophy hunting.
- Biltong hunting.
- Green safaris.

These activities, as indicated in the chapter, are what one can refer to as the traditional types of activities on game farms that have been passed on from previous generations. This means that there is room for developing the adventure or the so-called more tourism side of game farm tourism by implementing 4x4 trails, horse trails and other adventure activities where possible. This will lengthen the season and increase the income of game farms.

Activities that were seen to be not at all important are:

- Hot air balloon safaris.

- Fishing trips.
- Mountain bike trails.
- Venison sales overseas.

The four provinces that hosted the most types of game species are Limpopo, Northern Cape, North-West and KwaZulu-Natal. Ten most popular species that are found on the respondents' properties, in no specific order, are impala, kudu, springbok, duiker (common), warthog, blue wildebeest, waterbuck, eland, ostrich and gemsbok.

Aspects that were most implemented regarding sustainable ecotourism development, are summarised in Table 4.20.

Table 4.20: Most implemented sustainable ecotourism development aspects

SUSTAINABLE ECOTOURISM DEVELOPMENT ASPECTS	
1. Promote and ensure the respect for and dignity of people in the development, marketing and promotion of tourism.	97%
2. Promote a sound, proud, service ethic among all participants in the tourism sector.	96%
3. Avoid damaging the environmental quality of the enterprise's neighbourhood by noise or light pollution.	92%
4. Is visitor safety a paramount concern?	89%
5. The exploitation of human beings in any form, particularly sexual, and when applied to women and children, should be energetically combated with the cooperation of all concerned.	89%
6. In accordance with the Batho Pele principle, provide visitors with inclusive, honest and reliable information.	88%
7. Follow best practice guidelines to minimise environmental impact and to reduce energy requirements for lighting, cooling and heating.	88%
8. Is hospitality the prevalent attitude of employees?	87%
9. Educate tourists regarding local culture and, where necessary, make them aware of how they should behave to respect it.	87%
10. Plan new developments only in areas where the use of water and other natural resources for tourism will not conflict with the local community needs, now or in the foreseeable future.	86%
11. Design buildings with natural ventilation and actively plan to reduce resource use during the construction and operational phases.	86%
12. Negative social and cultural impact associated with tourism, such as increased crime, drug and alcohol abuse and prostitution should be monitored and be proactively addressed in cooperation with the community.	84%
13. Invest a percentage of profits or turnover in species conservation or habitat restoration and management.	84%
14. Ensure that tourism does not undermine the resource rights, traditional knowledge and skills	83%

of the local community.	
15. Use local materials (where sustainable) and local architectural styles on a scale that does not create a negative aesthetic impact.	82%
16. Recognise that tourism can create revenue from cultural heritage, traditional ways of life, wildlife and habitats.	81%
17. Replacement or avoidance of environmentally dangerous substances and products.	80%
18. Look for ways in which the enterprise and its guests can assist with the conservation of natural heritage.	80%

Factor analysis was conducted and six factors come out strongly, namely factor one: conservation and resources; factor two: local culture/architecture; factor three: involvement/tourists and host community; factor four: environment friendly products; factor five: local community and factor six: environment issues. All factor loadings were above 0.4 and a highest of 0.84.

To conclude Chapter 4 it can be stated that the majority of game farms in South Africa that formed part of the survey are developed as sustainable ecotourism attractions when looking at the natural/conservation/environmental side as well implementing cultural aspects such as learning the language of the host culture, but when looking at the community/stakeholders relationship one tends to find that there is still room for improvement in getting communities more involved in developments and letting them receive more advantages/benefits from tourism developments.



CHAPTER 5

RECOMMENDATIONS AND CONCLUSIONS

"After all, we cannot expect nature's forgiveness forever"

Monte Hummel

5.1 INTRODUCTION

From Chapter 1 it is clear that tourism, especially ecotourism, in South Africa is growing at a rapid pace. Each year more and more tourists travel to South Africa with their main aim to visit places that are based on the natural environment. Tourists want to interact with nature and learn about the environment that they are visiting (**Saayman, 2000**). This puts pressure on the tourism products situated in the natural environment to be more and more sustainable. Resources that are used for these products need to be conserved for future generations **(Wearing & Neil, 1999:xiv)**. The main goal of this study, as indicated in Chapter 1, was to determine aspects that will contribute to the sustainable ecotourism development of game farms. To achieve the main goal, the following objectives were set and achieved:

- To indicate how game farms form part of ecotourism (Chapter 2).
- To do a theoretical analysis of ecotourism and sustainable tourism development (Chapter 2).
- To determine where game farm tourism originated (Chapter 3).
- To determine the average size of game farms (Chapter 4).
- To determine the number of years that game farms exist in South Africa (Chapter 4).
- To determine the activities that are provided on game farms for visitors (Chapter 4).
- To determine which sustainable ecotourism development aspects are important for game farm owners (Chapter 4)?

The aim of this chapter is to draw conclusions and make recommendations concerning the issues described in the study for further research.

5.2 CONTRIBUTIONS OF THE STUDY

The main contributions of this study to the game farm tourism industry are as follows:

1. Firstly, criteria for sustainable ecotourism development was compiled that will assist game farm owners in developing their game farms sustainably from an ecotourism point of view.
2. Secondly, this research was one of the first in South Africa that studied sustainable ecotourism development of game farms, therefore through these results a theoretical model has been developed to indicate the role of game farms as part of ecotourism.
3. Thirdly, the statistical analysis of the results of the study have also weighed up the most important aspects of sustainable ecotourism development.
4. Fourthly, aspects that need attention and are neglected by game farm owners, were also identified.

5.3 CONCLUSIONS

The conclusions that follow are the main conclusions of the study. Firstly, conclusions regarding the literature study and secondly, conclusions regarding the survey will be discussed.

5.3.1 What is ecotourism?

The study revealed that ecotourism comprises of:

- **Tourism in undisturbed or protected areas**, fostering understanding, appreciation and conservation of the flora, fauna and geology.
- **Tourism that experiences** the **local cultures** of different ethnic groups.
- Tourism that includes the **natural history** of an area.
- Contributes to the visited area through labour or financial means.
- Implies a **managed approach** by the host country or area in order to establish and maintain the site with the participation of the local residents.
- It is important that participants **experience and learn** about nature.
- **Environmentally responsible travel** and visitation to enjoy and appreciate nature that promotes conservation and **sustainable development.**
- It is tourism that includes a scientific, aesthetic and philosophical dimension.
- **Stewardship** for the land and its indigenous people.
- Ecotourism tends to attract people who wish to **interact with and actively participate in nature.**

- **Educational** component or interpretation of participation. This means that tourists are actively involved and do learn from their visit.
- **Ecotourism is based on three pillars:**
  - promotion and enhancement of the natural and cultural environment;
  - effective planning and sustainable management of the environment; and
  - participation of the local community.
- Ecotourism must have a **minimum impact** on the **environment** and the host **communities**.
- Ecotourism is tourism that is based on the **natural environment**.
- Ecotourism forms part of alternative tourism and not mass tourism. Ecotourism is also part of nature-based or wildlife tourism, or in other words a type of the just-mentioned two.

5.3.2 Game farms: part of ecotourism

The following aspects were indicated in Chapter 3 (Table 2.7) as aspects that form part of ecotourism that also forms part of game farm tourism:

- Game farms provide a learning experience when visitors visit game farms to see and learn about game species.
- Game farms with provide visitors with opportunity to a**ppreciation and study** wildlife and natural resources.
- Game farms contribute to conserve the fauna and flora as well as to contribute to the quality of the environment.
- Tourism at game farms is conducted in a **responsible manner.**
- Game farms form part of **undeveloped natural** areas to be experience by tourists.
- Game farms directly and indirectly contribute to the area visited.
- Game farms strengthen the **economic well-being** of local residents.
- Game farms imply a **managed approach,** which commits to establishing and maintaining the area
- Game farms lead to the participation of **local residents** in the tourism industry.
- Game farms include the interaction between the tourist, nature and culture and is a tool for conservation.

The study showed that game farms form part of ecotourism. The only aspect that was seen as a possible stumbling block was the **consumptive use** of natural resources in the form of hunting. It was clearly explained that South Africa is unique in the sense that most, if not all game farms, are fenced therefore carrying capacity becomes a problem if hunting is not allowed. In return, hunting generates money that can be used to promote and strengthen

nature conservation. Even SANParks moved away from the old view that conservation areas were simply seen as a place for wildlife preservation and not for human consumption and interaction. Today in South Africa where there is less available land for human use, it is important that the surrounding communities must experience that they do benefit from the conserved areas. If not, the outcome can be far worse.

5.3.3 Sustainable ecotourism development

The following are the main elements of sustainable ecotourism development:

- To link a **development policy with environmental management**; the first step being to review the project plans and programmes from an environmental point of view.
- To have a **regional-level environmental management** scheme that can provide a framework in guiding local environmental management programmes.
- To **integrate tourism development and environmental management policies** at local, regional and national level.
- **General concepts of sustainable ecotourism development**
  - Development that *must be* controlled.
  - *Appropriate scale* of development for the area that will be developed.
  - *Long term* development.
  - *Qualitative* form of development.
  - *Control* by local community.
- ***Development strategies***
  - Plan and then develop the game farm.
  - Concept-led schemes are essential.
  - One must take the landscape info consideration.
  - Pressure and benefits must be diffused.
  - Local developers must be used for developing game farms.
  - Local people need to be employed for the development.
  - Vernacular architecture.
- ***Tourist behaviour***
  - Some mental preparation to understand ecotourism is important.
  - Learning local language is very important.
  - Tactful and sensitive behaviour towards the local environment.
  - Quiet and must fit in at you're place.
  - Repeat visits are important to the area.

5.3.4 *Growth of game farm tourism*

The following conclusions can be made regarding the growth of game farms is South Africa:

- Historical background of game farms in South Africa can be divided into three stages, namely:
  - Stage 1: 1652 until the end of the 19th century.
  - Stage 2: post Anglo-Boer war until 1960.
  - Stage 3: 1960 up to the present.
- Sustainable game farm tourism is based on four pillars:
  - Breeding game and rare/endangered game species.
  - Hunting.
  - Ecotourism.
  - Processed game products.
- 2002 statistics showed that **13.3% of the agricultural land was used for game farming,** while national and provincial game reserves only covered 6% or 6.1 million ha of land in South Africa.
- Game sales generated R105 million in 2002 with an average growth rate of R38 million per year over a 12 year period.
- Based on the fact that there are **18 000 registered hunters** at South African Hunters and Game Conservation Association, the total amount generated by them for one hunting trip per year is approximately R36 million.
- The average **game farm is too small** to implement the suggested strategies (conservancies and zoning) when considering that almost 50% of the game farms are in the Limpopo Province with an average size of 1 340 ha. This makes it difficult to combine hunting with other ecotourism activities such as walking safaris, game drives and horse trails.
- The fact that the industry exist 1 to10 years makes it a **very young industry** still and vulnerable.
- There is a movement away from the **typical traditional approach** of "Sun, Sea, Sand and Sex" tourism to a tendency where tourists want to interact with nature and the environment. Tourists do not just want to sit in a mini bus or bus and do game viewing. They want to interact where possible and learn about nature and culture.
- Game farms **form 80%** of the land that is used for nature conservation in South Africa.
- The growth in game farms was stimulated by various factors, such as:
  - the discontinuation of stock or crop farming subsidies;
  - cattle theft;
  - dry climate of certain areas;
  - new labour laws; and

- the tremendous growth in tourism, especially ecotourism.

5.3.5 Main conclusions regarding survey

The following are the main conclusions of the survey that was conducted:

- The research indicated that the **majority (61%)** of the game farms are between **1 001 and 5 000 ha in size.**
- The majority of game farms (56%) **were converted from stock/cattle farms** to game farms.
- Game farm tourism is a **relatively young industry** and has been managed for 1 to 10 years.
- The four provinces that host the most types of game species are **Limpopo, Northern Cape, North-West and KwaZulu-Natal.**
- The **ten most popular species**, in no specific order, are impala, kudu, springbok, duiker (common), warthog, blue wildebeest, waterbuck, eland, ostrich, and gemsbok.

Activities that respondents rated as **very to extremely important** are as follows:

- Breeding of rare/endangered game.
- Breeding of game.
- Trophy hunting.
- Biltong hunting.
- Green safaris.

Activities that were seen as **not at all important** are:

- Hot air balloon safaris.
- Fishing trips.
- Mountain bike trails.
- Venison sales overseas.

Ten most implemented sustainable ecotourism development aims found on game farms are to:

- promote and ensure the **respect and dignity of people** in the development, marketing and promotion of tourism;
- promote a **sound, proud, service ethic** among all participants in the tourism sector;
- **avoid damaging the environmental quality** of the enterprise's neighbourhood by noise or light pollution;
- establish whether **visitor safety is a paramount** concern;

- energetically combat, with the cooperation of all concerned, the **exploitation of human beings in any forms**, particularly sexual, when applied to women and children;
- provide visitors with inclusive, honest and reliable information in accordance with the Batho Pele principle;
- follow best practice guidelines to **minimise environmental impact** and to reduce energy requirements for lighting, cooling and heating;
- question whether **hospitality is the prevalent attitude** of employees;
- **educate tourists regarding local culture** and, where necessary, make them aware of how they should behave to respect it.

The factor analysis indicated six factors that came out strongly, which are as follows:

- Factor one: conservation and resources.
- Factor two: local culture / architecture.
- Factor three: involvement/ tourist and host community.
- Factor four: environment friendly products.
- Factor five: local community.
- Factor six: environment issues.

As indicted in Chapter 1 the main goal was to determine whether game farms are developed as sustainable ecotourism attractions. The answer to this goal is as follows: the majority of game farms in South Africa that form part of the survey are developed as sustainable ecotourism attractions when seen from a natural/conservational/environmental angle and also implement cultural aspects, such as learning local languages. When considering the community/stakeholders relationship, one tends to find that these aspects of sustainable development are not completely met (Table 5.1). More needs to be done to get communities to become involved in developments so that they can receive more advantages/benefits from tourism developments at the end of the day. For game farms to be even more sustainable, the owners need to invest in larger units (farms) so that they can provide more activities not only the traditional ones but also activities such as 4x4 trails, adventure activities (rock climbing, abseiling, mountain biking, quad bikes, night walking safaris) and horse trails.

Table 5.1: Neglected sustainable ecotourism development aspects

Category	%
Work closely with local community to develop new products.	46%
Develop partnerships and joint ventures in which the community has a significant stake.	66%
Identify projects that the enterprise can support that will benefit the poor.	51%
Assist in the development of the local community and emergent enterprises.	45%
Foster the development of community-based tourism products by providing marketing and	47%

mentoring support.	
Encourage tour operators to be more innovative in their itineraries by, for example, including shebeens, loc museums and arts and craft shops in their tour itineraries.	57%
Consider using local entrepreneurs in developing community initiatives.	48%
Consider what contributions the enterprise can make to scholarships, local youth sports teams and community causes.	50%
Create opportunities for visitors to interact with locals in an unstructured, spontaneous manner.	42%

5.4 RECOMMENDATIONS

The following recommendations can be made regarding game farms as sustainable ecotourism attractions:

- All four pillars of game farm tourism need to be developed by game farm owners. This will enable game farmers to provide a variety of products that will extend their tourism season which, on the other hand, will generate a bigger income. This will make game farms economically more sustainable.
- In order to accommodate the above-mentioned four pillars, it is recommended that game farm owners consider the different approaches as discussed in Chapter 3 namely the sectoral approach (zoning) and/or conservancies. This will lead to larger natural areas that can provide a better and wider variety of products, which will enable game farm owners to implement more adventure types of activities such as mountain biking, 4x4 trails, walking safaris and horse trails.
- It is also recommended that more be done by the private sector in cooperation with the government to uplift and support the struggling game meat industry which is still not functioning at full capacity.
- It is also recommended that more research be done to determine the economic contribution of game farm tourism in total. Currently the only relatively well research areas are game sales and trophy hunting. Areas that still need attention are the economic contribution of biltong hunting, non-hunting ecotourist and game meat sales.
- More needs to be done to showcase local artefacts and products such as paintings, crafts, handmade products, for example things that are made by the local V.L.V. (Vroue Landbou Vereniging).
- Not enough marketing is done by tour operators to include game farms in their itineraries, especially in the less known areas of South Africa.
- When relocating species, farmers must make sure that species are adaptable to the environment in which they will be relocated. This will save game farm owners money in the sense that game will breed easily and increase rapidly.

- It is recommended that game farm owners maintain a balance between the ecological carrying capacity and the economic carrying capacity of game farms. Product owners sometimes tend to think that making a profit is the only way of measuring sustainable development, which is not the case when nature is the product. If the natural environment is destroyed, the economic cycle will end.

5.5 RECOMMENDATIONS REGARDING FURTHER RESEARCH

The following areas regarding game farm tourism need more research:

- To determine the economic value and contribution of biltong hunters to the game farm industry in South Africa.
- To determine the economic value and profile of international as well as local ecotourists who visit game farms and are interested in other ecotourism attractions, such as walking safaris, game drives and educational walks, rather than hunting.
- To determine the socio-economic impact of game farm tourism on a community/surrounding area as well as on the province that it is situated in.

REFERENCES

ABSA. 2003. Report: Game ranch profitability in South Africa. 2003 edition. Johannesburg : SA Financial Sector Forum. 41 p.

AGENDA 21. 2003. Promoting sustainable agriculture and development: UN department of economic and social affairs. [Web:] ttp://www.un.org/esa/susdev/documents/agenda21/english/agenda21chapter14.htm [Date of access: 21 Nov. 2003].

ARONSSON, L. 2000. The development of sustainable tourism. London : Bath Press. 191 p.

BALDUS, R. 2003. African wildlife can survive without hunting - but can not without money. *African indaba,* 1(4):1-5, Jul.

BOTHMA, J. DU P. 1995. Belangrike ekologiese beginsels. (*In* Bothma, J. du P., *red.* Wildplaasbetsuur. Nuwe uitgebreide uitgawe. Pretoria : Van Schaik. p. 7-21.)

BOTHMA, J. DU P. 2002a. Some economics of wildlife ranching. (*In* Penzhorn, B.L., *ed.* Game ranch planning and management. Symposium held at Onderstepoort, Pretoria on 1-2 Nov. 2002. Pretoria : Wildlife group of South African veterinary association. p. 23-29.)

BOTHMA, J. DU P. 2002b. The semantics and selected principles of some wildlife production systems. (*In* Penzhorn, B.L., *ed.* Game ranch planning and management. Symposium held at Onderstepoort, Pretoria on 1-2 Nov. 2002. Pretoria : Wildlife group of South African veterinary association. p. 5-13.)

BOTHMA, J. DU P. & TEER, J.G. 1995. The semantics and conservation value of some game reduction systems. (*In* Bissonette, J.A. & Krausman, P.R., *eds.* Integrating people and wildlife for a sustainable future. Proceedings of the First International Wildlife Management Congress. Bethesda : The Wildlife Society. p. 313-317.)

BRIASSOULIS, H. 2002. Sustainable tourism and the question of the commons. *Annals of tourism research,* 29(4):1065-1085, Oct.

BRITS, D. & HERSELMAN, W. 1988. Wildbenutting. *Fauna & flora,* 44:18-24.

BRYAN, B. 1991. Ecotourism on family farms and ranches in the American West. (*In* Whelan, T., *ed.* Nature tourism: managing for the environment. Washington, D.C. : Island Press. p. 75 - 88.)

BUCKLEY, R. 1994. A framework for ecotourism. *Annals of tourism research,* 21(3):661-669.

CARRUTHERS, J. 1988. Game protectionism in the Transvaal, 1900-1910. *SA historical journal*, 20:33-56.

CARRUTHERS, J. 1989. Game protection in the Transvaal - 1846 to 1926. Cape Town : UCT. (Thesis - D.Phil.) 427 p.

CHRISTIE, I.T. & CROMPTON, D.E. 2001. Tourism in Africa. [Web:] http://www.worldbank.org/afr/wps/index.htm [Date of access: 21 Nov. 2003].

CIC (Council for Game and Wildlife Conservation). 2003. Young people: the biggest lobby group for sustainable use. *African indaba,* 1(4):4-6, Jul.

CLAYTON, A. 2002. Strategies for sustainable tourism development. *Social and economic studies,* 51(1):61-98, Mar.

COCCOSSIS, H., EDWARDS, J.A. & PRIESTLY, G.K. 1996. Sustainable tourism: European experiences. Guilford : Biddles. 212 p.

CONROY, A. 2001. The philosophy of game ranching is South Africa. (*In* Ebedes, H., Reilly, B., Van Hoven, W. & Penzhorn, B., *eds.* Sustainable utilization-conservation in practice. Proceedings of the 5th International wildlife ranching symposium held at Pretoria on 20-23 March 2001. Pretoria : South African Game Ranchers Association. p. 2-23.)

CONTOUR. 1999. Pilanesberg National Park: analysis and comparison of tourism, situational analysis and park management plan. Rustenburg. 36 p.

COOPER, C., FLETCHER, J., GILBERT, D. & WONHILL, S. 1993. Tourism principles & practice. London : Pitman. 290 p.

COX, G.W. 1997. Conservation biology: concepts and applications. 2nd ed. Dubuque, Iowa : Wm. C. Brown Publishers. 362 p.

DAMM, G.R. 2003. Economic analysis of the commercial consumptive use of wildlife in Botswana. *African indaba,* 1(1):12, Jan.

DAVIS, W. 1991. The green light: a guide to sustainable tourism. London : English Tourism Board. 48 p.

DAWSON, C.P. 2001. Ecotourism and nature-based tourism: one end of the tourism opportunity spectrum. (*In* McCool, S.F. & Moisey, R.N., *eds.* Tourism, recreation and sustainability: linking culture and the environment. Wallingford : CABI Publishing. p. 41-53.)

DU PLESSIS, P.C. 1997. Benuttingsvorme in die wildbedryf - 'n bestuurs- rekeningkundige evaluering. Potchefstroom : PU vir CHO. (Proefskrif - Ph.D.) 410 p.

DU PLESSIS, P.C. 2000. Game farmers not concerned enough. *SA game & hunt*, 6(7):9, Jul.

EAGLES, P.F.J. 1996. Fragile landscape: seeking eco-benefits. *Ecodecision,* 20:17-20.

EBEDES, H. 2002. Preface. (*In* Ebedes, H., Reilly, B., Van Hoven, W. & Penzhorn, B., *eds.* Sustainable utilization-conservation in practice. Proceedings of the 5th International wildlife ranching symposium held at Pretoria on 20-23 March 2001. Pretoria : South African Game Ranchers Association. p. 7-9.)

ELLIS, S. & STEYN, H.S. 2003. Management dynamics. *Contemporary research*, 12(4):51-53.

ELOFF, T. 1999a. Wins uit wildboerdery. *SA wild & jag*, 5(2):22-25, Feb.

ELOFF, T. 1999b. Professionalisme in die wildbedryf. *KLK nuus,* 29(1):9. Jan.

ELOFF, T. 2000. Die omvang van die wildbedryf in Suid-Afrika. Potchefstroom : PU vir CHO. (Ongepubliseerd.)

ELOFF, T. 2001. Knelpunte en geleenthede. *SA game & hunt*, 2(5):9, Jan.

ELOFF. T. 2002a. The economic realities of the game industry in South Africa. (*In* Ebedes, H., Reilly, B., Van Hoven, W. & Penzhorn, B., *eds.* Sustainable utilization-conservation in practice. Proceedings of the 5th International wildlife ranching symposium held at Pretoria on 20-23 March 2001. Pretoria : South Africa Game Ranchers Association. p. 78-86.)

ELOFF, T. 2002b. Boerdery met skaars groter spesies. *Wild & jag*, 8(2):21, Feb.

ELOFF, T. 2003. Gemiddelde wildveilingpryse 2002. *Wild & jag,* 9(2):21, Feb.

ERASMUS, S.D. 2000. Die ekonomiese lewensvatbaarheid van 'n wildvleisbewerkingsaanleg in Suid-Afrika. Potchefstroom : PU vir CHO. (Verhandeling - M.Com.) 308 p.

FLACK, P.H. 2002a. The conservation revolution. *Game & hunt*, 8(10):29-33, Oct.

FLACK, P. H. 2002b. Exotic game - catching up with Texas? *Magnum:*76-80, Oct.

FLACK, P.H. 2003. Go for the kill. *African indaba*, 1(1):5-7, Jan.

FORSTNER, M., REIMOSER, F., HACKL, J. & HECKL, F. 2001. Criteria and indicators of sustainable hunting. [Web:] http://www.biodiv.at/chm/jagd/english/ study.pdf [Date of access: 10 Nov. 2003].

FOX, T. & DU PLESSIS, P. 2000. Hunting in Southern Africa. *Africa indigo,* 3(3):40-47.

FRASER, J. 1999. Tourism is worth R80, 6bn to SA. *Star:*6, Aug. 17.

FURSTENBURG, D. & VAN NIEKERK, P. 2004. Die wildbedryf en die voorgestelde wildhervestigingswet. *Wild & jag,* 10(6):30-31, Jun.

GCIS (Government Communication and Information System). 1998. South Africa Official Yearbook. Cape Town : Rustica. 564 p.

GCIS (Government Communication and Information System). 1999. South Africa Official Yearbook. Cape Town : Rustica. 576 p.

GLEN-LEARY, J. 1987. Go for game. *Farmers weekly*, 77034:12-14, Aug.

GOODWIN, H. 2001. Contribution of ecotourism to sustainable development in Africa. (WTO seminar on planning, development and management of ecotourism in Africa. Maputo, Mozambique held on 5-6 March 2001.)

GOUWS, A. 1999. Smul gevaar van surpluswild weg. *Landbouweekblad,* 1124:16-17, Nov.

GROSSMAN, D., HOLDEN, P.L. & COLLINSON, R.F.H. 1999. Veld management on the game ranch. (*In* Tainton, N., *ed.* Veld management in South Africa. Pietemaritzburg : University of Natal Press. p. 261-280.)

HAMMAN, K., VRAHIMIS, S. & BLOM, H. 2003. Can current trends in the game industry be reconciled with nature conservation? *African indaba,* 1(5):3-5, Sep.

HARRIS, R. & LEIPER, N. 1995. Sustainable tourism: an Australian perspective. Chatswood : Butterworth-Heinemann. 156 p.

HICKS, R. 1996/1997. Tactics for tourism. *Your own businesses*, 3(9):7, Dec./Jan.

HOBSON, K. & ESSEX, 2001. Sustainable tourism: a view from accommodation businesses. *Service industry journal,* 21(4):133-146, Oct.

HOFFMAN, L. 2003. Game meat and South African consumers. *African indaba*, 1(5):8-12, Sep.

HOUSTON, C. 1996. Wildboerdery: boer met toeriste. *Effektiewe boerdery,* 11(3):214-216, Apr.

IEA (International Energy Agency). 2001. Toward a sustainable energy future. Paris : OECD. 254 p.

INSKEEP, E. 1991. Tourism planning: an integrated and sustainable development approach. New York : Van Nostrand Reinhold. 508 p.

INTERNATIONAL CONSERVATION SERIES WHITE RIVER. 2003. Hunting in Klaserie, Timbavati, Umbabat and Balule. *African indaba,* 1(1):1-4, Jan.

IOANNIDES, D. 2001. Sustainable development and shifting attitudes of tourism stakeholders: toward a dynamic framework. (*In* McCool, S. F. & Moisey, R.N., *eds.* Tourism, recreation and sustainability. New York : CABI Publishing. p. 55-77.)

KERZNER, S. 1995. Foreword. (*In* Bennett, J.A., *ed.* Managing tourism services. Pretoria : Van Schaik. 414 p.)

KRYNAUW, D.J. 2001a. The sustainability of exclusive game ranch systems in South Africa, with special references to co-operation reserves. Bloemfontein : University of the Free State. (Dissertation – M.Agric.) 317p.

KRYNAUW, D.J. 2001b. Promoting conservation in game ranching through a sustainable ranching approach. (*In* Ebedes, H., Reilly, B., Van Hoven, W. & Penzhorn, B., *eds.* Sustainable utilization-conservation in practice. Proceedings of the 5th International wildlife ranching symposium held at Pretoria on 20-23 March 2001. Pretoria : South Africa Game Ranchers Association. p. 26-34.)

LANDMAN, M. 1993. Ekotoerisme al toeka gewild. *Custos:*13, Apr.

LEO-SMITH, K. 1993. Game ranching: is there a pot of gold at the end of the rainbow? *Effective farming*, 8(1):101-103, May.

McCOOL, S. F. & MOISEY, R. N. 2001. Introduction: Pathways and pitfalls in the search for sustainable tourism. (*In* McCool, S. F. & Moisey, R.N., *eds.* Tourism, recreation and sustainability. New York : CABI Publishing. p. 1-17.)

McINTOSH, R.W., GOELDNER, C.R. & RITCHIE, J.R. 1995. Tourism, principles, practices and philosophies. 7th ed. New York : Wiley. 551 p.

McNEELY, J.A., THORSELL, J.W. & CEBALLOS-LASCURAIN, H. 1992. Guidelines: development of national parks and protected areas for tourism; prepared with the assistance of IUCN. Madrid : Joint Publications. 53 p.

MEFFE, G.K. & CARROLL, C.R. 1994. Introductory concepts. (*In* Meffe, G.K. & Carroll, C.R., *eds*. Principles of conservation biology. Sunderland : Sinauer Associates. p. 3-110.)

MIDDLETON, V.T.C. & HAWKINS, R. 1998. Sustainable tourism: a marketing perspective. Oxford : Butterworth-Heinemann. 266 p.

MILNE, S.S. 1998. Tourism and sustainable development: exploring the global-local nexus. (*In* Hall, C.M. & Lew, A.A., *eds*. Sustainable tourism. Harlow : Prentice Hall. p. 35-49.)

MOHASI, L. 1999. Adventure travel and sustainable tourism development in Lesotho: the case of pony trekking. Pietermaritzburg : University of Natal. (Dissertation - M.Sc.) 149 p.

MSIMANG, M. 1995. New vistas for tourism industry. *R.S A. review*, 8(4):20-29, May.

MURPHY, P. 1985. Tourism: a community approach. New York : Methuen. 200 p.

MYBURGH, E. & SAAYMAN, M. 1999. Ecotourism in action: practical guidelines and principles. Potchefstroom : Leisure Consultants and Publications. 252 p.

OXFORD DICTIONARY OF ENGLISH. 2003. Farm/ranch. Oxford : Oxford University Press. 2088 p.

PAGE, S.J. & DOWLING, R.K. 2002. Ecotourism. Harlow : Prentice Hall. 338 p.

PHASA (Professional Hunters Association of South Africa). 2000. Professional Hunters Association of South Africa. Statistics. Pretoria : PHASA.

PHASA (Professional Hunters Association of South Africa). 2001. Professional Hunters Association of South Africa. Statistics. Pretoria : PHASA.

PHASA (Professional Hunters Association of South Africa). 2002. Professional Hunters Association of South Africa. Statistics. Pretoria : PHASA.

PHASA (Professional Hunters Associations of South Africa) 2003. Professional Hunters Association of South Africa. Statistics. Pretoria : PHASA.

PIGRAM, J. J. 1995. Resources constraints on tourism: water resources and sustainability. (*In* Butler, R. & Pearce, D., *eds.* Changes in tourism: people, places and processes. Londen : Routledge. p. 208-228.)

PIGRAM, J.J. & WAHAB, S. 1997. The challenge of sustainable tourism growth. (*In* Wahab, S. & Pigram, J.J., *eds.* Tourism, development and growth. London : Routledge. p. 3-13.)

PRETORIUS, L. 1996. Boerdery met groot toekoms: wild. *Landbouweekblad,* 77(928):10-12, Feb. 9.

PRETORIUS, L. 1998. Wildboerdery beplan sy oorlewing: wild. *Landbouweekblad,* 1077:16, Des.

PRIMACK, R. B. 1993. Essentials of conservation biology. Sunderland : Sinauer Associates. 564 p.

RADDER, L., VAN NIEKERK, P. & NAGEL, A. 2000. Matching the hunting experience staged by selected farms in the Eastern Cape to the value expectations of hunters. Port Elizabeth : PE Technikon. 53 p.

READER'S DIGEST UNIVERSAL DICTIONARY. 1988. Farm/ranch. London : Reader's Digest Association. 555 & 1270 p.

REID, D.G. 1999. Ecotourism development in Eastern and Southern Africa. Guelph : University of Guelph. 192 p.

RHODES, J.A. & SAAYMAN, M. 1998. Statistical analysis of domestic and international tourists: general. Potchefstroom : Institute for Tourism and Leisure Studies. 50p.

ROBINSON, G.A. 1993. Ecotourism: local community must benefit. *Custos*, 54(5):6-11, Oct.

SAAYMAN, M. 2000. En route with tourism. Potchefstroom : Leisure Consultants and Publications. 330 p.

SAAYMAN, M. & O'KELLY, W. 2003. The big question. (Television broadcast SABC 2).

SAAYMAN, M., SLABBERT, E. & SAAYMAN, A. 2002. Report and database: Mpumalanga tourism authority. Potchefstroom : Institute for Tourism and Leisure Studies. 98 p.

SAAYMAN, M. & VAN DER MERWE, P. 2003. A marketing analysis of tourist visiting: Addo Elephant, Karoo and Tsitsikamma National Parks. Potchefstroom : Institute for Tourism and Leisure Studies. 81 p.

SAAYMAN, M., VIVIERS, P. & SAAYMAN, A. 2002. North West socio-economic tourism audit. Potchefstroom : Institute for Tourism and Leisure Studies. 39 p.

SATOUR. 1998. Tourism leading global economical driver of the 21st century. *Satour news:*3, Dec.

SCHACK, W. 2004. Wildboerdery van wêreldgehalte: algemene filosofie, potensiaal, bedreigings, doelwitte. *Wild & jag,* 10(4):22-25. Apr.

SCRIVEN, L. & ELOFF, T. 2003. Markets derived from nature tourism in South Africa and KwaZulu-Natal. (*In* Aylward, B. & Lutz, E., *eds.* Nature tourism, conservation, and development in KwaZulu-Natal, South Africa. Washington, D.C. : World Bank Publishers. p. 247-324.)

SELMAN, P. 1996. Local sustainability. London : Paul Chapman Publishing. 175 p.

SHACKLEY, M. 1996. Wildlife tourism. London : Biddles. 152 p.

SHAW, S. & WILLIAMS, A.M. 1994. Critical issues in tourism: a geographical perspective. Oxford : Blackwell. 280 p.

SOUTH AFRICA. Department of Environmental affairs and Tourism. 1997. White paper on conservation and sustainable use of SA's biological diversity. [Web:] http://www.environment.gov.za/Po1Leg/Whitepapers/Biodiversity/Chapter3a.htm [Date of access: 20 Nov. 2003].

STEENKAMP, N. 1994. Afrotourism: landbou kan nie kers vashou. *Custos:* 8-13, Sept.

STEYN, H.S. (jr.) 2000. Practical significance of the difference in means. *Journal of industrial psychology*, 26(3):1-3.

SUTHERLAND, W.J. 2000. The conservation handbook: research management and policy. Cambridge : Blackwell Science. 296 p.

SWANEVELDER, L. 1997. Jag is 'n saak van lewe en dood. *SA wild & jag,* 3(2):15-17, Apr/Jun.

SWARBROOKE, J. 1999. Sustainable tourism management. New York : Cabi Pub. 371 p.

THORNTON, G. & FEINSTEIN, K. 2002. Tourism talk: a summery of the most important data and statistics relevant to the regional tourism industry. *The journal of Southern Africa tourism,* 1(3): 48-53, Nov.

VAN DER MERWE, C. 1996. How it all began. *African wildlife,* 50(3):7-8 , May/June.

VAN DER MERWE, P. & SAAYMAN, M. 2002a. Game farms as sustainable ecotourism attractions. (*In* Muuka, N.G., *ed.* Expanding the horizons of African business and development. Proceedings of the IAABD international conference, 2002. p. 602-608.)

VAN DER MERWE, P. & SAAYMAN, M. 2002b. Managing game farms from a tourism perspective. Potchefstroom : Ons Drukkers. 234 p.

VAN DER MERWE, P. & SAAYMAN, M. 2002c. A different approach to wildlife tourism and hunting. (*In* Ebedes, H., Reilly, B., Van Hoven, W. & Penzhorn, B., *eds.* Sustainable utilization-conservation in practice. Proceedings of the 5th International wildlife ranching symposium held at Pretoria on 20-23 March 2001. Pretoria : South Africa Game Ranchers Association. p. 128-136.)

VAN DER MERWE, P. & SAAYMAN, M. 2003. Determining the economic value of game farm tourism. (Paper delivered at the 55th International Atlantic Economic Conference at Vienna Austria on 13 - 16 March 2003.) Vienna. (Unpublished.)

VAN DER WALT, J. 2002. Proliferation of game ranches. *Game & hunt*, 8(10):7, Oct.

VAN DYK, A. 2003. Editor: South Africa Hunters & Game Conservation Association. Johannesburg. (Telephonic interview, January 20.)

VAN ROOYEN, N. & VAN ROOYEN, J. 2002. Handling and measuring trophies. (*In* Bothma, J. du P., *ed.* Game ranch management. 4th ed. Pretoria : Van Schaik. p. 513-546.)

VAN WYK, M.L. 1995. Die invloed van ekotoerisme op lewenskwaliteit in ontwikkelende gemeenskappe: 'n ontwikkelingskommunikasieperspektief. Potchefstroom : PU vir CHO. (Verhandeling - M.Com. (Komm.)) 152 p.

VAN ZYL, J. 1999. Kies 'n wenplaas met 'n sakeplan. *Finansies & tegniek,* 51(41):30, Nov.

VAN ZYL. J. 2000a. Eko-wins vervang die jagters. *Finansies & tegniek,* 52(4):30-31, Jan.

VAN ZYL, J. 2000b. 'n Boer maak 'n plan: wildbedryf: fokus. *Finansies & tegniek*: 22, Apr. 14.

WAHAB, S. 1997. Sustainable tourism in the developing world. (*In* Wahab, S. & Pigram, J.J., *eds.* Tourism, development and growth. London : Routledge. p. 3-13.)

WALTER, J. & NOBLE, A. Principles of sustainable development. [Web:] http://www.sustainabletourism_info-sheets.net [Date of access: 25 Feb. 2004].

WEARING, S. & NEIL, J. 1999. Ecotourism: impacts, potentials and possibilities. Oxford : Butterworth-Heinemann. 163 p.

WEAVER, D. & OPPERMANN, M. 2000. Tourism management. Brisbane, Australia : John Wiley. 468 p.

WHITE PAPER ON CONSERVATION AND SUSTAINABLE USE ***see*** SOUTH AFRICA.

WORLD BANK. 1998. World bank group and world tourism organisation examine role of tourism in development. [Web:] http://www.world-tourism.org/pressrel/ WBWTO [Date of access: 3 Dec. 1998].

WORLD TOURISM ORGANISATION (WTO). 1998a. Results prove strength of tourism. [Web:] http://www.world-tourism.org/newslett/febmar 99/1998results [Date of access: 19 March 1999].

WORLD TOURISM ORGANISATION (WTO). 1998b. Guide for local authorities on developing sustainable tourism. Madrid : WTO.

WORLD TOURISM ORGANISATION (WTO). 2001a. WTO long-term forecast tourism 2020 vision. [Web:] http://www.world-tourism.org/market_research/data/ forecast.htm [Date of access: 19 March 1999].

WORLD TOURISM ORGANISATION (WTO). 2001b. Africa to triple tourist numbers. [Web:] http://www.world-tourism.org/newsroom /releases/more _releases/R010607.html [Date of access: 19 March 1999].

WWF-SA (WORLDWIDE FUND FOR NATURE-SOUTH AFRICA). 2003. WWF-SA position statement on sustainable use. *African indaba,* 1(1):14, Jan.

YUNIS, E. 2001. Conditions for sustainable ecotourism development and management. [Web:] http://www.world-tourism.org/sustainable/IYE/Regional _activities/Mozambique/Spee [Date of access: 21 Feb. 2004].

ZEIGER, J.B. & MCDONALD, D. 1997. Ecotourism: wave of the future. *Parks and recreation,* 32(9): 84-92, Sept.

APPENDIX

SUSTAINABLE ECOTOURISM DEVELOPMENT OF GAME FARMS

A. DEVELOPMENTAL ASPECTS

1 In which province is your game farm located?_____

2 How did you acquire the farm?

Bought cattle or crop farm and converted it into game farm	1
Bought already-existing game farm	2
Inherited cattle or crop farm and converted it into game farm	3
Inherited already-existing game farm	4
Other	5

3 What is the size of the game farm in hectares?_____

4 What do you consider to be a suitable size for a sustainable game farm in your area?_____

5 Indicate the number of years the farm has been managed as a game farm

1–5 years	1
6–10 years	2
11–15 years	3
15 years or more	4

6 Which species are found on your game farm?

Blesbok	1
Bontebok	2
Buffalo	3
Burchell's zebra	4
Bushbuck	5
Bushpig	6
Duiker blue	7
Duiker common	8
Duiker red	9
Eland	10
Elephant	11
Giraffe	12
Grey rhebuck	13
Grysbok Cape	14
Grysbok Sharpe	15
Hartebeest red	16
Hippopotamus	17
Impala black-faced	18
Impala common	19
Klipspringer	20
Kudu	21
Mountain reedbuck	22
Mountain zebra Cape	23
Mountain zebra Hartmann's	24
Nyala	25
Oribi	26
Oryx	27
Ostrich	28
Reedbuck	29
Rhinoceros black	30
Rhinoceros white	31
Roan antelope	32
Sable antelope	33
Springbok	34
Steenbok	35
Tsessebe	36
Warthog	37
Waterbuck	38
Wildebeest black	39
Wildebeest blue	40
Other (Specify)	41

7 Rate the following activities on scale of importance (Please answer all possibilities)

Extremely important	5
Very important	4
Important	3
Less important	2
Not important at all	1

		1	2	3	4	5
A	To breed rare/endangered game species	1	2	3	4	5
B	To breed game species	1	2	3	4	5
C	To offer trophy hunting	1	2	3	4	5
D	To hunt game for biltong	1	2	3	4	5
E	To offer bird hunting	1	2	3	4	5
F	To offer "green" safaris	1	2	3	4	5
G	To offer bow hunting	1	2	3	4	5
H	To offer fishing trips	1	2	3	4	5
I	To sell venison overseas	1	2	3	4	5
J	To sell venison to local markets	1	2	3	4	5
K	To provide bird watching	1	2	3	4	5
L	To provide hiking trails	1	2	3	4	5
M	To offer photographic safaris	1	2	3	4	5
N	To provide 4x4 trails	1	2	3	4	5
O	To provide adventure activities	1	2	3	4	5
P	To provide hot air balloon safaris	1	2	3	4	5
Q	To provide horse trails	1	2	3	4	5
R	To provide mountain bike trails	1	2	3	4	5
S	To provide educational walks	1	2	3	4	5
T	Other	1	2	3	4	5

B SUSTAINABLE ECOTOURISM DEVELOPMENT ASPECTS

In future we will regard this as **VERY IMPORTANT**	3
In future we will regard this as **IMPORTANT**	2
In future we will regard this as **NOT IMPORTANT**	1

No, in our organisation we **do not practise** this statement	
Yes, in our organisation this statement is already in **practice**	

		Yes 1	No 2		N 1	I 2	V 3
1	**Assess economic impacts as a prerequisite for developing game farms as ecotourism attractions**						
A	Extend the season of enterprises by developing new products to create better employment conditions.	1	2	AA	1	2	3
B	Recognise that tourism can create revenue from cultural heritage, traditional ways of living, wildlife and habitats.	1	2	BB	1	2	3
C	Encourage business relationships between foreign entrepreneurs and local and emerging entrepreneurs.	1	2	CC	1	2	3

		Yes	No		N	I	V
2	**Ensure that communities are involved in and benefit from tourism**						
A	Work closely with local community to develop new products that provide complementary products for tourism enterprises.	1	2	AA	1	2	3
B	Develop partnerships and joint ventures in which the community has a significant stake.	1	2	BB	1	2	3
C	Identify projects that the enterprise can support that will benefit the poor.	1	2	CC	1	2	3
D	Assist in the development of the local community and emergent entrepreneurs.	1	2	DD	1	2	3
E	Foster the development of community-based tourism products by providing marketing and mentoring support.	1	2	EE	1	2	3
F	Encourage visitors to spend more money in the local economy.	1	2	FF	1	2	3
G	Encourage tour operators to be more innovative in their itineraries by, for example, including shebeens, local museums and arts and craft shops in their tour itineraries.	1	2	GG	1	2	3
H	Consider using local entrepreneurs in developing community initiatives.	1	2	HH	1	2	3
I	Be transparent when reporting community benefits	1	2	II	1	2	3
J	Consider establishing targets to monitor progress in achieving objectives.	1	2	JJ	1	2	3
K	**Cooperation relationship with regard to:**			KK			
a	local communities	1	2	aa	1	2	3
b	tourists	1	2	bb	1	2	3
c	small enterprises (sectoral bodies)	1	2	cc	1	2	3
d	local councils	1	2	dd	1	2	3
e	the government	1	2	ee	1	2	3
3	**Maintain and encourage social and cultural diversity**						
A	Develop "tourism with dignity and respect", and nurture local cultural (including religious) experiences.	1	2	AA	1	2	3
B	Use tourism as a catalyst for human development, focusing on gender equality and career development	1	2	BB	1	2	3
C	Tourism development should not compromise respect for social and cultural and religious right, or the essential human rights of people to food, a safe and clean environment, work, health and education.	1	2	CC	1	2	3
D	Support visits by local school children to tourism sites that promote and display their heritage	1	2	DD	1	2	3
E	Consider what contributions the enterprise can make to scholarships, local youth sports teams and community causes	1	2	EE	1	2	3
F	Showcase local cultural artefacts in your enterprise and encourage the development thereof	1	2	FF	1	2	3
G	Encourage craftsmen and other cultural workers to maintain the authenticity and cultural values of their products.	1	2	GG	1	2	3
H	Give enterprises a local flavour by serving local dishes and sourcing soft furnishings, arts and crafts locally	1	2	HH	1	2	3
I	Identify cultural heritage resources in the local area and develop them as sustainable tourist attractions.	1	2	II	1	2	3
J	Encourage tourists to show respect by learning a few words of the local language and learning about the host culture and traditions.	1	2	JJ	1	2	3

		Yes	No		N	I	V
K	Draw the attention of ground handlers, the media and tour operators to complementary product opportunities in the local community.	1	2	KK	1	2	3
L	Is hospitality the prevalent attitude of employees?	1	2	LL	1	2	3
M	Is visitor safety a paramount concern?	1	2	MM	1	2	3
4	**Be sensitive to the host culture**						
A	Respect, develop and invest in local cultures and protect them from over-commercialisation and over-exploitation.	1	2	AA	1	2	3
B	Respect indigenous intellectual property, especially when setting up contractual arrangements for the use of indigenous knowledge.	1	2	BB	1	2	3
C	Use local guides, and support them so as to ensure that the community speaks for itself, and to increase the revenues going into the local community	1	2	CC	1	2	3
D	Develop a local social contract for interactions and behaviour between the local community and tourists	1	2	DD	1	2	3
E	Create opportunities for visitors to interact with locals in an unstructured, spontaneous manner	1	2	EE	1	2	3
F	In accordance with the Batho Pele principle, provide visitors with inclusive, honest and reliable information	1	2	FF	1	2	3
G	Promote a sound, proud, service ethic among all participants in the tourism sector.	1	2	GG	1	2	3
H	Promote and ensure the respect for and dignity of people in the development, marketing and promotion of tourism	1	2	HH	1	2	3
I	Ensure that tourism does not undermine the resource rights, traditional knowledge and skills of the local community.	1	2	II	1	2	3
J	Negative social and cultural impacts associated with tourism, such as increased crime, drug and alcohol abuse, and prostitution should be monitored and be proactively addressed in cooperation with the community.	1	2	JJ	1	2	3
K	Educate tourists regarding local culture and, where necessary, make them aware of how they should behave to respect it.	1	2	KK	1	2	3
L	The exploitation of human beings in any form, particularly sexual and when applied to women and children, should be energetically combated with the cooperation of all concerned.	1	2	LL	1	2	3
5	**Assess environmental impact as a prerequisite for developing tourism**						
A	Plan new developments only in areas where the use of water and other natural resources for tourism will not conflict with the local community needs, now or in the foreseeable future	1	2	AA	1	2	3
B	Follow best practice guidelines to minimise environmental impact and to reduce energy requirements for lighting, cooling and heating	1	2	BB	1	2	3
C	Use local materials (where sustainable) and local architectural styles on a scale that does not create a negative aesthetic impact.	1	2	CC	1	2	3
D	Avoid damaging the environmental quality of the enterprise's neighbourhood by noise or light pollution	1	2	DD	1	2	3

		Yes	No		N	I	V
E	Design buildings with natural ventilation and actively plan to reduce resource use during the construction and operational phases.	1	2	EE	1	2	3
F	Tell visitors what has been done to make the enterprise environmentally more friendly. Quantify the resources "saved".	1	2	FF	1	2	3
G	Plan new developments to have the lowest possible ecological impact, particularly in environmentally sensitive areas	1	2	GG	1	2	3
H	When developing plans, include elements that contribute to the maintenance of biodiversity by planting local indigenous species	1	2	HH	1	2	3
I	An environment friendly product purchasing policy	1	2	II	1	2	3
J	Environment friendly guidelines for construction firms	1	2	JJ	1	2	3
K	Fines against contractors that do not keep within environmentally friendly development aims.	1	2	KK	1	2	3
L	Replacement or avoidance of environment dangerous substances and products.	1	2	LL	1	2	3
M	Conserving fresh water resources.	1	2	MM	1	2	3
6	**Use local resources sustainably, avoid waste and over-consumption**						
A	Meter the quantity of water consumed and manage consumption and leakage so as to reduce water consumption	1	2	AA	1	2	3
B	Measure electricity consumption and introduce energy saving measures	1	2	BB	1	2	3
C	Monitor the use of diesel, paraffin and petrol and set targets to reduce consumption and switch to less polluting fuels.	1	2	CC	1	2	3
D	Set targets to increase the proportion of energy used from renewable resources, for example solar, wind, hydroelectric.	1	2	DD	1	2	3
E	Install and showcase appropriate technology to reduce consumption of natural resources and production of waste.	1	2	EE	1	2	3
F	Monitor the sewage system and demonstrate how pure the outflow back into the environment is.	1	2	FF	1	2	3
G	Set percentage targets and time scales for the reduction of waste produce, levels of recycling and reuse of waste.	1	2	GG	1	2	3
H	Work with suppliers to minimise the amount of packaging purchased with supplies.	1	2	HH	1	2	3
I	Reduce "food miles" by using locally produced food.	1	2	II	1	2	3
J	Enterprises should assist conservation by investing in sustainable trails, hides and interpretation.	1	2	JJ	1	2	3
K	Encourage the use of environment friendly transport.	1	2	KK	1	2	3
7	**Maintain and encourage natural diversity**						
A	Encourage visitor behaviour that respects natural heritage and has a low impact upon it.	1	2		1	2	3
B	Discourage the purchase of products that exploit wildlife unsustainably or contribute to the destruction of species	1	2		1	2	3
C	Look for ways in which the enterprise and its guests can assist with the conservation of natural heritage	1	2	CC	1	2	3

D	Invest a percentage of profits or turnover in species conservation or habitat restoration and management.	1	2	DD	1	2	3

E	Avoid pollution by using environment friendly chemicals, and by using biodegradable soaps and detergents	1	2	EE	1	2	3
		Yes	No		N	I	V
F	Work with conservation authorities to ensure that visitors are aware of the impact that they may have on the ecology	1	2	FF	1	2	3
G	Ensure that relevant members of staff are familiar with the issues and ways of avoiding environmental impact	1	2	GG	1	2	3
H	Do not market tourism resources to encourage tourists into ecologically sensitive areas which are vulnerable to irresponsible tourism practices, particularly sports or recreational uses – discourage these activities (e.g. irresponsible 4x4 use).	1	2	HH	1	2	3
I	Planning of attractions and accommodation to be adequate to meet the needs of visitors without losing the character of the area.	1	2	II	1	2	3

8	Do you have any other recommendations or suggestions

THANK YOU FOR YOUR COORPORATION