THE STATUS OF GAME FARMING IN THE NORTH WEST PROVINCE – THE MOTIVE FOR THE ESTABLISHMENT OF GAME FARMS AND THEIR COMPLIANCE WITH THE BLACK ECONOMIC EMPOWERMENT FRAMEWORK

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ABSTRACT

The primary aim of this study was to investigate the justification for establishing game farms and compliance to broad based Black Economic Empowerment (BEE). The focus of the study was on game farms in the North West Province. The main aspects under discussion included game farm ownership patterns in terms of age, gender and race. Other aspects (i.e. economic) like income generating activities, nature of client base and liquidity of game farms were also examined.

The study employed the quantitative approach. The population of game farms was 569 and the derived sample was 112 (i.e. 20%), though 53 questionnaires were usable. The primary method used for collecting data was questionnaire. The data is presented using both tables and graphs. The data is analysed using SPSS.

The study revealed that gender and racial equity were not accomplished in the game farming sector of the province. The findings also conclude that not many jobs are created by game farming given its extensive mode of operation. Despite the high rate of conversion of ordinary farms into game farms, they held little biodiversity value for conservation purposes and were not economically sustainable except for a few. The government need to intervene and regulate the sector in order for it to be sustainable both ecological and economical.

DECLARATION.

I hereby declare that work done as part of this study is original and has never been submitted to any university for a PhD degree. The work was done by myself, and thus I, Letlhogonolo Gaborone absolves to stand by the contents of this manuscript.

Signature: _____ Place: Mafikeng.

Date: 08/01/2007

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Chapter 1

Orientation

1. 1 Background.

Game farming is a major beneficiary from the tourism factor. Tourism is by itself a big industry (Swart and Saayman 1998) which generated about R 1.4 billion in 1999 for the North West province (DACE 2002). Game farming relies largely on tourism for income generation, to an extent that the relationship between the two becomes inevitable. Though wildlife based tourism accounts for 30% of all visitor arrivals in South Africa (Cleverdon 2002), the private sector alone should not be trusted to bring about social upliftment through tourism without direct government intervention, since poverty reduction is only marginal to the tourism agenda (Ashley and Roe 2002).

The debates over the environmental sustainability of wildlife based tourism focusing specifically on game farming (Novellie, et al 1996) and hunting (Radder, et al 2000) are both interesting and tempting given its potential money generating capability. However, this study focused on verifying the current status of game farming in the North West province which to date has lacked both geographical emphasis and scholarly analysis, begging for initiation of this particular study. There is a relative dearth of information, particularly published literature on this subject. It should however be pointed out that articles exist (Fabricius, et al 1996, Breebaart, et al 2002, Higgins, et al 1999, Kotze & Zacharias 1993) on game farming and its various aspects especially as it relates to other areas elsewhere in South Africa.

There is also limited data on issues of gender and racial equity in the wildlife industry. There was and continues to be ample opportunities for integrating these pertinent issues in the process of transforming the eco-tourism sector including game farming as South Africa develops, especially when viewed against this era of change and democracy which came into being almost twelve years ago. Focus has not concentrated on issues of Black Economic Empowerment specifically in the game farming sector, but was rather placed on the generic aspects of agrarian land reform (Cousins1996, McIntosh, et al 1996). Land reform has had little bearing on how the game farming sector continues to moulds itself and contribute to benefit sharing on a broader scale than is currently the case. In fact, debates still continue on the effects of current land reform and

whether it has succeeded in bringing equity, parity and normality in agricultural production and household food security (De Wet 1997).

1.1.1 Game farming versus mainstream agriculture.

The limited literature available on the subject of game farming as it relates to the North West province prompted this study. Other provinces like Limpopo (Luus 2003), Gauteng (Reilly, et al 2003) or Eastern Cape (Radder, et al 2000, Kerley, et al 1996) have detailed area specific literature on game farming. The effect of Black Economic Empowerment on game farming is a recent phenomenon, save for extensive information on land reform policies (Hanekom 1996, Rohde, et al 1999, Cousins 1996) and its impact on the agricultural sector which have been in existence for the past decade (i.e. 1995 – 2006). It is often argued that game farming is nothing new but a component of mainstream agriculture (Radder, et al 2000), however game farming requires massive spending in capital infrastructure, like game proof fencing, establishing handling facilities and/or visitors apartments, which contrast significantly with either livestock or crop farming (Luus 2003). Entry models for aspirant crop or livestock farmers are abundant albeit not necessarily sustainable (Duvel 1995, Van Rooyen and Van Zyl 1996, Carnegie and Louw 1996), given relatively low overhead costs involved. The relative ease of joining the ranks of small scale farming in South Africa in general and the North West province in particular need no overemphasis (Bullock, et al 1995).

1.1.2 Land tenure system and game farming.

The communal land tenure system as practised currently by aspiring game farmers is not conducive to successful game farming for various reasons, including inadequate browse if compared to private game farms (Higgins, et al 1999), lack of cohesive management planning brought by multiple range users (Rohde, et al 1999) and poor range management leading to destruction of niche habitat types of key game species (Kotze and Zacharias 1993).

Game farming is to a large extent a South African invention, which coincidentally also makes it one of the major land use types (Radder, et al 2000). Bothma (2002) is considered an authority in South African game farming and has referred to it as 'the managing and extensive production of free living animals on large fenced private land for purposes of live sales, ecotourism, venison and trophy hunting'. However not very much is written about the economics of game farming and

its contribution to Black Economic Empowerment, creating a vacuum and denying the critical analysis of this subject. Game farming for all intends and purposes is one division of farming which is available for economic beneficiation (Radder, et al 2000), unlike livestock which needs regular veterinary care and can be readily stolen (Du Toit 2004).

1.1.3 Role of game farming in biodiversity conservation.

There are generally strong feelings to exclude exotic species when reference is made to both ecotourism and game farming (Combray 2004) for the fact that they are not indigenous to their habitats and may probably destabilise natural ecosystem processes (Deines, et al 2005). The threats of exotic game species introductions are numerous and are not worth risking (Bossenbroek, et al 2005) especially if the prospects of adding game farms to existing networks of protected areas in South Africa is to be realised.

Game hunting is often viewed as an integral part of the philosophy of conservation through utilisation which epitomises game farming in some respect. Hunting is advocated (Joubert 2004) as the primary driving force behind the success of conservation in general and game farms in particular. It should be pointed out that hunting by itself may not be a *panacea* capable of sustaining game conservation. Since certain hunting practices do ignore basic mammalian breeding principles (Anderson 1985, Allendorf 1983), like the injudicious culling of trophy or breeding males and resulting in inbreeding (De Bois, et al 1990), which may serve to decimate pools of breeding game in the course. Some biltong hunters for example ignore basic hunting ethics (Radder, et al 2000) and do not observe conservation principles which are meant to be upheld through selective hunting.

Conservation as a concept needs to be qualified, since not all biodiversity can be harvested or hunted to maintain their existence and the rest of the unhunted are largely ignored (Anderson 1985). It is perfectly correct to assume that the creation of a suitable habitat for the keeping of a bontebok *(Damaliscus dorcas dorcas)* may by default allow a number of associated life forms like certain *dicotyledonous* plants to co exist (Boshoff, et al 2002), but may as well exclude others like invertebrates which get trampled over in the process. In a typical Bontebok habitat like Fynbos of the Western Cape province there are ants which help specifically in seed dispersal of 20% of its vegetation and for a long time were overlooked in favour of the various Erica species

found in that area (Richardson and Cowling 1993). It is unethical to expect natural resources to pay for themselves (Novellie, et al 1996) for inclusion into conservation programmes.

Game farming is also acknowledged for playing a significant conservation role, especially for threatened and rare wildlife like roans *(Hippotragus equinus)* and sables *(Hippotragus niger)*. Roans and sables are by their nature selective foragers and are unable to survive in badly denuded game farms where palatable grass species are eliminated. Thus for game farms to suitably hold and allow proliferation of these species, other selective but destructive feeders like blesbok *(Damaliscus dorcas phillipi)*, wildebeest *(Connohaetes spp)* and tsessebe *(Damaliscus lunatus)* are to be closely monitored to avoid damage to the farm's vegetation (Krynauw 2005). Though the South African government acknowledges the significance of game farms as a major land use and biodiversity conservation option, their support is restricted to the provision of the certificate of adequate inclosure (DEAT 2005). It is upon provincial conservation authorities to insure that game farming conforms to principles contained in the Convention on Biological Diversity (CBD), which include amongst others the following:

- establishing coherent networks of protected areas including game farms.
- Sustainable use of biodiversity.
- Reviewing progress on global conservation priorities

(King: 2004, 26).

Challenges which the game farming sector has to contend with, include amongst others the dearth of information due to the under utilisation of appropriate sources of knowledge like universities and other institutes, which have the potential to bring about added value to their management practices. A study of the game farmers in the succulent valley bushveld areas around the Eastern Cape revealed that they often lacked fundamental and habitat specific principles of game management as result of not corporating closely with both universities and research institutes (Erasmus and Kerley 2004). The study indicated that game farmers of the valley bushveld relied more on personal experience and common sense (i.e. > 54% of the time) and communication with fellow farmers (33%) than research findings or extension services, which is likely to be a pattern elsewhere in South Africa.

1.1.4 Origins and extent of game farming.

Game farming remains a popular activity in the countryside, which grew from just over 250 farms in the period 1960/70 to well over 5400 farms in 2004 (Joubert 2004). This sector of the economy has its beginnings from around 1945 in the old Transvaal district of Dwaalboom (Louw 2004). The game farming sector alone brought in R 1 billion in 2003, specifically from biltong and trophy hunting, live game sales, eco tourism and sales of venison (Du Toit 2004). It thus becomes logical for prospective entrants to define their exact goals when contemplating establishing a game farm. Some of the reasons highlighted for establishing a game farm include the following,

- Doing it as a form of investment by focussing on developing and growing capital.
- Doing it for personal enjoyment and relaxation (leisure).
- Establishing a hunting destination.
- Doing it for eco tourism purposes.
- Focussing on selling live game.
- Production of exclusive (rare, endangered or threatened) game.
- And lastly, doing it for the greater conservation goal

(Fourie and Fourie 2005: 21-22).

1.1.5 Economic justifications for game farming.

Land prices increase when an area is used for conservation type of activities (du Toit 2004), as opposed to cropping unless where high value plantations are considered like vineyards. Market prices for game farms are at least three times more than normal cattle or crop farms (Luus 2003), which has a likelihood of increasing land speculation by wealthy investors. Initially indications were that land used for conservation, including game farms biased towards biodiversity protection, will enjoy tax rebates and concessions as a measure of appreciation by government, however these prospects presently seem less likely (Luus 2003). The land debate, which culminated in the July 2005 conference proposed taxation for all farms (Botha 2005, Van Burick[a] 2005) not used actively for food production, or where they are not used at all . Thus absentee landlords and multiple property owners, some of which are used as weekend breakaways, are likely to be taxed heavily with the anticipation that they will dispose of the properties in the government's favour (De Waal 2005, Van Burick[b] 2005).

Currently, the game farming industry is full of activity, especially in the game handling trade, with the estimated value in excess of thousands of rands on an annual basis (Schack[b] 2004). Costs associated with the hunt itself like the permit, direct expenses and levies amount to about R 1 billion per annum (Vary 2004), confirming the impression that the entire game industry is worth multi million rands . The game ranching sector is suggestively reaching its maturity after a decade or so of unprecedented growth if projections by Bothma (2002) are confirmed to be valid, which contrast with Schack[b]'s (2004) experiences. Schack[b] (2004) assertion is that the game farming industry is performing well financially and that the momentum is likely to be maintained into the foreseeable future. This is likely to be solely based on capture and translocation services alone and not on the entire game farming sector which involves by and large game farm owners. It is thus a misleading yardstick for purposes of evaluating the economic sustainability of the entire game farming industry.

Game capture and translocation companies are likely to be immune from liquidations and insolvencies which beset game farmers on a daily basis, attributable to failed business ventures be it hunting or ecotourism for obvious reasons (i.e. Game capture businesses make profit under circumstances of both normality and crisis such as insolvencies). Game capture and translocations companies are at most positioned strategically to benefit either way, namely when the industry does well and when it goes through difficulties, since their task remains unchanged. Such a task is to derive income from capturing and translocating game in either failing or successful game farm operations. Game handling is currently done for the following reasons:

- Capture operations specifically for venison production.
- Conservation and management of rare and endangered species, which need to be given veterinary care or translocated for breeding purposes.
- Stocking of game farms and other eco-tourism destinations (e.g. national parks where only sightseeing and photography is allowed).
- General disease outbreak containment especially for zoonitic ailments like foot and mouth from game to domestic livestock.
- Capturing for scientific research, like putting of tracking devices implanted under the animal's skin and / or telemetry collars

(Schack 2004: 24 - 25).

It may thus turn out to be true that the game industry has indeed reached the peak of its growth measuring by the increasing numbers of entrants and consequently the saturation effect they may have on the entire sector. According to Bothma (2002), game fenced areas increased by 2.5 % between 1998 and 1999 (i.e. 300 000 ha/annum) reaching its crescendo around 2000/2001. In the year 2000, there was an estimated 9 000 private game farms covering just over 17 million ha. Live sales of game around that time were estimated at 400 000 heads and generated in excess of R 180 million (Du Toit 2004). The annual game sales by Ezemvelo KwaZulu Natal wildlife are a major contributor to national game live sales, generated in excess of R19 million from disposing off surplus game in 2003.

Though game farming and the ecotourism sector are considered to be relatively sizeable in South Africa, no specific reference has been made about them in the about to be promulgated land tax act (Schoeman 2003). This creates uncertainty with regard to the setting of acceptable tax levels for the sector (Smith 2004). Reservations have though been raised regarding the tendency to put emphasis on land as an investment vehicle, given challenges associated with the government's land reform programme (Willemse 2004). Crop farming on the other hand offers very little rewards especially against the World Trade Organisation (WTO)'s enforced low import tariff regimes even for staple crops such as maize (Agrireview 2005). The predecessor to WTO, the General Agreement on Trade and Tariffs (GATT), marked an end to the era of protectionism which saw the liberalisation of trade across borders and consequently, a shift in land use patterns (Blignaut 1996).

However, crop farming is not entirely rendered useless by global trade, since exceptions of good performance and reward are still to be found in high value crops like sugar cane. Experience in Southern Maputaland still justifies sugar cane farming ahead of ecotourism related activities like game farming based on positive marginal economic returns realised (Oldham, et al 2000). Crop farming itself in comparison to game has its own resilience against factors such as drought and disease which were contained over time through practices inherited as part of cultural and indigenous knowledge systems (Niemeijer 1996). In circumstances where game farming has a competitive advantage over mainstream farming, land owners have alternatively created conservancies as a tool for tax rebates, given that contributions to environmental and social programmes are tax deductible.

1.1.6 Contribution of venison to food production.

Schack (2004) estimates that well over 10 000 tonnes of venison get produced from game farms on an annual basis, providing the necessary livelihood to both farm owners and labourers. The export prospects of venison are similarly high, estimated currently at over 1000 tons per week (Schack[b] 2004). Furthermore, venison is widely acknowledged for its desirable dietary and health properties like its low cholesterol level and fat content. The dietary benefits of venison in comparison to beef or mutton are relatively superior, given that it has high concentration of nutrients like protein (i.e. around 22g per each 100g portion) and iron (Hoffman 2004). Game hunted at night yields more quality venison than the one hunted during the day (Bezuidenhout[b] 2004). Other forms of game utilisation exist like the communal hunting of free roaming game in tribal areas and the intensive game production systems as is the case with ostriches, crocodiles and fish. Ostriches are farmed for slaughtering purposes for instance at the Klein Karoo Landbou-ontwikkelingsentrum in Oudtshoorn (Coetzee 2003).

1.1.7 Land size and game integration into cattle farming

The factor of size is important in game farming and is raised elsewhere again in this chapter (i.e. section 1.2 and 1.2.6). A consensus reached among experts in this field tends to link game farm size with aridity and resource availability including vegetation and land (Reilly, et al 2003). The humid areas tend to have relatively small game farms, assuming that their diversity and production of vegetation is high, thus capable of accommodating multiple game species at high stocking rates. In the Lowveld region of both Limpopo and Mpumalanga provinces, precipitation is relatively high (Van der Walt 2004) and hence a game farm size of around 2 000 ha is considered the norm. In more arid areas, like parts of the Northern Cape's Kalahari thornveld, the stocking rates are low and hence 10 000 ha is considered an ideal size for a game farm (Luus 2003).

Game farming is carried out at two scales in the North West province, namely, extensive and intensive. Extensive systems are practised on generally large farms, where the object is both hunting and breeding of game animal species. Under intensive systems, farms are generally small, in certain instances not larger than 100 ha. Game farmers who practices intensive husbandry focus primarily on adaptable and expensive game species like roans *(Hippotragus equinus)*, nyala's *(Tragelaphus angasii)* and to some extent on buffaloes *(Syncerus caffer)* (Gouws[b] 2003).

Most of the farms in the province are gradually switching over to game farming, with initial stages characterised by varying levels of integration of game and livestock.

Current predictions suggest that game is being farmed side by side with cattle in 15 000 cattle farms across South Africa (Bothma 2002). Integration of livestock and game is considered a risk spreading strategy, aimed at the optimal utilisation of the resource base on the farm, given the complementary vegetation utilisation patterns of grazers and browsers. Integration is also preferable for maintaining consistent income flow and liquidity on the farm with the receipts from winter hunting complementing the summer sales of livestock (Pretorius[a] 2003). Though domestic livestock is amendable for inclusion in a mixed livestock / game enterprise, it is not at times as valuable or profitable as game. A comparative study between cattle and buffalo *(Syncerus caffer)*, have shown the latter to be more profitable given their resistance to common tropical diseases, explained by relatively low mortalities. Furthermore, to reach a target income of at least R 100 000 per annum, only 3 buffaloes are needed in contrast to 20 cattle (Gouws[b] 2003). However, game animal species are habitat specific and may not be amendable for introduction to every region of this country. Physiologically, game animal species and wildlife in general are habitat selective (Whitford 1997), given the restricted distribution of lipids reserves in their bodies (Stoltz 2004) which manifests in slow / inferior adaptability characteristics.

Cattle in general get replaced by game increasingly on farms as a form of management intervention given the deterioration of either conditions or production factors on farms (Twine, et al 2002). The game farmers, some of them already converted, raise the following reasons for converting:

- Concerns over labour laws which bring with them additional financial stress.
- Perceived lack of livestock trained labourers.
- Erratic rains and regular droughts on marginally profitable cattle farms in which game remains the logical competitive alternative.
- Perceived overall degradation of veld condition and loss of high production veld on cattle farms.
- Ease of cattle theft in comparison to game.
- Macro economics and trade factors favour overseas cattle farmers attributable to subsidy regimes

(Fourie and Fourie 2005: 21 - 22).

Game farming is, however not compatible with small stock like sheep, because sooner or later the owner has to contend with carnivores like jackals and caracals (Du Plessis-Swart 2003), which are considered problem animals especially where the natural prey like steenbok *(Raphiceros campestris)* and rietbok *(Redunca arundinum)* are exterminated.

1.1.8 Critique of the game farming sector.

Complaints have been raised about the game industry of late, which call for fundamental transformation of the sector. Some of the problem areas identified includes:

- A deliberate avoidance of predators in game farms, because they consume antelopes which can otherwise be offered to hunters or willing buyers for an income (Fourie 2004).

- Game hunting on game farms is getting unethical by the day, attributable largely to the pressure to show profit by allowing unprofessional hunting like so called 'canned hunts' (Nullis 2005). Canned hunts refer mostly to the killing of captive bred game, mainly carnivores, by releasing them from the cage and subsequently hunting them down within 24 hours.

- Deliberate or accidental hybridisation between game species, as apparently allowed or not properly mitigated in some game farms. This is common among members in a *genera* like keeping Bontebok *(Damaliscus dorcas dorcas)* and Blesbok *(Damaliscus dorcas phillipsi)* together, leading to cross breeding which is undesirable for their genetic integrity and future survival as pure gene lines (Anon[f]. 2005). Cases of cross breeding between black and blue wildebeest have also been reported (Smillie 2004).

As part of the sector's transformation, a grading system is proposed similar to that used in the hospitality sector to grade hotels and other similar accommodation facilities (Du Toit 2004). This measure is aimed to weed out unscrupulous operators and reward deserving operators, by putting a monitoring and evaluation regime in place. According to Du Toit (2004), one star may be awarded to a game breeding facility with little conservation value, or alternatively five stars to a game farm with standards similar to a private nature reserve.

1.2 Scale of game farming in the North West province.

Game farms and nature reserves, whether private or public, constitute one of the major tourism related land uses in this province, especially in the Marico – Rustenburg and Brits areas (Clarke 1997). At the moment, 20% of the total surface area of South Africa is used for wildlife conservation purposes, of which 5000 are private game ranches (Table 1.1). Provincial parks constitute 5.8% and national parks another 2.8% of the total land surface (Louw 2004). In terms of game ranching, the North West province accounts for about 6.7% of the total number of exempted farms in the country, which converts into well over 3 million hectares, a significant figure by all proportions. In reality, it occupies position four in terms of exempted game farms, after Eastern Cape, the Northern Cape and Limpopo in ascending order.

This province is furthermore a home to local game hunters, who are in turn affiliated to five regional hunting associations operating within its boundaries, namely, Brits (Bojanala district), Diamant (Wolmaranstad), Hartebees (Potchefstroom), Marico Bosveld (Rustenburg) and Molopo (Central and Bophirima districts).

Table 1.1 Distribution of game farms across provinces.

Province	Game (No.) farms	% of total number	Area (ha) Exempted	% of total area	Average size (ha)
Free State	180	3.56	147 743	1.43	820.79
Limpopo	2 482	49.04	3 325 652	32.1	1 339.91
North West	**340**	**6.72**	**364 935**	**3.52**	**1 073.34**
Mpumalanga	205	4.05	276 016	2.66	1 346.42
Gauteng	72	1.42	82 076	0.79	1 139.94
Natal	90	1.78	168 841	1.63	1 876.01
Eastern Cape	624	12.33	881 633	5.51	1 412.87
Northern Cape	986	19.48	4 852 053	46.82	4 920.95
Western Cape	82	1.62	265 205	2.56	3 234.21
Total	**5 061**	**100**	**10 364 154**	**100**	**2 047.85**

Adapted from Louw 2004: 36.

Game hunting, contributes significantly to the economies of provinces such as Limpopo, the North West and the Northern Cape. The rules that govern game hunting vary from one province to the next. Limpopo for example has already promulgated its own environmental act (Limpopo Environmental Management Act, Act no. 7 of 2003), which is specifically focussed on game farmers and hunters. This law (Stott 2005) distinguishes at least five categories or schedules of wild animals for purposes of hunting. The higher the schedule, the more difficult it is to acquire a hunting permit, which is in itself useful for species conservation. Scheduling of game into categories or functional classes is necessary since it emulates the model used by pharmaceuticals to regulate access to specified drugs (i.e. certain medication or scheduled drugs needs prescription and cannot be readily purchased over the counter). The North West province certainly needs to take heed of this essential component of the act so as to help intervene usefully in the hunting and game farming fraternity as practised by Limpopo. The schedules are as follows:

- **Schedule 1:** Specially protected game, e.g. African elephant, white and black rhinoceros.
- **Schedule 2:** Protected game, e.g. African buffalo, leopard, cheetah and lion.
- **Schedule 3:** Ordinary game, e.g. Nyala, eland, gemsbok and red hartebeest.
- **Schedule 4:** Protected wild animals, e.g. bat eared fox, cape fox and honey badger.
- **Schedule 5:** Problem animals, e.g. Warthog, porcupine.
- **Schedule 6:** Non-indigenous wild animals to Limpopo

(Stott 2005: 11 - 13).

1.2.1 Defining hunting seasons.

A system of hunting seasons is applied across South Africa, with both open and closed season for specific categories of game. This system though, determined and applied at provincial level, is influenced partly by ecological factors such as physiography of the environment including vegetation type and cover (Mangel, et al 1996). To some extent, the behavioural patterns of game may play a decisive and crucial factor in determining the hunting seasons. Under normal circumstances, the sizes of social units of open plains game increases with a decrease in vegetation cover (Strauss 2004). These adaptations to vegetation cover allow for hunts at any other time of the year. This contrast with conditions in savannah environments with their dense shrubs and thickets which makes tracking and hunting down of game at the height of summer difficult as opposed to winter months when vegetation has shed its foliage thus permitting high relative visibility (Verdoorn 2004).

Another equally important factor considered when determining hunting seasons is the reproduction and breeding season of specific species (Anderson 1985). Most species reproduce and raise their offsprings in summer when foraging resources are abundant as is the case with a number of antelopes, carnivores and birds. Thus it will be unwise to allow their hunting then (summer), since it can affect their demographics (sex ratios, age intervals), breeding success and consequently, population sizes (Bothma and Van Hoven 1993). Water dependence of certain game species do affect their hunting success and hence may be considered in determining open seasons, as is the case with browsers which apart from being virtually camouflaged, are not frequent visitors to the watering hole during summer in contrast to bulk grazers which need to take in water every other two days.

Hunting seasons for various types of game (including birds) exist, which are at times province specific and may vary from season to season. In certain instances exemption certificates offered by various provincial administrations are inspired by national legislation like the game or wildlife theft act (Act no. 105 of 1991), which *inter alia* prescribes the hunting of game to exempted farms outside the hunting (open) season (Nel[a] 2004). In the North West province, the new biodiversity law is being drafted and will hopefully be promulgated by the end of 2006. In the meantime, laws from the previous dispensation are used to regulate game hunting, its translocation and keeping. These laws are derived from past administrations which had jurisdictions in what is currently the North West province of South Africa (Burgener, Snyman & Hauck 2001), namely, the Transvaal nature conservation ordinance (Ordinance 12 of 1983), the Cape provincial ordinance (Ordinance 19 of 1974) and the Bophuthatswana Parks Board Act (Act 3 of 1973).

1.2.2 Government role in game farming.

The government's role in game farming is two fold, namely, regulating the industry through a myriad of legislation and policies (Burgener, Snyman and Hauck 2001), and providing incentives for growth of the sector through public sector funding (Novellie, et al 1996). The regulatory role is played satisfactorily given baseline requirements for holding and rearing game animals as prescribed by the Biodiversity Act (2004) and the National Environment Management Act (1998). These pieces of legislation together with the Environmental Conservation Act (1989) provide framework for provincial legislation, which in turn prescribes minimum standards for keeping, fencing and transporting wild animals. The policy on translocation of game is still in the

drafting phase (Hamman and Lloyd 2004). The government has however failed to guide and set rules governing the operating of game farms as money generating business. This has contributed to the mushrooming of game farms even under circumstances where economics and ecology do not justify their existence. This perceived lack of government support is not only limited to the game farming industry, but also affects the tourism sector in general and was particularly rife at both provincial and local level (Cleverdon 2002).

There are many instances where open plain game like Blesbok *(Damaliscus dorcas phillipsi)*, Springbok *(Antidorcas marsupialis)* or Black wildebeests *(Connochaetes gnou)* are introduced into unsuitable savannah habitats. Habitats which are unsuitable for certain game species, have dire consequences and may lead to dietary deficiencies which are difficult to ascertain immediately and are only identified when it is too late (Stoltz 2004). This is known at least to be the case with black rhinoceros which will not do without a browse diet (Shaw and Owen Smith 2004; Ganga, Scogings and Raats 2004).

Since game farming is a relatively new farming occupation, it was not traditionally supported by government in terms of providing incentive and subsidisation schemes (Bothma and Van Hoven 1993). It was also very recent that the National Department of Agriculture officially accepted game farming as a sector worthy of statutory support. From a Black Economic Empowerment perspective, game farming has remained behind and has received little support from the government especially with regard to funding of land acquisition for the purpose (Lyne and Darroch 1997). Private sector alone without direct government intervention cannot drive the black economic empowerment agenda in a lucrative tourism sector (Ashley & Roe 2002), particularly game farming as it relies primarily on but not limited to land reform. Kupka (2004) states that recipients of land for restitution purposes are more likely to venture into either crop or livestock than outright game farming, since game farming is of no immediate relevance to issues of poverty and household food security. The writer further states that lands the tribe whose lands were restituted in the St Lucia wetland vicinity thought that people would return to the land to plant crops or hope to get mining jobs.

Purchasing of land for agricultural purposes receives more favour and support than for game farming, which saw funds allocated to the Department of Land Affairs (DLA) doubling up in 2 years, from around R 1 billion in 2001 to R 1.7 billion in the 2003/04 (Louw[b] 2004). Budget allocations may not make success of the land restitution process, especially given the multitude of

hurdles besetting potential land recipients. Aspirant black entrepreneurs are faced with risky factors such as refusal by the private sector to help finance land (Schirmer 1996) and capital for game farming, and where this hurdle is overcome, willing buyers are often faced by unwilling sellers (Stoddard and Osodo 2004). This is partly explained by the emotional attachment which land owners have on their land making it difficult to dispose it in anticipation of cash compensation (Pretorius[b] 2003). The only other reason which may see game owners disposing part or all of their land is to avoid the law on property tax which is about to be promulgated (Smith[b] 2004).

1.2.3 Integrating black economic empowerment into game farming.

Due to pressures from farmers (predominantly African) in developing areas (Makhura, et al 1998), the government has of recent identified this apparent loophole (i.e. property tax) to its advantage in dealing with the redistribution of at least 30% of agricultural land to previously disadvantaged individuals. The government intends to use additional prohibitive land holding tax as a disincentive to force wealthy landlords to dispose land not used for agriculture or food security at household level. This new strategy under consideration by the ministry of land affairs is unlikely to create an outcry as witnessed during the Zimbabwe's 'land grab' policy and its impact on the macro economy (Alwang, et al 2001), since it will be executed under the environment of coercive market forces subsumed within the context of tightened tax regimes. This move by the government may create little resistance as opposed to outright expropriation as currently allowed under the 1975 Expropriation act (Mkhabela 2005).

The organ of government at the forefront of Black Economic empowerment promotion and guidance is notably the Department of Trade and Industry (DTI) and to a limited extent, the ministry of environment. The DTI encourages other state organs to target black empowerment in their procurement budgets to ensure maximum participation by historically disadvantaged individuals in the mainstream economic activities (Mkhabela 2004). Private sector initiatives have also taken it upon themselves to support and monitor the implementation of Black Economic Empowerment in different sectors of the economy thus insuring fast tracking of the otherwise lax broad based Black Economic Empowerment Act (Act no.53 of 2003). The law provides for the establishment of sectoral BEE charters in all facets of the economy, which in turn need to be adhered to by all potential investors irrespective of the foreign ownership of some companies which is often used as a scapegoat for not affirming blacks in their South African operations

(Qoza[f] 2005). Empowerment charters are by nature, time tables of some sorts which indicate willingness on the part of the 'advantaged' and by coincidence 'the wealthy' to transfer resources to the disadvantaged and often poor. Realisable and quantifiable targets are hence the core of empowerment charters, which without BEE become meaningless. For instance, firm dates have been set together with targets to fast track the transformation of the association for communication and advertising (ACA), otherwise transformation may be difficult to contemplate at best or accomplish at worst (Sowaga 2005).

The national ministry of environment recognises the importance of Black Economic Empowerment especially in the ecotourism business and has consequently put mechanisms in place to evaluate the extent to which historically disadvantaged individuals are incorporated in this sector. A task team appointed by the ministry have drawn up the terms of reference for black economic empowerment which culminated with inauguration of the first Tourism Black Economic Empowerment Charter Council (TBEECC) in October 2005 (Brown and Mosola 2006). The formulated tourism scorecard evaluates the following:

- Ownership of existing ecotourism businesses.
- The management and control of such businesses.
- The implementation of employment equity.
- Contribution to skills development.
- The extent of preferential / affirmative procurement.
- The level of enterprise development.
- Contributions towards social development

(Brown and Mosola 2006: 8 - 9).

The aim of this exercise is to inform the development of measurable targets and indicators for each of the listed factors and thus measure the extent of black economic empowerment in the ecotourism sector. Cue needs to be taken from the financial services sector which is pursuing various schemes to achieve BEE targets, ranging from selling major stakes in the shareholding of member firms to black economic empowerment firms (Monama 2005) to opening up opportunities for broadened share benefiting by clients (Mashalaba 2005). Such bold initiatives from the government will encourage existing communal tourism operators who show indications of progress as witnessed in Limpopo (Viljoen and Naicker 2000) and the Eastern Cape province (Bourgouin 2002).

1.2.4 Faltering and amateurish management skills.

The greatest bottleneck identified and attributable to the collapse of game farms, especially those in private hands seem to do much with lack of proper management, marketing and strategic positioning (Van Zyl and Sartorius von Bach 2002). A number of protected areas including game farms are unable to exist without additional capital injection from elsewhere otherwise the rules of demand and supply might prevail costing the existence of the establishment (Barnes 1996). Factors such as fierce competition, availability of cheaper alternatives, poor management and image have impacted negatively on the game farming sector in general. Market saturation and poor service standards have in certain instances contributed to the eventual collapse of game farms, which is evidenced by the number of properties coming into the market every week. Game farms have also of recent shifted from being primarily business establishments, to being bought by wealthy individuals for conversion into weekend or holiday retreats (Fourie 2004). Kupka (2004), for instance reports that very little growth occurs in this sector contrary to the popular belief and the noise created around it. The author further points out that general investment in tourism has favoured accomodation (29%), casino's (25%), big complexes (21%) and to a lesser extent, ecotourism (2%).

Short-term interests on the part of private game farm owners are borne in part by greed, which lead to the subverting of standards though at times set by the game farming industry itself with minimum interference from government. It is hence probable for an individual with minimum or no training in game farming to operate it as a trophy or biltong hunting destination without any need analysis or feasibility study. The operation of a game farm away from identified growth points and in an already crowded market may prove treacherous, given the existence of cheaper and quality alternatives. Chances of success for such an entrepreneur are minimal at best or non-existent at worst (Agrireview 2001).

Skills development is one of the critical elements to the success of every business (Van Rooyen, et al 2001), more so for black economic empowerment initiatives which are hamstrung by lack of both technical and managerial skills (Agrireview 2004). Game farms, which do not obey the principles of entrepreneurship nor practice the rules of discipline governing the management of private businesses, are in for a rude awakening. The game farm owners seem not to realise that their farms are business entities, which are supposed to be run along strict codes of financial discipline and management. In the real world it does not help to understand the variety of game

animals available if the owner cannot appreciate the costs of keeping them. The same applies for the attractiveness of facilities on a game farm, if the criteria for generating optimal revenue from them are non existent. Game farms are indeed expensive ventures which call for judicious management practices, considering especially the amount of capital expended on establishing them (Barnes 1996). A study commissioned by ABSA bank (Luus 2003) indicated clearly that successful game farms require at least R6.00 in capital outlay for every R1.00 of revenue generated annually.

1.2.5 Non strategic game ranch developments.

There is common occurance in the North West province, as is perhaps the case in other provinces of establishing game farms all over the place. During their establishment little attention is paid to detail (especially with regards to financial sustainability over time), and precious time and effort is spent on establishing infrastructure and stocking such places with wild animals. Basic consideration like the carrying capacity of the farm, the habitat preference of animals and their upkeep is rarely known, let alone studied. Another equally important factor is black economic empowerment in the game ranching sector. Black economic empowerment has certainly been ignored and continues to be shunned by this sector, especially if latest investment trends are to be considered. There are many applications for game farms than authorities can handle, properly monitor and allow operating (Burgener, Snyman and Hauck 2001).

There are similarly many guesthouses opened all over the place offering from over-night or bed and breakfast accommodation to lodges catering for lengthened duration of stay. The being and existence of such establishments does neither suggest sustained patronage nor consistent generation of revenue. A vibrant market for estate agents, conveyancers and liquidators is created in the process. The role of liquidators is to intervene cases where forces of free market prevailed, and are hence in the business of disposing the spoils of failed transactions in the form of real estates like game farms and guesthouses. Property is sold and bought for business purposes and money is spent on renovations rather than on attracting and keeping potential clients. Large debts are made on property investments, in spite of falling property value (Agrireview 2002) and against the threat of property tax (Agrireview 2003). Insolvency's are on the increase, also there are at times rivalry and fierce competition in a crowded market place (Agrireview 2001). Money is spent on game animals and at times, introduced game is less adaptable to some farms this may lead to unexpected and unsustainable game mortalities.

1.2.6 Managing game farms for profit.

Some of the investors lack skills and competencies to run successful game farms, and some of them are neither farmers anyway. For clarity, investor refers to individual or a group who has capital and is willing to see it grow. The investor's management approach is premised on supplying the product, which in this case is leisure or hunting experience and is not privy to other complex factors inherent in farming or game farming in particular. The financial management skills of some entrepreneurs are at minimum, in doubt, or simply lacking especially with regard to game farming (Coetzee 2003). Entrepreneurs may not be in a position to appreciate the inherent habitat suitability problems, which are a common factor in game farming where different game species have varying and at times over-lapping feeding behaviours and for that matter, habitat preferences (Whitford 1997). Elephants prefer to feed on vegetation that has between 12% and 18% crude protein (Roosendal 2004).

It takes a trained eye to appreciate that Zebra (*Equus burchelli*) and Blue wildebeest (*Connochaetes taurinus*) have complementary feeding characteristics and can hence be stocked together. The same cannot be said of kudus (*Tragelaphus strepsiceros*) and springbok (*Antidorcas marsupialis*), which have contrasting habitat preferences, and as a norm are not to be stocked together, unless the farm is large enough and has a variety of vegetation types or habitats. This introduces the issue of farm size, which is a determinant factor in game farming. Small farms as could be appreciated are not self-sustaining ecosystems, or lack the variety of habitats necessary to cater for more species of game which in itself allows for self regulation and reduced human intervention including culling (Anderson 1985). Genetic integrity is also a subject of population size of a particular species and hence a product of game farms size (Franklin 1980). The smaller the size of a game farm, the smaller will be the populations of specific game species (Bothma 2002), and hence its breeding pool, which may lead to inbreeding (Soule 1980).

At times genetic integrity is independent of farm size (where game farms can accommodate a breeding population), but is affected by the scarcity, perhaps rarity of a given game species (De Bois, et al 1990), as is the case with either Sables (*Hippotragus niger*) or Bontebok (*Damaliscus dorcas dorcas*). Scarcity of breeding stock on such instances may also lead to no breeding (static populations) or inbreeding especially in the face of limitations on game acquisitions and movements imposed by the Convention on the Illegal Trade in Endangered Species (Cites). Endangered species are often precarious and may not be readily adept in every game farm and

hence thus partially explains why strict permitting is applied (Burgener, Snyman and Hauck 2001). Roan antelopes *(Hippotragus equinus)* in contrast to sables, need quality vegetation in larger quantities in order to survive, breed and raise offsprings (Furstenburg 2004), thus having implications on permitting conditions. Limited skills of permitting officers is another factor that decide success and failure in game farming especially where game animals have to be bought and sold on regular and short intervals, requiring timely permits . Permits can to some extent affect the process of marketing and its forecasting or timing play a crucial role. Market forecasting is profitable for game farming determining when to buy and sell game (Agrireview 2003).

Game farming offers a variety of ways of utilising game for profit, including hunting of all types at times with a certain degree of creativity which insures survival in a crowded market (Radder, et al 2000). Market trends at the moment tend to favour both biltong (Table 1.2) and trophy hunting (Gouws[b] 2003). Game is considered a worthy land use alternative, since it contributes to long term biodiversity conservation (Freilich, et al 2003), where hunting is practised to regulate over utilisation of the natural resource base.

Prospects of biltong and trophy hunting for game farmers are good, venison itself sells well either at farm-gate, or through retail chains. Past indications (i.e. year 2000 statistics) suggest that local hunters alone generate three times as much income for local game farmers than foreign hunters (Nel 2004), which in itself provides a glimpse of confidence for the local game industry.

Table 1.2 Income generating activities on the game farming sector.

Activity	Turnover
Biltong hunting	R 450 Million
Live game sales	R 180 million
Trophy hunters	R 153 million
Eco-tourism	R 40 million
Venison sales	R 20 million
Total	R 843 million

(Adapted from Louw: 2004: 37)

Indeed game farmers do take advantage of this market by offering culls or surplus game for biltong hunting, reducing in the process pressure on the veld and helping to achieve reasonable and acceptable carrying capacity (Van Cotthem 1999). On the other hand good quality trophy

animals with horns of specified length and thickness are required to keep the brisk trophy hunting business operating (Vary 2004). Selling or utilising surplus game is also proving profitable and may help off set the costs involved in raising it to a marketable age. Surprisingly, very few farmers do actually account for the costs of raising such surplus game and rarely ever take it seriously. It is estimated that only 1% of game farmers actually take cognisance of the cost of producing and rearing an antelope (Gouws[b] 2003). Costs are as much important as income, and keeping costs down is at times the only way of remaining viable and profitable in game farming. Since game selling prices are difficult to influence in a competitive market, the only alternative is to keep costs low in order to remain profitable and hence increase the overall efficiency in a farm (Kirsten & Sartorius 2002).

Prospective entrepreneurs in the game farming are advised to plan for droughts as much as it may be the case with timing of game sales based on competitive market trends (Hatch, et al 1996). Based on such a plan, animals can be sold in time if the probability of dying from droughts is high (Duvel 1995). Such timing is crucial for long term sustainability and does avoid outright losses, because game animals do die from hunger (Stuart-Hill and Aucamp 1993). The only other tool to avert possible deaths from hunger is by adhering to stipulated stocking rates as determined by the vegetation condition and carrying capacity (Coetzee 2003). Carrying capacity and costs, particularly variable costs, determine the profitability of game farms (Hatch, et al 1996). According to Gouws[b] (2003), the costs of keeping one animal (e.g. rooibok costs between R 420.00 to R 1 200.00/animal) should correspond to the actual revenue realised from sales, which is determined overall by the carrying capacity of the game farm. If such calculations are done for each species on the farm, then an economic optimal species combination can be done. Gouws[b] (ibid) focuses on the revenue generated by one animal above gross expenses and as such the level of degradation effected on the vegetation.

Profitability in game farms varies and depends upon the utilisation regime of game animals, for example, hunting, selling or photography (Barnes 1996). In cases where the utilisation regime is dominated by hunting, its profitability is determined in part by the scarcity and rarity of game species (Radder, et al 2000). For rare species, breeding females are the most expensive, followed by males especially if they are offered for trophy hunting. For scarce game like nyalas (*Tragelaphus angasii*) and reedbuck (*Redunca arundinum*) optimum profits are realised through live animal sales. For common species like kudus (*Tragelaphus strepsiceros*), blesbok (*Damaliscus dorcas phillipsi*) and blue gnu (*Connochaetes taurinus*), live sales are not

necessarily profitable, unless done in the face of droughts or surplus animals. Drought is a common occurrence in Southern Africa (De Kock 1980), which is capable of decimating both livestock and game. The South African government spent in excess of R 100 million in drought aid for the period 2003/04, of which R 18 000.00 came to the North West province to purchase fodder for animals including game (Mulaudzi 2005). Trophy and wholesale hunting is however a sensible option for such animals and their meat is readily sold. Processed venison from these animals provides the optimal cash flow, though hunting infrastructure by itself puts an additional cost for game farmers.

Venison sales have a potential of keeping farms profitable and as such provide a sustainable source of income for game farms. Gouws[b] (2003) cites Professor Du Plessis of UNISA's analysis which suggest that all game venison has potential revenue generating ability. The harvesting of venison (hunting) in communal areas is likely to be profitable especially for rooibok (*Aepyceros melampus melampus*) and kudus (*Tragelaphus strepsiceros*). Game farming should be treated like any other business enterprise, especially where focus is on hunting and venison production. Failing or bankrupt game farms are capable of generating income through venison hunting, thus converting them from loss making to profitability. Venison hunting is the biggest generator of income in the game farming industry and it is estimated at R 700 million.

1.3 Research objectives.

This particular study is pioneering in many respects, namely, it introduces black economic empowerment into game farming which is a popular and growing sector, ascertaining the current situation and its operators, their motives, by default finding out how many blacks are game farmers in the province. This will in turn allow the element of black economic empowerment (BEE) in the sector to be explored. However, this particular study has no basis for comparison, since it will be a benchmark for future research in this field, at least as far as black economic empowerment is concerned. It attempts to fill a void in the current available literature on the subject which to date is poorly researched. In order to do justice to this particular project, five objectives were identified which formed the theme and hence direct the research methodologies adopted. These objectives were to:

1.3.1 Examine ownership of game farms in the North West province in terms of gender, age, race and location.

1.3.2 Examine the economic factors like the money generating activities on game farms, size of property (by default relative monetary value), original source of funding, profitability, monetary value of game and client base (size and origin).

1.3.3 Examine the extent of black economic empowerment in terms of racial profile of client base, shareholding (indicator of black participation) and work force employed in terms of skills levels (indirectly racial profiling based on current but changing racially based skills levels).

1.3.4 Examine the objective and basis of game farming in terms of biodiversity (i.e. game numbers and variety, size of habitat / farm, ecological goals, occupational background and commitments) and economic (i.e. money generating activities, investment goals, marketing aspects and financial liquidity) imperatives.

1.3.5 Devise a cost effective systems or model for fast tracking Black Economic Empowerment in the game farming sector in the North West province on the basis of existing and collected information.

Other secondary research persuasions (i.e. specific gaps) which were likely to benefit from this project include subjects like:

- The exact impact of game farming in tourism.
- Role and contributions of game farms at a provincial scale.
- Possible benefits of land reform to the game industry.
- Game farming under a communal land tenure system.

1.4 Importance of the study.

As briefly outlined in preceding discussion in this chapter, black economic empowerment is not evident in the game farming sector. This is revealed by factors such as measurable indicators like land ownership patterns, level of involvement in professional hunting organs and participation in outfitting, taxidermy, auctioning and translocation of game. Out of the estimated 569 game farms in the North West province (government records), those owned by blacks may not number more than ten. This is a serious concern that needs to be addressed as a priority issue, given the years of the democratic dispensation since 1994 and the impact of the system's reform (Bernstein 2005).

Game management associations in the province should actively encourage black members to join their ranks, with the aim of sensitising them about the prospects of game farming.

Early in 2004, the South African government set up targets in all sectors of the economy including game farming to speed up reform and transformation, with the intended objective of broadening access to resources and opportunities by all citizens. The aim was to affirm the historically disadvantaged communities especially the black majority, by *inter alia*, offering financial incentives to small and medium enterprises to help access empowerment deals (Lebelo 2004). Structurally, an institutional vacuum to facilitate the black economic empowerment initiatives existed and needed to be filled to ensure the accomplishment of set targets. This void was partially filled with the promulgation of the Broad Based Black Economic Empowerment Act (Act no. 53 of 2003), which allows for the establishment of institutional structures.

The pending establishment of an advisory council to track and monitor the level and tempo of black economic empowerment in all the sectors will serve as a catalyst to fast track the process. The council will within the game industry measure literal black acquisition of game farms and meaningfully participation in their management. Apart from the mooted Black Economic Advisory Council, a fund called the National Empowerment Fund with a modest budget will seek to finance empowerment transactions. Black entrepreneurs are similarly responding to this challenge, though not in significant numbers yet The pattern to date has been the emerging of a single individual or small group, responding to institutional preferential procurement criteria as encouraged by state and parastatal organisations. However, not much momentum has been reached within the game farming sector, which this particular study sought to model and advance.

Game farming in the North West province as in the rest of South Africa, is growing at a phenomenal pace, estimated conservatively at 25% per annum (Stoltz 2004) and certainly far surpassing the tempo of transformation and reform within the sector. The rate of transformation will need to be increased if it is to match and share within the growth of this sector. Contribution of the game farming sector towards the mainstream economy is estimated currently at about R 15 million per annum and grows significantly from year to year. The level of land transformation from agriculture to game farming is tremendous. Cattle farms are turned into game farms, without at times necessarily taking the labour tenants into account (Bezuidenhout[b] 2004). Employment provision is often used as a smokescreen to divert attention away from benefit sharing for

labourers, thus allowing game farm owners to get away without allowing for meaningful empowerment to take place within their labour force.

Trophy and biltong hunting in communal areas can to a certain extent be compared with game farming in private land. Hunters from far and wide converge in communal areas during the hunting season, and spend their money on hunting permits and package consisting of specified game (Monau, pers comm.). The fact that money is spent by hunters does not necessarily imply instant riches to rural communities on whose lands the hunts are carried out. Meaningful empowerment in the form of imparting required skills to manage game stocks in communal areas is lacking and as such the hunts are carried out not as culling exercises for excess game, but as decimation campaigns for critically falling stocks of game. Game census is a necessary tool in every successful and sustainable hunting safari operation since it determines the allowable harvestable crop of game on an annual basis. The fact that hunting quotas for game are released on a regular basis surely should be corresponding to updated census statistics, which are fundamentally the basis for granting of hunting licenses and permits.

Census by themselves are not a common occurrence in both large game farms and tribal lands suggesting that yearly hunting quotas that are issued by executing authorities are somewhat faulty and largely not reliable. Authorities in Botswana imposed a moratorium on lion hunting on the basis that uncertainty existed over the actual numbers of this species (Funston 2005), thus not allowing ignorance to negatively affect the appropriate management of available lion stocks. Hunting in areas falling under tribal authorities is largely chaotic, since hunting permits are issued for non existent or depleted game stocks. None of the hunters pause to help implement sustainable communal game management practices, instead they return every year to deplete remnant game stocks. Such practices ignore logic and 'flies in the face of reality' given the necessity of game counts as a critical ingredient in wildlife management (Venter, Harley and Malatji 2004). Apart from impoverishing the communal rearing grounds for game, hunters get away with game without considering the black economic empowerment (BEE) compliance factor, since monitoring is poor.

1.5 Research Design.

This concept refers to the framework which is used in the collecting and analysis of data (Churchill 1992). The research design of this project entailed a number of aspects which reflect in

the following discussion:

1.5.1 Population.

The population of interest refers to all game farms in the province, cutting across the four regions, namely, Central, Bojanala, Southern and Bophirima. The total number (i.e. most recent tally) of game farms in the North West province is 569. These farms have had inspections and subsequently passed exemption certificates (i.e. sound game proof fence). Thus the primary source of information is derived from the owners of the game farms. Game farms refer to all exempted farms irrespective of size and ideally with game on them. Exemption certificates are applied for from the North West Department of Agriculture, Conservation and Environment (DACE). Reserves owned by the government, including South African Parks (Sanparks) and the North West Parks Board (NWPTB) are excluded.

1.5.2 Sample size.

The determination of sample size in this study was not difficult since the population in which the parameters of interest were examined was finite (i.e. the total population estimate is available and is around 569 farms). The sample size constitutes a representative proportion (i.e. 20%) of game farms which are registered with DACE, by virtue of exemption inspections or by applications for permits (i.e. holding, transportation, import, export or hunting permits). To compensate for sample size based bias, a sampling frame (i.e. consists of sampling units) was also contructed so that each sampling units should have a fair chance of being included and thus to reduce sampling error. Brunt (1997) states that sampling error represents the discrepancy between outcomes from a representative sample (n) when compared to those from the true population (N). The author advocates for any sample beyond 20%, since it will help to reduce sampling error. The sample size of 20% was decided upon in view of constraints in terms of time and funds available. Sample size is determined by population size if known and where possible the sample has to be representative of the population and its various unique characteristics (Mikkelsen 1995). Williams and Duvel (2005) did use a sample of about 20% in a social study to measure the effect of messages communicated to rural households by Agricultural extesionists in Lesotho.

1.5.3 Sampling method.

Random, systematic sampling may be applied through the use of telephonic interviews. In this study, telephone interviews were specifically chosen in order to save both time and costs. The costs of traveling and working both within and between regions were exorbitant for the level and intensity of the study. Telephone interviews are themselves adequately reliable and have been used extensively in tourism research (Brunt 1997). The use of telephone interviews saved time and effort, insuring ultimately that the field work was done and completed within three months (October to December 2004).

The sample was also stratified according to distribution of game farms in the four regions of the province, since the population of game farms is not uniformly distributed across the province in terms of density (Mikkelsen 1995). The region having the most game farms had a higher proportion of the sample. The sample had to be random in order to reduce sampling error bias, otherwise the likelihood of selecting a sample based on subjective considerations like easy of access and /or convenience factors would have been difficult to eliminate. Given that the population size was known (*N=569*), the sample had to be systematically selected to insure representativity and fair chance of inclusion of all sampling units.

1.5.4 Data collection and analysis.

The data collected were in line with the five identified objectives of this study project and the process is summarized and reflected in Table 1.3. Data collection took place from October to December 2004.

Table 1.3 Data collection and analysis process.

Objective	Method of Data Collection	Source	Data analysis
1. Examine ownership of game farms in the North West province in terms of gender, age, race and location.	Telephone inquiries. Records.	Land owners. DACE records.	Basic statistics including chi squares.
2. Examine the economic factors like the size of property.	Telephone inquiries. Records	Land owners. DACE records.	Basic equations like Frequency tables and chi squares.
3. Examine the extent of BEE in relation to racial profile of client base and shareholding.	Telephone inquiries. Records	Auctions / Estate agents. DACE	Basic equations like frequency tables and chi squares.
4. Examine the objective and basis of game farming in terms of biodiversity and economic imperatives.	Telephone inquiries. Records	Land owners. DACE	Descriptive statistics e.g. flow charts
5. On the basis of existing and collected information devise a model for BEE for game farming, North West province.	Available data	Literature and findings of study.	

1.5.5 Facilities and special resources.

This study was largely desktop given the nature of the topic and the method of data collection used. The following equipment, resources and facilities were used:

- Telephone and contact addresses.
- Computer and printer with access to Internet
- Attendance of auctions, workshops and meetings.
- Time
- Personal contacts.

1.5.6 Definition of key concepts.

Affirmative action	The act of deliberately advantaging previously disadvantaged groups like the youth, women, disabled and black people in general (Lourens 2003).
Black Economic Empowerment	It is an affirmative action based intervention to put previously disadvantaged individuals on par with the acceptable living standards of society and is partly inspired by the broad based black economic empowerment act (Act no. 53 of 2003).
Biodiversity	It refers to the wealth of a specific area with regard to its actual multiplicity or number of fauna and flora species (Van der Walt 2004).
Carrying capacity	The ecological limits of an area inclusive of climate, soil and quantity of vegetation to support a specified number of game animals (Hatch, et al 1996).
Communal hunting	The act of purchasing hunting rights with the intention of hunting feral or free roaming game in areas falling under tribal or communal jurisdiction (Monau, pers comm.).
Conservation	The act of protecting and preserving abiotic as well as biotic factors, in this case game from unsustainable exploitation (Manson 2004).
Ecotourism	It refers to a form of travelling where natural areas are experienced, understood and appreciated (Kupka 2004).
Exempted farms	Gamefarms that have undergone statutory (Government) inspection and are subsequently approved for the

	keeping of game through the use of compulsory game proof fencing (Reilly, et al 2003).
Feasibility study	The procedure of thoroughly understanding all factors including ecology, society and economics which are likely to favour or hinder the establishment of potential game farms (Fourie & Fourie 2005).
Game farms	Farms in which a bulk of their activities or income is directly attributable to the keeping and/or breeding of game animals (Reilly, et al 2003).
Game farming	The act of keeping game animals with the partial or sole object of deriving income / livelihood (Reilly, et al 2003).
Game management	The art or science of keeping wild animals in a sound, self perpetuating and sustainable manner that makes both ecological and economic sense (Bothma & Hoven 1993).
Genetic integrity	The level of intra specific breeding that does not compromise the healthy survival of a given game population into the future (Soule 1980).
Habitat	It is a specific unit area in which a specific plant or animal species is restricted to by choice and / or resource availability (Furstenburg 2004).
Intensive systems	The scale and level of game farming characterised by the deliberate breeding of one or a handful of game species for hunting, resale or restocking of game farms (Gouws[b] 2003).

Land owner	An individual who owns land (i.e. farm) and may posses game (Fourie 2004).
Natural resource base	The abiotic and biotic factors which support the existence and perpetuation of wildlife especially game (Fabricius, et al 1996).
Stocking rate	The actual quantity of game species allocated to a specified unit area expressed as number of game per hectare (no./ha) (Twine, et al 2002).
Transformation	Changes enacted in an organisation with the object of furthering black economic empowerment and affirmative action (Blignaut 1996).
Trophy hunting	The act of hunting game especially old males for their skin, horns or any other part of their body considered valuable as an ornament (Radder, et al 2000).
Venison	The edible part of the game carcass (Schack[b] 2004).
Wildlife	All aspects of the natural environment, especially fauna and flora (Barnes 1996).

1.5.7 Organisation of the Study.

The study consists of the following chapters:

Chapter 1 – Orientation

Chapter 2 – Literature review

Chapter 3 – Theoretical foundation

Chapter 4 – Defining the problem and formulation of research questions.

Chapter 5 – Research design and analysis.

Chapter 6 – Results and interpretation.

Chapter 7 – Discussions, conclusions, implications and recommendations.

The following chapters focuses on the literature reviewed for this study.

Chapter 2

Literature review.

2.1 Background.

Africa's popularity as a tourist destination dates back to an era when the continent was teeming with wildlife, and hence became a favourite destination for overseas visitors. Tourism in Africa has meanwhile retained its international base and is consistently influenced from outside the continent especially with respect to issues like competitiveness and benchmarking (Cleverdon 2002). Part of this particular background initially inspired the national parks system in Africa, followed by the current mushrooming of game farms in South Africa (Barnes 1996). Visitors to the continent have always retained certain stereotypes, especially with regards to its landscape, *biota* and inhabitants. Such stereotypes include the belief that African wildlife should be conserved solely to serve the interests of safari tourists (Baldus and Cauldwell 2005), which may compromise biodiversity conservation as the primary goal. Tourism standards applied are also foreign, influenced as they are by global agendas (Wahab and Cooper 2001). The role players, especially tourists have similarly changed over time and have become, as Swart and Saayman (1998) observe, smarter, sophisticated, well informed and confident of their expectations.

Earlier, visitors were keen to experience the unspoilt beauty and scenery, far from the disturbed Europe. Conservation then was construed as the protection of species and habitats for consumption by overseas tourists. The popularity of South Africa as a tourist destination may not necessarily be construed differently with the rest of the African continent (Cleverdon 2002), especially seeing that pastoral rangelands were appropriated for exclusive wildlife conservation (Pearce 2006). Currently, close to 65 million hectares of land outside national parks is used exclusively for game farming (Agrireview 2003). Contrary to popular belief, the relative high number of game farms and associated high capital investments in a variety of game species has nothing to do with the viability of the sector (Luus 2003). It however represents misdirected investments in capital projects which are finding it increasingly difficult to justify their existence, against their inability to repay back funds expended on them. The picture presented by the game farming sector, shows high level of indebtedness characterised by poor patronage from potential clients. Save for the subsidisation of some game farms by their owners, many could have disappeared into oblivion, replete with mounting debts and visitor apathy (Fourie 2004).

South Africa is considered a safe and cheap tourist destination (Graham 2003), and has steadily built up its capacity to cater for all categories of tourists, despite obvious bias towards overseas visitors. Overseas tourists to the country are estimated only at about 15.8%, whilst visitors from the African continent make close to 73% (Clarke 1997) making it inconceivable for the upholding of the status quo. The only difference tipping the scale in favour of European tourists is the fact that they bring in hard currency for which services not goods are offered in return (e.g. sleeping in a game lodge or going on a game drive). African tourists in contrast to Europeans, visit South Africa to shop for capital goods which may be absent or very expensive in their own countries and rarely ever explore existing ecotourism destinations, specifically game farms (Cembi 2001).

South Africa is one of the few destinations around the globe which has maintained its competitiveness and popularity post the 9/11 terrorist attack in New York (Pretorius, et al 2002). Unlike East African countries like Tanzania and Kenya with almost a half century experience in hosting ecotourists (Wales 2006), South Africa's tourism sector is still reeling from years of sanctions and isolation. Tourism in South Africa possesses the ability to contribute wholesomely to the gross domestic product (GDP). For qualifying as a prime eco-tourist destination, South Africa offers the best infrastructure in terms of roads (Cleverdon 2002, Agrireview[a] 1997), telephones, air travel, hotel accommodation, amusements and heritage sites (including memorial sites). The mosaic of private and public resorts as well as game reserves offers irresistible temptations to potential visitors. At the game farm level shift in focus has to occur, moving the emphasis from catering for high income international ecotourists and hunters and start nurturing the reluctant domestic clients.

At some stage South Africa like any developing economy was victim to currency depreciation, falling trade barriers and vulnerability of the domestic market to foreign trade associated with investor apathy with serious repercussions for the economy (Agrireview[b] 2004). The losses incurred on the market front (i.e. macro economic adjustments) were reversed by the gains on the ecotourism front (Monama 2004). Stronger foreign currencies, meant affordability of travelling and staying in South Africa and the flooding of the ecotourism market. Game farms specialising in offering trophy hunting had potential benefits in their directions (Cleverdon 2002), provided that they marketed their products well and that their facilities were of a certain standard.

In Botswana there are necessarily no game farms of a scale and standard witnessed in South Africa (Botswana Tourism 2001). Thus apart from Namibia and possibly what remains in

Zimbabwe, South Africa is the only country in Southern Africa, perhaps in the whole of Africa with a functioning albeit struggling game farming industry (Milledge 2005). Though Botswana is endowed with a fair wealth of wildlife especially along the shores of Lake Ngami and the Okavango delta, few operators have gone the game farming direction (Barnes 1996). This can be partly explained by the existing land tenure system which tends to favour communal ownership of land on a long term lease basis and the fact that game farming itself is a relatively young, evolving sector. Botswana's tourism sector is based solely on wildlife and wildlife related activities and not so much on other aspects like culture, or human heritage (Barnes 1996). With its world class game sanctuaries and a string of privately run ecotourism destinations like Okavango, Chobe, Ngamiland, Moremi and Kgalagadi, tourists are reluctant to take additional tours into villages to experience the cultural heritage of local inhabitants (Botswana Tourism 2001). The Botswana tourism sector is currently contemplating diversifying tourism by opening up new areas of the country and "adding new components like cultural and historic experiences" (ibid), in a sense promoting developments in rural and remote areas. The aim of this new strategy is to support participation of communities in tourism, creating opportunities for employment and income.

2.2 Tourism theory and its linkages to game farming.

The central point of this discussion is eco-tourism management, especially with respect to its marketing and thorough administration at a micro level, namely at the game farm level. Game farming forms an integral part of ecotourism, which happens to be encapsulated in the broader concept of tourism. According to Seaton and Bennett (1996), tourism refers to the aggregate of all businesses that directly provide goods or services to facilitate business, pleasure and leisure activities away from the home environment. Ecotourism needs to be defined in its entirety, so that its importance at both the provincial and local level can be appreciated. Ecotourism is largely a South American concept which has outgrown into a global cliché (Mader 2003). This concept has evolved over time and was influenced by growing concerns about conservation and sustainability, which should be compatible to livelihoods and human survival (Pearce and Turner 1990).

Ecotourism responsibilities are no longer abstract, but cater for the well being of people directly affected like indigenous people of the forests and prairies and their cultures. In the case of South Africa, ecotourism needs to include cultural excursion into divesre cultures, township stays and relevantly, black operated game farms and private nature reserves (Mahony and Van Zyl 2002).

In contrast to general tourism, ecotourism emphasis has simply integrated the equally important socio cultural variables into the otherwise accepted biophysical dimension. Thus in a nutshell, ecotourism is a nature based travel experience that contributes to the cultural and economic resources of host communities, including in this case game farms.

The Canadian experience with regard to ecotourism management and regulation has set standards for the world, at least with regard to formulating some of the innate conservation policies into a functional strategy. The Canadian ecotourism management framework was developed by the Saskatchewan provincial government (Speer 1997). The framework hinges on the following aspects:

- Supports conservation and ecosystem protection.
- Follows conservation principles of reduce, reuse, recycle in daily living and travelling habits.
- Accepts nature on its own terms, not expecting it to change or be modified for the traveller's convenience.
- Respects local cultures and traditional lifestyles.
- Becomes as informed about local environmental, cultural and resource uses.
- Patronises tourism facilities that conduct their operations in an ecologically and socially responsible manner.
- Supports local community services where possible and contributes to local environmental conservation

(Speer 1997: 3).

From a South African perspective, eco-tourism refers to a form of sustainable tourism which through its associated infrastructure seeks to operate within the natural capacities for the regeneration and future productivity of natural and cultural resources, recognising the contribution that communities, customs and lifestyles make to the tourism experience (Manson 2004 and Moore 2004). Clarke (1997) argues that tourism activities have to be successful in order to be appreciated and patronised over time. Based on author's the analogy, for tourism to be sustainable it has to optimise the economic and other societal benefits available currently but not jeopardise potential for benefit in the future.

Marketing forms the biggest component of the management agenda of every single business enterprise, irrespective of size. However certain stereotypes exist which tend to align efficient marketing with bigger or corporate organisation, belittling in the process smaller organisations marketing drives as primitive and without hope (Seaton and Bennett 1996). It is often argued that marketing of tourism destination or business is independent of size and is not only about getting people to part with their well earned money, but is indeed the opposite as per principle of willingness to pay (Pearce and Turner 1990). It is further contended that the product offered should be of satisfactory quality and standard, which will by itself lure or tempt potential clients (Upton 1996). The same analogy is brought by Seaton and Bennett (1996: 4 - 9), who see tourism management as a holistic concept, encompassing *inter alia*:

- A philosophy of consumer orientation.
- A set of analytical procedures and concepts
- A body of data gathering techniques
- A managerial planning programme
- An organisational orientation.

Tourism is defined as an aggregate of all businesses that directly provide goods and services to facilitate business, pleasure and leisure activities away from the home environment (Masemola 2003). It is the differences between enterprises in operational scope and impact arising from differences in financial resources, control of the market, the degree of integration with similar enterprises and customer volumes that inspire this discussion (Varian 1996). Marketing plans of many small organisations may look primitive, however during the establishment and planning phase of the business it should be determined exactly who are and where the customers will come from (Cleverdon 2002). Location is everything for a business and hence has to be strategically decided, taking into consideration aspects such as proximity to some form or mode of transport or communications (Upton 1996). Some enterprises will go to any length to position their businesses close to an airport or main road, thus in a way taking advantage of good passing trade. One game farmer in a remote part of the province specifically granted a mobile phone company space, almost for nothing in return on his farm in order to communicate with clients. Other entrepreneurs, including game farmers use the advantage of being situated along a main road, to offer overnight bed and breakfast facilities to passing tourists(Jonker 2003).

2.2.1 Tourism marketing.

Tourism marketing is essential for the success of every tourist attraction, enterprise or destination, since it is through the marketing component that people tend to know about a place and end up visiting it (Fouche 2003). Marketing needs to be explained and defined in order to be understood with the aim of implanting it in a tourism or tourism related enterprise (Kirsten and Rogerson 2002). To this end, an elaborate, definitive and comprehensive analysis of marketing as a concept is given by Seaton and Bennett (1996) who define marketing as,

'an analytical orientation which involve knowing what questions need to be asked and answered to determine the business potential of a tourism enterprise in relation to: its past, present and predicted customers, the business environment in which it exists, the societal and social environment in which the business must operate.'

Tourism marketing is about fulfilling the demand put forth by the tourist (Nel 2006). It involves the process of identifying the needs of a tourist as a consumer (i.e. consumer preferences), influencing them to some extent, satisfying them accordingly and being able to derive profit from the whole exercise (Varian 1996). Ecotourism management refers to the running and management of the foresaid process, since it seeks to concentrate on identifying the needs and environments or situations under which consumers are served. The whole business is all about management. Eco-tourism management as it relates to game farms focuses on developing products for the market, pricing them correctly, promoting them, or whenever necessary distributing them to consumers in an attractive and packaged manner (Jonker 2003). Mapungubwe National Park, for instance, was developed as an eco-tourism product (both as a brand and an entity) and hence, made itself amendable for succesful marketing (Helfrich 2004). Evaluation of the effectiveness of the whole management process occurs through feedback provided by consumers, with the sole aim of measuring the amount of satisfaction realised or consumer utility (Varian 1996).

2.2.2 Developing products for the market.

Entrepreneurs in the game farming sector should behave like business people and organise the affairs of their businesses in a professional manner (Fourie 2004). To be professional in the ecotourism sector is to have good financial management and marketing skills, being able to sell one's services to prospective buyers and earning a decent profit for services rendered (Upton

1996). The game farm owner must know his or her clients, their needs and preferences and be able to deliver a memorable and lasting impression for visitors (Botha 2005). Regular clients should be treated with the high standard as if they were new visitors and thus always keeping abreast with market developments with the aim of attracting as many clients as the establishment could possibly be able to cater.

2.2.3 Pricing products correctly.

There is nothing as distasteful or repelling as charging unreasonable prices from one's current and prospective clients. Prices should match the quality of service and exercise caution when putting prices for services (Jooste 2003). An enterpreneur should always look at the prevailing prices for similar services in one's vicinity and avoid pricing one's services beyond the reach of clients or as the saying goes, 'pricing oneself out of the market'. Classicaly the product price is determined at a point where marginal costs equal marginal revenue (Upton 1996). The popularity of any tourist destination, including any game farm is spread mostly by word of mouth (Botha 2005). Thus if one's prices are unreasonable, the word will spread out, having serious consequences for one's business.

2.2.4 Promoting products.

Promoting a business is important and takes a lot of effort, which takes some time to pay dividends (Van Burick[c] 2003). It is thus not realistic to expect a recently established business to start making lots of money when little effort was spent in promoting it. Promoting a service or product has more to do with its quality and its 'readiness' for the market (Cordes 2004). Half done or inferior products are often hard and difficult to sell. Thus the well prepared a service is, the better the chances of it being successfully promoted and eventually getting bought.

2.2.5 Distributing products to consumers properly.

Customer care is very important for every business and it should always be coupled with friendliness, courtesy, politeness and hospitality (Jooste 2003). In this marketing era, customer care is used as one of the tools in selling or promoting the services on offer at businesses. Thus customers will always be right when visiting game farms (Botha 2005).

2.3 Origins and characteristics of tourism markets.

Marketing in general and tourism marketing in particular, is a phenomenon that is time adaptive and evolving consistently (Sharp 2003). Experts in marketing divide the phases of marketing into three, incorporating the present technological era, namely, the production era, the selling era and the marketing era.

2.3.1 The production era.

This era is associated with the period of mass production, where every effort was spent on maximising production and optimising distribution not in a necessarily *pareto* efficient way (Pearce and Turner 1990). Then suppliers were few and hence there was no need to compete for serving the market. Welfare and social systems of governance and ideology dominated this era, where the state had a greater role in directing citizens' rights (The Economist 2004). In the ecotourism sector of South Africa, this era coincided with the establishment of tourism institutions like Aventura, national parks systems and boards. The organisation supplied what it thought was wanted and the consumers or tourists were glad to accept anything that was on offer. The supplying organisations did not need to adapt their products to specific tastes or engage in massive promotion to make the consumer aware of their products. This era has some parallels with the current mass establishment of game farms, where owners of these places think they know what the market expects of them and feasibility studies are not considered an option (Fourie 2006).

2.3.2 The Selling era.

This was an era of deregulation and reformation of the markets, where demand and supply started to take shape (Scholtz and Schirm 2005). Deregulation meant no reasonable restriction on competition and hence allowing other suppliers to enter the market place, where demand was driven by consumer behaviour and influenced by differing tastes and preferences (Agireview[b] 2004). There was no longer guaranteed demand on the side of consumers and hence demand had to be stimulated and influenced through intensive selling in the face of competition from rivals (Nell and Napier 2006). More efforts were made out of high pressure selling and advertising to generate demand for goods and services.

2.3.3 The marketing era.

The marketing era is an era which began during the Word War Two, or immediately thereafter. This period is characterised in part by relative peace and serenity coupled with the massive reconstruction phase of especially Japan and Germany (Taro 2005). The era is marked by increased competition among suppliers, increased consumer purchasing power and obsoleteness of intensive selling campaigns which were simply proving inadequate and inefficient (Jeffery 2002). The consuming public likewise became more sophisticated and were unwilling to accept anything inferior or not worth the money they had to part with. Many goods and services of varying qualities and quantities were now readily available for potential consumers to pick from (Scholtz and Schirm 2005). The suppliers had to adapt to the new reality and they responded by designing goods and services which matched consumer's exact tastes and preferences (Fourie 2006). Marketing research, as a component of mainstream marketing emerged, with the sole aim of keeping track with consumers' changing needs (Nell and Napier 2006).

Tourism markets follow almost similar operating principles common to mainstream marketing. They adapt to changes in more or less a similar pace or mode. However in contrast to marketing of goods, services tend to follow subjective modes of evaluating consumer satisfaction which in this case does not subject itself to easy and ready measurement. Characteristics (As adapted from Vellas and Becherel 1999, and Seaton and Bennett 1996) that make marketing of tourism services unique, include the following:

■ Intangibility: Services or the quality thereof, can only be experienced, felt or seen and do not subject themselves to touch, packaging or sight as is the case with goods. In case of game farming, all the services are intangible up to a point were an antelope has to be put down and processed for trophy or biltong. Thus services are intangible and this particular factor sometimes counts against them, in that they may be awarded poor grading simply because they do not have quantity or have mass. A typical example is a visit to a given game farm guest house or chalet. If one is tasked with evaluating its quality, he or she will be blinded by his or her previous experience of similar establishments. If previous experience was good not because of the look or service of the said establishment, he or she is likely to use that particular experience as a benchmark to evaluate the quality of the establishment at hand. Intangibility of the service industry, including the tourism sector is thus discretionary and arbitrary and at worst subjective.

However its performance ratings may be objective since they are based on tangible aspects like turnover, visitor numbers (Rogerson 2002), etc.

■ Heterogeneity: Tourism destinations between classes and within classes differ in quality and aspects of consumer interest. Two game farms within the same area, or environment will always differ from each other, including experiences that various visitors experience from them. These differences are bound to remain even if services offered are standardised across the board, simply because the respective establishments are different, either in terms of clients profile, appearance, accessibility or affordability (Cleverdon 2002). This particular aspect of heterogeneity further makes the service sector unique with respect to its marketing or marketing tools it requires.

■ Temporary ownership: Experiences which tourists feel when they visit a particular destination are once off and short term. If a visitor goes on a game drive in a particular game farm, his or her experiences are short lived and sooner or later the use lease would have expired, transferred to other users or simply relinquished because one has to pass on and give others a similar opportunity. Frequently, tourists are only allowed to rent a guest house for a specified period, which may not be prolonged.

■ Perishability: Services are amendable to ready or immediate use and may not be stored or packaged for later nominated time. A unique sighting of lions hunting during a visit to a game farm is rare and if one fails to avail oneself, that opportunity might not be repeated and can be forfeited for good. Thus tourism services are to an extent perishable and not easy to postpone.

■ Inseparability: Services offered by tourism organisation are inseparable, in that the service provider and consumer interact at given times and those particular interactions are short lived and may not be repeated, hence making those opportunities non divisible and inseparable.

■ Inelasticity of supply: Tourism services generally are not responsive to demand in the short term, and hence take time for price adjustment to be effected. Demand for tourism services increase and decline in the short term, thus not able to affect their pricing within such restricted time frames. A good example is when visitors decide to come and hike on a given game on a particular weekend, without doing reservations before hand, a game farm cannot decide on that given Friday to escalate known tariffs so as to tap into the massive visitor numbers. The same type of situation can also occur if below normal visitors arrive during a particular time the game

farmer cannot decide to drop the tariffs to lure more visitors in the short term simply on grounds of not being aware of such a development.

■ Sensitive to events: The tourism sector is sensitive to developmental, socio-economic and political events. Tourism is as sensitive to events as the stock trading and exchange, and can within a nick of time either depress or increase demand for tourism products. Rumours about the occurrence of bird flu certainly affected the normal visitations to ostrich farms in Southern and Eastern Cape, for example in Outshoorn.

■ Complementarity: Tourism can refer absolutely to every event involving travelling which include transportation, hotel and accommodation, restaurants and museums. Thus in order for a tourism experience to be worth the while, the transport, accommodation, food, guiding and all other necessary things should be of a similar and high standard.

■ High fixed costs: The tourism sector has an expensive capital outlay requirement, involving property in the case of game farms. It is thus a sector which can either ruin or make a success out of an entrepreneur.

■ Labour intensive: Tourism is a service sector which relies to a greater extent on humans than machinery unlike traditional industries like manufacturing or forestry. There are even suggestions that tourism provides for more personnel for each client served, thus having high staff to client ratio. A lone tourist for example has to be served by airline, hotel and amusement park staff at any given point in time.

2.4 Impact of globalisation on tourism.

Tourism as it is must forge strong institutional linkages at local, national and international level. Sound institutional foundations will enable the tourism sector to withstand structural changes brought about by international macro economic policies including globalisation. According to Wahab and Cooper (2001), globalisation describes the process by which: 'events, decisions and activities in one part of the world come to have significant outcomes for communities and individuals in quite distant parts of the globe'. The South African tourism sector is yet to wither economic storms brought about by globalisation, which *inter alia* include consequences of terrorist attacks, civil wars, fraud and corruption, and political instability.

2.4.1 Consequences of terrorist attacks.

International terrorism is one single factor which has so far had a negative effect on tourism (Girvan 2001). This has led to prime tourist destination like Kenya, Saudi Arabia and Indonesia being avoided as a result of suspected terrorist attacks. The Nairobi US Embassy bombing in 1998 and the consequent bombing of an Israeli air line in Mombassa in 2002 have markedly affected tourism in Kenya, which is ironically the biggest economic sector in that country (McGregor 2006). The subsequent mass cancellations of hotel and airline bookings had significant impact on the economy of Kenya (Mastny 2001). The same can be said about the Bali bombings in Indonesia and the twin tower collapse in New York (Girvan 2001). The aftermath of the American bombings had a crippling effect on the airline industry with some airlines having to be grounded for days on end. The airline industry, which accounts for facilitating more than 60% of international travels and tourism, has never recovered fully from this ordeal (Dokupil 2003). This international phenomena has without doubt affected the local game industry, in that foreign hunters and visitors had to either re-schedule, shorten or cancel their visits on account of safety considerations.

2.4.2 Civil wars.

Civil wars are also capable of wreaking havoc in the tourism sector (Somah 2005). Potential visitors and tourists to the African continent and elsewhere are forced to reconsider their holiday itineraries because of the looming civil war threats, in which tourists fall victim to paramilitary factions (Duale 1993). The capturing and holding of tourist hostages in some exclusive and remote island locations in the Philippines is perhaps a case in point (Hayes 2003). The subsequent capturing of tourist by rebel gangs in Colombia (South America) is also a typical case of the victimisation of visitors due to civil unrest (Penhaul 1999).

2.4.3 Fraud and corruption.

Fraudulent transactions and rampant corruption at both the national and international level has had a negative impact on tourism (Bildirici 2005). Credit card fraud involving either the overcharging, illegal debits or soliciting of bribes from tourists is a common occurrence in popular tourist destinations around the globe. At times tourists are preyed upon by corrupt

government officials who solicit bribes, which if not forth coming, are subject to harassment and unbearable experience further repelling tourists away (Luboff 1999).

2.4.4 Political instability.

The tourist trade is a very fickle industry and just like the stock exchange is very sensitive to mere sentiments irrespective of their validity (Legum 2004). Events of the mid 1960s to 1970s in East Africa affected its tourism receipts dramatically and negatively. In Uganda, the Idi Amin factor, where the economy was deliberately taken away from private ownership and nationalised sent shock waves in the international community resulting in the self imposed, but temporary travel moratorium (Engel 1997). The same can be said about the current political turmoil in Zimbabwe, which has not only kept tourists away, but has also led to a crippling effect to that country's economy. Scarce foreign exchange reserves have consequently been depleted causing inflationary effect on the local currency and all the negative factors which go with it (Shaw 2002). Prime game farms have been taken over, decimating whatever remained of that country's game farming sector (Groenewald 2003).

2.5 The theory of demand as it relates to tourism.

Tourism on an international scale is stimulated by varying factor endowments between countries. Factor endowments can play a significant role also at a regional scale, as is typically the case with different provinces within South Africa (Mmbengwa 2006). The factor endowments of a province like the North West in terms of its bushveld based game farming sector and agriculture (Mc Ghee 2006), makes it to have a comparative advantage in terms of having to attract a considerably higher number of tourists than other inland provinces like the Northern Cape and the Free State.

2.6 Ecotourism under conditions of perfect competition / free market economy.

Profit maximisation should essentially be adopted by every business enterprise as the guiding principle (Upton 1996), coupled as it may with other equally important factors such as integrity, customer care and service, reasonable pricing and above standard deals (Cordes 2004). It is no secret that businesses which make it through the years have good marketing strategies, which incorporate sound advertising. Given that close to two of every five businesses started, fail in the first five years, it thus become important for entrepreneurs to focus whole heartedly on

developing sound competitive model, laced as it may with strong profit maximisation strategies (Maree 2004).

Focussing on profit maximisation is essential, given the fact that most of the small and medium enterprises are price takers (Cordes 2004), unless they can bond together for purposes of purchasing requisites thus forming a formidable force which is able to influence prices at the market place (Botha 2004). Such corporative models do exist in the hospitality and game farm industry and they assume such forms as budget bed and breakfast franchises, eco-tourism destinations (including specialising in agro-tourism) and guest houses (Fouche 2003). In the game farming sector, conservancies are formed consisting of more than one game farm (Gouws[a] 2003). Conservancies formed around game farms and private nature reserves like the Sabi sand and Mala Mala in the vicinity of Kruger National Park are able to influence the market based on their sheer size and buying or selling power.

Price taking may turn out to be a crippling factor for many a business enterprise, since it does not allow one to be fully competitive (Bezuidenhout[a] 2003), simply because if prices of game animals fall, one is expected to follow suit and offer similarly cheap hunting packages often at a loss. If a game farmer fails to follow the cue from the markets, he or she gets punished for insisting on higher prices than the market offers, by simply losing clientele unless substantive justifications exist for allowing the prices to remain as they are. The other factor of price taking is that it is inflexible, in that prices can fluctuate with big margins within short time frames hence affecting futures markets and signed contractual obligations (Agrireview[b] 2004). A typical example is the strengthening of the South African currency, the rand against the American dollar from R13.00 to R6.00 for $1 within a period of eight months (Smith 2004), affecting price for hunting packages negotiated with foreign tourists detrimentally. Such drastic currency appreciation against major currencies, means foreign trophy hunter's buying power is eroded, thus likely to change his mind to come and spend a week or two in South Africa. Alternatively, if the foreign currencies strengthen against the South African rand, farmers will be forced to honour their contractual obligation, losing out seriously from the deal (Coetzee 2006).

Decisions on the part of the game farm owners in the face of currency exchange fluctuations are complex (i.e. whether to cancel contracts and face legal consequence or honour contract and face financial ruin), allowing for micro economic theories to set in (Katz and Rosen 1998). These theories normally provide guidance to entrepreneurs to make good predictions and consequently

reasonable decisions. Since the object of an entrepreneur is to make business and derive satisfactory profit, he or she should aim to operate in such a way that marginal revenue will equal marginal cost (Upton 1996). In general, profit maximisation is realised at a point where average revenue is above average economic cost (Varian 2004).

Though price taking is not a desirable option for maximising profit, it can surely be managed through thorough micro economic decision making. Entrepreneurs should make decisions with the understanding that they cannot influence prices of services that they offer nor can they control circumstances that they operate under (Smith 2004). Katz and Rosen (1998), offer guidance for price taking entrepreneurs as follows, viz.:

- That most entrepreneurs, and to that effect their businesses are price takers. This implies that no single guest house or game farm owner can influence price as determined by forces of demand and supply. The decision of one single entrepreneur to close or continue operating his or her business will not affect the game farming industry unless where vertical integration is the norm and probably where such an operation is a monopoly.

- Price taking is the result of independent forces of supply and demand, where neither suppliers nor demanders collude to act in concert, forming a cartel so as to influence prices.

- Since the price taker's behaviour is subject to analysis (using marginal cost and revenue curves), it becomes easier to make decisions and hence manage the situation.

There are rules which govern profit maximisation and these are essentially critical tools for determining the fate of any given enterprise (Upton 1996). Decidedly, entrepreneurs are wary of loss and are likely to avoid events that will culminate in failure. Thus still using the micro economic theories, it is possible to determine if an enterprise is to be allowed to operate or not. These rules (Table 2.1), namely, the marginal output rule and the shut down rule, can be interpreted as crude and arbitrary, since they separate decision making from sensations and emotions. According to these rules, either an enterprise can be allowed to operate on the basis of costs being less than revenue, or alternative closed when costs are always above revenue (Katz and Rosen 1998).

Table 2.1 Rules for profit maximisation.

Rule	Situation	Verdict
Marginal output	Marginal revenue is equal or above marginal cost for offering goods and services.	Not to close
Shut down	The business's average revenue is consistently below its average economic cost.	Close down

(Adapted from Katz and Rosen: 1998, 300-301)

2.6.1 Managing crisis situation in the hospitality and services sectors.

Whenever crisis situations occur (for managers of businesses and enterprises), they cause strains in decision making, since instant solutions have to be found for new problems (Genis 2004). In actual fact, instant decisions required have all the characteristics of short term supply curves and coincidentally, they also occur in the short term (Varian 1996). A typical example is where currency has strengthened affecting the already negotiated prices for boarding and lodging as well as hunting packages for foreign tourists (Agrireview[b] 1997). For purposes of illustration, accommodation (excluding hunting costs) for seven days costs $ 1 750 per person at an official exchange rate of $ 1 is to R 9, 20 is negotiated in December 2002 for November 2003. If the local currency strengthens in the meantime, to $ 1 is to R 6,30, the actual depreciation amounts to 32%, implying that the game farmer will receive R1 750.00 less 32% (i.e. R 1 198,36).

At 50% occupancy rate the lodge accommodation (i.e. it accommodates ten groups of four hunters or 40 people) on the game farm is able to break even, implying that the average revenue is equal to the average costs. Thus at 50% occupancy rate, the game farm will only receive R 23 967.2 against the target of R 35 000 assuming that the local currency does not strengthens.

The decision of the game farmer in the short term, will either be to up the occupancy rate to at least 75% in order to be able to break even (i.e. reach target of R 35 000) or cancel negotiated future contracts at a loss.

2.7 Perspectives on ecotourism marketing.

In order for ecotourism to be successfully managed it has to fulfil certain critical requirements, one of which is effective marketing (Sharp 2003). Failure of various business enterprises, including game farms is attributed to ineffectual or non existence of marketing strategies (Gouws[c] 2003). Marketing itself is a complex phenomenon, requiring at times specialist advice and pragmatic approaches. Marketing is defined from different angles, however, it is generally and classically referred to as "the management process responsible for identifying, anticipating and satisfying customer requirements profitably"(Becherel and Vellas 1999). According to Seaton and Bennett (1996: 4 - 9), marketing is:

- A directive, management function targeted at the consumer with the purpose of generating profit.
- A transactional exchange in which consumer needs as well as those of the enterprise must be balanced.
- A philosophy or state of mind. This emphasizes marketing as a broad orientation to business which involves putting the consumer at the centre of things.
- The management process responsible for identifying, anticipating and satisfying customer requirements profitably.
- The process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods and services to create exchanges that satisfy individual and organisational objectives.
- A management philosophy that, in the light of tourist demand makes it possible through research, forecasting and selection to place tourism products on the market most in line with the organisation's purpose for greatest benefit.
- A directed, goal oriented activity that balances the objectives of the tourist destination, or supplier within it, with the needs of tourists.

2.8 Politics and eco-tourism in South Africa.

South Africa is a country with an enormous ecotourism potential, which to a certain extent is exploited for economic and social reasons (Masemola 2003). The tourism sector is worth an estimated R 13 billion to the economy of this country, and consequently constitutes around 3.4% of its GDP (Clarke 1997). However, the ecotourism potential was affected to a large extent by

political realignments and reforms, which date from the late 1970s (Hanekom 1996). The fact that South Africa was at some stage an undemocratic, segregationist state affected its ecotourism potential negatively (Cousins 1996). It meant that the country was isolated from the international centre stage and with it a myriad of sanctions, ranging from travel bans to gaining of *pariah* status. With meaningful political reforms from around 1985 came the easing of sanctions allowing this country a chance to tap into the enormous opportunity offered by tourism in general and ecotourism in particular (Lund 1998). In practice, this meant tourists only went to national parks and provincial reserves and very few to game farms, or their predecessor. Tourists brought scarce foreign exchange into the country, allowing for the full advancement of this country into one of the sought after tourist destination, especially after the 1994 democratic elections (Masemola 2003).

2.8.1 Game farming and ecotourism in post segregation South Africa.

The era following the 1994 democratic dispensation was marked by both negative and positive developments in Ecotourism (Smit 2002). It was marked by the meaningful liberalisation of the ecotourism sector leading the way for existing agricultural entities to be converted into game farms (Smit 2002). Game farms established immediately after 1994 were few in numbers and thus stood to benefit from the ecotourism hype created then. With a handful of established game farms especially in the Limpopo province, domestic tourists visited these places for leisure during summer and hunting in winter and these places proved lucrative then (Mabogoane 2003). Ecotourism itself was to a large extent deregulated, resulting in the decrease in the government's dominant role. The South African government then started playing a minor role in the ecotourism sector (Coetsee 2003). The government was at one stage the sole owner of national parks, provincial game reserves and a major shareholder in various leisure organisations such as Aventura, Aquariums, guesthouses and some hotels. This changed dramatically with the privatisation of some of these institutions (Van der Merwe 2003).

2.8.2 Ecotourism in private hands.

The structural realignment in the ecotourism sector was to a large extent influenced by major policy shift on a macro economic level, which saw the shed of jobs in the formal employment sector (Venter 1999). Farmers also got into the ecotourism bandwagon, abandoning livestock and crop husbandry for game farm developments and 'bed and breakfast' establishments (Fourie

2004). Ecotourism promised new opportunities for growth and everyone wanted a share in it (Kupka 2004). Individuals had convincing reasons for participating in this sector, including farmers who cited livestock theft, failing crops and high input costs as reasons for abandoning traditional farming (Smit 2002). Game farming was also considered because certain farmers just liked the idea of wild antelopes sharing their farms with livestock like is the case with farmers in the Kgalagadi area of the North West province.

Where wildlife was introduced on an agricultural holding as a hobby, game drives and hunting which took place were limited to the friends and close relatives of owners of the game farm concerned (Fourie 2004). The fact that game does not require the same detailed care and management as livestock in terms of dipping intervals against ticks, dehorning, castration and vaccination against endemic pathogens, also constituted a part of the argument for introducing it into traditionally livestock farms (Smit 2002). Trophy hunting specifically by foreign clients brings in valuable hard currency and has been the reason behind the sophistication of certain game farms (Kerley, et al 1996). Some of the viable game farmers were smart enough to keep costs down in order to remain viable and competitive (Els 2002).

2.8.3 The future of game farming as a component of tourism in Southern Africa.

There is no disagreement that tourism is a big money generating sector in the world, given that it employs 11% of the total workforce and generates 10.1% of the Gross National Product (Masemola 2003). South Africa occupies a promising 0.2% of the world's tourism market, which translates into about 4.5 million outside visitors per annum (Clarke 1997), a sizeable number which visits game farms on a regular basis. Some game farms are advanced in their advertising and promotions programmes to the extent that they employ foreign agents on a full time basis to further their interests in the European and North American continents. This strategy by itself including advertising via the internet and through large wildlife exhibitions, has contributed towards the relatively high number of visitors to South Africa. In 1998, these tourists contributed R 53 billion to the country's economy (Kupka 2004).

World travel and tourism council in 2004 predict that tourism will in eight years time constitute 11% of the global gross domestic product, accounting in the process for about 19% of all the employment opportunities. At the moment the receipts that the game farming sector stands to benefit from the current unprecedented wave of tourism growth in South Africa have not been

quantified. However game farming clients constitutes a significant fraction of the plane loads of visitors who come to South Africa on a regular basis, specifically to view the so-called big five game (Novellie, et al 1996). At the global scale, Africa derives less than 2% of the world's tourism receipts, which converts into an estimated 16.5 million employment opportunities (Manson 2004).

The number of export permits for wildlife and their products can be used as a surrogate (i.e. used in unpriced environmental goods) in determining the actual number of visitors whose visit is linked to game farming in one way or the other (Wilson and Bryant 1997). The potential visitors to game farms can be distinguished in terms of their origin and subsequently funds that they are likely to expend (Table 2.2).

Table 2.2 Tourist categories.

Tourist nature	Characteristics	Expenditure
Non traveller (i.e. < 150 km)	Local area only / day visitor	Variable / budget
Home traveller	Hunt self & may process into biltong	modest
Distant traveller	Normal lodging	high
International traveller	Trophy hunter & prefers up market lodge	high

(Adapted from Woodside, et al 2000: 3)

Woodside, et al (2000), has discovered that non travellers are contrastingly taking a larger share of the tourist market in the United States of America (USA), estimated at 45%, which has implications on overall tourist generated reciepts.

2.8.4 Categories of game farms.

Game farms are not the same and tend to focus on specific niche market based on the variety of game species including the availability of the big five and other activities on offer like hiking, rock climbing and abseiling (Roosendal 2004). Some game farms restrict potential clients to foreign based trophy hunters who apart from harvesting old (trophy) animals are prepared to pay generously in foreign currency. Furthermore some game farms have accommodation as an option and where that is the case, additional income could be generated (Fourie 2004). The majority of game farms offer winter hunting, with or without professional hunter services (Kerley, et al

1996). Other game farms specialise in live sales of game, where game capture teams round off game into bomas to be sold later on (Botha 2002). The game is kept in the boma for some time before the actual sale in a system referred to as cataloguing. Classically for a farm to be considered a game farm, it should have a game proof fence and be appropriately exempted by a provincial conservation agency. There are basically three types of fence heights allowed for exemption purposes, namely, 1.4m, 1.8m and 2.4m (Bothma & Van Hoven 1993). The 1.4m fence is ideal for non jumping but creeping species like springbok *(Antidorcas marsupialis)* and blesbok *(Damaliscus dorcas phillipsi)*. The 1.8m and 2.4m fences are ideal for the rest of the jumping species, like eland *(Taurotragus oryx)*, kudu *(Tragelaphus strepsiceros)*, zebra *(Equus burchelli)* and giraffe *(Giraffa camelopardalis)*. Where applicable electrical fencing is activated like in instances where any of the big five is to be housed, to serve as a restraining barrier against escape.

2.8.5 Ecotourism and game farming.

Ordinarily ecotourism is taken to any form of ecologically inspired tourism, which in this case, implies environmental and wildlife tourism (Louw 2004). Visits to waste management and recycling plants constitute a greater part of the environmentally based tourism, whilst wildlife based tourism is taken for its literal meaning and may include visits to zoos, game farms and national parks. Ecotourism is a term coined essentially to define the type and nature of traveling involved, namely ecological tourism. It is the type of tourism which is supposed to benefit the environment and in Latin America, this concept is dubbed '*proyectos ecoturisticos*' (Mader 2003). This type of tourism, alias wildlife based tourism, puts emphasis on sustainability, avoiding the destruction of the resource base on which the industry lies (Clarke 1997), which may not necessarily include hunting.

Game farming is more ecologically sustainable than cattle farming in that, both woody and herbaceous vegetation are used in a balanced manner by game, specifically rhinoceros, giraffe and kudu since they consume trees taller than 1.5 m and take in more than 60% of their diet as browse (Botha 2003), mitigating bush encroachment in the process. Thus hiking trails as found in most game farms are the integral part of the adventure and leisure activities pursued by ecotourists. In short, some aspects of game farming are compatible for inclusion in the ecotourism activities (Kerley, et al 1996).

Ecotourism does also have an overarching and holistic definition. Mader (2003) has provided a rather inclusive definition of ecotourism within the context of environmental conservation. He accordingly holds the view that:

- Ecotourism should help people to understand and appreciate the environment.
- Ecotourism should help people to appreciate and enhance the understanding of other cultures.
- Ecotourism should enable people to do more than just observe – it should actively involve people in the subjects being explored and encourage them to follow it up.
- It must aim at minimising environmental and social impacts and insuring that it is sustainable.
- It should benefit the environment, the regional economy and local communities.
- It should be educational and enhance both the ecotourists experiences and their appreciation of the environment and regional cultures without assuming any value judgments

(Mader 2003: 4).

2.8.6 The growth potential of ecotourism within the greater tourism sector.

Tourism is one of the fastest growing sectors in the world, and is likely to maintain this trend into the foreseeable future. If recent reports are anything to go by, South African tourism sector has maintained an upward growth trend, seen nowhere else at least when measured against the backdrop of terrorism threats like the September 11 events of 2001 in America (Garson 2002). South Africa has generated in excess of R 650 million in 2000 and subsequently R 840 million in 2001 from ecotourism related hunting (Van Rooyen 2003). An estimated 6 000 overseas hunters visited South Africa in 2002, staying on average 10 days each and hunting at least 9 game animals to the overall cost of R 50 000 per hunter (Fourie 2006). The Eastern Cape province happens to have recorded the highest growth with regard to the game farming industry, estimated at between 20% to 30% per annum (Furstenburg and Van Niekerk 2004). The Eastern Cape province has experienced a period of growth since the year 2000, generating in excess of R4 billion to date. The number of game farms in this province has also phenomenally increased to 372 880 hectares (Pearce 2006).

It is however difficult to verify visitor numbers objectively given the often biased leanings usually adopted by agencies including newspapers. This happens when reporting on thought provoking issues like tourism where sensationalism tend to get the better part of agencies and reporters. It may turn out that visitor numbers are the exception rather than the norm given international conferences and meetings that where held in this country.

Ecotourism is a sector which is duly acknowledged for generating foreign revenue without depleting national resources of concerned nations (Kerley, et al 1996). It is unlike mining, agriculture, forestry or manufacturing where environmental externalities like pollution, resource depletion or human livelihood exploitation are rife. Ecotourism around the world is to a greater extent driven by leisure travelers who are keen to see fascinating and adventurous places, thus escaping from their daily often-uninteresting occupations (Mader 2003). The momentous growth experienced in the tourism sector has attracted a number of entrepreneurs who venture with the sole goal of generating wealth. In the process fundamental and ethical business rules are ignored, including market research and feasibility studies (Fourie 2004). Some operators become causalities and others manage to persevere amidst the vagaries of the free market where willing buyers and sellers are the order of the system. In South Africa, as is the case with other countries, tourism has created a euphoric environment with no set rules and standards, where operators enter the one moment and exit the other. Unscrupulous business practices become common occurrence.

2.9 The North West province on the eco-tourism front.

Mining, agriculture and industries in this order of importance dominate this province (Clarke 1997). So far, industries in general including mining and agro–enterprises are shedding workforce in great numbers (Qoza[b] 2004). Employment loss is inspired in the majority of cases by shifts and changes in global markets and the World Bank-influenced policies (i.e. austerity measures). Multinational companies including mining houses are competing for the consumer market share and in the process adopt cost reduction strategies which always prove fatal to employment opportunities (Qoza[b] ibid). Ecotourism at this stage remains the only source of sustainable activity, immune to short term globalisation moves, but a victim to visitor apathy and terrorism (Mastny 2001). The only identified side effect of ecotourism is visitor pressures and densities which threaten to damage the very environment it seeks to protect (Phillips 2003). Cases of ground compaction and littering in sensitive environments are regularly reported.

The North West tourism sector is developing relatively fast however, tourism activities and their contribution to the national gross domestic product is yet to be determined (Clarke 1997). The sector is estimated at less than 29% (DACE 2002), however it is acknowledged that tourism is responsible for the development of human settlements and related economic activities. North West is the most visited province in South Africa, with international tourism receipts in excess of R 1.4 billion in 1999. This contrast to a country like Kenya with 28 reserves and 22 national parks, where tourists are believed to spend close to $ 700 000 million per annum (Wales 2006). This trend is to some extent arising from world class infrastructure especially road and air transport to destinations like Sun City, Pilanesberg, Magaliesberg, Hartebeesfontein, Borakalalo and Madikwe Game Reserves.

Ecotourism destinations like parks in the North West province are 'nodes of development for rural areas with limited development potential'. Around Madikwe villages the anticipated development within the Madikwe Game Reserve is in excess of R 200 million and has had a positive economic stimulus (Lentswe 2003). The same situation around neighbouring game farms has not been reported and that may suggest limitations to the economic impact created specifically by these areas. The greater part of the North West province's vegetation is classified as typical savannah, and only a small part towards the south east is considered pure grasslands, especially from Coligny to Fochville (Mc Ferren, Fleming and Willis 2002). The savannah component is made up of principally thickets, shrubs and barely woodland, thus making it ideal for game farming. Game farming at some stage occupied about 160 000 ha of land (DACE 2002), which has certainly changed since then.

Independent studies to verify biodiversity in this province are few and whatever information is available is either fragmented, anecdotal or purely based on observation by few individuals. There is however no dispute about the mammalian and birdlife which the province boasts, including the so-called big five, lion (*Panthera leo*), leopard (*Panthera pardus*), rhinoceros (*Diceros bicornis*), buffalo (*Syncerus caffer*) and elephant (*Loxodonta africana*). Other souces of attraction for the province, though not pulling the intended crowds of tourists include the poorly marked and elusive, Baberspan Ramsar Wetland System, which is a home to a variety of migratory and sedentary birds, totaling 365 species recorded at any point. A study commissioned by the directorate of conservation in the province concluded that there are 395 different species of birds sighted in this province as reflected in Table 2.3 (DACE 2002).

The generic economic value of the world's 89 identified wetlands is estimated to be in excess of $ 70 per annum in terms of services they provide to the environment (Anon[d] 2004). Given the aridity of the province, artificial water bodies like dams have over time assumed some importance in terms of fulfilling recreational needs of tourists both within and outside the region. Notable amongst those include dams like Disaneng, popular with fishing and yachting at least within the vicinity of Mafikeng. Bloemhof holds seasonal angling competitions, whilst Hartebeespoort is sought after by property investors from all over including notably Gauteng (DACE 2002).

Table 2.3 Biodiversity indicators in the province.

Biodiversity indicator	Species tally
Amphibians	25
Birds	395
Plants	217
Mammals	138
Reptiles	95

(Adapted from DACE 2002: 28)

The provincial entity which posseses the mandate to run both tourism business and game reserves, runs at least 14 proclaimed game reserves, including two hotel schools and the popular Madikwe– Pilanesburg complex (Table 2.4). At another level, this province is dubbed the 'heritage destination' by the local tourism authorities, precisely for its popular cultural sites. These include the recently enlisted World Heritage sites of Vredefort dome and Taung skull in Buxton (DACE 2002). The Rustenburg, Brits and Hartebeespoort area is renowned for its oldest hominid remains and unique Magaliesberg Mountains (Clarke 1997).

Another critical factor that needs to be formulated in this province is a tourism land use and zoning plan, which if not properly considered, can serve as a stumbling block to efficient tourism development. In such a plan, there should be ways and means of addressing issues such as recreational carrying capacity, environmental impacts and air pollution which can be borne by tourism, or alternatively affect tourism. Recreational carrying capacity is a broad term referring to carrying capacity with all its three dimensions, namely, physical, ecological and social. Clarke (1997) provided the following definitions of concepts:

- Physical carrying capacity: Refers to the maximum number of people or activities which can be accommodated or handled by a site.
- Ecological carrying capacity: Refers to the maximum level of recreational use, in terms of the numbers of people and activities that can be accommodated by an ecosystem or area before an unacceptable or irreversible decline in ecological value occurs.
- Social carrying capacity: Refers to the maximum recreational use, in terms of people and activities above which there is a decline in the quality of the recreation experience from the point of view of recreation participant

(Clarke ibid: 22).

Table 2.4 Game reserves and location.

Eco tourist destination	Area
Barberspan Bird Sanctuary	Delareyville
Borakalalo Game Reserve	Brits
Boskop Nature Reserve	Potchefstroom
Botsalano Game Reserve	Ramatlabama
Bloemhof Dam Nature Reserve	Bloemhof
Hartebeespoort Dam	Brits
Pilanesberg Nature Reserve	Mankwe
Madikwe Game Reserve	Madikwe
Mafikeng Game Reserve	Mafikeng
Molopo Game Reserve	Vorstershoop
Rustenburg Nature Reserve	Rustenburg
Sun City Resort	Mankwe
S A Lombard	Bloemhof
Taung World Heritage Site	Taung
Vaalkop Dam Nature Reserve	Brits
Vredefort Dome	Potchefstroom

(Adapted from DACE: 2002: 30)

In statutory terms, environmental impact assessments are required for tourism planning and form an important part of the integrated environmental management especially during the planning, implementation and decommissioning phase of every theme park or hotel complex (DACE 2002).

Game farms are accommodated by the change of land use clauses, whilst guesthouses are affected by the local municipal ordinances, or where applicable actual environmental impact studies depending on size of the proposed development.

2.9.1 Competitive advantage based on factor endowments for the North West province.

The North West province is dubbed the heritage destination of South Africa given the quantity of both natural and cultural wealth (DACE 2002). It does not only compare with other provinces in terms of tourism potential, but competes well with destination across the African continent, at least if resorts and holiday destinations like Pilanesberg and Madikwe game reserves are included (Kupka 2004). The North West province is in actual fact factor endowed since it is able to have a competitive advantage over destination of similar calibre, based solely on its unique features like parks, reserves, historical attractions and a friendly atmosphere (Bartlett 2005). The theory of factor endowments (Vellas and Becherel 1995: 65 - 67) indeed, categorise endowments into three, namely:

- Natural resources, historic, artistic and cultural heritage.

The North West province is well endowed with resource of eco-tourism significance like the majestic Magaliesberg and Pilanesberg mountain ranges including the game farms and conservancies that grace the environment. These mountain ranges are unique in every respect, especially with regard to traces of earlier settlements which were discovered including San paintings and historic Setswana civilizations. These mountains are pristine and places of great endemism for both flora and fauna (Clarke 1997).

- Human resources in employment and skills.

This province has a potential of absorbing valuable and skilled labour force into its burgeoning tourism sector, given the growing numbers of tourists who frequent it. Though tourism itself is not a major employer in the province (i.e. estimated at less than 30%), it promises to grow this figure considerably in the next five to ten years (Clarke 1997). Highly trained candidates are currently available to serve as tour guides, chefs, travel agents, restaurant owners, etc in the highly competitive tourism market.

- Capital and infrastructure resources.

The tourism is a capital oriented industry, which is also very labour intensive. In order for an entrepreneur to engage actively in tourism, he or she has to acquire very expensive investments like buildings to run a hotel, plane or coach liner to be involved with the transportation sector or liquid capital to run a travel agency (Luus 2003).

2.10 Implications of globalisation on the ecotourism sector.

Globalisation is part of and affects macro economic planning of countries, including those which rely on tourism like Mauritius, Seychelles, Kenya, Tanzania and Guatamala. Globalisation also affects other sectors of the economy like transportation, trade and industry as well as agriculture that the ecotourism sector is intricately linked to (Mkhandawire 2001). Tourists need airline tickets, local coaches and taxis, buy artefacts and curios, stay in hotels which are equipped with gadgets procured abroad and are served meals which are sourced from local traders and farmers. Some countries however resist free trade as embodied within the concept of globalisation, making it extremely difficult for foreign firms to operate within them (Coetsee 2004). These barriers include amongst others, visa restrictions, document charges, ease of access, exchange controls, or bias to national firms by way of subsidising them (De Waal 2005).

International tourism as appropriately called, is one product borne by globalisation which in this context refers to what Swart and Saayman (1998) explain as, 'a process of shrinking the world, increasing competition and stimulating innovation'. It is hence no pure coincidence that international tourism is linked with globalisation. International tourism as a concept is elaborately explained by Wahab and Cooper (2001) who explore its influence on national government, which in turn formulate favourable tourism policies to accommodate multinational tourism firms.

2.10.1 The micro economic theory considerations and implications on ecotourism related businesses.

Costs are an important consideration in any business since they determine its ability to continue operating and hence generating profit (Upton 1996). In principle, firms have to keep their costs low and optimise sales of their products and services in order to remain profitable (Nell and Napier 2006). There are basically three types of costs in any game farm or guest house business,

namely, short term, medium term and long term. Short term costs are incurred for purposes of purchasing requisites like food for guests, transport and phone calls. Since these costs are incurred in the process of running or operating a business, they vary from time to time and are referred to as operating costs. Medium costs are incurred in the process of purchasing, expanding or renovating property for purposes of running a game farm or guest house (Lunn 2004). Long term costs are incurred for the better part or entire life span of the business and may include interest on capital, wages, electricity and other services bills. These types of costs are also referred to as fixed costs since they tend to remain fixed for the duration of the life span of the business (Varian 1996).

Costs also help entrepreneurs in any sector to make decisions. If a game farm-owner makes a long run output decision, he or she resorts to long run marginal costs as a measure to use (Katz and Rosen 1998). The long run marginal costs refer to the costs of supplying a service or product and it is equal to the change in the long run total cost of supplying a unit more of a service or product (Varian 1996). Thus a decision to construct one further chalet is informed by the additional expenditure likely to be incurred. The decision to continue operating a particular business relies on the long run average cost or shut down principle as it were.

2.10.2 Economies of scale on the ecotourism sector.

Economies of scale as a concept refers to the most profitable farm size and influences the running of eco-tourism related enterprises like game farms in the long run. In the short term, an enterprise can vary the quantities of various factors it employs like capital, labour and time whilst holding others constant with the aim of determining which among those listed has a significant influence on its profitability (Varian 1996). However, in the long term things operate differently, in that decisions often relate to the scale of the business itself, where cost advantages accrue with its expansion of operation. Katz and Rosen (1998) state that for any economies of scale to be proved, costs (i.e. long average costs) have to fall as output rises. At that stage, constant returns to scale will be exhibited, characterised by constant long run average costs in the face of increasing output levels (Upton 1996). Economies of scale refer to a condition where long run average costs fall in the face of increasing output (Katz and Rosen 1998).

The costs of producing an initial unit of output is usually high and start to decrease with every subsequent output produced thereafter. Realistically this implies that the cost of putting up the

first chalet is far higher than those of subsequent ones, in that capital is borrowed at high interest and costs of connecting to services are high but decrease substantially as soon as few additional ones are established (Varian 1996). This is explained by the fact that receipts from renting the first chalet out normally pays for the establishment of others. Connections to services like water and electricity to other subsequent chalets can be done from the initial chalets at relatively minimal costs.

Economies of scale is a concept which is common to monopolistic firms under conditions of perfect competition (Varian 1996), which do not exist in the ecotourism sector of the North West province. The ecotourism sector of the province is characterised by rampant game farm developments in the face of unstable currency exchange rate, stringent permitting requirements, poor marketing of destinations and general visitor apathy. In order for a prospective game farmer to break into the lucrative overseas clientele, he or she has to have several requirements, amongst which the quality and standard of service is paramount (Van Hasselt and Naude-Moseley 2003). Economies of scale will not be exploited if prospective visitors have trouble in locating a given game farm, securing the necessary permits of hunting animals and exporting of trophy, finding suitable accommodation, food and adequate transportation. All this amounts to poor visitations and receipts, raising in the long run average costs of keeping the business running, creating in a way diseconomies of scale (i.e. rising costs with rising or constant output level). In actual fact the amount of effort in running an ecotourism enterprise should be more than compensated by increased visitations and subsequently rising receipts.

Economies of scope is the answer to meeting clients needs in the future, since it offers 'one stop shop' facilities making the experience convenient, hassle free and memorable. In principle, it is similar to the concept of economies of scale, but only varies in context. It refers to diversification of products and services on offer, like is the case in many game farms where traditional hunting experience is offered as a package together with allied services like taxidermy (for trophy preparations), accommodation, meals, transportation and animal tracker (Coetsee 2003). The only scenario is where the ability to exploit the benefits associated with economies of scale is restricted by entry barriers, as it happens to befall small scale operators (Hart and Burgess 2005).

2.11 Ecotourism case studies in the North West province.

The North West province is still largely rural, thus making it suitable for marketing as an

ecotourism destination (DACE 2002). Many traditional cattle and crop farmers are switching in droves to game farming (Coetsee 2003). Cattle numbers have indeed declined in favour of game farming (Anon 2000). ClickAfrique Magazine (2003) has for instance, declared game farming as the fastest growing sector in South Africa and estimates its growth by on average 6% per annum since 1993. Enterprises in the North West province are made up of farms with game proof fencing, ranging in size from just over a thousand hectares to several tens or hundreds thousand hectares. The variety of wildlife contained by these reserves varies tremendously, from glorified zoos with a lot of different species to overstretched estates with a few wildlife species. In some areas game farmers practise canned hunt of endangered species like cheetahs and sables, sometimes without necessary permission (Nullis 2005).

The protagonists of canned hunting are exploiting the legal loopholes currently existing in conservancy legislation, which will need to be closed by drafting guidelines and policies regarding hunting. Universal hunting code of ethics does not recognise canned hunting as the form of hunting (Nullis 2005). All the same, these game farmers eke a living from ecotourism and the spin-offs it creates. The game farming hype in this province has increased by leaps and bounds ever since the major and pseudo privatisation of state game reserves, which gained momentum just after 1994.

It is however not all game farmers who do well in the game farming industry as a result of several factors (Fourie 2004). Amongst the common factors which hinder progress and success of game farming include poor advice, lack of both fore and hind sight on the part of prospective game farmers, shoddy or substandard service, lack of commitment and vision and so on. Chance takers abound, they enter the game farming sector at one moment and exit at another (Coetsee 2003). With them they erode the trust and confidence that existed, whenever something else goes wrong or blunders occur. It then becomes easy to associate failure with specific sectors rather than individual risk takers in it.

2.11.1 The Kalahari game industry.

The Kalahari game industry is one of the biggest in the province with regard to absolute area occupied, which is estimated at more than 20 000 hectares in extent (Erich Graupner, pers comm). The name Kalahari is actually coined from the corrupted Setswana word, Kgalagadi and refers specifically to the bulk of the area falling in the Bophirima district municipality of the

North West province. This area is characterised by deep sandy soils which in turn support the Kalahari thornveld savannah with a wealth of both fauna and flora species along the common border with the Republic of Botswana. Despite its inhospitable nature, in terms of aridity and extreme climate, the game industry in this part of the province is driven by large scale commercial holdings which specialise in the leisure and trophy hunting activities (Luus 2003). As is the case in other parts of province, game farms in this region were converted from cattle farming into game farms with the initial intention of keeping game for exclusive use by the farmer's family, relatives and close circle of friends.

The changing trends in cattle farming influenced as it is by both internal and external factors prompted the shift from cattle farming to game farming (Coetsee 2003). Internal factors include, fluctuating and unreliable retail price of livestock for breeding and slaughtering purposes, cost of managing cattle including stringent record keeping and registration for stud book purposes, livestock theft in that cattle are easily rounded up and stolen, increased cost for supplementary feeding and veterinary care (Smit 2002). External factors are normally beyond the influence of individual farmers, like global fall in price of red meat due to among others mass dumping of imported beef into local markets, phasing out of subsidies, closure to single channel marketing system previously undertaken by the Meat Board and its subsidiary Abakor and the general liberalisation of trade in red meat (Venter 1999 and White, et al 2004).

Many farmers in this region saw it fit to change over into game farming amidst great expenses of putting up game proof fence (i.e. cost between R 15 000.00 to 30 000.00 per km) and stocking the area with game (Lunn 2004). A single rhino *(Ceratotherium simum)* fetches up to R 375 000.00 whilst a roan antelope *(Hippotragus equines)* costs R 106 000.00 per head. Besides, game farmers spend anything, from R 50 000.00 to R 250 000.00 on game viewing vehicles, tractors for road and infrastructure maintenance, two way radios, rifles and dart guns. Change over per se did not bring miraculous benefits to these farmers in terms of sudden prospective trophy hunters into their region (Coetsee 2003). It however gave promises for lucrative participation in sharing into the spoils of eco-tourism that has benefitted the country of late, considering that hunters spend up to four times what ordinary citizens spend when visiting a game farm (Fourie 2006). Of the few fortunate game farmers in the region, diversification into other activities on the farm has helped increase receipts from foreign tourists. This diversification or economies of scope, has seen a traditional game farm, being also upgraded to keep and breed cheetahs (*Acinonyx jubatus*) and lions (*Panthera leo*) on extensive scales. The aim, it is said with this practice, is to breed these

carnivores for distribution and sale around the country. Already, these captive bred animals are offered for hunting by foreign tourists for significantly huge amounts and hence are likely to be the sole or major source of income of these Kalahari game farmers (Nullis 2005).

There are parallels that can be drawn between game farmers in Kalahari and their counterparts in other parts of South Africa. Experience elsewhere in South Africa identifies game ranching as one of the most expensive ventures, especially where chalets are to be developed (Luus 2003). The expansion of ecotourism in the direction of large, exclusive, self sufficient luxury lodges in the Southern Maputaland Biosphere reserve does not come cheap (Anon[a] 2003). The estimated investment cost per job in this case was not encouraging, standing at between R 180 000 and R 259 000 especially if tourism is intended to create jobs at relatively low capital costs. A formal Reserve Bank study commissioned in 1996 collaborated the findings of this study, indicating the capital to labour ratio of game lodge developments at around R 165 000 (using 1995 currency value). Thus an investment of R 16.6 million planned for lodge expansion in Maputaland will only amount to 73 formal and informal job opportunities, constituting a poor investment in relative terms (Lunn 2004). Indirect effects of game lodge development are however enormous, considering the fact that one direct employment opportunity created by a lodge may stimulate the creation of another elsewhere in the service sector (Anon[a] 2003).

Where large game farm lodges have been established, they experienced higher occupancy rates, possessed trained staff who are better remunerated and higher number of employees per tourist than purely bed and breakfast establishments. The fact that Bed and Breakfast operations are run as adjuncts to other farming operations (Botha 2005). The poor revenue generating capacity of some Bed and Breakfast is an area of concern since their very existence is taking away potential clients from established game lodges.

2.11.2 Comparative analysis of agriculture versus ecotourism.

Ecotourism as a land use option especially for less arable or marginal lands has always been praised for better income generation than agriculture. Comparative studies commissioned in 1992 by the then Central Statistical Service, showed a different trend in terms of total revenue per hectare, employment units created and its cost (Anon[a] 2003). About R 1 694 per hectare was derived from agricultural produce sales compared to R 1 450 from eco-tourism, with the former employing 0.07 persons per hectare compared to 0.03 from tourism. Agriculture given its

intensive land use employed more labour units per hectare than tourism, albeit at a lower tariff structure. However ecotourism will still remain a favourable occupation, given its relatively low pollution factor and almost benign environmental impact (Smit 2002). The advantages of game ranching, especially where ecological considerations take precedence, are well documented in literature especially where multi species game production systems are practised (Botha 2003).

2.12 Conclusion.

Game farming, which refers to the managing and extensive production of free living animals on large fenced private lands, does derive its benefits from the spills of the tourism sector, though not quantitavely determined. Conservation needs to undergo a paradigm shift which entails amongst others, the need to shed the image of pleasing the foreign tourism sector at the expense of local tourists. The mushrooming of game farms has undoubtedly proven to have nothing to do with the viability of the sector, instead the game farms are proliferating against the background of mounting costs and falling profitability. However game farming has failed to turn the merits accompanied with the popularity of South Africa as a popular tourist destination into meaningful benefits for the sector. There are two explanations to this behavioural pattern, namely, that tourists prefer to stay at game reserves to the detriment of ordinary game farms, or alternatively that game farms are simply not positioned prominently on the priority lists of visiting tourists. The latter argument does not in any way suggest the alienation of game farms from the broader tourism sector, it merely portrays the trends as directed by varying tastes and preferences. It may be that tourists are smart and sophisticated, to the extent that they patronise known national parks and a few prominent game farms, probably because of price, quality of service, ease of booking and access from main towns. Advertisement and marketing through mass media, especially the internet has the potential of bringing exposure to tourist destinations. The importance of proper marketing of destination cannot be overemphasised, since it forms the basis of successful tourism management.

The next chapter focuses on the theoretical foundation of black economic empowerment within the game farming industry.

Chapter 3

Theoretical foundation:

Black economic empowerment within the game farming industry.

3.1 Background.

Black economic empowerment does not feature that well, if at all, in the South African game farming industry. A case in point is certainly the North West province, where game farming as an occupation or income generating activity, still eludes the enthusiasm of black entrepreneurs. There are a few instances in which black entrepreneurs have made inroads, namely, in the hospitality and transportation sectors and these have borne fruits through establishment of a range of 'bed and breakfast' facilities, lodges and certainly luxury tourists' liners. The involvement of Black equity in the mining industry has seen trade union membership capital used to fund acquisition of shares in black economic empowerment deals.

The government of South Africa through legislation and policies seeks to promote Black Economic Empowerment so that it starts to be the culture and style of conducting business. There tends to be widespread support of black economic empowerment as a concept which will bring about a non discriminatory business society (Mthunzi 2004). Some private companies none-the-less view it as a hindrance which needs not to be there in the first place. They view every black economic empowerment intervention as unnecessary interference in how they conduct their business (Lourens 2003). Sasol, a government petrochemical parastatal is on record decrying black economic empowerment on the basis that it runs the risks to potential investors (Qoza[e] 2004), which to some respect is not the case. This condemnation of black economic empowerment initiatives has not spared the recently outlined AgriBEE draft charter, which is viewed as a unilateral imposition by the government (Van der Walt 2004). In the face of hostile reception, the government adopted an incentive scheme underlain by penalties to deal with companies avoiding or ignoring black economic empowerment requirements.

3.1.1 Sanctioning system.

The Broad Based Black Economic Empowerment Act, Act no.53 of 2003 directs companies to adopt black economic empowerment principles which call for inclusion of historically

disadvantaged individuals (HDIs) in the ownership and running of companies. Companies are encouraged to transfer part of their shareholding to their employees to avert exploitation and provide broadened benefit sharing. Companies with acceptable and reasonable Black Economic Empowerment credentials are considered for preferential procurement by the government and its parastatals. If such companies prioritise the skills development of their employees, they are also exempted from the skills levy paid by all business organisation to the government. Where incentives come short of encouraging companies to implement black economic empowerment, penalties are put in place which include regular inspection of adherence to standards and where possible, issuing of fines and possible prosecution. Where companies choose to broaden shareholding to their employee such gesture is exempted from all types of tax and may be used as a tool to reduce the tax burden on employers (Monama 2004).

The privatisation of state owned nature reserves is essentially a black economic empowerment project, with both the hospitality and game reserves expected to generate excess of R60 million in impoverished and poverty stricken regions like the Eastern Cape (Van der Merwe 2003).

3.1.2 Strengthening ties and uniting the business community.

Corporate South Africa and government parastatals on the verge of privatisation promote black economic empowerment as a concept actively. The government inspired policies of equity, affirmative action and promotion of wealth creation within and beyond black business circles also seeks to promote unity within the business community (Van Wyk 2005). The separate development of business according to race is not helpful to the South African business community. Major business investment ventures, which happen to be predominantly white, are forced by these policies to have significant black ownership, including formation of partnership with black led economic consortiums (Smith 2006).

Some companies in industries like agriculture, forestry and fishing are largely reluctant to embrace black empowerment and are to some extent buying time to neutralize its effect on their organisations. One way of neutralizing the BEE effect is downsizing operations of the business and rendering it too small to apply employment quotas and shareholder widening. Game farming in particular has almost been immune to the concept of Black Empowerment, to the extent that contract and casual workers are employed to dilute its effect. The unregulated nature of the game farming industry has made it difficult to implement the BEE programme, in that no central

register exists for game farmers in the province making it difficult to trace and monitor their operations.

3.1.3 Revised AgriBEE codes of practice.

Concerns of using the BEE programme to enrich a few black elites especially politicians and high ranking civil servants were raised. Telkom saw the acquisition of major stakeholding by its former bosses after privatisation for example in a classical 'insider trading style' thus disadvantaging intended beneficiaries from the working class. A number of BEE deals which either went sour, or worse benefited the elite inspired the government to review its empowerment credentials in favour of the intended beneficiaries in the broader civil society (Monama 2005). As part of the BEE restructuring, a new code of good practice was introduced, which amongst others puts emphasis on the maintenance of a score card biased specifically on women empowerment.

The new changes will see companies doing a thorough task of identifying suitable BEE partners rather than targeting already prominent elites within society. Inviting prominent figures to serve either as BEE partners or worse, members on the board of directors was the most convenient practice of big businesses which needed to be put to an end at some stage, because it was simplistic and patronising. Prominent individuals are not necessarily successful business people, explaining the high rate of BEE consortiums which get liquidated some time after their inauguration. The about to be introduced incentive scheme in favour of new BEE entrants is likely to bring about genuine empowerment and restore reputation to this programme.

3.2 AgriBEE discussion document.

In response to increased public criticism to the not so successful black farmer settlement schemes carried out by the National Department of Agriculture and Land Affairs (NDALA), the department responded by issuing an agricultural black economic empowerment draft charter, otherwise dubbed AgriBEE. Black farmer settlement and subsequent participation in agriculture, has been low key to date (i.e. 2005), if general agricultural production is used as a parameter to measure their performance. Small scale producers of deciduous fruits in the Western Cape, are for instance yet to match their commercial counterparts in terms of efficiency as measured by fruit produced per hectare (ha) of land, thus losing out of lucrative export opportunies abroad (Hart and Burgess 2005).

The draft AgriBEE charter, which was issued by the Minister of NDALA on the 26th July 2004 (Smith 2000), seeks to address loopholes currently experienced in efforts of genuinely empowering black entrepreneurs in the agricultural sector and deal with challenges of overcoming production hassles. This draft charter is held in disdain by the predominantly commercial agricultural sector under the banner of Agri SA (an umbrella national agricultural union), who views it only as a socialist trick to disown and distribute wealth within the sector. Agriculture South Africa (Agri SA) for instance considers the set targets in the draft charter too ambitious for realisation, which can raise unnecessary expectations from certain quarters and dampen optimism in others. On the other hand, the predominantly black National African Farmers Union (NAFU) is pleased with the government sponsored programme as it promises to effectively implement the broad based black economic empowerment act (Act no.53 of 2003) in a more useful and practical manner. Optimism about the realisation of some of the set targets for this draft charter arises from the fact that financial, infrastructural and information systems will be aligned, creating a conducive environment for its eventual implementation. A score card system will also be put in place to make sure that the charter is effectively implemented.

The charter sets ambitious targets in place (Van Burick 2004), which includes amongst others the following:

3.2.1 Increasing Black owned farming land.

Based on the draft charter, 30% of the agricultural land in South Africa should be in black hands within the next ten years from 2004 to 2014. The white commercial agricultural sector will within the same timeframe be expected to lease out a further 20% of high potential land to willing black entrepreneurs to give leverage to this emerging sector, without which discernible progress will be difficult to accomplish. These targets surely have implication on the game farming sector, which in any case is considered another branch of the agricultural sector. The only difference is the mechanics of implementing the law, which in this case might find it unpopular and difficult to sell over loss making game farms to anticipating black enterprises just for purposes of reaching the 30% targets levels set by the law. Farm labourers are not forgotten under this framework in that 10% of the land currently farmed is supposed to be transferred over to them as part of the re-organised shareholding at the farm unit level.

3.2.2 Farm labourers' empowerment.

Skills development is necessary in the farming sector in that the majority of labourers at farm level are either illiterate or semi literate, barely able to write beyond their names. The AgriBEE charter directs that 75% of all illiterate farm labourers should be appropriately skilled by 2008 and within two years from then (i.e. 2010) to phase out illiteracy of any form at the farm worker level.

3.2.3 Increased shareholding in Agribusinesses.

Since Agribusinesses like those involved in the value adding and beneficiation of farm produce, form part of the broader agricultural sector, they are as much affected by the draft charter as are private land owners. In the game farming sector, this includes businesses such as taxidermy, outfitting and professional hunting support services. The Agribusinesses sector according to the draft charter should aim at transferring 35% of its shareholding to black entrepreneurs by 2008. Individual private farm owners should aim at transferring 10% of the gross value of the farm business to labourers within the same timeframe. Mining companies like De Beer are taking the signals from the draft charter, which may happen to have similarities with the existing mining charter, and aim to sell 15% of their local assets to black investors by 2007 (Qoza[e] 2004).

3.2.4 Introducing agricultural learnerships and black recruitment initiatives.

It is envisaged within the framework of this charter that training programmes will be put in place to upgrade the knowledge base of farm labourers both at technical and managerial level. This intervention should be done in such a way that it offers opportunities to unemployed black graduates to be taken by the agricultural sector in some form of a learnership programme. In the game farming sector, this might entail providing the necessary in-service training to aspirant game rangers and professional hunters. The programme should aim to cater for a 30% black recruitment quota of which 10% should be women at executive management positions. The quota will have to be upped to 50% (25% women) at executive level, 60% (30% women) at middle management and 70% (45% women) at junior management level by 2008. These targets, apart from being too ambitious, need some supporting and monitoring mechanisms to take ground, at least when viewed against the background of resistance and hostility from a sect of the white agricultural sector.

3.2.5 Preferential procurement programmes.

Preferential procurement is one area which is given consideration in almost every charter which was created through the broad based black economic empowerment act. The Financial sector charter for instance recommends a 50% target for preferential procurement by black based consortiums by 2008, which stands to increase to 70% by 2014 (Campbell 2004). The AgriBEE draft charter is a bit relaxed on timeframes, but targets are basically the same, recommending outsourcing of 50% by 2010 and 70% by 2014 (Van Burick 2004).

3.3 Black investment in game farming.

Game farming is a complicated and costly industry for entrepreneurs to get involved in unless in situations where they are brought along as concessionaires in established businesses. Land prices are currently at their long term high in the rest of South Africa and thus for entrepreneurs to access modest pieces of land on which they are to establish their game farms is itself a formidable task. Game farming unlike agriculture is sensitive to farm size and may not be conveniently carried out in pieces of land beyond a certain size unless where intensive breeding is the object. In some localities around the North West province, small farms of around 25ha where used for keeping single species flocks of Blesbok *(Damaliscus dorcas phillipsi)* for recreational hunting purposes.

Another factor that makes game farming not amendable for easy access is the level of technical expertise needed to identify, plan, stock (with game) and eventually manage a game farm. Identifying a suitable area to establish a game farm will require technical assessment of factors like the landscape, the climate and vegetation of an area. This makes game farming as elusive as many parts of the financial services sector to both affirmative action and black empowerment (Qoza 2004). It should be argued however that the relative remoteness of game farms may not necessarily impede their acceptability as tourism products, since visitors generally tend not to be discouraged by the remoteness of a preferred destination (Stewart, et al 2005).

3.3.1 Identifying and acquiring a possible game farm.

Two processes may be followed in acquiring a game farm, namely, converting an existing farm into a game farm or purchasing an existing game farm (Fourie 2004). Converting an existing farm

into a game farm has many requirements and depending on various options available, it may turn out to be either expensive or affordable (Coetsee 2003). It becomes cheaper where the proposed farm is already paid for and only infrastructure has to be put in place. Then the owner can exercise the option of installing the relevant infrastructure by him/herself using the available (own) capital and labour source. The other extreme is where an entrepreneur buys an ordinary farm, put appropriate infrastructure up and having it stocked.

Another challenge is identifying game species that are adaptable to the local climate / habitat, and which can be accommodated in sufficient numbers to justify a breeding pool (Fourie 2004). It may be inconceivable for instance to keep hippopotamus *(Hippopotamus amphibious)* and water buck *(Kobus ellipsiprymnus)* in the arid Kalahari or Karroo environments. Thus habitat suitability assessment may prove complicated enough for a small entrepreneur to get involved in game farming let alone spending funds on costly projects like fencing and stocking the farm with game.

3.3.2 Stocking the game farm with wildlife.

The stocking of farms with game is very expensive, depending on the type or species may turn out to be anything from R 800.00 (Blesbok) to R 500 000.00 (Rhinoceros). Where borrowed capital is used for stocking the farm, a financial burden may be created to the entrepreneur if the game farm itself or its infrastructure were realised through a loan. Financial institutions are not keen to finance the game or wildlife as part of the medium operating game farm costs because of its perceived poor returns on investment, and where they do strict conditions are put in place (Luus 2003). Risky operations for which loans are difficult to obtain include farming in general, and game farming is on the extreme right of this continuum since it is fickle and unreliable. Unlike cattle or sheep, the market for game is restricted, specialised and possibly exclusive, serving as a stumbling block to both the acquisition and disposal of game animals. Game, unlike livestock, is subject to strict permitting, the strictness of which varies according to the animal's abundance, vulnerability and level of endangering or threat to its own or habitat survival (Stott 2005).

3.3.3 Management of a game farm.

Game farm management consists of at least three components, namely, the technical maintenance of infrastructure, the ecological management of the landscape and vegetation and lastly the game itself. The infrastructure is made up principally of fences, watering holes and capture equipment and depending on availability, slaughtering facilities and refrigerators. The game farm landscape includes physiographic features like the hills, mountain ranges, valleys, rivers or shorelines of large water bodies like dams, lagoons or sea. Like the different landscapes and micro climatic conditions they create, vegetation formations may vary to a similar degree in a singular game farm (Fourie 2004). The variety of habitats and vegetation available on a given game farm should be managed to mitigate overgrasing, degradation, soil erosion and subsequently denudation, in order to can sustain game animals in acceptable condition. This calls for a comprehensive monitoring system to be put in place in every game farm integrating both game and vegetation.

Preferably for an arid province like the North West, a long term monitoring plan should be established to allow for patterns and trends for both drought occurrence and vegetation dynamics to be monitored and possibly predicted. Contingency plans and response mechanisms should similarly be in place to complement the monitoring system and possibly mitigate degradation, over utilisation of vegetation, starvation and soil loss. The management and monitoring of trends in vegetation dynamics are critical in the game management itself (Smit 2002). If game farms are to play a strategic biodiversity conservation role, then their existence should not be necessarily linked to the type of income they generate, but rather to species and landscapes they protect (Furstenburg and van Niekerk 2004).

3.3.4 Modifying AgriBEE for the game industry.

The question of modification of the existing AgriBEE draft charter is currently debated by game farmers for likely adaptation and adoption in the game farming industry. The argument for these adaptations is based on similarities of game farming to mainstream agriculture in the following respects:

- Both sectors are based in the countryside.
- They all employ farm workers though for varying reasons.
- Most game farms were agricultural holdings at some stage.

- Breeding principles of game are no different from those of livestock.
- General chain supply mechanisms are similar (i.e. breeding for auctions).

Canvassed opinions of some game farmers lead one to believe that they (i.e. farmers) are toning down their opposition (in principle) to the AgriBEE draft policy (Anon[c] 2005). Some farmers are resorting to pragmatism and acceptance of the inevitability of the AgriBEE policy, though its implementation may be subject to review in view of the heterogeneous nature of the game farming sector with respect to the size and income generating ability of individual holdings. Though the Wildlife BEE charter is yet to be drafted, a growing number of farmers are willing to comply with the AgriBEE draft stipulations so as to avoid likely future conflicts with authorities. Some farmers are contemplating implementing proposed training courses and leanerships for farm employees, with the belief that other targets contained in the draft charter like inclusive management and broadening of opportunities to farm employees will be easier to realise thereafter (Anon[c] 2005). Possible training fields in the game farming sector include amongst others, game trackers, skin tanners, taxidermists, professional hunters, venison chefs and meat technicians. Trainee game farm managers can also be produced along those lines. The strategy adopted by farmers may be dismissed as overcautious and reactive, but may turn out to be useful in case a prolonged delay occurs in drafting the Wildlife charter. The worst case scenario is where authorities expect all game farmers and operators in the wildlife industry to use the existing draft charter for both agriculture and game farming, after all they are not much different from each other (Own analysis).

The only drawback discerned from the game farmer's approach to empowerment is their lack of total commitment and honesty. Advisers to game farmers are at times not genuinely committed to BEE in totality, thus resorting to bogus schemes with the aim of faking compliance on stipulated targets. One such example is where a game farmer is advised to outsource the skinning of game and tanning of remaining skins to farm employees who then become sub-contracted to the farmer's broader hunting revenue stream just to qualify for the 10% target set for developing business opportunities for employees. Such sub-contracts often fail to derive significant income, making the whole arrangement subservient to the usually stronger (economically) mainstream game farm operations.

3.4 Contextualising the broadening of access to the growing sector.

Black Economic Empowerment is by its nature meant to thrive in sectors which offer growth and opportunities. The game farming sector has for the past years been growing at an appreciably high rate (Anon[b] 2003), which had every justifications to warrant the implementation of the Black Economic Empowerment provisions, even in the absence of a legal targets charter. However due to several inherent factors within the business fraternity like the perceived risk profile of the sector and the relatively high overhead cost required it could be understood why it does not offer much comfort to BEE. Some of the factors have to do with the fact that, game farming is relatively complex and does require technical expertise, thus adding up to its already high overhead costs.

Furthermore not all facets of the game industry are equally lucrative. For instance, game auctions and trophy hunting are the two major revenue generating activities in the game farming industry and these are instances where black economic empowerment logically makes sense. Game auctions have seen animals on offer doubling up from 8 292 in 1991 (Table 3.1) to well over 19 645 in 2003 (Nel 2004). There are currently an estimated number of 200 000 domestic hunters in South Africa (Anon[c] 2003) which in the absence of foreign trophy hunters are still able to keep the hunting sector functioning though not profitably, given prices on offer. The trophy quality of ungulates (especially springbok, mountain reedbok and impala) in the absence of the foreign hunter factor is demonstrated to have declined over time, especially if indications of stochastic models are anything to go by (Von Brandis and Reilly 2004). This seems however not to be case with the trophy quality of lions, if off take levels of older males is analysed, indicating 67% mortality due to sport hunting which has to date not satisfied the increasing need (Loveridge 2004).

3.4.1 Black Economic Empowerment beyond South African borders.

Black economic empowerment as a concept, is certainly not restricted to South Africa it is universal. It is rather circumstantial and is used as a tool to broaden opportunities, especially careers and wealth creating means across the broad spectrum of individuals in a given society. In South Africa, black economic empowerment is critical given the previously engineered advantaging of minority communities to the neglect of majority communities (Brown and Mosola 2006). South Africa has promulgated a law to further the interests of broad based black economic

empowerments, the Broad Based Black Economic Empowerment Act, Act no.23 of 2003. This law identifies individuals and communities for empowerment, and prescribes a strategy to further the interests of affirmative action and black empowerment.

Table 3.1 Turnover of live game over time.

Year	Number of game sold	Estimated turnover (R)
1991	8 292	R 8 999 871
1992	9 546	R 10 859 969
1993	11 449	R 11 732 596
1994	11 096	R 11 705 605
1995	9 171	R 14 335 894
1996	11 340	R 26 559 557
1997	12 077	R 28 526 052
1998	14 354	R 40 017 946
1999	15 455	R 53 705 823
2000	17 702	R 62 960 451
2001	17 282	R 87 000 473
2002	20 022	R 105 192 180
2003	19 645	R 102 420 445
Total	177 431	R 564 016 862
Average	13 649	R 43 385 912

(Adapted from Nel 2004: 37)

In Europe and America, a concept similar to Black economic empowerment is used to provide meaningful opportunities for minorities and other disadvantaged communities in those areas. In the United States of America, a quota system is still in place in both the federal and states administrations to enforce the empowerment of Blacks, Asians and people of Latin American origin (The Economist[1] 2004). The same goes for other countries of Europe with relatively large immigrant populations like France, Portugal, Germany and Britain. They have special empowerment schemes at universities, the public service and the private sector. There is no doubt that black economic empowerment in those societies also enhances race relations through integration of marginalised communities into the mainstream economic activities.

The other extreme which is essentially carried out under the auspices of Black Economic Empowerment, is the blanket dispossession of white owned farms by the Zimbabwean government (Groenewalt 2003). In the absence of minimum international standards and codes of prescriptions on which to base Black Economic Empowerment, it is possible that human rights abuses against minority communities can be perpetrated under the disguises of BEE. Uganda has had such an experience under Idi Amin, where Ugandians of Asian origins where dispossessed of their properties and businesses under the pretext of native empowerment (Anon[8] 2006).

3.4.2 Overlooking game farming for other sectors.

Unlike other sectors of the economy like telecommunications, transport, health and agriculture, where black economic empowerment is the norm rather than the exception, game farming is relatively an exclusive occupation (Mthunzi 2004). Skills transfer may turn out to be inadequate in the game farming sector, at least in terms of technical aspects meaningful for the successful running of an enterprise. A number of factors have contributed to the unpopularity of game farming among aspirant black entrepreneurs in general and business financiers in particular. Some of these factors have to do with the fact that game farming is a relatively young and it is a new industry in South Africa. It is perceived as far too capital intensive and consequently a very expensive investment to engage in. Prospective entrepreneurs do not simply have the necessary skills especially technical details of keeping and looking after game (Louw 2003). To some extent, prospective investors are not willing to expend their resources on something that is unknown and might also turn out to be risky.

The Department of Land Affairs through its land redistribution and agricultural development (LRAD) plan is helping prospective entrepreneurs to acquire farmland for game farming though grants up to the tune of R 100 000, on the understanding that they would make a predetermined contribution. However the amount of money on offer to prospective game farmers is far too small to enable them to purchase game farms (Louw 2003). The minimum price tag for a reasonable farm is currently at around R 800 000, which is almost eight times the value of the grant on offer (i.e. R 100 000).

3.5 Conclusion.

Black Economic Empowerment (BEE) is poorly featured in the South African game industry.

It eludes the enthusiasm of black entrepreneurs, unlike other sectors of the economy where blacks have joined in significant numbers, like transportation, mining or banking. The lack of a charter to direct BEE is clearly evident in the game farming sector. The blame for the absence of a BEE framework rests both with the industry and the government, by failing to interact and reach consensus for the benefit of the entire sector. The game farming industry for instance, is not at all proactive in unveiling its BEE agenda, neither has the government adopted a policy framework for the sector.

Currently the game industry is preoccupied with wealth accumulation at the expense of fast tracking affirmative action within the sector. Though an enabling legislation is in place in the form of the 'broad based black economic empowerment act' (Act no.53 of 2003), very little follow up programmes are effected to make good its implementation. It is up to the government to adopt a policy on game farming, which if debated with the game farming sector, can help steer and introduce new emerging entrants. There is clearly more to benefit from BEE, especially the gains associated with the broadening in shareholding and reducing individual risk on the part of game farm owners. The possibility of the game farming sector catering for new emerging markets or clients with potential positive capital injection holds the prospects of excitement. Penalties which are linked to the contravention of the BEE law are prescribed but not yet in place. They are in themselves a disincentive for failure to implement BEE. The recently unveiled AgriBEE discussion policy document is meant to inspire a similar document dealing with game farming, though many similarities in principle and mechanics exist between agriculture on the one hand and game farming on the other. BEE should not be viewed as solely a South African invention, since many countries in the Americas and Europe have implemented it to cater for equity across the population demographic spectrum.

The game farming sector has evolved in such a manner that it makes the implementation of BEE in the tradional way problematic because of high entry barriers. The entry barriers into game farming are tight at least with respect to capital requirements, technical exposure and amendability for implementation under small scale conditions. Game farming, unlike agriculture is not meant for small scale operators, mass employment production or adequate provision of food security at household level.

The following chapter is on defining the problem and formulating research questions.

CHAPTER 4

DEFINING THE PROBLEM AND FORMULATION OF RESEARCH QUESTIONS.

4.1 Introduction.

The orientation to this chapter centres on the background of game farming in the North West province and the reasons it still upholds the pre-1994 *status quo* (e.g. contravening equity considerations) despite the form of law reform and transformation that has occured. A preliminary inventory of the game farming industry tends to suggests that black people are denied the opportunity of this seemingly lucrative activity (i.e. in terms of fixed asset base), otherwise loss making entity in terms of income generated per unit time. The object of commissioning this Ph.D. study is centred on the discussions in this chapter. It is in this chapter that both primary and secondary research questions are integrated into research questions.

4.1.1 The perils of game farming in the North West province.

Game farming is not an easy field, but instead a rough terrain where even seasoned entrepreneurs fail to make a decent profit. The sector is characterised by entrepreneurs who enter it at one moment and exit the next. The new entrants face challenges which they have to overcome in order to remain viable in this business enterprise (Schack[b] 2004). The sector can no longer afford the luxury of adventurous land owners who turn even miniature farms into holding camps for game under the pretext of game farming (Reilly, et al 2003). Ironically, size tends to be the decisive factor for both the financial and ecological sustainability of game farms. Evidence tend to support the establishment of larger game farms through the process of consolidation, than allowing for small fenced enclosures no better than 'glorified zoos' to exist fragmented over the landscape (Reilly, ibid). Game farms with an average size of 30 000 ha (which happen to be rare) have proved to be profitable from both an ecological and economic point of view.

Ecotourism, especially potential receipt from game farming, is viewed currently as a panacea for solving the unemployment problem of the North West province. With a population of around 3.7 million and unemployment levels of just over 38% (DACE 2002), the establishment of additional game farms have to date not significantly helped to alleviate the problem of poverty and unemployment in the province. Logic suggests that if a cattle farm is replaced by a game farm, lesser manpower will be needed to care and manage game with respect to dosing, feeding and moving from one camp to the next thus justifying the reason for laying off additional labourers (Radder, et al 2000). Furthermore, livestock farming systems allow for income to be generated year round from sales, whilst receipts from game are only restricted to two or three times per annum, namely, during hunting (winter) and auctions (which are normally a once off annual event).

Game farming can in the absence of a thorough and rigorous cost benefit analysis be referred to as a misdirected investment. A recent report by ABSA (Luus 2003) revealed that the majority of game farms in South Africa are not profitable and those, which do operate at break even point. The capital cost of purchasing and establishing appropriate infrastructure on a game farm are not covered by receipts in the short run. Estimates for fencing are on average around R 15 000/ km where the big five are kept, namely elephants *(Loxodonta Africana)*, lions *(Panthera leo)*, leopards *(Panthera pardus)*, buffaloes *(Syncerus caffer)* and rhinoceros *(Ceratotherium simum)*. Such expenses may to some extent compromise the involvement of black economic empowerment consortiums. Considering the costs involved in establishing, stocking and providing necessary facilities on a game farm (Van Zyl and Sartorius von Bach 2002), discounting the costs of maintenance and management, some of the newly established game farms could rarely survive the vagaries of open markets. The general management under such circumstances requires positive balance sheets or solvency for medium to long term viability. Mistakes in such instances do not cost a few thousand rands, but are well over several thousand rands. The majority of entrepreneurs in this field soon accumulate debt, became insolvent and suffer large losses in their capacity as individuals.

4.1.2 Challenges of accommodating Black Empowerment in Game farming.

Game farming as a sector has been poorly adopted by South Africans across the colour barrier, which makes it an appropriate area to test various models of Black Economic Empowerment. The government's role in this sector is largely administrative and regulatory, rather than

developmental and strategic (Rivera 2001). Legislative and policy guidelines still need to be developed so as to avoid chaos in the sector. Entry requirements need to be listed as per existing legislative framework so that monitoring in existing farms can be implemented and exit does not become the logical step. If authorities know exactly the entry requirements, whether they are ecological or administrative it becomes possible to offer concessions to black based consortiums. The current concern is that Black economic empowerment is not even on the discussion agenda and affirmative action is relegated to non priority issues. The sector is bereft with unfaithful operators who pursue profit at the expense of genuine wildlife conservation. It might also be that existing game farms are run as summer breakaway cottages by wealthy middle class residents, as has turned out to be the case with farms around Thabazimbi and Hoedspruit. The situation lends itself to disorganised development characterised by weak insight, chance taking and inherently poor planning (Coetsee 2003).

The game farming sector is largely not regulated and is run in an uncoordinated manner with unscrupulous practices being common, especially with regard to overstocking, smuggling of permits and misrepresentations with regard to actual game numbers and species kept. Game farming needs to shift away from amateurish commercialisation to sustainable and holistic management principles, grounded on ecological factors and good financial discipline (Stoltz 2004). Black Economic Empowerment has largely escaped the focus of operators in the sector, who aim only to maximise profit from their operations, be it from selling of the property or disposing of game. Operators in the game farming industry are not yet able to take it upon themselves to help emerging black entrepreneurs get involved in this industry, as is the case in industries were the empowerment charter is non existent or not pronounceable (Rogerson 2002) Unlike mainstream Agriculture where the process of Black Economic Empowerment is guided by the draft charter[1] and actively supported by the land reform programme (Esterhuyse 2005), game farming still lags behind on the transformation agenda and critically needs reform. There is generally broad consensus for transformation to take place, where a black economic empowerment model will be put in place with the expectations that it will broaden access to the sector which everyone aspires to join.

Aspirant black entrepreneurs find it difficult to enter game farming. Unlike the Agricultural sector, where government intervention was facilitated by the Land reform programme through restitution of land rights and active fast tracking of land acquisition (Genis 2005), game farming

[1] Draft Black Economic Empowerment Charter issued by the government.

is not yet at a stage which can allow it to follow suit. The probable reasons hampering the entry into game farming are numerous and include amongst others, the fact that it is not a critical and strategic sector for food security, income generation and mass employment opportunity. Given that government support is orientated on supporting schemes that can either alleviate poverty or broaden opportunities through wealth creation, it may partly explain why the game farming sector is not favoured as a Black Economic Empowerment vehicle. Unlike mainstream farming where cooperative operation and ownership is encouraged, game farming tends to favour land tenure regime which put emphasis on individual ownership for ease of management and success (Platteau 1996). Entry into game farming is itself expensive, given that size (ha), adequacy of fences, optimal stocking with game and the level of technical management required are not easily realisable (Luus 2003).

Game farming in South Africa is for all intends and purposes aimed at servicing the hunting fraternity and to a limited extent, tourism purposes. This aspect alone has a potential of impeding black access and entrance into the sector, given that few blacks are professional hunters, let alone ordinary hunting rifle owners and may not be privy to developments and potential client needs in the hunting fraternity. Furthermore, very few blacks have joined the ranks of professional hunters, which is a mandatory skill whenever problem animal control has to be resorted to in both commercial farms (Laubscher 2005) and communal areas, where game does become a menace (i.e. kudu's and baboons get accused of feeding on grain crops).

Game farming is a complicated field which is characterised by huge capital investments (Fourie 2003) in obligatory facilities like game proof often electrified fencing, building of accommodation facilities, intense marketing including the use of internet and websites, provision of off road type of vehicles and stocking of farm with game which further pushes the expenses up (Radder, et al 2000), given the costs of capture and transportation of game species (Schack[b] 2004). Another factor, which from time to time may determine success or failure of a game farming enterprise, is the availability of clients, who are at the advantage of a huge market where they can pick and choose from an array of game farms in the country. Potential clients to game farms are not ordinary and tend to be choosy with respect to type of accommodation and / or facilities offered, accessibility of the farm as well as popularity of the farm with respect to reputation and integrity built over time (Botha 2005). Game farming is definitely for the patient entrepreneurs who are not interested in quick returns on investments (Fourie 2004). Realistically an entrepreneur can expect a steady flow of income within the middle to long term duration

provided the game farm is sufficiently stocked, has the necessary amenities, is competitive possibly a 'cut above the rest'. Game farming like any other sector should be focused and possibly fulfill the needs of a specific market and for this to happen the entrepreneur needs to help develop a niche market for specific clients who fall in certain income group. In order for this to be realised by the entrepreneur, he / she needs to be innovative, skilled (Van Rooyen, et al 2001), smart and a bit sophisticated to always stay clear off from possible competitors.

Many black economic empowerment initiatives in other sectors of the economy like retail and financial services fail to accomplish their goals for various reasons, some of which have to do with unsuitable entrepreneurial candidates allowed to take risky and complicated tasks most suited for the seasoned and able individuals (Van Rooyen, et al 2001). Fronting is one such practice, followed by using the name of employees as directors in a fraudulent manner (not with their consent). Fronting refers to the use of false company credentials in order to benefit from preferential procurement from the state and its parastatals, together with other forms of abusing the empowerment philosophy are cast a poor image on the Black Economic Empowerment strategy (Monama 2004). This has proved damaging to the whole concept of empowerment, constituting poor foresight and sending a good lesson for other sectors to heed (Bukula 2004). Game farming should be taken for what it is, 'a complicated, complex and risky business venture with little guarantee on returns for capital invested'.

Black Economic Empowerment models are many, but not all of them are equally successful. For example, the land reform process for specifically agricultural purposes is generally not realising immediate deliverables as anticipated. A model developed and used for land reform purposes has advantageous factors in an idealistic situation. The applied model worked on the following assumptions, namely, that land reform by itself was a catalyst for successful black farming sector, that restitution of land to former owners will unleash the talents and expertise of former owners and that capital or funding was the most critical stumbling block preventing potential entrepreneurs from plying their trades. However good intentioned, the Department of Land Affairs as champions of the process had neglected much valuable groundwork and unfortunately focused on deliverables, like securing farmland, mechanising and equipping it. One of the oversights at that stage was forgetting to mentor and nurture the human capital, through a phased system practised by private organisations elsewhere. Cases of meaningful empowerment of black farm workers, at least from a skills development/human capacitating point of view, are known in South Africa, where landowners initiate a share or contracting system on their farms as also

provided for within the AgriBEE concept plan (Van Wyk 2005). The excuse for not pursuing black economic empowerment (BEE) is often attributed to the shortage of critical technical skills, incompetence (Duvel 2001) and inferior training (Kgosana 2005), which for game farming is a prerequisite for getting a firm foothold. An influential organisation within the BEE fraternity, the Black Management Forum (BMF) has acknowledged the general lack of black professional in sufficient numbers to satisfy the different sectoral needs within the economy (Qoza[f] 2005).

Though at times BEE agreements are not sufficiently reached nor satisfactorily concluded at enterprise level, land owners and their employees emerge both better off from the deal in the sense that neither farmers are forced by legislation to apply black economic empowerment policies nor are farm workers suddenly expected to assume ownership and management responsibilities on farms (Eckert, et al 1996). This scenario provides a basis for the development of a black economic empowerment model which is sensitive to the needs of existing landowners, and at the same time seeking to affirm imbalances created by the legacy of discouraging black ownership of land[2]. A model based on these principles may not necessarily be a panacea for the game farming sector, in terms of practicalities and appropriateness, but goes a long way in providing a premise for allowing meaningful black participation in the sector.

4.2 Problem statement.

Black people constitute more than 70% of the estimated population of about 45 million in South Africa but own less than 5% of the game farms at both national and provincial scale. To be exact, blacks own less than five of the estimated 569 game farms in the North West province (government records). Game farming is worth more than R1 billion and covers several thousand hectares of land. It is one sector which is not affected by affirmative action and has recently excluded itself from the programme of black economic empowerment. Black people are further not members of hunting clubs or land owner's association.

The ecotourism hype created both opportunities and misfortunes depending on each stake holder's viewpoint. Ecotourism is a sector which has seen tremendous growth in the past 15 years. However very few black entrepreneurs have joined in game farming and those who did, have not experienced the growth that is written about in the media. This is not to say that blacks have been totally excluded from the broader wildlife sector, since that statement will need to be

[2] Land Act of 1913, repealed recently.

qualified in view of concessions that have been offered by government owned game reserves in pursuit of black economic empowerment (BEE), specifically focusing on youth and women. These concessions come in the form of the running of accommodation, kitchen and game viewing transportation services in Provincial nature reserves like Borakalalo outside Brits.

It is inconceivable that the status report of game farming at a provincial scale has not been compiled (done justice), especially with regards to the North West province. It is partly in pursuit of determining the status of game farming and finding out details about it, with a certain bias towards studying the extent of black economic empowerment that this particular study embarked was upon. The salient as well as the fundamental details need to be known about the game farming sector at a provincial scale, in order to inform and advise intervention strategies in terms of black economic empowerment agenda and its targets. The details pursued by this study include, viz:-

4.2.1 Identifying the current operators.

It is necessary to know the current game farmers in the North West province in terms of their gender, age group, race and nature of business (e.g. whether hunting or ecotourism). Additional information that is needed in order to characterise game farming includes categorisation according to district municipality, in determining the density of game farms and the importance of game farming on the local economy. Game farms are a source of employment for both skilled and unskilled labour force and in areas where regular auctions are held, outside buying power becomes a factor in the local economy.

4.2.2 Ecological relevance.

In terms of biodiversity and species conservation targets, it is critical to understand the trend in terms of the size of the game farms, especially where large mammals are to be accommodated including the big five category and other CITES listed species. This factor ties in well with knowing the number of game species kept, as this is one indicator of the health and function of critical ecosystem processes like energy flow and its regulation. Normally the higher the number of species kept, the higher biodiversity status that can be bestowed on a game farm, and the higher the number of potential clients it can draw whether for hunting or broader eco tourism reasons.

Given the sprawling of game farms at both national and provincial scale, it may sound appropriate to find out from those who are involved the reason for such sudden interest and momentous growth of the sector. Game farming has of late been viewed as just another arm of agriculture, hence having nothing to do with conservation but more to do with generating profits. The age group of current game farmers will help to explain the popularity of this sector, since retirement as a factor might prompt certain investment options.

4.2.3 Maintain liquidity and follow market trends.

Indebtedness and bankruptcy go hand in hand with the profitability of the sector and hence the engagement of borrowed capital into an enterprise. Normally there is nothing wrong in borrowing capital in order to grow a business enterprise, but that is certainly not the same when poorly performing enterprises have enormous amount of borrowed capital pumped into them. It will be expected of game farms without financial burden to be able to survive a longer period of time than those which are saddled by debt from the beginning.

The profitability of game farms is at times tied to the number of activities that they have. A game farm which offers hunting in addition to hiking trials and camping will fare better than the one where hunting is the sole source of income. Similarly, a game farm which does not follow market trends might find itself at odds with its potential customer base, as is the case with enterprises where customer care is neglected. In order for a game farmer to know what the market requires of him or her, it requires networking and association with counterparts and colleagues in the sector. Poorly networking game farmers often work in isolation and rarely ever understand the market they are operating in.

Hunting and income statistics are one area which can determine the health and prospects of a game farm. Logically, rising hunting statistics do suggest increasing income, leading to the financial independence of the game farm. This aspect is difficult to determine from game farms and it may be that game farmers do derive profits from their enterprises and are not prepared to disclose it on tax liability grounds.

The cost of establishing a game farm is high, especially the fencing component and the stocking of game and it varies according to the type of animals kept. The pricing of game is similar to any commodity in the market, with scarcer game being more expensive than common game. In

general CITES listed species and the big five are expensive and costly in comparison to common game.

4.2.4 Maintain human resource capacity and equity ratios.

The staff component of every game farm is proportional to both size and income, with more bigger and profitable game farmers employing technical and secretarial staff. Smaller game farms generally employ fewer employees, and are not able to afford the services of full time technical persons in the form of Ecologists or competent managers. Because of the past legacy of segregation, the majority of workers who are either semi-skilled or unskilled happen to be black. The fraction of the black workforce is evidently expected to swell the bulk of the junior positions in any given game farm. By finding out the number of employees in a game farm, it is possible by default to differentiate them along racial lines.

4.2.5 Maintain BEE compliant shareholding.

The shareholding or ownership of a game farm is another interesting aspect which could determine the extent of black economic empowerment in the sector. The assumption is that all one man-businesses and to some extent all family owned businesses including close corporations are by default indicative of the ownership of a game farm (i.e. based on a specific racial group). It is thus possible to know the race of every owner of every one man or family business including close corporation in the game farming sector of this province. Normally, businesses which are owned by joint ventures also provide the possibility of the inclusion of black equity. Joint ventures do have scope to take in black equity as partners in the game farming sector and subsequently contribute to the AgriBEE targets.

4.2.6 Conservation value adding.

Game farming is not necessarily intended to contribute to the broader conservation strategy of the province, and hence given such a scenario, game farm owners are unlikely to have formal conservation training. Game farmers are thus not necessarily conservationists by background or training, and most probably have entered this sector with other objectives which do not necessarily centre on biodiversity conservation. Tied to this subject is land ownership, with capitalist game farmers likely to put more premiums on the economic benefits of more than one

farm, whilst conservationist will only advocate the expansion of game farm size on ecological grounds. Trophy hunters hold the view that it contributes towards the conservation of rare species and the upkeep of game reserves, through income generated (Baldus and Cauldwell 2005).

4.2.7 Derive interest across the cross section of society.

The extent to which involvement in a sector can be measured centres around the interest, value and enthusiasm which individuals display to the activities offered on that particular sector. Thus commitments that could be shown to a sector like game farming can take any form, ranging from involvement in hunting to ecotourism activities and are likely to be reflected by visitor registers on every game farm. Through these visitor registers it becomes possible to study the racial profile of client base at any given game farm and in turn it is through such details that the level of black visitations can be determined. The higher the recorded black visitations, the safer it becomes to make assumptions about their interest in game farming.

4.2.8 Exploit niche market opportunities.

Since game farming is one form of generating income for those involved, it is thus logical to analyze its client profile as a means of determining its niche focus in the market. The game farmers, who are interested in generating adequate profit, normally prefer foreign clients as a niche market, given the favourable exchange rate on offer. Those who service local clients in most instances do so because they lack the funds to upgrade their facilities like accommodation to global standards. Other secondary reasons on this subject are all ecological in nature, since foreign clients prefer trophy animals which happen to be old males, thus likely to do very little in balancing sex ratios of the game species involved. Local clients from a hunting perspective, happen to hunt for biltong which can be used as an indiscriminate tool to cull excess game in game farms with carrying capacity problems.

Marketing is a very important subject in the ecotourism sector, and this explains the reasons behind its prominence and attention in this study. Marketing can indeed determine the success and profitability of every game farm provided that the fundamentals behind its establishment (i.e. like its feasibility studies and reasons for its establishment) have been adequately taken care of. There are several methods of marketing a game farm, depending on the objectives of the owner. These methods are inclusive of the use of exclusive publications and the worldwide web

(internet) for the international audience and local newspapers or magazines for local clients. Game farms with up market facilities will certainly place their advertisement with exclusive publications and international wildlife exhibitions with the intention of capturing the willing international audience.

4.2.9 Maintaining financial discipline and integrity.

The financial health of any business enterprise is tied up with the reputation it has established over time, including adherence to principles of fiscal discipline. Game farms with reasonable years of operation (> 9 years) are likely to have gone through a period of trial and error (i.e. testing systems and procedures) preparing them for accountability and responsible administration. Accountable and responsible game farms normally carry out effective bookkeeping, which is overseen by independent bookkeepers. Such game farms are far more likely to display from normal to exceptional growth based on the conduciveness of the circumstances. Game farms with promising prospects are normally characterised by excellent standards of service, increasing clientele and reducing operating costs. They are furthermore able to meet their short, medium and long term financial obligations.

In general, game farms with a promising future believe in their intellect and inherent strength to make it through the years. They need to be optimistic about the future in order to maintain courage against all odds.

4.2.10 Communal parallels of game farming and its problems.

Tribal authorities in rural areas joined the ecotourism hype a bit earlier, but similarly in a chaotic fashion. In contrast to game farms, they operated under *laisez faire* rules, without exemption guarantees which are applicable to private land owners. They recommended and authorised the issuing of hunting licenses without ascertaining if there were enough wild animals to hunt in the areas under their jurisdiction. All they had was anecdotal sightings and nothing in the form of new and recent, let alone credible game count inventories (Monau, pers comm..).

Hunting licenses were nevertheless issued and remnant breeding populations of antelopes were reduced and subsequent hunting expeditions yielded fewer and fewer animals. Without, credible game monitoring research, it became difficult to determine the reasons wild animals stocks

dwindled in the face of poaching and periodic droughts. Without monitoring and vigilance, the situation in private game farms is likely to follow the same route, where hunting permits will be issued for non existing game.

4.3 Summary: Problem statement.

The ecotourism sector in South Africa with its offers ruined some and made others rich, largely as a result of its sudden deregulation. Little work went into feasibility and organisation of the sector under a de-regularised post democracy state in South Africa. There was never any autonomous effective statutory to oversee the transition of the ecotourism sector from a highly regulated entity into a free market industry. All of a sudden, livestock farms were converted into game farms. The eco-tourism hype was rushed, little effort spared in verifying the likely outcomes. As a result, there were both gained and missed opportunities. For others, it epitomised poor investments, lack of proper planning and feasibility analysis. The whole process lacked market focus and identification, as a result there were lost niche market opportunities (Agrireview 2002) and poor standards since many stakeholders ventured into same or similar businesses. They are too many, have flooded the existing market and the market itself have shrunk somewhat, or is simply oversaturated. Effective investment on the other hand ensures long term survival of enterprises (Agrireview 2000).

Game farming is expanding at an alarming rate, which should raise some concerns since its growth is neither creating income (liquid capital) nor substantive job opportunities. The growth in this sector is not need based but driven by misplaced investment where capital is frozen in assets which surely appreciate over time, but then incurring the opportunity costs of postponing the use of these resources in productive activities.

The additional establishment of game farms does not help the situation very much, it certainly constitutes misdirected investments. Considering the costs involved in establishing, stocking and providing necessary facilities on a game farm discounting the costs of maintenance and management, some of the newly established game farms could rarely survive the vagaries of open markets (Du Toit and Van Rooyen 2002). Mistakes in such instances do not cost a few thousand rands, but are well over several thousand rands (Stoltz 2002). The majority of entrepreneurs in this field soon became insolvent, amid big losses to individuals. The game auctions and trophy hunting are suggestively the only viable components in the game ranging sector, this situation

may not remain forever. There will be a point in time when all existing game farms will be adequately stocked and certain game species will simply lose their monetary value putting a cap on the existing vibrant market. At the moment given the flooded game farm market, it will not surprise to experience a paucity and dearth of potential visitors to these establishments.

A number of existing farms even in traditionally game impoverished areas were turned into ecologically unsustainable entities best fitting the description of 'little zoos'. Some of the farms soon turned from profitability to loss making entities. There was certainly no market focus and as such, no one had any clue who the actual patrons were (i.e. whether ordinary leisure travelers or wealthy trophy hunters). Worse, the conversion into game farming has brought about the following:

- Reduction in job opportunities, especially where cattle farming is replaced by game.

- Reduction of BEE compliance, since prospects of BEE adherence in agriculture is generally higher than in game farming. Compliance is actually nil or negligible in game farming.

- Reduction in potential to generate income and livelihood, given that majority of game farms are running at a loss or break even.

- Increase in probabilities of insolvency, given the generally higher debt to income ratio or rather liabilities to asset ratio in game farms than agricultural holdings except for a few successful places.

(Own analysis)

4.4 The objectives of the study and formulation of research questions.

The objectives of this particular study are once more revisited as discussed in Chapter 1 of this research report. The intention of this exercise is to integrate the objectives with formulated research questions and insure that the objectives of the study are not lost in the process. In short the research questions should be construed along this line, viz:

- Identification of game farms and their owners, thereby finding out their exact numbers as well as age, race, gender, background and enterprise details of owners.

- Examine the economic factors like the money generating activities on game farms, size of property (by default relative monetary value), original source of funding, profitability, monetary value of game and client base (size and origin). In short, examine and study the level of black ownership and participation in the game farming sector in the North West province through existing land and game ownership. Are there more white-owned than black-owned game farms ?

- Examine the extent of black economic empowerment in terms of racial profile of client base, shareholding (indicator of black participation) and work force employed in terms of skills levels (indirectly racial profiling based on current but changing racially based skills levels). Study the involvement and impact of blacks as a consumer group in hunting and game purchases in the province.

- Examine the objective and basis of game farming in terms of biodiversity (i.e. game numbers and variety, size of habitat / farm, ecological goals, occupational background and commitments) and economic (i.e. money generating activities, investment goals, marketing aspects and financial liquidity) imperatives. In short, examine the motives for entering the game farming, its economic health like profitability and financial liabilities.

- On the basis of existing and collected information devise a cost effective system or model for fast tracking Black Economic Empowerment in the game farming sector in the North West province.

4.4.1 Formulating research questions.

The research questions are posed about certain aspects of both the ecotourism and game farming sectors in this province. They are listed as follows:

Research question 1

Research question: Do game farmers in the North West Province evade BEE principles and equity in general?

Game farming sector in the province is not compliant with the black economic empowerment programme of the government as per the BEE act. Blacks as a distinct group are poorly represented in this province's game farming sector. The majority of black citizens in this country do not own farms and hence are not able to inherit them. To purchase a farm with a potential of keeping game is not a cheap option, with a farm of around 900 ha costing anything in excess of R 1.6 million and that is without game proof fencing or facilities. Commercial banks are prepared to finance up to 50% of the market value of the farm and the rest has to be sourced elsewhere. Putting up facilities including game proof fence is costly and game is similarly expensive to purchase.

In brief the purchase and development of a game farm cannot be done through borrowed capital, unless one is a reputable business person, sophisticated or well connected with lenders, which is not necessarily the case with ordinary black people. Thus the market and financiers in the game farming sector discriminates by default against this group of individuals, which will require statutory means or government intervention to redress. Gender equity is also compromised in favour of white males (i.e. Male domination). Black economic empowerment is ignored by the game farming sector partly because of the preoccupation with profit. Most blacks have in turn lost interest in game farming.

Research question 2

Research question: Are game farms in the North West Province a financial liability and burden on owners?

Game farms in the North West province are not economically viable in terms of revenue generated versus liabilities. Game farms spend capital on erecting game proof fence, putting up slaughter facilities, chalets or bungalows and stocking the farms with game. These capital developments are done in the hope that hunters will frequent them and spend money during their stay. Thus the absence of hunters or eco-tourists can hardly be tolerated either in the short,

medium or long term since certain overhead costs need to be paid on a regular basis. The employees who clean and maintain the establishment need to be paid. The electricity, water (where applicable) and telephone bills also need to be paid. The owner and his managers need to get their salaries. The interest on borrowed capital together with capital needs to be serviced. With such a state of affairs, the game farm owner either has to close down, sometimes through liquidation or compensate for lost income through personal savings.

A number of game farms in this province will be unable to exist without additional capital injection or subsidization by owners. They are often an appendage to an existing job (i.e. full time profession elsewhere) or some agricultural activity. The majority of game farms in the province end up being nothing more than weekend or holiday retreats for their owners, given a dearth of potential clients. This clearly demonstrates that game farms are by themselves not profitable in this province. This aspect is likely to be explained by the fact that the financial management skills of the majority game farmers are minimal, in doubt or simply lacking. Most of these game farms are not run along strict codes of financial discipline and management. They end up operating just below or at the break even point.

The cost structure of game farms in this province is the most determinative factor of success. Most of the game farms keep common plains game than other types of game, because it is relatively cheap and less costly to maintain (not bound by many laws, e.g. CITES). By implication, every other game farm will at some stage have common game, saturating the market and tightening competition for clients. Foreign clients on the other hand are largely trophy hunters, with the fewer arrivals having a financial drain on game farm income. This end up with the frequency of game farm visits by local hunters or clients greatly surpassing those of foreign clients, on the grounds that they are less sophisticated and easier to deal with. By implication, they are less costly to cater for.

Research question 3

Research question: Are game farms in the North West Province established for other reasons than conservation?

The majority of game farms in the North West province have been established for reasons other than conservation. Game farming is aimed solely at servicing the hunting fraternity (at a profit)

and to a limited extent the eco-tourism sector. The majority of game farms in the province are nothing more than glorified zoos in terms of size (i.e. hardly more than 2000ha). The smaller the game farms the smaller the variety of species on offer, thus affecting the existence and size of breeding or viable population of each member species in that community. Habitat considerations like niche and microsites for specialised species are not well provided for in small game farms, as are the home range size of each and every fenced species (e.g. a leopard requires a home range in excess of 150 km^2 for foraging).

In instances where multiplicities of game species are fenced in a relatively small area, they start to denude the environment through overgrazing, bruising, uprooting or trampling the vegetation. The soil becomes compacted affecting its structure, porosity, infiltratration capacity and ph level especially where urine and excretement is accumulated in a localised area. The majority of game farms have recently been established without conducting necessary feasibility studies, at times for pure fascination with game irrespective of the size of the farm. Biodiversity considerations like species endemnism, habitat irreplaceability, population viability and integrity and ecosystem processes like migration and pollination, are not adequately catered for.

4.5 Concluding remarks.

The game farming industry in this province creates an impression that they are not affected by the transformation of civil society structures including the law reform that swept South Africa in recent times. This is demonstrated by issues raised in the problem statement discussed in this chapter. From the forgoing discussion it is evident that the game farming sector is bereft with problems which need to be addressed before profitability and sanity can be restored. It is odd for 70% of the citizens to be excluded from an important industry like game farming. The status of game farming needs to be ascertained and validated with the view of informing both public and political debate so as to come up with mechanisms of redressing the situation. Ecotourism in general has experienced substantial growth for some time and holds potential of contributing in a major way to the Gross domestic product (GDP).

The economic health and sustainability of individual game farms, however remains a concern which this study sought to address. The existing information on game farming is fragmented and needs to be put in some form of database which can be updated on a regular basis and this study can contribute to that. The extent to which the provincial game farms have contributed to the

conservation goal in terms of biodiversity and protected area expansion is unknown, but is thought to be insignificant. The World Park Congress and IUCN are known to promote the expansion of existing protected area network to at least 10% of the country's land surface area. If indeed targets for the North West province are around 10%, then the 4% currently conserved is insufficient and may seek the direct contribution of the local game farming sector.

The following chapter is on research design and analysis.

CHAPTER 5
RESEARCH DESIGN AND ANALYSIS

5.1 Introduction.

The determination of the status of game farming in the area requires a two pronged approach to be adopted, namely, obtaining primary and secondary data. Primary information about game farming in the province was obtained through the use of telephone based interviews. Postal interviews have been found to be as useful as telephonic interviews, with the former used recently to gain information from landowners about management of reserves (Botha 2004). Secondary information is institutionalised and readily available, as such obtainable from books, archived materials at conservation agencies, personal discussions and official records. This approach is likely to yield adequate information, to enable the determination of the health of the sector in the province as well as its black economic empowerment status. The research approach for this particular study also relies on a number of aspects which will enable the objective assessment of the game farming and related ecotourism potential of this province. The research efforts will focus on two aspects, viz.:

5.2 Obtaining a representative sample of game farms in the province.

Sample size was directed by the actual number of game farms in a specific district municipality which is in turn informed by visitor statistics in that given area. There are four district municipalities in the province, namely, Bojanala (East), Bophirima (West), Central and Southern.

5.2.1 Size of game farms.

In each of the four district municipalities, game farms differ in sizes (Table 5.1).

Table 5.1 Game farms distribution according to size.

District municipality	Minimum size	Maximum size
1. Bojanala	70 ha	6 700 ha
2. Bophirima.	65 ha	23 356 ha
3. Central	60 ha	6 000 ha
4. Southern	100 ha	4 800 ha
Average	74 ha	10 214 ha

Bophirima district municipality has the biggest game farm overall and Central has the smallest. The average size of small game farms, or 'glorified zoos' as they are often referred to, is about 74 ha whilst the average big size is 10 214 ha. The interview itself did not recognise farm size as a variable and hence did not stratify around it.

5.2.2 Gender distribution.

Incidentally not only men are game farmers, women although constituting less than 10% of the identified sample, are increasingly getting involved in the sector. Women are joining the sector, accidentally when their spouses pass away and as daughters when their fathers retire or pass away. In instances where a surviving spouse is a woman, she often allows her son to run the farm as a family business. There were no black women in the interviewed sample of game farmers.

5.2.3 Age distribution.

The questionnaire distinguished between three age groups, namely, young (i.e. 17 – 38), middle age (i.e. 39 – 58) and old (i.e. 59 and above). Apart from instances where game farms were run either by a son or daughter, the majority of game farmers were run by older men some of them older than 75 years. The youth are generally not keen participants in farming related operations. Zwane (2005) made similar observations which were contained in a survey report done in the Limpopo province.

5.2.4 Race.

The compiled list that contained the details of game farmers, provided names and telephone numbers, making it possible to identify the race of the individual in the identified sample partly by virtue of name. The fact that the interviews were conducted telephonically helped to confirm the race of the person, otherwise it would have been insensitive to inquire about the race of the individual. It became apparent that race stereotypes still existed in the rural areas and any reference to race would have encountered hostility.

5.2.5 Training or occupational background of the game farmer.

A distinction could be made only between four categories, namely, agriculture, conservation, professional and other. Based on the sample, most game farmers interviewed were by and large coming from an agricultural background. They have had cattle or ploughed their fields at some stage and only at a later stage introduced game on their farms. There were ironically very few game farmers who were conservationists by profession, and those who did hardly had any qualification in the field. Professionals and business people comprised the second largest group of individuals who owned game farms (i.e. with the intention of making money and having leisure).

5.2.6 Type of game farm ownership.

The majority of game farms sampled were largely one man businesses, followed by family businesses. In instances where game farms were run as family businesses, it was done with the intention of involving spouses and grown up children. Joint ventures were very few in the sampled group and this pattern may turn out to be the norm in the actual population. In one or two of the joint ventures black equity was incorporated, boosting the black economic empowerment credentials in game farming. The other category is that of close corporations which make inheritance less costly for later transference to children.

5.3 The sampling method.

For purposes of simplicity, systematic random selected sampling was used. Systematic random sampling is a form of sampling used in finite or known populations, as is the case with the actual number of game farms in this province (Brunt 1997). The list of game farms is taken and a

predetermined sample is selected, by choosing every fifth game farm for interviewing purpose as discussed under 5.3.3 (sampling frame). The advantage of systematic sampling is pronounced in relatively homogenous population as is the case with game farm owners in this province (Brunt 1997). The earmarked sample size was not be below 10% of the population, since the larger the sample taken within a population, the better representation it shall offer and thus lessen the bias related to sample size. The population of game farms was stratified according to the four regions as discussed earlier. For example since the Bojanala region has the greatest concentration of game farms, it logically had the largest sample size proportional to the concentration of game farms.

5.3.1 Sampling unit.

The population has been divided into four sampling units, which in this case refer to a region as comprised of different districts. Sampling unit refers to a member of the survey population (Table 5.2).

Sampling and sampling methods depend on the population size. The bigger the population, the larger is the sample to be obtained in order to be representative. Important considerations are hence, the following:

- How will the sample be selected from the population?
- How large should the sample be?
- To what extent can the sample be considered reliable?

Indeed bias is not borne only by incorrect sampling procedures and techniques, it may well be brought by either the methods employed in data collection, weaknesses in questionnaire or simply, poor planning. In order to overcome this shortcoming, a suitable sample has to be selected in the population of interest, in this case from a finite population. A finite population is known and can be counted as a whole. Sampling units within a sampling frame should have equal chance for selection or inclusion in a survey.

Table 5.2 Grouping game farms into regions.

District	Game farm no.	District municipality	Aggregate total.
1. Brits	107	Bojanala	307
2. Koster	20		
3. Madikwe	9		
4. Marico	68		
5. Rustenburg	46		
6. Swartruggens	57		
7. Vryburg	158	Bophirima	158
8. Lehurutshe	1	Central	11
9. Lichtenburg	6		
10. Molopo	2		
11. Delareyville	2		
12. Bloemhof	4	Southern	93
13.Christiana	6		
14. Fochville	3		
15. Klerksdorp	22		
16. Potchefstroom	18		
17.Schweizer Reneke	15		
18. Ventersdorp	13		
19. Wolmaranstad	12		
Grand Total	**569**		**569**

5.3.2 Determining sample size.

A sample size should essentially be large enough to allow for deductive inferences or make generalisations about a population after only studying a sample. Since the population is spread

unevenly over a large geographical area, the systematic random sampling method (Brunt 1997) was used in this study. Out of the known or finite population of game farms in the province estimated at 569, a sample of 112 was decided upon, which represent about 20% of the population of interest. Sample sizes of 20% and above in a population (Brunt 1997, Duvel 2005) are generally taken to be reliable. The larger the sample size, the lesser will be the sampling error i.e. difference between sample and actual values.

A population of size N is divided into subpopulations called strata. Samples of size n_i are drawn from the strata or sampling units N_i

Where: $n_1 + n_2 + n_3 + n_4 = N$ (Population size)

Where: $n_1/N_1 = n_2/N_2 = n_3/N_3 = n_4/N_4 = n/N$ (Proportional stratified sampling)

Where: n_i = sample size of region (i.e. game farms)

N_i= population size of the region (i.e. game farms)

$(i = 1,2,3,4)$

And: n/N = sampling fraction

112/569 = 19.68%

Table 5.3 Determining sample size per region.

Region / District municipal	**Population (Game farms)**	**Sampling fraction (% of Population)**	**Actual sample**
1. Bojanala	307	20	61
2. Bophirima	158	20	31
3. Central	11	20	2
4. Southern	93	20	18
Total	***N=569***		***n=112***

5.3.3 Sampling frame.

It is critical to determine sampling frame within this known or finite population. The sampling frame (Brunt 1997), is made up of sampling units. Each of the sampling units has an equal chance of being sampled. A systematic random sampling method (Brunt 1997) was used in this study. Every K^{th} member of the population was included into a sample of size n,

where: $K = N/n = \frac{Population\ size}{Sample\ size}$ = Sampling ratio.

= *569/112*

= 5, 1 – meaning every 5^{th} game farm in a sampling unit was included in the survey.

5.4 Measuring instruments.

Since this study was evaluative in approach, it sought to combine both the descriptive and explanatory research components. This is aimed at making judgements on the economic health of game farms and also exploring strategies and models of incorporating the black economic empowerment into the sector. The adopted research approach sought to advance knowledge in the area especially with regards to avoiding common pitfalls in game management, addressing issues of participation and equity as well as exploring the status quo with regard to the participation of black entrepreneurs.

A questionnaire was used as a primary instrument of collecting data. A telephone based interview was used because it is generally acceptable and reliable for collecting data (Churchill 1992, Brunt 1997). It was chosen to administer the questionnaire because of the following factors, viz:

- It saves time involved in traveling from one game farmer to the next.
- It saves resources which otherwise have been used in traveling to game farms in different parts of the province.
- It is quick and hassle free, allowing for a questionnaire to be filled by between seven and 15 minutes, depending on the friendliness of the interviewee.

- It reduces the need for and involvement of many interviewers. One interviewer is appropriate to interview 112 identified game farmers for reasons of consistency and accuracy. Involvement of many interviewers with different interpretation of questions in the questionnaire is likely to reduce distortion and increase accuracy.

The shortcomings of using the telephonic interviews include amongst others the fact that they are considered impersonal and people being interviewed can easily end the interview at any point without notice (Brunt 1997). The telephone conversation may also be distorted by the telephone line when it is not clear (i.e. not transmitting clear sound). A well formulated and structured questionnaire (appendix 2) was used and was supplemented by the informal attendance of meetings, workshops (Table 5.4) and discussions forums.

Table 5.4 Informal meetings and workshops attended with land owners / game farmers.

Theme	Type of meeting	Region	Date
Provincial Conservation strategy	Workshop	Potchefstroom	04-05 August 2004
Raptor Conservancy	Workshop	Vryburg	24 September 2004
Mziki Conservancy	Meeting	Rustenburg	17 January 2005
Wetlands Conservation	Meeting	Ottoshoop	02 February 2005

Questionnaire-based interviews are appropriate for many of the tourism related research, in that they provide accurate measurements of the populations characteristics and attributes in contrast to casual observation. Surveys have always played an invaluable role in the tourism sector, especially for assessing tourism satisfaction. However there are scientifically accepted principles governing the use of surveys to gain representative information about a larger population (Brunt 1997) as is the case with game farms in the province.

The following ethical principles and procedures, form part and are a prerequisite of every questionnaire based research commissioned, namely:

- There should be informed consent from participants, especially where some aspects of the questionnaire are likely to be influential in any respect, including contents which are sensitive.

- There should be openness and honesty, especially with regard to the research's purpose and application. Deception should be avoided, unless credible reasons and scientific merit are to prevail.

- The right to withdraw has to be guaranteed and no participant must be coerced, or persuaded unnecessarily.

- Guarantees should be provided for protection from harm, whether physical or psychological for all participants.

- Participants should be debriefed, providing in the process, an account of the purpose of the study as well as its procedures, preferably at the outset, or alternatively at the end.

- Confidentiality is critical in interview surveys, and all endeavours should be undertaken to provide it by encoding transcriptions.

- Race, gender, culture and physical handicap of all participants should be respected

(Brunt 1997: 7 - 9).

5.5 Data analysis.

The data for this particular study was analysed using Software Package for Social Scientists (SPSS), version no. 12 (2003) as installed at the North West University's Statistics department. The data analysis was comprised of the following,

5.5.1 Frequencies.

Frequency tables were also selectively used to interpret and report on aspects like:

- Reasons for involvement in game farming.

- Source of capital to start game farming.
- Profitability of game farming.
- Affiliation to game farming association.
- Funds spent on game at time of establishment.
- Type of game species kept.
- Type of game farm ownership.
- Occupational background of game farmer.
- Number of game farms owned or purchased.
- Racial profile of game farm client base.
- Activities offered on game farm.
- Target market of game farmer.
- Marketing of game farm product.
- Bookkeeping on game farm.
- Health and status of financial records.

The same data was presented in graphs was also analysed using the frequency tables.

5.5.2 Chi – square test of association.

The chi square is expressed as

$$\chi^2 = \sum (O - E)^2 / E$$

Where O = the observed value

E = the expected value

It was used in this instance to test independence between two categorical variables, namely, the independent and dependent variables. It is more useful in interpreting data presented in a cross tabulation form (Brunt 1997) as was the case with this study. The level of significance is set at 0.05. This implies that the relationship between two categories is significant at 5% level of significance if the p-value is ≤ 0.05. It is consequently the level at which the null research questions will be rejected or not.

5.6 Concluding remarks.

This study employed the quantitative and deductive approach since statistical procedures were applied. Furthermore for generalisations to be made about the survey population and the testing of research questions numerical evidence was required. Qualitative methods were used to a limited extent, since they provided the depth and not the extent of the situation. There are reasons and attributes that provide credence to quantitative approaches and these are:

- Identical questions and methods of recording the answers are used on each respondent so that the information can be recorded easily.
- The sample is usually quite large and representative of the population under consideration.
- Statistical analysis is used to draw conclusions.
- Closed questions are used widely because they are more convenient for computer and statistical analysis.
- Attitudes and opinions are measured by the use of scoring and rating scales.
- The method is adaptive to the use of large sample sizes, thus being more representative of the population and providing scope for inferences to be made with a degree of confidence

(Brunt 1997: 16).

The following chapter is on results and interpretation.

CHAPTER 6

RESULTS AND INTERPRETATION.

6.1 Introduction.

The population of game farmers in the province was divided into four geographical and/or administrative regions of the province, namely, Bophirima, Bojanala, Central and Southern. Based on the population density of game farmers it was decided to stratify samples on these basis. A close type of telephonic questionnaire was used. It surely lacked in depth but could trade off that important consideration for being amendable to statistical quantification. A pilot testing of the questionnaire was done during the end of October 2004. General problems encountered during the pilot testing, include:

- Inability to win confidence of the interviewee, when a total stranger calls upon him or her. Some farmers required either personalised face to face interviews, or that the questionnaire be faxed to them so that they could fill them in and fax them back to interviewer. Reluctancy to participate in events organised by strangers is not a new phenomenon among farmers, because of fear, suspicion and lack of clarity (Zwane 2005).

- Some of the game farm owners were hostile and not taking kind to the answering of certain questions. Those included questions on what the number of animals hunted or sold (live sales statistics) on his farm, the profile of his employees and the racial profile of his / her clients (who frequent the game farm).

- At other times game farm owners were difficult to contact, especially where the interviewer had access only to landline (house telephone) numbers, only told to phone later and again to no avail.

- In some cases the game farmers were busy during the day (09h:00 – 18h:00), and found the calls irritating or inopportune. This led to poor interviews (i.e. interviews were always rushed and not helpful).

- Some of the questions were not responded to adequately and needed to be guided to provide the appropriate responses.

6.1.1 Correcting and normalising the interviews.

The pilot testing prompted the putting of the following measures in place to reduce distortions and normalise relationships between interviewer and interviewee:

- The interview was started by first disclosing the identity of the interviewer and the full object of the call so that issues of ligitimacy, credibility and authenticity are cleared right from the start. The interview began like this: My name is ....., I work for this department, I am busy with the research on game farming, Do you mind going through the interview with me? Where it was not possible the game farmer always proposed a suitable time for calling or interview.

- At both the beginning and the end of every interview the telephone contacts were left. The farm owner was thanked for participating in the study. This gave the land owner confidence of asking the interviewer about other services offered by the department, at other times even lodging complaints / inquiries. One such inquiry was about whether the widow should register with the department as the new owner / manager of farm given that his husband passed away a short while ago. Others were about hunting permit applications or just confirming knowing another employee of the department who service them on a regular basis.

- Where clarity was necessary, switching to Afrikaans was done by the interviewer which boosted his rapport with the land owners, who went an extra mile to provide all the other additional information without necessarily being asked to do so.

- Where the interviewer deemed fit not to ask a certain question (e.g. Racial profile of land owner's client), the specific questions was rephrased in a different way. This would go like: Do you get school groups visiting your farm or do you get all the times professional hunters, or are there some learners / people who never hunted before visiting. Rephrasing at other times was not helpful at which point a specific question was omitted or reported as missing.

This explains the missing comment found in tables presented in the results and also reduction of the eventual size to only 53 usable and answered questions in the questionnaire.

- Actual game farm owners could not be contacted through landline (house telephones) in certain instances and interviews had to be conducted through knowledgeable intermediaries (i.e. they either worked closely with or work for the game farmer) like spouses, children, managers (game farm) or relatives. This explains the reduction of sample size to 53 from the intended 112.

- Most game farmers were too busy during the day and interviews had to be conducted from around 16h:00 to 20h:00 strictly during weekdays. However calls that came beyond 20h:00 and at weekends were turned down. Time is a critical matter for game farmers, who are likely to avoid being interviewed when the conditions are not conducive or suitable. Past experience with farmers elsewhere showed that they avoided meetings which clashed with other chores that they do during the day (Zwane 2005).

6.2 Results and their interpretations – A perspective.

The general response rate for this telephonic interview was between 40% to 50%, varying from region to region. The response rate was 49% for Bojanala, 48% for Bophirima, 50% for Central and 44% for the Southern region. The fieldwork or telephonic interviews lasted two of the scheduled three months (i.e. November 2004 to January 2005). However, only 53 individuals participated in the study though 112 were iniatially earmaked. The other 59 where either unavailable or difficult to find. The interviewees can be divided into three, namely, those whose questionnaire were filled (i.e. 53), those whose questionnaire were deferred for a later appointment, at times never materializing, and lastly those who were never contacted because of faulty telephone numbers (i.e. spoiled questionnaires). The latter two categories constituted at least 59 spoiled questionnaires. The completed copies of the questionnaire were used to determine the response rates from the total identified sample and those fiqures were expressed as a percentage. An important aspect is that not all questions were necessarily answered during each of the conducted interviews. The response on certain questions was low while on others it was high. In a few instances the expected 53 individuals were interviewed.

6.2.1 Adherence to BEE principles by game farmers in the North West province.

The outcome of the surveys indicates that the game farming sector is not compliant with the black economic empowerment programme of the government as per the BEE act (Act no. 53 of 2003). The fact that blacks only represents less than 10% of the provincial game farming sector is a point of concern (Table 6.1.1), which clearly demonstrates that game farmers are predominantly white in the province.

Table 6.1.1 Racial dimension of the provincial game farming sector.

		Frequency	Valid Percent
Valid	White	52	98.1
	Black	1	1.9
	Total	53	100.0

It is also evident that blacks as a consuming sector have not embraced and supported the local game farming industry as discerned from visitation records held by game farmers (Table 6.1.2).

Table 6.1.2 Racial Profile of Client Base.

		Frequency	Valid Percent
Valid	Mainly white	11	29.7
	Mainly black	3	8.1
	Racial mix	23	62.2
	Total	37	100.0

Less than 10% of the game farmers in this study did indicate that they received a mainly black clientele. A few of the game farms offer veld schools to visiting schools from townships and villages especially around the Brits area and it is likely to be amongst them that black visitations are recorded. These routine visits are known to occur also on game farms around the Vredefort Dome, where survival skills and identification of plants and animals are taught. It should be pointed out that veld schools are not necessarily a common feature in all game farms and they are

common in properties which put a high premium on conservation ethics and principles than merely on profit.

Normally, two broad categories of visitors frequent game farms, namely, hunters and eco-tourists or nature enthusiasts. The former group is often the larger and the less representative in terms of racial demographics. Black people generally are not rifle hunters, though they may occasionally hunt with dogs thus becoming automatically overlooked in the classical definition of hunters. The most authoritative publications in the South African hunting fraternity are largely subscribed to by white males, hence further pointing to the unbalanced representation of hunting as a recreational activity in this province and the country. Furthermore out of the estimated 28 regional hunting associations in South Africa, five of which operate within the North West province, all of them have white chairpersons and executive committees. Thus the outcome of this study may not be further away from the truth or rather realities on the ground.

The culture of 'bosberaads', which roughly refers to meetings held by corporative bodies like private companies and government departments away from offices, has seen the use of game farms as venues rise. It is at such occasions that game farms record visitations by racially mixed clientele, which for purposes of this study was estimated at around 43.4%. The other meaningful options which could allow the black community to participate and gain ownership, perhaps control of the provincial game farming sector is through forming joint ventures with current owners on preferably a BEE mode. This can prove a challenge, considering that a paltry 9% of the ownership of the local game farms is held by joint ventures (Table 6.1.3).

Table 6.1.3 Ownership mode of provincial game farms.

		Frequency	Valid Percent
Valid	One man business	20	39.2
	Joint venture	5	9.8
	Family business	21	41.2
	Other	5	9.8
	Total	51	100.0

Comparatively speaking, about 80% of all game farms in the province are in the hands of white owners. These farms are held either as 'one man businesses' or 'family concerns', which raises the question of commitment (on the sector's side) to meaningful black participation. Genuine commitment should not be limited to the improvement of the employee's working environment, but must seek to grant them shares in the business based on realistic targets and timeframes.

The practising of game farming at the moment is exclusively the preoccupation of middle aged white males (50%) and pensioners (30%). The pattern has not changed over time to include marginalised groups like women, the youth or blacks in general. The youth are less than 20% in the sampled population (Table 6.1.4). One explanation can possibly be that young people avoid farming in general or game farming in particular, especially where rewards are not justified by time and effort invested. Farming involves a lot of sacrifice and hard work, where non compensated overtime is the norm and time for resting enjoys little priority.

Table 6.1.4 The age distribution of game farm owners.

		Frequency	Valid Percent
Valid	17 - 38	10	18.9
	39 - 58	27	50.9
	59 and above	16	30.2
	Total	53	100.0

In cases of Blacks, the presented explanation does not necessarily hold, since they were restricted from owning land and as such, age was not a factor. The pattern of farm ownership is however unlikely to vary (i.e. in favour of older people) if experiences from predominantly black farming areas are considered. There are fewer young black graduates coming into farming, because of inherent discrimination as practised by lending institutions which value experience (i.e. number of years) and ability to provide collateral than the incumbent's potential or interest. A review into lending rules needs to happen to insure that age based discrimination is not perpetuated, at least if viewed against the background of relaxed and liberalized market economy policies adopted by South Africa in the post 1994 democratic dispensation.

6.2.2 Extent of game farms as financial liabilities to owners.

Game farms in the North West province operate either at a break even point (i.e. revenue generated equaling liabilities) or alternatively at a loss. Considering the fact that 58% of game farmers declared normal growth and another 40% are either declining (16.3%) or stagnant (23.3%) (Table 6.2.1), indicates the precarious financial situation that the sector at the provincial level has to contend with. The response to this particular question was provided by 43 individuals instead of the expected 53 This results suggest that the financial status of participating game farms has not necessarily deteriorated, but persist at break even point.

Table 6.2.1 The financial health status / records of game farms.

		Frequency	Valid Percent
Valid	Exceptional growth	1	2.3
	Normal growth	25	58.1
	Stagnant	10	23.3
	Declining	7	16.3
	Total	43	100.0

By assumption, any business enterprise which fails to display impressive results with respect to income target, may as well find it difficult to contend with the servicing of its loans and probably its overhead costs. Game farms experiencing normal growth might just find it difficult to expand their capacity, as is supposed to be in the logical growth path of any business. A stagnant business is unlikely to go beyond covering its cost structure which is also not a good prospect for any enterprise supposed to show profit.

The precarious situation created by normal to declining growth prospects for the local game farming sector does suggest the existence of problem areas which need attention for the sector to rejuvenate itself. Among weaknesses existing in the sector, are high operating costs and decreasing clientele. It is logical to expect that where close to 40% of game farmers operate under high operating costs, other factors like decreasing clientele might actually force generated income to fall well below the liabilities of any given game farm (Table 6.2.2).

Table 6.2.2 Identified weak points of game farms.

		Frequency	Valid Percent
Valid	Decreasing clientele	2	5.4
	High operating costs	20	54.1
	Other	15	40.5
	Total	37	100.0

High operating costs may refer both to overhead cost (e.g. rent, labour costs, etc.) and operational costs (costs of running and operating chalets). Again, only 37 individuals responded to this particular question instead of the expected 53.

In order to continue operating, game farmers tend to use funds generated elsewhere to neutralise the rising costs in their game farms, otherwise the business may be forced to close. Solving of the identified problem areas, short of bailing out the technically insolvent game farms is needed as part of a broader strategy to improve customer focus, improve general management and reduce overall costs (Table 6.2.3). Out of the 53 respondents interviewed, only 30 individuals found this question relevant to their game farms and hence responded accordingly.

Table 6.2.3 Preferred approaches to raise performance of game farming sector.

		Frequency	Valid Percent
Valid	Improve customer focus	3	10.0
	Improve general management	6	20.0
	Reduce costs	9	30.0
	Other	12	40.0
	Total	30	100.0

Other responses received, but not listed in the table included devising a strategy to save the struggling game farms from fading into oblivion, sharing of ideas and technologies and belonging to study groups. What became evident when conducting these surveys was that the game farmers themselves were unsure as to the exact mechanisms that need to be put in place to have them

operating at full capacity. The fact that the majority of game farms were established and ran from the owner's capital resource can partly be explained by their continual subsidization and consequently poor return on investment (Table 6.2.4).

Table 6.2.4 Source of capital to start game farming.

		Frequency	Valid Percent
Valid	Own capital	41	80.4
	Inheritance	3	5.9
	Loans	6	11.8
	Other	1	2.0
	Total	51	100.0

Loans themselves seem not to be the preferred source of capital for purposes of establishing game farms, probably because it is generally known that the return on investment in this sector is generally low. Only 5.9% of game farmers had the priviledge of inheriting their properties. This suggests that game farmers who have not inherited their farms have little chance of bringing about innovation, since every income that comes their way is used to cover both overhead and operating costs. Entry barriers into game farming are known, particularly the fact they become more pronounced without the required, often substantial capital base.

The expense involved in game farming is likely to keep ordinary entrepreneurs from 'plying their trade' in this field, especially for generating profit in the short to middle term. Under such challenging circumstances, it will be inconceivable for anyone to put money into conservation through the game farming route, given that many deserving and ecological sustainable conservation areas like national parks and reserves do exist to put such extra resources to better use. It is likely that game farms established over the past five years, were done so for other reasons, amongst which include turning them into high yielding property investment for exclusive use by their owners during holidays and weekends. Wealthy individuals and corporate bodies are not necessarily conservationists and whenever they enter game farming under the pretext of conservation, their motives are bound to attract suspicion. Such individuals are prepared to sacrifice their savings for fun and / or investment which has potential of yielding good returns

whenever the properties are sold. Game farms become by default an appendage to an existing job (i.e. full time profession elsewhere) or some agricultural activity.

Table 6.2.5 Effective bookkeeping in game farming.

		Frequency	Valid Percent
Valid	Yes	38	74.5
	No	13	25.5
	Total	51	100.0

Given that 75% of game farms in the province (Table 6.2.5) do carry out effective bookkeeping does suggest that financial management standards are kept, even if the records indicate poor performance on the side of game farms.

Table 6.2.6 Quality of bookkeeping in game farms.

		Frequency	Valid Percent
Valid	Owner	9	22.0
	Game farm staff	6	14.6
	Independent bookkeeper	25	61.0
	Others	1	2.4
	Total	41	100.0

Bookkeeping irrespective of its quality is not supposed to compensate for fundamentally flawed business plans. Weak business plans lead inevitably to poor generation of income. The only other problem in this instance may be that game farmers in general have poor financial management skills making it often difficult to appropriately interpret bookkeeping findings and where possible do away with identified shortcomings. It is commendable that most game farms (i.e. 61%) make use of independent bookkeepers, whose integrity is generally beyond reproach, to balance the game farmer's financial records (Table 6.2.6). Again, only 41 individuals found this question relevant to comment on.

Doing up to standard bookkeeping may not, as logic suggests turn around the profitability of an enterprise, but what it well does is that it facilitates the creation of conducive conditions, which can then allow the enterprises to be run profitably.

Table 6.2.7 Profitability of game farming.

		Frequency	Valid Percent
Valid	Yes	30	60.0
	No	20	40.0
	Total	50	100.0

The existence of an effective and probably functioning bookkeeping system, is not supposed to exempt game farmers from using strict codes of financial discipline and management. General experience is that business ethics and principles are capable of doing well to the reputation and acceptability of any business, including game farms. The acceptability of a business in the end does determine its profitability. It however may sound bizarre for any other business to consider itself profitable, as seems to be the case with the majority (i.e. 60%) of game farmers who participated in this study (Table 6.2.7). In the absence of proof for acceptability and consequently, broad clientele appeal, the impression (of profitability) created may be misleading unless other parameters to determine profitability were used. Bookkeeping does not compensate for ability to generate optimum income, whether in game farming or any other sector.

Another explanation may be that local game farmers are too over confident of themselves and for what their game stand for without basing their analogy on processed financial as reliably examined by an independent bookkeeper. The bookkeeper is able to advise on the assets to liabilities ratio of a game farm thus determining both its liquidity and profitability.

Profitability and instruments of financial discipline are related, but however mutually exclusive. It is hence possible for financially disciplined game farms to be profitable, without making all profitable game farms financially disciplined. The gap between believing and observing reality needs to close in order for game farmers to realise that not a lot of profit is generated by game farms even if the costs of external subsidisation are discounted. In a game farm situation, strict

bookkeeping may be practised under the guidance of an independent bookkeeper, but non arrival of clients may still render the enterprise non profitable.

Table 6.2.8 Type of game animals kept.

		Frequency	Valid Percent
Valid	Inclusive of big 5	1	1.9
	Mainly common game	42	80.8
	Combination of above	9	17.3
	Total	52	100.0

Game farms are generally expensive forms of investment thus justifying the need to be profitable and sustain themselves. Apart from the price of the farm and its infrastructural costs, the price of game is the third expensive asset on the farm. The value or price of game seems to be determined largely by its abundance, with rare and endangered species being more expensive than common game. This scenario might help explain why close to 81% of game in the province's game farms is of the common type, compared to about 2% of rare game (Table 6.2.8). The notion that common game is more cost effective than other types of game, as well as the fact that it is easier to acquire, may further explain its dominance on local game farms. It should also be added that some of the common game are not actually bought by the game farmer, they simply get fenced around with the establishment of the game farm. Other unscrupulous practices like dropping fences and driving free roaming game like kudu and eland with the use of helicopters into designated game farms around the Zeerust area have been reported. Other game categories like the 'big five', and endangered species are under strict legislative and international convention rules and may not be easily introduced into ordinary game farms, without looking into habitat suitability studies and actual size of the game farm.

It is often argued that foreign clients who frequent game farms are far more sophisticated and selective than local clients, in that they prefer older types of common game and endangered species to convert into trophy ornaments. Trophy hunting is indeed a significant money generating activity on selected game farms frequented by foreign hunters. A perception that exists suggests that foreign hunters as expensive to cater for, especially in terms of hospitality, entertainment and refreshments, which tend to be costly for game farms.

Table 6.2.9 Client profile of game farms.

		Frequency	Valid Percent
Valid	Mainly foreign clients	4	8.0
	Mainly local clients	19	38.0
	Combination of the two	22	44.0
	Other	5	10.0
	Total	50	100.0

Thus maintaining focus on local clients (Table 6.2.9) and keeping common game species may actually be interpreted as a cost saving measure on the part of game farmers, since it lowers the initial costs of establishing a game farm. The strategy of most game farms seems to be gradualist, focusing initially on local clients and building capacity in the meantime to eventually service foreign clients. In this transitional phase of game farms, about 44% focus simultaneously on both local and foreign clients. At the moment, foreign hunters constitute about 8% of the total hunting pool which frequents game farms in this province.

Given that the bulk of game farms in this province are younger than five years, it is not surprising that game farmers have chosen to focus on a combination of the two markets (i.e. 44%) or primarily on the local clients (i.e. 38%) as opposed to the foreign clients alone (i.e. 8%). The observation that local clients surpass foreign ones confirms what is already reported in literature. Foreign clients though small in proportion to locals, spend more money and hence provide better income for game farm owners.

6.2.3 Reasons for establishing game farms.

When more than 70% of game farms are smaller than a 1000 ha (Table 6.3.1), which is far below the benchmark (minimum average) of 2 000 ha for humid areas like Mpumalanga's lowveld, may jeopardize certain ecosystem processes. Based on benchmark figures, it is evident that the majority of game farms are indeed 'little zoos' in terms of size, which suggest that they were not meant to contribute to biodiversity conservation. The basis for landscape conservation as may be assumed in a game farm situation, strives for enlarged areas so as to allow ecosystem processes and individual species proliferation to occur.

Table 6.3.1 Distribution of Game Farm Sizes.

		Frequency	Valid Percent
Valid	500ha and less	15	28.3
	500 - 1000ha	22	41.5
	1000 - 1500ha	4	7.5
	1500ha and above	12	22.6
	Total	53	100.0

Only about 30% of game farms are sufficiently large in size to be both ecological and economically sustainable, though the benchmark figures are not necessarily fixed but vary according to climate, particularly annual rainfall and the suitability of the habitat in terms of vegetation abundance.

Table 6.3.2 The distribution of number of years of operation of game farms.

		Frequency	Valid Percent
Valid	Less than 2 years	5	9.8
	2 - 5 years	22	43.1
	6 - 9 years	7	13.7
	More than 9 years	17	33.3
	Total	51	100.0

It is logical to expect smaller game farms to have a smaller variety of game species on offer. Coincidentally, there seems to be parallels between sufficiently large game reserves (i.e. > 1 500ha) and the number of years that the game farm has been established, with larger game farms tending to be both ecologically and economically sustainable. About 33% of such game farms exist in this province (Table 6.3.2).

Financially struggling game farms, like any business enterprises, tend to last a few years except where these enterprises are kept operating by deliberately inputting funds into them. This practice of continual subsidisation may prove undesireable with time, since it stops game farms from being efficient and self sustaining. Ironically game farms that have been in existence for less than

five years, tend to be the most numerous in the North West province (Table 6.3.2). As indicated in the preceding discussion, only a third of surveyed game farms have operated for sufficiently long periods, suggesting that they should be in a financial position to continue operating beyond medium time frames.

Table 6.3.3 Reasons for your involvement in game farming?

		Frequency	Valid Percent
Valid	Investment	13	24.5
	Conservation	32	60.4
	Other	8	15.1
	Total	53	100.0

The mushrooming of game farms in the province could have suggested that other reasons, excluding conservation goals were driving this goal. However upon finding out from game farmers it came out that only 25% were actually into game farming to make money (Table 6.3.3). With a large fraction of game farmers (> 60%), having gone into game farming for conservation reasons makes it logical to reject the null research questions. If indeed game farmers do it for conservation, then the rate at which land gets transformed into game farms becomes suspect and questionable. Investment rates are far lower than conservation, in terms of reasons for getting involved in game farming.

Table 6.3.4 Focus of game farms.

		Frequency	Valid Percent
Valid	Hunting	7	13.2
	Ecotourism	8	15.1
	Combination	36	67.9
	Other	2	3.8
	Total	53	100.0

Since hunting is used as a management tool to cull and thin excess game, it should not be viewed independently from conservation. The only instance when hunting is separated from conservation is when it is used for non ecological reasons. Conservation is often construed as eco-tourism, suggesting in a sense that hunting is at odds with conservation ideals, which has been proven not to be the case. Both ecotourism and hunting are part of a conservation continuum placed slightly away from each other in that most tourists abore hunting and only use their cameras to take pictures of animals. A combination of hunting and ecotourism itself is far more widespread (i.e. 67.9%) as an activity in game farms than hunting (13.2%) or ecotourism (15.1%) alone (Table 6.3.4). This trend is likely to be used for diversification purposes, where the object is the attraction of a maximum number of willing clients, in contrast to where a single activity is offered.

It is evident that the establishment of game farms is driven primarily by a combination of both hunting and eco-tourism. This makes sense if land owners are serious about making a livelihood, since neither of the two activities is capable of providing sufficient income on its own. Profit motives are central to the strategy adopted by game farmers, since it allows them to take advantage of a combination of income streams, instead of just one. This particular response is also conforming to findings in literature regarding income streams of game farms.

6.3 Statistical validation.

A number of issues raised in the questions certainly are interdependent on each other, where changes effected on one issue may have ripple effects on the other. In statistical terms, associations between dependent and independent variables are generally referred to as relationships. The critical relationships that will come into scrutiny, include profitability of game farm versus type of ownership, profitability of game versus racial profile of clients, game species kept versus size of farm, type of game species kept versus number of years since game farm was established, game species kept versus membership of relevant association. Chi square ($p = 0.05$) is used to determine existence of these relationships (Brunt 1997).

6.3.1 Relationship between profitability of game farm and type of its ownership.

Relationships in this case are bound to exist for a number of reasons, including the following:

- One man businesses are bound to be more profitable than joint ventures or companies, because of the amount of personal commitment and efforts expended.
- Joint ventures or companies in turn are bound to go into bankruptcy or liquidation than one man business. This is to say that the frequency of failure is higher in companies, because ownership and consequently control is diluted in companies or joint ventures.

Table 6.4.1a Influence of game farm ownership on its profitability.

			Ownership / Shareholding				
			One man business	Joint venture	Family business	Other	Total
Do you find game farming profitable?	Yes	Count	14	1	13	1	2
		Expected Count	10.7	3.0	12.4	3.0	29.(
		% of Total	28.6%	2.0%	26.5%	2.0%	59.2%
	No	Count	4	4	8	4	2(
		Expected Count	7.3	2.0	8.6	2.0	20.(
		% of Total	8.2%	8.2%	16.3%	8.2%	40.8%
Total		Count	18	5	21	5	4
		Expected Count	18.0	5.0	21.0	5.0	49.(
		% of Total	36.7%	10.2%	42.9%	10.2%	100.0%

The results of the study showed that 28% of game farms which are run as 'one man' businesses (Table 6.4.1a) tend to be more profitable than those run by any other type of ownership arrangement. Alternatively, 21% of game farms which are run as family businesses tend to be the least profitable, creating the perception that unproductive members in family businesses may be shielded by hardworking ones, causing problems and eventually rendering the businesses unprofitable.

It is generally common to shift responsibilities and accountability whenever it is expedient to do so on the side of one family member to the other, and where finances are involved that could determine the success or failure of an enterprise. Game farms by their nature, are family owned

and run enterprises, which makes it difficult to exclude other family members. This is more common where ordinary family farms are converted into game farms with the family itself still living on the property. The only exception is whereby a game farm is purchased privately for business purposes, then rules and regulations revert to those of a corporative entity with ability to sue or be sued, raise capital by whatever means and ability to list shares in the stock exchange among others. Game farms that operate independently from the family may be helpful in instances of personal liquidation, bankruptcy or prosperity.

Table 6.4.1b The strength of the relationship between type of ownership and profitability.

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.996(a)	3	.029
Likelihood Ratio	9.278	3	.026
Linear-by-Linear Association	3.271	1	.071
N of Valid Cases	49		

a 4 cells (50.0%) have expected count less than 5. The minimum expected count is 2.04.

It is no coincidence that the type of ownership of a game farm is strongly ($p = 0.29$) associated with its profitability (Table 6.4.1b). The one man type of ownership will carry with it innovation, entrepreneurial flair and certain degree of cost management. Joint ventures seem not to be common among the game farming industry, since it is associated with poor profitability. Family controlled game farms are generally taken to be more reliable than joint ventures, and are however less profitable than 'one man businesses' for known (already discussed) reasons.

6.3.2 Influence of client racial profile on the profitability of a game farm.

In a country like South Africa where the consuming public is multiracial, it will be interesting to find out how the racial profile of game farm clients will influence its profitability. Game farms which are frequented by white people alone are less profitable than those where mainly blacks are the clients (Table 6.4.2a).

Table 6.4.2a Influence of the racial profile of client on the profitability of a game farm.

			Do you find game farming profitable?		Total
			Yes	No	
Racial Profile of Client Base	Mainly white	Count	3	7	10
		Expected Count	6.3	3.7	10.0
		% of Total	8.6%	20.0%	28.6%
	Mainly black	Count	2	0	2
		Expected Count	1.3	.7	2.0
		% of Total	5.7%	.0%	5.7%
	Racial mix	Count	17	6	23
		Expected Count	14.5	8.5	23.0
		% of Total	48.6%	17.1%	65.7%
Total		Count	22	13	35
		Expected Count	22.0	13.0	35.0
		% of Total	62.9%	37.1%	100.0%

The emerging picture is that game farms which have reformed their rules and are willing to accept a multiracial clientele are bound to do very well in business, if responses by 49% of the profitable game farms are taken into consideration.

Alternatively, the most unprofitable game farms happen to focus on whites only as a consuming group which is unrealistic and counter productive in a country like South Africa where black people form a large proportion of the human population. Considering that an overwhelming 20% of the respondents who declared to be unprofitable where focusing on whites only, compared with none who focused on black clients. Furthermore, only 17% of game farms who have multiracial clients have declared themselves as unprofitable.

Table 6.4.2b The strength of the relationship between client racial profile and profitability.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.010(a)	2	.030
Likelihood Ratio	7.560	2	.023
Linear-by-Linear Association	5.018	1	.025
N of Valid Cases	35		

a 3 cells (50.0%) have expected count less than 5. The minimum expected count is .74.

A strong link (p = 0.03) in favour of multiracial clients exists in the province's game farming sector, suggesting that profitable game farms tend to have a non discriminate admission policy (Table 6.4.2b). In cases of reluctant game farm owners as is the case in some instances, will be costly financially to them even likely to cost them the farm if it was bought on the assumption that it will repay its bond.

6.3.3 Influence of game species variety kept on game farm size.

The number of game species that can be kept on a given game farm is reliant on its size, referred ordinarily as its carrying capacity. The variety of species may be an additional factor which can be addressed through enlarged ground surface area with a possibility of habitat variety to fulfill their ecological needs. The best fit available between game size and game species variety, is where 11 – 15 game species are accommodated in an area of 500 – 1000ha (Table 6.4.3a).

Table 6.4.3a Influence of game farm size on variety of game species kept.

			Size of Game Farm				
			500ha and less	500 - 1000ha	1000 - 1500ha	1500ha and above	Total
Game Species Kept	1 – 5	Count	5	3	0	1	9
		Expected Count	2.5	3.7	.7	2.0	9.0
		% of Total	9.4%	5.7%	.0%	1.9%	17.0%
	6 - 10	Count	7	4	0	2	13
		Expected Count	3.7	5.4	1.0	2.9	13.0
		% of Total	13.2%	7.5%	.0%	3.8%	24.5%
	11 - 15	Count	3	10	0	4	17
		Expected Count	4.8	7.1	1.3	3.8	17.0
		% of Total	5.7%	18.9%	.0%	7.5%	32.1%
	15 and above	Count	0	5	4	5	14
		Expected Count	4.0	5.8	1.1	3.2	14.0
		% of Total	.0%	9.4%	7.5%	9.4%	26.4%
Total		Count	15	22	4	12	53
		Expected Count	15.0	22.0	4.0	12.0	53.0
		% of Total	28.3%	41.5%	7.5%	22.6%	100.0%

The untenable situation is where a variety of too many game animals are enclosed in an area less than 500ha, or alternatively far fewer animals in an area of about 1 500ha. Lessons continue to be learnt on the issue of game farm size for species conservation, especially incidences of elephants, kudus or rhinos breaking fences as a result of forage resources scarcity within small game farms. A rule of thumb is to keep species variety and numbers down whenever the game farm is smaller than 2000 ha.

Table 6.4.3b The relationship between size of game farm and game species variety.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.887(a)	9	.003
Likelihood Ratio	27.218	9	.001
Linear-by-Linear Association	10.453	1	.001
N of Valid Cases	53		

a 13 cells (81.3%) have expected count less than 5. The minimum expected count is .68.

The most obvious choice will be to have a variety of game species inhabiting a relatively sizeable area with a variety of landscapes and vegetation to offer microsites and habitats for multiple game species. A very strong relationship ($p = 0.003$) exists between large game farms and keeping of a variety of game species (Table 6.4.3b). As discussed earlier, smaller game farms fall short of conserving biodiversity at landscape level, in that ecosystem processes are unable to take place under conditions of limited space as may be the case with some of the game farms.

In situations where game farms have more game species in terms of numbers and variety, other secondary problems arise like over grazing, ground cover denudation, inbreeding with its associated side effects and increased mortality. Some game species are more prone to high mortalities under congested conditions, attributable to high stress levels, pathogen and disease manifestation, nutritional deficiencies and literal starvation. Human intervention is often called for periodically to provide supplementary feeding and veterinary care at high cost.

6.3.4 Influence of duration of existence of a game farm on the variety of game species it keeps.

The relationship between the number of years since the game farm was established and the variety of game species kept suggests that game farms with a number of years of existence would have had both the time and resource to build up their game animal species both in variety and

numbers. The picture which emanates from the study suggests that game farms with two to five years of experience tend to have the optimal number of common game species.

Table 6.4.4a The relationship between varieties of game kept versus duration after establishment.

			How long has this business been in operation?				Total
			Less than 2 years	2 - 5 years	6 - 9 years	More than 9 years	
Type of game animals kept	Inclusive of big 5	Count	0	0	1	0	1
		Expected Count	.1	.4	.1	.3	1.0
		% of Total	.0%	.0%	2.0%	.0%	2.0%
	Mainly common game	Count	3	22	5	11	41
		Expected Count	4.0	17.7	5.6	13.7	41.0
		% of Total	5.9%	43.1%	9.8%	21.6%	80.4%
	Combination of above	Count	2	0	1	6	9
		Expected Count	.9	3.9	1.2	3.0	9.0
		% of Total	3.9%	.0%	2.0%	11.8%	17.6%
Total		Count	5	22	7	17	51
		Expected Count	5.0	22.0	7.0	17.0	51.0
		% of Total	9.8%	43.1%	13.7%	33.3%	100.0%

The 'big five' type as well as other rare species are only kept on selected game farms because they require strict permitting conditions with elaborate specifications, with regard to size of holding facility, its electrification (where applicable), quarantine facilities and conformity to international treaties. In brief, the so called 'big five' and other rare species put an additional financial and skills strain on game farm owners to the extent that they become less popular (Table 6.4.4a).

Common game in contrast to other game types is kept by game farmers right across the spectrum irrespective of number of years of experience. Unlike in the case where a combination of both 'the big five' and common game is kept, which tend to be favoured by farmers with more than nine years of experience, 'the big five' are exclusive to farmers with a certain number of experience in game farming. The 'big five' type of game, is largely restricted to game farm owners with between six and nine years of experience. Thus keeping of game is not strictly a function of the number of years of experience, except for 'the big five' type of game which is in any case not widely kept in the province's game farms.

The relationship between the varieties of game held versus the number of experience in a game farm is not following a clearly delineated pattern, with common game in general being kept by a cross section of game farmers. The only logical pattern is displayed by 'the big five', which is restricted to game farmers with a specified years of experience.

Table 6.4.4b The strength of the relationship between variety of game kept and duration after establishment of game farm.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.530(a)	6	.011
Likelihood Ratio	17.030	6	.009
Linear-by-Linear Association	1.985	1	.159
N of Valid Cases	51		

a 9 cells (75.0%) have expected count less than 5. The minimum expected count is .10.

A defined relationship does not exist ($p = 0.11$) between the variables, namely, variety of game kept and number of years of game farming (Table 6.4.4b). It is thus expected of any game farm in this province to keep any type of game with the exception of rare species and / or 'the big five' irrespective of the year of its establishment.

This unstructured pattern of game ownership is not likely to affect the game farming industry at least in terms of its administration, but may well turn out to be a 'nightmare' in terms of implementing statutory compliance and law enforcement. Authorities need from time to time to enforce permitting conditions, enforce export and import regulations, monitor compliance to holding specifications and perform reporting as part of both national and international conventions.

6.4 Summary.

The majority of game farmers saw an opportunity in the industry without doing the necessary probing and feasibility studies, only to realise the inherent difficulties along the way. A significant number of game farms in the province were either fully or partially converted from cattle farms. They have adopted a mixture of cattle and game farming or in certain instances chose to deal strictly with game.

The bulk of game farms in this province use own capital to finance the conversion to game farming. A rising number of game farmers do it for profit purpose and coincidentally happen to be professionals predominantly engaged in separate business activities like having consultancy, engineering, bookkeeping or law firms. The purchase of the game farm, followed by putting up of infrastructure and lastly, acquiring of game are the three most expensive activities. The maintenance and running costs of the game farms against the background of drought (e.g. Kgalagadi area) and visitor apathy are increasing the debt burden on game farms, to the point that they become liquidated or rendered ineffectual.

Common game is preferred to other types of game like the Cites listed or 'big five', on account of the latter being far more expensive, costly to keep and restricted by statutory permitting requirements. Very few farmers keep the game farms for personal pleasure, and those who do generate enough income from other occupational activities. The general conversion into game farming is creating a scarcity factor, resulting in the fuelling of the already escalated market for

both game farms and game animals. Very few interviewed game farmers acknowledged the over saturation and out pricing of both game hunting for ordinary citizens.

The following chapter is on discussions, conclusions, implications and recommendations.

CHAPTER 7

DISCUSSIONS, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS.

7.1 Introduction.

The game farming sector in this province is generally young, consisting of game farms which have been in operation for periods of between two to five years. The operators in this sector are predominantly middle aged white men. These game farms are largely one man businesses. The majority of game farms in this province offer a variety of activities ranging from ecotourism to hunting. A greater number of game farms are situated in the Bojanala region, followed by the Bophirima, then Southern and Central districts in this order (Table 7.1).

Table 7.1 Sample distribution of game farms by proportion across the North West Province.

Region	Frequency	Valid Percent
Bojanala	23	43.4
Bophirima	14	26.4
Central	8	15.1
Southern	8	15.1
Total	53	100.0

In terms of size, the majority of game farms in this province fall between 500 to 1 000ha with an average of between 11 – 15 game species on each farm. The type of game kept is mainly of the common type, for example kudu, springbok, eland and blue wildebeest. The game farms are not necessarily profitable, though owners might hold a contrary view. Continual and progressive subsidisation with running costs from income generated elsewhere forms the hallmark of game farming in this province.

7.2 The status of the provincial game farming sector – A discussion point

7.2.1 Identifying game farmers in the province.

The majority of game farmers in the North West province are men. Based on the sampled group, men constitutes more than 80% of all game farmers in the province, with women constituting an insignificant proportion of about 10% (Figure 7.1.1). This does not bid well for gender equity in this critical eco-tourism sector. Intervention efforts in the form of enforcing affirmative action and implementing provisions within existing legislation should be investigated. Where applicable provisions for gender equity and affirmative action will need to be explored in laws like the Labour Relations Act and the Broad Based Black Economic Empowerment Act to fast track changes and balance the situation.

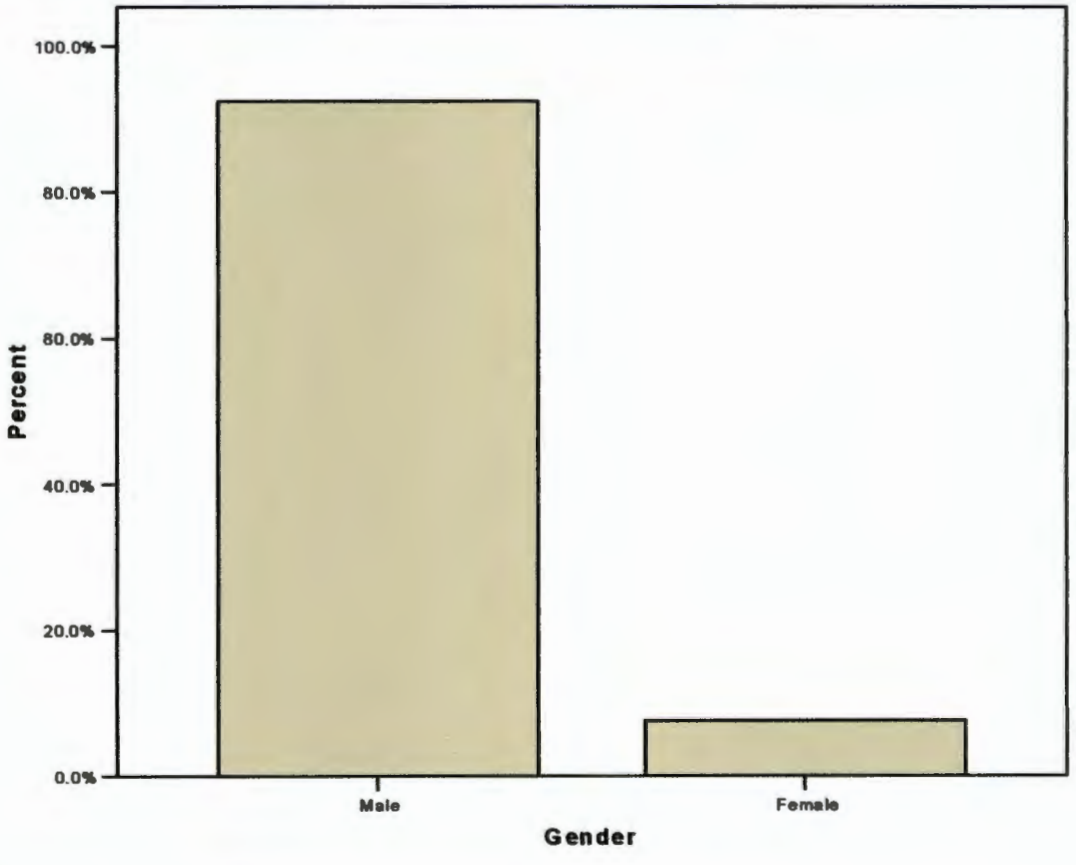

Figure 7.1.1 Gender distribution of game farmers in the Province.

Though the government has recorded a few successes in transforming the rural landscape in this country and certainly in this province in the form of resettling entrant black farmers, prescribing

working conditions and fostering interracial relations and affirmative action, more still needs to be done in terms of deracialising game farming. Hunting as a form of deriving a livelihood and providing recreation still needs to be demystified and serve the needs of rural dwellers in the province. The only form of hunting which the majority of blacks got used to over generations is referred to as barbaric and brutal, because dogs and knobkerries are used. On the other side the wholesale slaying of game using rifles is seen as acceptable since it allows game to die quickly and without hassles. These two hunting methods are similarly cruel since they are both aimed at killing the target animals, under assumptions of 'fair chase'. According to Damm (2005), fair chase is, 'the pursuit of free ranging animal or enclosed ranging (i.e. fenced) animal, possessed of the natural behavioural inclination and possibility to escape from the hunter. These animals should exist as naturally interacting individuals of wild sustainable populations, located in ecologically functional systems that meet the spatial (territory and home range) and temporal (food, breeding and basic needs) requirements of the population of which that individual is a member'. Thus the only other difference in the fair chase is that in one instance dogs are used and in the other modern weaponry (e.g. riffles) is used.

General representativity of the game farming sector is another argument that needs to be raised and discussed. Equity is a generic consideration and as such is also applicable to the issue of racial composition of the game farming sector. It is both unacceptable and its defeats the aims of affirmative action to have a tiny proportion of black game farmers more than ten years after South Africa's democratic dispensation. More than 98% of all game farms in the North West province are owned by whites and only 2% are owned by black operators.

The racial distribution of game farm ownership in this province is unlikely to be much different from the national pattern. Apart from game farm ownership, other allied factors like possession of a fully licensed hunting rifle, belonging to a hunting association or frequenting any other events linked to game farming is generally low among the black population.

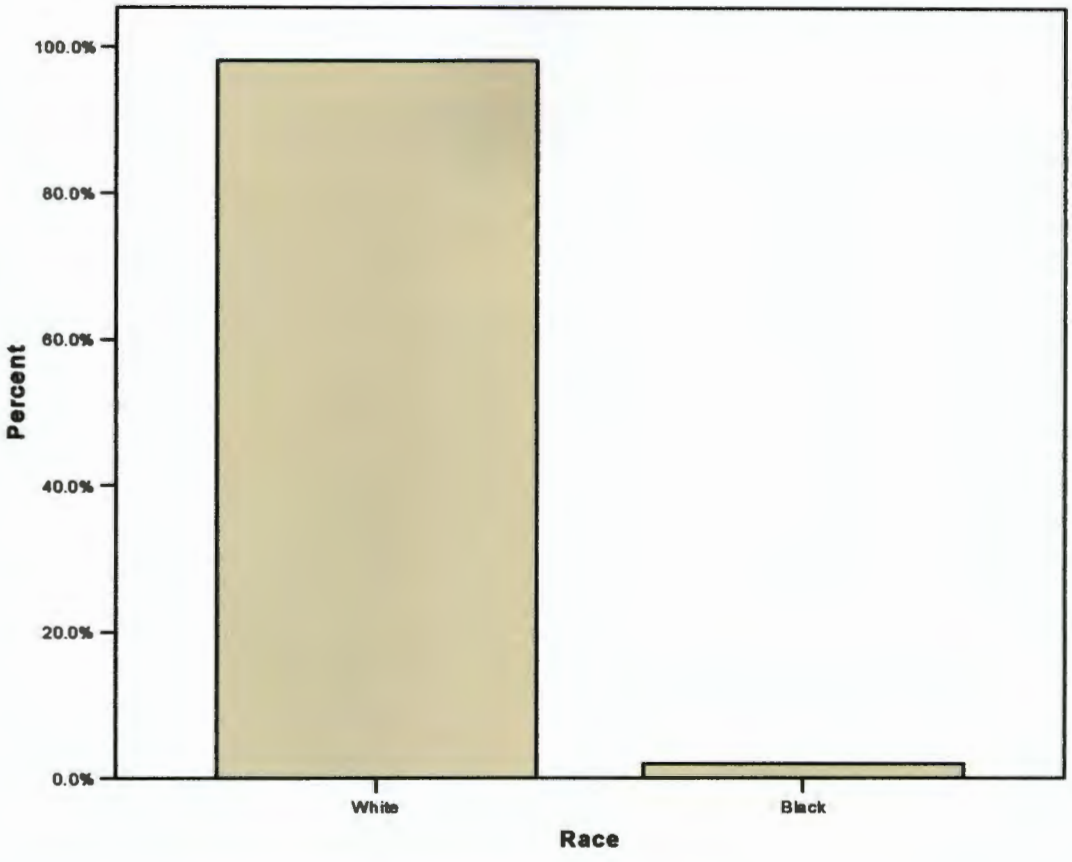

Figure 7.1.2 Racial profile of game farmers.

Though blacks participate increasingly in outdoor activities like sporting events, recreational occasions and social endeavors, little has been reported on their active participation in hunting or hunting related activities, apart from being trackers (i.e. tracking game *spoor* for hunters). It is evident that blacks do visit game farms as either school groups or as members of corporate organisations and rarely as individuals or private families, despite widespread advertisements. This issue will need to be further analysed, certainly through future research.

The skewed ownership of game farms in favour of whites is indicative of the past legacy of apartheid where blacks were prohibited from owning land and could only exercise such options under the democratic dispensation (i.e. post 1994 period). This meant that only few blacks, those who operated exclusively in the tribal homelands that existed then could participate on a limited scale in the land market. They in turn took advantage of the reasonable land prices on offer then, together with white entrepreneurs to acquire land which they later converted into game farms.

This situation has lead to the current state where, out of 53 sampled game farmers, only one was black and the rest were white, emphasising the necessity of racial equity and affirmative action in the sector. The need for BEE in game farming, should not be compromised by a few black elites who happen to own game farms with, or without favours extended to them.

The inequity in game farm ownership has persisted to this present moment, but for totally different reasons. It still proves a challenge to get black entrepreneurs interested in the lucrative game capture and hunting business, which forms an integral part of the game farming sector despite the obvious barriers of inadequate capital, poor institutional support and lack of statutory intervention. Game farming like any other sector requires planning and good strategy manned by able bodied individuals who are also mentally fit. Current trends with regard to the age of existing operators tend to follow a normal bell shaped curve when plotted on an age distribution graph in Fiqure 7.1.3.

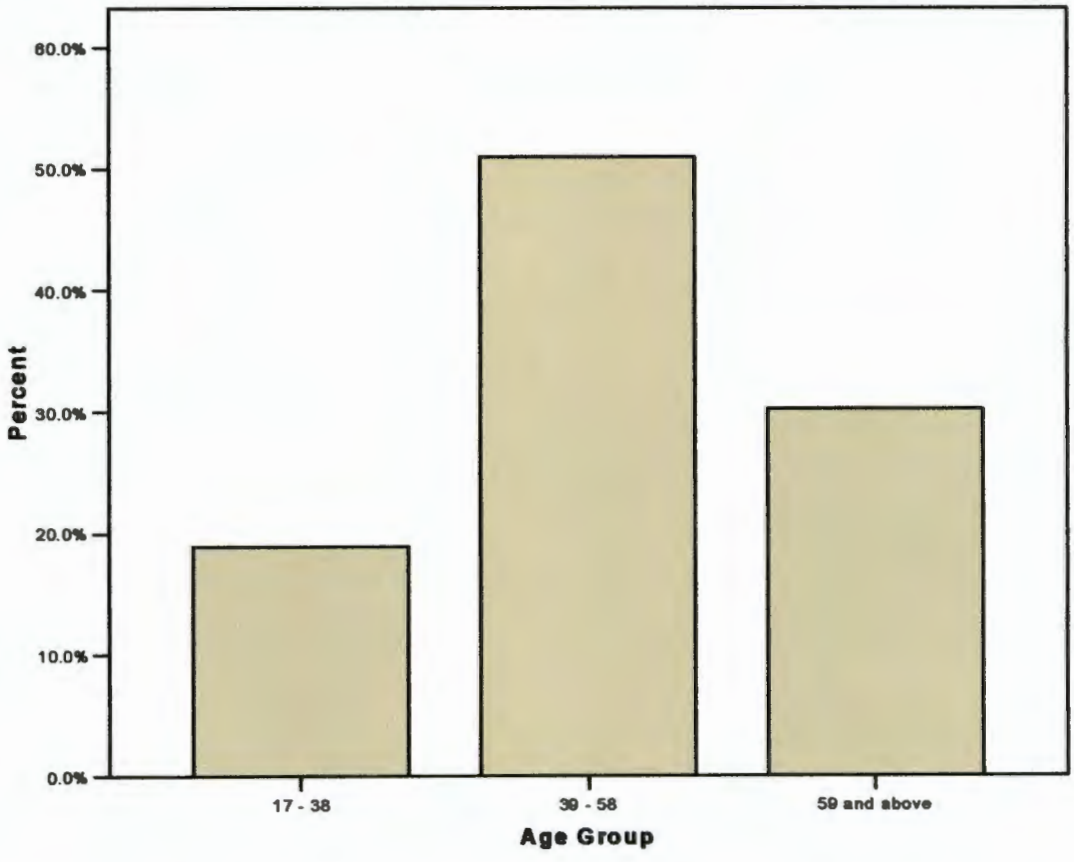

Figure 7.1.3 Age distribution of current game farmers.

The age curve follows a normal distribution with the economically active middle aged group, namely, the 39 to 58 years old range comprising the bulk (i.e. 50%) of the game farming population in the province (Figure 7.1.3). The older generation or so called pensioners comprising 30% followed by the relatively young generation with 20%. This particular age distribution is desirable for several reasons, which include amongst others the availability of opportunity for growth and innovation (especially for willing black youth), the potential for adapting to provisions of equity and affirmative action and lastly, holding optimism for the future prospects of the sector.

Figure 7.1.4 Distribution of employees per game farm for the entire sector.

Ecotourism is referred to as the major employer of the future, perhaps to the extent that prime agricultural land finds reason to be converted into game farms almost on a wholesale scale. Justifications for converting over large tracts of land to game farming are made under the guise of job creation, which is proving more of a myth than reality perhaps if findings of this particular study are anything to go by. Interestingly, the highest proportion (i.e. 36 - 38%) of game farms in

this province only employ less than five (5) employees on all levels in the hierarchy inclusive of secretarial, technical and unskilled capacity (Figure 7.1.4). Another 35% of game farms employ between five to ten individuals each, followed about 25% who take in more than ten individuals each. Presumably, large and profitable game farms will tend to employ more employees than small sized farms.

Game farms in the province are not equitably distributed over its surface area. The eastern part of the province, which constitutes the Bojanala District Municipality, has just over 42% of the total number of game farms as illustrated in Figure 7.1.5.

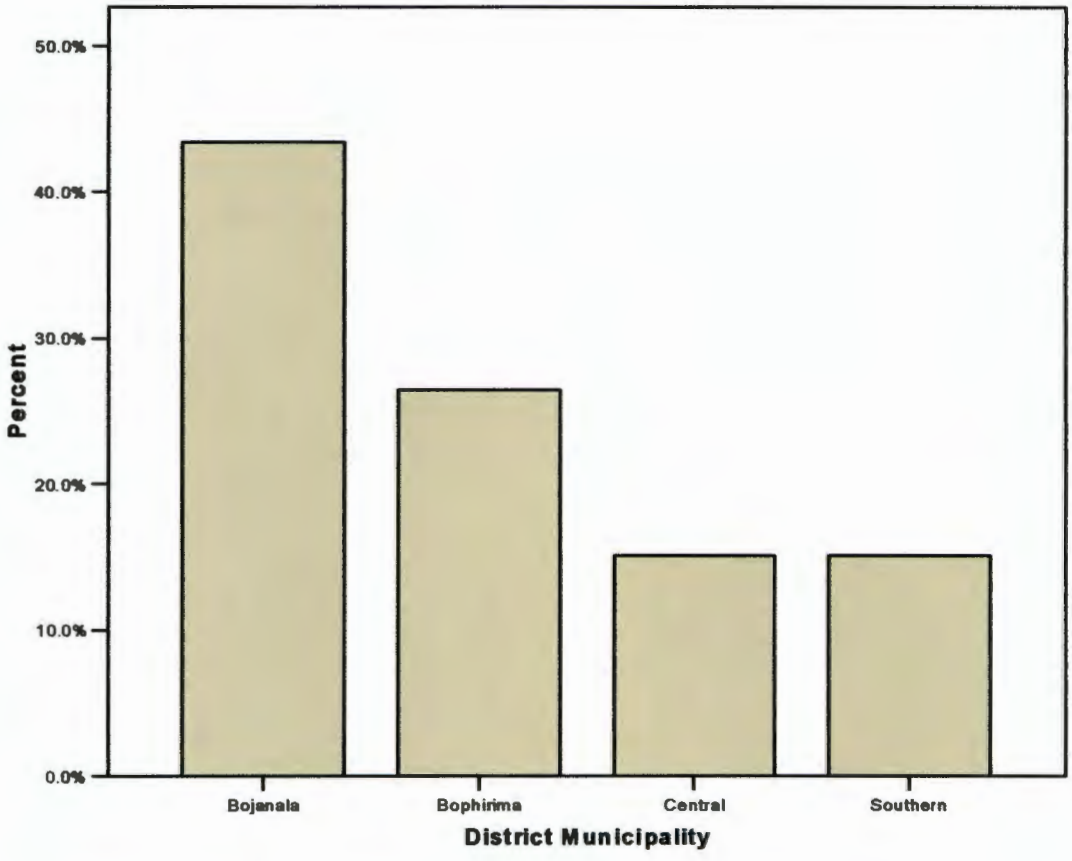

Figure 7.1.5 Distribution of game farms across the province.

This region is the highest in the North West province with respect to human population, economic activity, land conversion rate into human settlements and lastly tourism related activities. Bojanala, with the town of Rustenburg as nucleus, is dubbed the fastest growing urban area in South Africa. This rapid development accounts for the urban sprawl which affects virgin lands

including areas of the Magaliesberg Protected Natural Environment (Declared in terms of the Environmental Conservation Act of 1989). There is indeed real fear that current wildlife sanctuaries will make way for human settlements and everything that goes with it by 2025 (Baldus and Cauldwell 2005).

The other towns in the Bojanala district municipality are Hartebeespoort Dam and Brits. The town Brits for instance has a record number of 107 game farms, second only to Vryburg in the Bophirima region with 158. For record sake, Bojanala has 307 game farms whilst Bophirima has 158 coincidentally all in the Vryburg district. Game farming is arguably gaining prominence in almost all district municipalities in the province, though in real and comparative terms contributing very little to the employment sector. Not all of these game farms are rich in species variety. The contribution of game farms to game species diversity and consequently to biodiversity conservation is debatable, given that less than 30% of game farms have more than 15 game species and above (Figure 7.1.6).

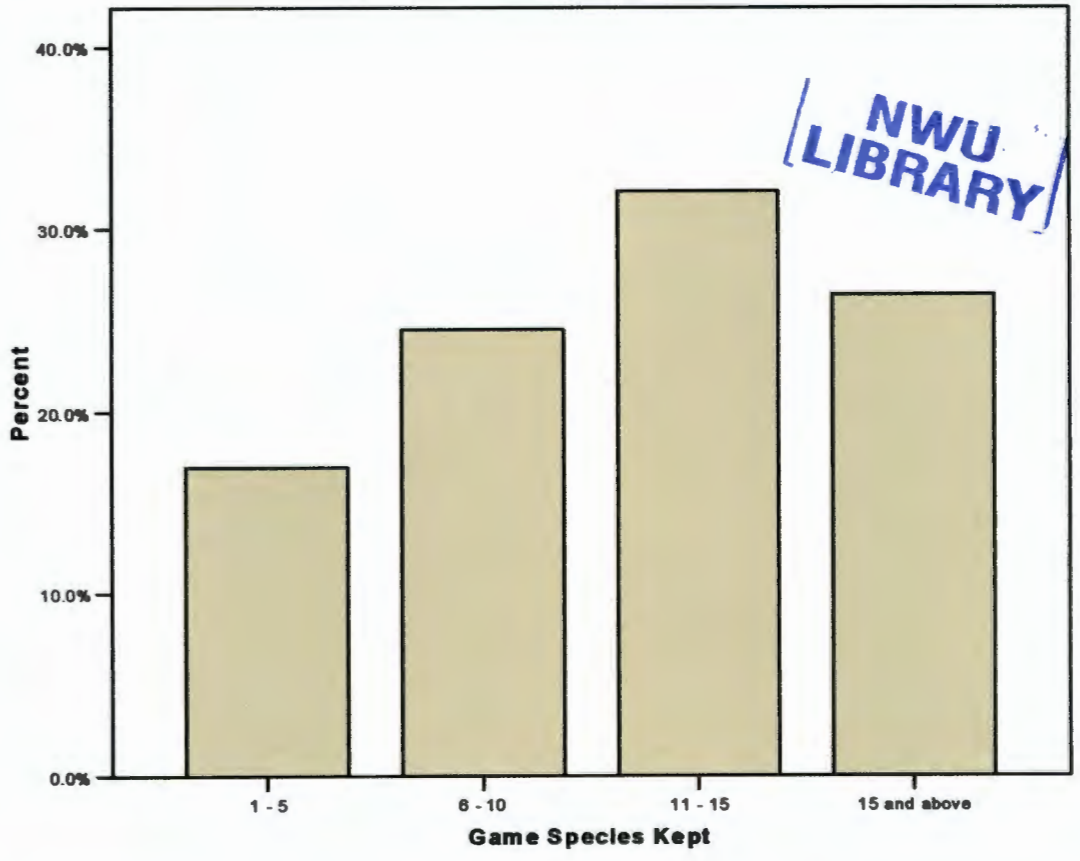

Figure 7.1.6 Game species diversity on game farms.

Mammals, particularly prominent game species are often used as indicators of the health of an ecosystem, because they represent high echelons of a food chain. However in situations where a variety of game species are cramped into small game farms, ecosystem processes like reproduction, herbivory within acceptable levels and speciation are negatively affected, thus making a mockery of conservation ideals.

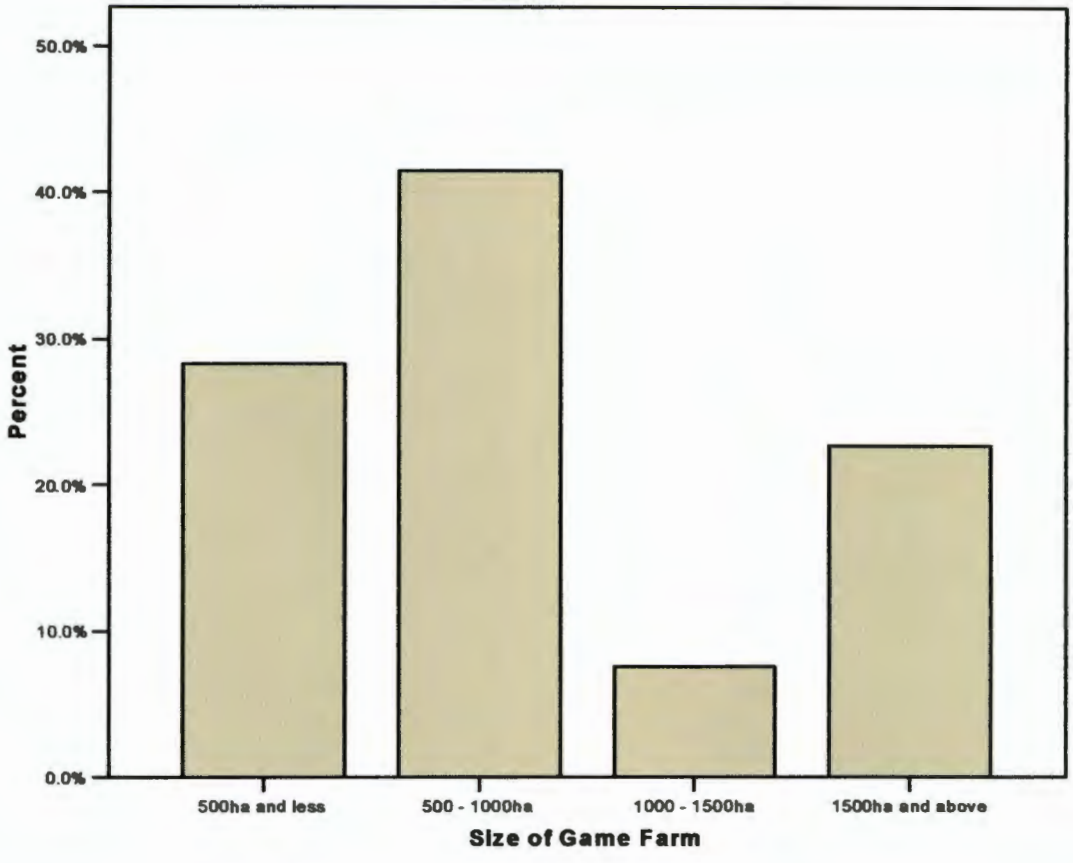

Figure 7.1.7 **Distribution of game farms according to size.**

The more the game species are, the larger the game farm and the better are its prospects of being taken seriously as a conservation area. Given that 30% of game farms (Figure 7.1.7) in the province are large enough to be considered as fully functioning conservation areas one might question the role of game farms in biodiversity conservation. The integrity and agenda of game farm owners will be vindicated by facts and evidence on the ground. Game species are not kept for their ecological value, but for their monetary worth which makes it easier for speculators to breed them for the market. Thus game farms from the sampled population with diverse game

species as is the case with about 30% of them (i.e. 11 – 15 species), are likely to be more of an investment vehicle than a genuine conservation cause.

There are indeed very few game farms in this province in terms of size which contribute meaningfully to biodiversity conservation given that close to 40% of them are smaller than 1000ha. The other explanation to the size of game farms rests with the fact that they are not run as economically self sustaining entities, but do project (in certain instances) appendages of expanded agricultural holdings. The majority of game farms (i.e. > 40%) are younger than five years (Figure 7.1.8), implying that they could have arisen as sidelines to mainstream farming operations.

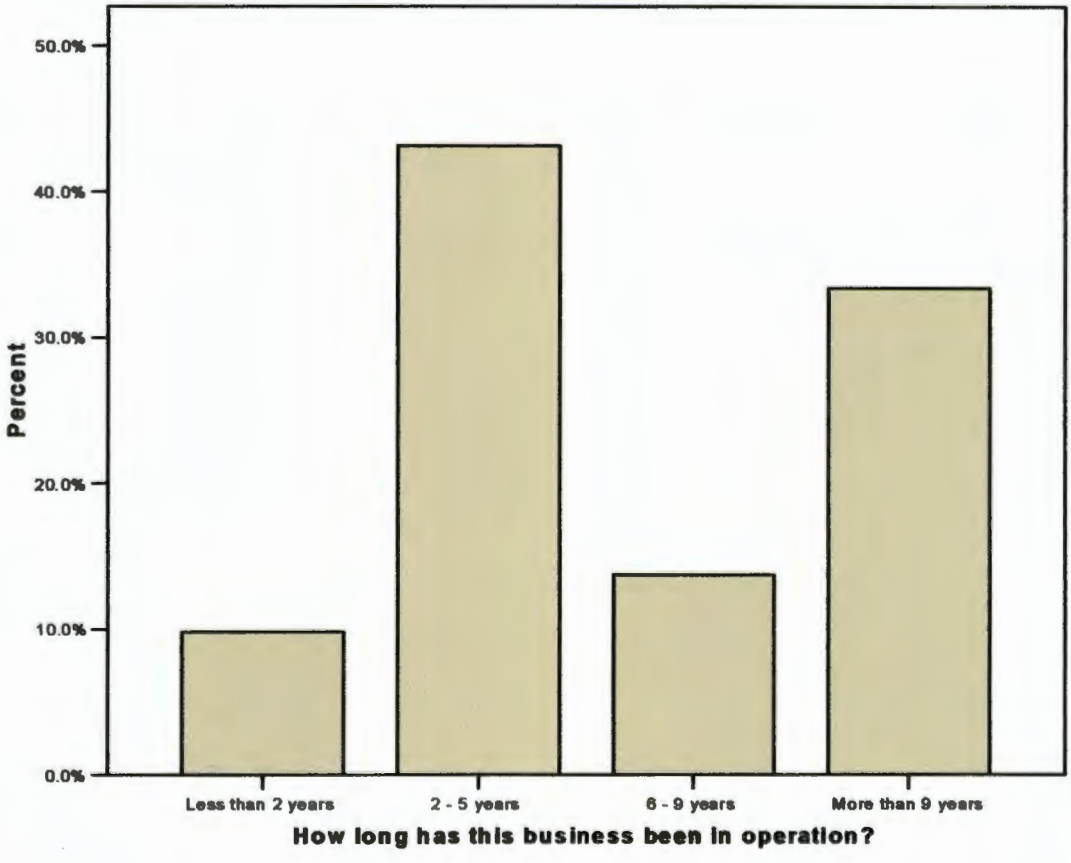

Figure 7.1.8 The number of years of operation since establishment of game farms.

Under such circumstances it is logical for the land owner to allocate more land to mainstream activities in contrast to sideline activities such as game farming. Game farming becomes then subsidised by the mainstream farming activities for it to can meet the hunting and leisure requirements of the land owner. Game farming under these conditions is not expected to generate

profit let alone sustain itself but is aimed at satisfying the routine leisure needs of the game farmer, his/her family and close friends. The more older game farms (i.e. > 9 years old) might be interpreted to have survived the vagaries of open markets, in cases where game farms are expected to sustain themselves and generate profit, which is mostly feasible in large sized properties. The smaller game farms tend to be more of a financial liability than an asset and only time will decide their fate in the absence of direct subsidisation from their owners.

Judged by the rate of game farms registered in estate agents records, it does suggest a high turnover rate predisposed in most cases by rising debt, poor liquidity and apathy associated with low visitor numbers. These are all symptoms of an oversaturated market characterised by rising numbers of entrant game farmers, which owners find difficult to acknowledge. There are disadvantages to the continual subsidisation of game farms, unless in cases of extremely wealthy individuals, especially in cases where the possibility of 'abrupt' changes in income elsewhere might adversely affect the ability to continue providing support to struggling game farms. Natural disasters like droughts have also impacted negatively on the game farming sector, with massive mortalities experienced by game farmers unless in instances where supplementary fodder is purchased at high costs, further draining the individual's financial reserves.

The mushrooming of game farms in the past two to five years has been unprecedented, indicative of the absence of a clear policy on game farming in this province. The policy or legislative vacuum is likely to exacerbate the situation in months and years to come again serving as a reminder about the stage of development in which the game farming sector finds itself, which for lack of description is considered to be delicate and without statutory support. The financial sustainability of a game farm is also hinged upon the number of enterprises that it commands as a means of generating income. It is apparent that game farms which offer a combination of both hunting and ecotourism fare better and are popular than those that offer any of the activities as separate things. This further implies that a game farm which specialises in hunting alone will perform poorer than the one which offers both hunting and ecotourism as a package. It is also unlikely for a game farm which offers a single activity to survive the vagaries of open markets.

The principle of diversification is important in every economic sector including game farming. This explains the rationale behind 60% of game farmers offering a combination of activities on their farms (Figure 7.1.9).

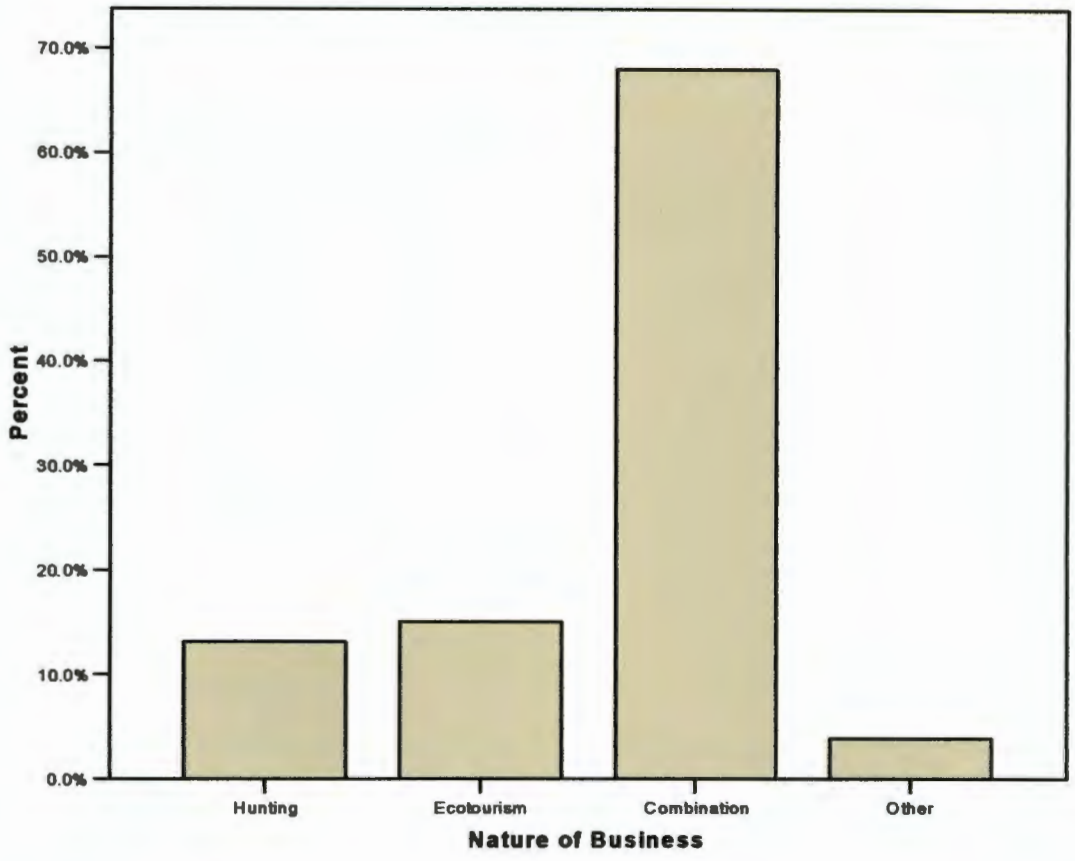

Figure 7.1.9 Activities on an average game farm in the province.

To diversify on a game farm does not come cheap, since capital expenditure has to be laid down before any potential benefits could be gained. Having a hunting enterprise on a game farm is not costly to run especially where focus is on domestic clients, since what needs to be constructed are hideouts which are used to stalk and put down game. Furthermore basic shelters or buildings may be needed to handle carcasses and house a cold storage room. The other costs of a hunting expedition like the hiring of a tracker and skinning of the carcasses are often borne by the hunter. This contrast with the infrastructure needs of an enterprise specialising in ecotourism where amongst others chalets, hiking trails, picnic sites, ablution facilities and game drive routes need to be built and furnished, making the costs insurmountable.

7.2.2 Implications.

The findings from this study suggest a number of factors, namely that:

- Gender equity is an issue which needs to be adequately addressed in the game farming and broader ecotourism sector.
- Racial representativity needs to be achieved in the game farming sector, this will need to be fast tracked through measures like legislative intervention.
- Affirmative action as an interventionist government policy or alternatively instituted by the sector itself should be investigated, otherwise the status quo will be perpetuated into the future.
- Game farming is not for the weak minded, it requires potential entrepreneurs to be determined, patient, hard working and always being ahead of competitors.
- Potential job creation as a motive for establishing game farms is not only a myth but over saturate the market, tightening competition and showing very thin profit margins as a reward.
- An average ordinary farm with both livestock and crops employs anything from five to 20 employees compared to the paltry five employees on a game farm, not a good prospect for the currently high rates of farm conversion into game farming.
- The future of game farms in fast urbanising district municipality like Bojanala is a concern, which coincidentally, has the highest number of game farms in the province.
- The role of game farming in biodiversity conservation is doubtful and likely to be insignificant, given their impoverishment in terms of game species variety. It should be noted that less than 30% of all game farms in the province keep more than 15 game species.

7.3 Conclusions.

The game farming sector in this province has to set itself for transformation which could see a number of critical aspects being debated including amongst others its compliance to black economic empowerment, gender equity, its accessibility to all potential role players or participants and focus on issues of its general management. Game farming in the province is a very exclusive sector were participation is not guaranteed, unless one has the following or at most a combination of them:

- Having inherited a game farm.
- Having R 5 million or more to spend.
- Being connected to someone who is currently influential in the sector to use as surety.
- Having a good name with lending institutions.
- Affiliated to any game farming association or their formations

- Having a farm of more a 1 000ha.

In order for an entrepreneur to gain access into the sector and convert himself or herself into a game farmer, he/she not only has to contend with racial and class stereotypes, but needs to familiarise himself with the set criteria. To inherit a game farm, which is debt free is by itself a rare occurrence, explained by the fact that only 5.7% of game farms in this province were acquired through inheritance. Another rarity is for an individual to have millions of rands in cash and willing to spend on game farming. The list goes on, suggesting indirectly that resource poor individuals will find it difficult to gain entry into this sector by virtue of falling short of the unwritten rules and requirements of being a game farmer.

The only strategy of fast tracking black equity involvement is through the government sponsored black economic empowerment programme with its set targets. The legacy of a patriarchal system of control both at home and work could be blamed for the large-scale male dominance in the sector, given that farming itself has always been a male dominion. Further, the possibility of luring potential investors of colour as part of the black economic empowerment plan has for all intends and purposes stalled. Both the game farming sector and government are to be blamed for the delay, especially for failing to produce a blueprint for BEE in this province. The national ministry of environment has however managed to formulate a tourism scorecard which has bearing on and many implications for the game farming sector.

7.4 Recommendations.

The game ranching sector charter has to come into being to redress the backlog of imbalances in this lucrative occupation. The existing financial services charter has initiated and created excitement around the Black Economic Empowerment circles, leading commercial banks adopting certain positions to accommodate the provisions of the charter. The Standard Bank has already held its own summit to try and define the ways of implementing the charter in a constructive and useful manner (Agrireview 2004). One of the lessons learnt during the summit, led the bank to believe that it was in the vantage position to allocate LRAD grants on behalf of the government. Together with other sectors, the game ranching sector has to commit itself to substantive and realisable targets which will change it into a typical South African, multi stakeholder and inclusive entity.

The acid test for this sector is to engage relevant institutions such as the National Economic Development and Labour Council (NEDLAC), draft a transformation charter as is the case with other sectors including the financial services with its unique financial sector charter (Agrireview 2004). The game ranching charter should ideally aim to promote a transformed, vibrant and competitive sector which reflects the demographics of the people of South Africa. Where possible, participants in the game ranching sectors, like landowners, taxidermists, auctioneers and estate agents, should be in a position to increase black ownership and control, management and skills development. This they should do within a quantifiable framework with dates, targets and equity shares stipulated. This commitment goes with insuring that this sector reinforces its stand on Black Economic Empowerment (BEE), doing business with and associating itself with BEE compliant partners. Yardsticks to measure BEE commitment and compliance will range from evidence of services procured from black companies to publishing of BEE reports and/or audited scorecards. Agreeably, the eco-tourism industry of which game ranching is a dominant sector, has to broaden participation and rewards to everyone and insure growth and stability (Swart and Saayman 1998).

Black Economic Empowerment as a concept has had a hostile reception from certain quarters since its inception, despite its good intentions in the post apartheid South Africa. It was vilified by local and foreign investors alike as being discriminatory against non Blacks, having intentions of victimising successful entrepreneurs and likely to stagnate growth in all sectors of the economy. This fear of the unknown, or rather the prospects of it, has lead to the despising of this necessary policy intervention on the grounds that it is unworkable, has a socialist agenda and is only useful in keeping foreign investors away. Some firms from America (USA) like the Bank of New York went to an extent of labeling the South African economy as risky, likely to lower investor equity and lessen the global competitiveness of locally based companies (McCauley 2003). Critics abound as they were, focused then on the Financial Services as well as Mining Charter.

7.4.1 Modeling a plan for Black Economic Empowerment in the game farming sector.

This manuscript, has amongst others identified barriers to entering the game farming sector. These barriers range from acquiring a game farm, through lacking of necessary technical skills to participating effectively and meaningfully in the sector. The first model proposes entry points into game farming and identifies pathways that could be followed to success. The second model is imformed by discussions in this manuscript like and thus

attempts to identify problem areas ranging from earmarking lands for game farming, proposing funding alternatives for the secor (e.g. introducing a variety of incentives and subsidies) and proposing basis for an empowerment charter. Agreeably, a suitable black economic empowerment model has to be developed which will see more black entrepreneurs involved in game farming not simply as employees, but as owners.

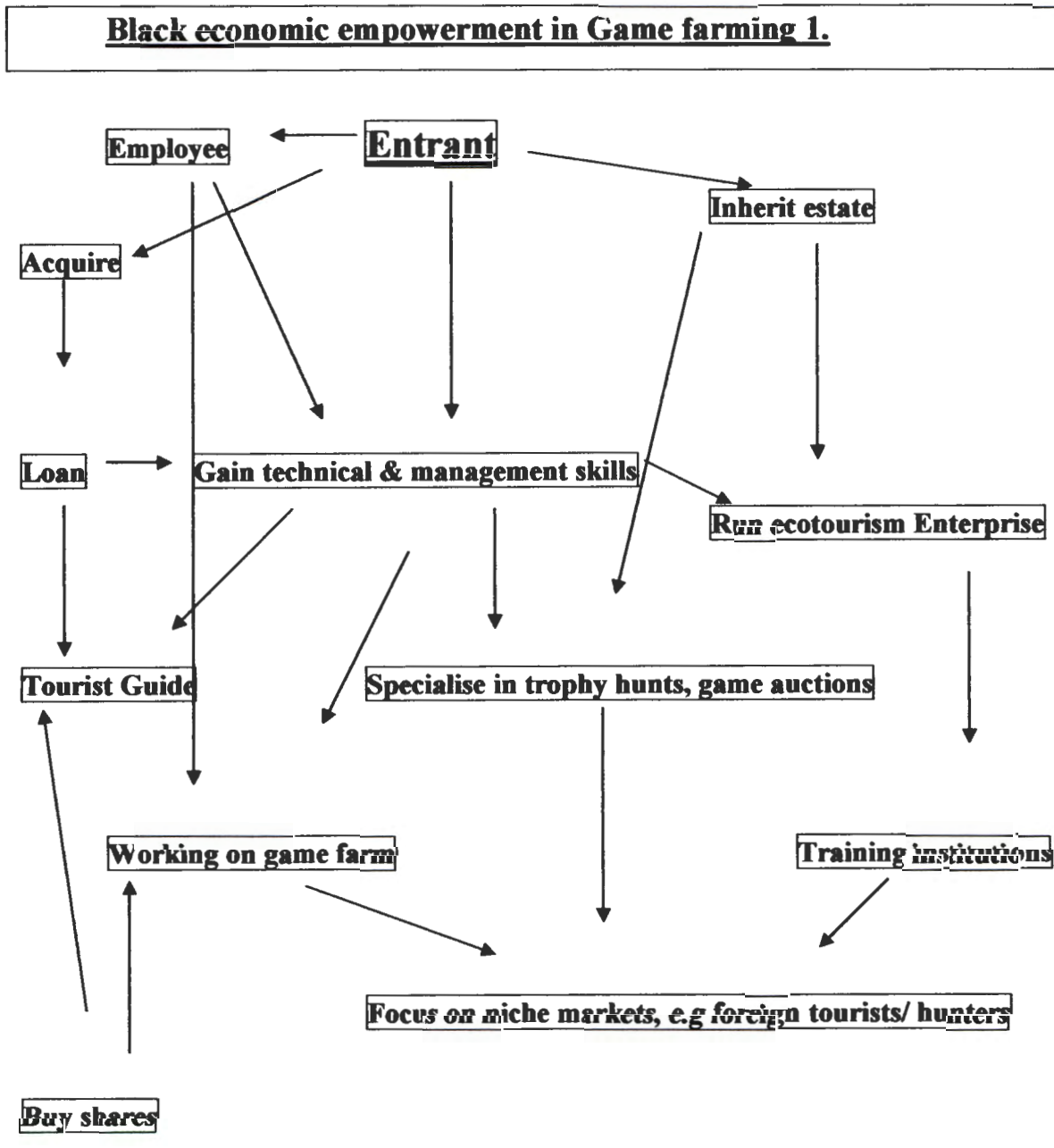

Figure 7.1.10 Empowerment model.

There are however several ways that can be explored with the prospect of providing meaningful participation of black entrepreneurs in the game farming industry. Some of the options or pathways of participating in game farming are manifold, including those illustrated in the schematic representation (Figure 7.1.10 and 7.1.11).

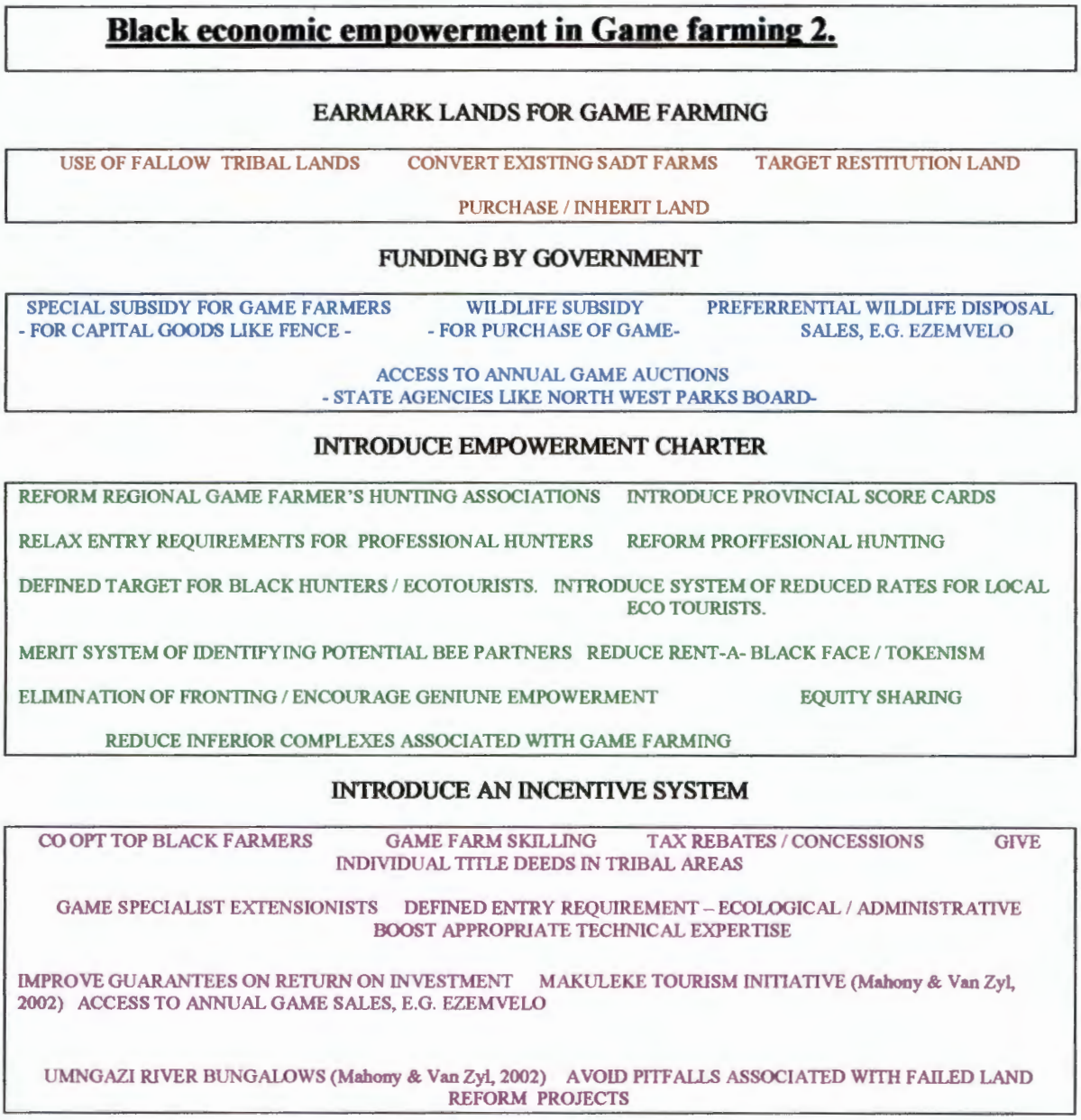

Figure 7.1.11 Black Economic Empowerment model proposed for North West province

The ensuing discussions on Black Economic Empowerment has inspired the development of the latter model (Figure 7.1.11) since it seeks to resolve the identified barriers which are found in, but not limited to game farming. It is evident from the ensuing discussions that Black economic empowerment does not simply come by itself, it requires a plan and time table which will help position black entrepreneurs in a better and strategic posture to enter the game industry.

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Appendix 1

Population of game farms in the North West Province **with sampled farms in bold.**

1. Bojanala Region.

Farm Name	District	Owner	Contact no.
1. Doringboom JQ	Brits	D Abdinor	082 362 0405
2. Kareesloot	Brits	A. P Adami	083 629 2059
3. Wildebeesontein 4	Brits	N. J. Adami	082 441 1929
4. Tweerivier	Brits	S. J. Alberts	012 1177 1692
5. Hartebeestontein	**Brits**	**P. Aucamp**	**082 590 4678**
6. Sandsloot	Brits	A. A. Badenhorst	011 954 1855
7. Vogelfontein 5 / 6	Brits	J. A. G. Barnard	083 459 5536
8. Langerand	Brits	M. C. Barnard	012 250 2406
9. Vlakplaats Ptn 3	Brits	W. D. Becker	082 955 7112
10. Palmietfontein	**Brits**	**H. J. Beneke**	**012 322 7806**
11. Boschkop portion	Brits	B. P. J. Bevan	014 785 0690
12. Vogelfontein	Brits	S. Bosch	083 457 4303
13. Buffelspoort	Brits	P. G. Breedt	082 891 3458
14. Blaauwbank	Brits	A. P. Brittz	082 870 8182
15. Elba	**Brits**	**G. J. S. Burger**	**012 255 5781**
16. Veekraal Portion	Brits	O. Coltman	012 277 1305
17. Rooinek	Brits	J. P. Cronje	083 629 2090
18. Hartebeespoort	Brits	C. S. Eckard	012 254 0219
19. Atoom	Brits	J. C. B. Engelbrecht	012 252 5670
20. Hartebeespoort	**Brits**	**L. M. Ferreirea**	**082 456 6712**
21. Boekenhout	Brits	J. H. H. Fourie	082 411 6370
22. Klipplaat (camp A)	Brits	L. P. Fourie	083 264 0612
23. Klipplaat (camp B)	Brits	L. P. Fourie	083 264 0612
24. Tweeriviere	Brits	R. A. Fourie	083 376 0232
25. Veekraal Portion	**Brits**	**P. J. F. Greyling**	**082 443 0874**
26. Hartebeespoort	Brits	D. J. Grobler	082 457 1886

27. Doornkloof	Brits	J. P. Grobler	082 457 6943
28. Klipplaat portion 8	Brits	S. Gulmini	012 277 2389
29. Hartebeeshoek	Brits	C. J. Hassler	012 207 1187
30. Klipkop Portion	**Brits**	**H. Hechter**	**012 277 1247**
31. Tweerivier	Brits	B. J. Hermann	083 629 8251
32. Vogelfontein	Brits	N. C. Ho	011 883 4548
33. Vaalkop Portion 3	Brits	C. Hoek	082 410 0466
34. Bulhoek	Brits	M. J. Jacobs	012 277 1629
35. Schietfontein	**Brits**	**P. A. Jones**	**011 792 6073**
36. Sterkfontein	Brits	L. H. P. Kroon	012 372 0358
37. Yzerfontein	Brits	S. J. Krugel	011 907 9000
38. Syferkuil	Brits	J. G. Kruger	083 651 0329
39. Tweeriviere	Brits	P. Langenhoven	082 789 9740
40. Blaauwbank	**Brits**	**B. J. Liebenberg**	**012 998 5791**
41. Hartebeespoort	Brits	K. D. Madden	083 250 2380
42. Vogelfontein	Brits	G. C. Mc Cormac	011 484 3524
43. Sandrivierdrift	Brits	J. W. P. Meintjies	012 1177 1343
44. Wildebeestfontein	Brits	E. J. Meiring	082 556 2854
45. Goldreef	**Brits**	**L. J. Mpafudi**	**082 780 2060**
46. Vogelfontein	Brits	F. G. Mulder	011 976 2563
47. Slipfontein	Brits	P De V Naude	083 625 7771
48. Syferkuil	Brits	I. L. Nel	012 548 0122
49. Rooiboslaagte	Brits	E. H. Owens	012 250 2748
50. Tweerivier	**Brits**	**C. G. Peake**	**083 701 081**
51. Kruidfontein	Brits	P. C. Pio	012 1177 1770
52. Klipplaat	Brits	A. L. Poole	012 205 1229
53. Veekraal	Brits	W. F. Powell	012 277 1955
54. Beestekraal	Brits	J. G. Prinsloo	082 925 6598
55. Yzerfontein	**Brits**	**F. S. B. Ramsey**	**083 228 1409**
56. Mooimeisiesfontein	Brits	M. N. Riekert	012 258 0076
57. Blaauwbank	Brits	P. M. Rossouw	082 322 7021
58. Klipkop	Brits	C. J. L. Scheepers	012 546 7999
59. Blaauwbank	Brits	G. P. Scheepers	083 655 0942

60. Vaalboschlaagte	**Brits**	**S. J. Schoeman**	**012 112 1640**
61. Bankfontein	Brits	C. E. Schutte	011 888 4388
62. Sterkfontein	Brits	E. J. Sharpe	012 277 1407
63. Assen	Brits	E. G. Shaw	082 608 1696
64. Blaauwbank	Brits	D. Smit	083 225 7697
65. Vaalkop	**Brits**	**F. A. Smit**	**082 663 3558**
66. Blaauwbank	Brits	G. Smith	082 264 4699
67. Zanddrift	Brits	H. Snyman	082 550 8961
68. Boschkop	Brits	J. J. Steyn	082 447 7811
69. Bulhoek	Brits	S. M. Steyn	011 678 7786
70. Vaalkop	**Brits**	**S. M. Steyn**	**011 678 7786**
71. Blaauwbank	Brits	W. C. Steyn	012 1155 5845
72. Zandrift	Brits	G. G. F. Stoltz	012 259 0067
73. Rooisloot	Brits	J. C. Swanepoel	083 759 2373
74. Blaauwbank	Brits	J. P. A. Swanepoel	083 306 5184
75. Klipplaat	**Brits**	**L. J. Swart**	**082 551 1775**
76. Massekier	Brits	M. J. Swart	082 416 3480
77. Slachtkraal	Brits	Z. Swart	082 572 1735
78. Vogelfontein	Brits	W. J. Theron	012 252 4769
79. Palmietfontein	Brits	F. Venter	082 551 6040
80. Beestekraal	**Brits**	**J. J. Venter**	**082 784 7617**
81. Boschkop	Brits	L. A. F. Venter	082 460 0558
82. Boschkop	Brits	W. Viljoen	018 297 1626
83. Palmietfontein	Brits	A. P. Vorster	082 954 1623
84. Maroela	Brits	L. Vorster	082 772 8052
85. Vlakplaats	**Brits**	**W. K. Wengerek**	**011 391 2119**
86. Vogelfontein 191 JQ	Brits	P. Wentzel	011 867 1532
87. Kleinfontein	Brits	E. J. Wiehahn	082 658 1010
88. Sienna	Brits	H. J. Yeates	012 1177 1200
89. Langerand	Brits	F. G. de Beer	082 923 3564
90. Silkaatsnek	**Brits**	**C. de Jager**	**012 332 0950**
91. Groenkloof	Brits	H. de Jonge	014 272 3101
92. Kareesloot	Brits	C. de la Rey	082 490 7971

93. Slachtkraal	Brits	C. J. du Plessis	012 985 661
94. Palmietfontein	Brits	J. H. du Plessis	012 1177 1616
95. Rooiboslaagte	**Brits**	**W. A. J. du Plessis**	**012 1177 1564**
96. Syferkuil	Brits	S. van As	082 332 0808
97. Palmietfontein	Brits	J. J. van Dyk	012 277 1617
98. Buffelspoort	Brits	J. J. van Greunen	012 277 1486
99. Wildebeesfontein	Brits	M. C. van Niekerk	082 378 9402
100. Yzerfontein	**Brits**	**G. J. van Rensburg**	**082 577 6838**
101. Kruidfontein	Brits	M. van Rensburg	012 252 4591
102. Kruidfontein 1	Brits	M. van Rensburg	012 1156 0165
103. Schietfontein	Brits	G. J. van Staden	014 592 4785
104. Sanddrift	Brits	I. B. van Zyl	012 1150 2484
105. Slipfontein	**Brits**	**C. J. van den Berg**	**082 493 9228**
106. Klipplaat	Brits	J. L. van der Merwe	082 855 5693
107. Veekraal	Brits	G. H. van der Walt	012 112 4251/2
108. Waterval	Koster	R. J. Charter	014 543 9033
109. Vlaknek	Koster	M. J. D. Diedericks	014 543 9340
110. Hartebeesfontein	**Koster**	**A. H. Engelbrecht**	**082 813 6124**
111. Bankdrift	Koster	H Janse v Rensburg	083 232 4256
112. Skoongesicht	Koster	W. J. Lauf	018 264 2877
113. Mabalani	Koster	J. H. Liebenberg	082 861 0887
114. Waterkloof	Koster	B. J. Lourens	082 805 2449
115. Rooibees	**Koster**	**V. D. Mouton**	**082 829 7338**
116. Roodewal	Koster	R. F. Odendaal	082 901 0910
117. Vlakhoek ptn 4-15	Koster	J. G. Pohl	082 822 6425
118. Vlakhoek ptn 37	Koster	L. A. Prinsloo	083 250 5281
119. Weltevreden	Koster	E. M. Rabie	083 986 2693
120. Olievenfontein	**Koster**	**A. W. Reader**	**082 449 5414**
121. Groenfontein of 37	Koster	P. S. Rossouw	083 274 5527
122. Groenfontein	Koster	P. Sevenhuysen	082 322 6259
123. Olievenfontein	Koster	L. D. C. Verster	082 732 2581
124. Hartebeesfontein	Koster	S. J. Viljoen	083 589 6307
125. Middelhoek	**Koster**	**D. J. de Waal**	**082 773 9800**

126. Naauwpoort	Koster	D. J. de Waal	082 773 9800
127. Waterval	Koster	J. E van der Meulen	082 722 1720
128. Schoonkloof	Madikwe	A. L. Botha	083 457 1824
129. Schoonkloof ptn 2	Madikwe	P. Hugo	083 414 4255
130. Aalwynspoort	**Madikwe**	**L. M. Mangope**	**083 655 3824**
131. Voogelstruisdraai	Madikwe	G. J. J. Smit	082 781 7188
132. Schoonkloof	Madikwe	A. J. Welgemoed	082 461 4335
133. Sebele	Madikwe	B. York	083 231 1115
134. Mankwe	Mankwe	D. A. I. Mc Tavish	083 380 1914
135. Doornhoek	**Mankwe**	**J. P. A. Turnbull**	**082 556 2570**
136. Zandspruit	Mankwe	M. O. v Loggenberg	082 684 4553
137. Rietfontein	Marico	C. J. Botha	082 335 1692
138. Petrusdam	Marico	J. Botha	082 892 9080
139. Veeplaas	Marico	J. Buitendag	082 921 8152
140. Olifantsvlei	**Marico**	**S. P. Dorrington**	**083 266 6178**
141. Nietverdiend	Marico	M. Englezakis	083 375 5230
142. Abjaterskop	Marico	S. Englezakis	083 654 1228
143. Grootpoort	Marico	S. Englezakis	083 654 1228
144. Magozastad	Marico	J. N. J. Erasmus	082 370 6285
145. Skietkraal	**Marico**	**G. E. Errington**	**083 260 3354**
146. Modderfontein	Marico	H. J. Feldberg	083 650 1502
147. Koedoespoort	Marico	P. Fett	083 297 8467
148. Mezeg	Marico	P. Fett	083 297 8467
149. Modderfontein	Marico	H. C. Goosen	082 324 9652
150. Putfontein	**Marico**	**J. J. Greyling**	**082 378 9704**
151. Windheuwel	Marico	G. C. Grobler	082 554 3232
152. Doornhoek – A	Marico	G. J. Grobler	018 642 1994
153. Doornhoek - B	Marico	G. J. Grobler	018 642 1994
154. Doornhoek - C	Marico	G. J. Grobler	082 321 9598
155. Doornhoek	**Marico**	**H. A. J. Grobler**	**014 642 331**
156. Zendelingspos	Marico	M. S. F. Grobler	012 345 1898
157. Rietfontein	Marico	R. J. Hill	018 642 3918
158. Rietvlei	Marico	D. Hough	082 577 9768

159. Jagersfontein	Marico	M. M. J. Huyser	083 704 3143
160. Tweekoppiesfontein	**Marico**	**A. Janse v Rensbur**	**083 272 7401**
161. Kleinfontein	Marico	J. Jordaan	083 239 6662
162. Syferfontein	Marico	B. D. Koekemoer	083 230 5815
163. Roodesloot	Marico	T. G. Kruger	083 752 6019
164. Elandsgeluk	Marico	J. W. Lang	082 893 2952
165. Wintershoek	**Marico**	**C. J. Lewis**	**018 642 2071**
166. Putfontein	Marico	P. H. Loots	082 494 0989
167. Medfordpark	Marico	C. J. Ludik	014 2592 ask 1132
168. Jagersfontein 3	Marico	B. D. Marais	014 288 563
169. Jagersfontein 1	Marico	D. P. Marais	082 938 3929
170. Drogedal	**Marico**	**M. M. Meyer**	**083 454 6230**
171. Logoga	Marico	M. M. Meyer	083 454 6230
172. Sandbult	Marico	M. M. Meyer	083 454 6230
173. Bronkhorstfontein	Marico	G. D. Morey	083 253 1833
174. Driefontein	Marico	M. Nel	083 407 2313
175. Draailaagte	**Marico**	**G. J. Niemand**	**018 264 2804**
176. Kalkdam	Marico	H. L. Oosthuizen	083 600 9943
177. Olifantsfontein	Marico	M. A. Ragie	083 463 2967
178. Veeplaas	Marico	R. B. Reader	083 274 6379
179. Zwartfontein	Marico	L. S. D. Roets	083 269 4447
180. Heuningboom	**Marico**	**M. J. Roos**	**018 642 2759**
181. Doornplaat	Marico	C. H. Rossouw	083 647 1568
182. Zendeling	Marico	H. K. T. Scholtz	072 226 1206
183. Wilgeboomspruit	Marico	J. J. Schoombee	014 252 2511
184. Rietvaly	Marico	A. H. Smith	011 954 2813
185. Kareespruit	**Marico**	**J. C. Steyn**	**082 375 8905**
186. Doornrivier	Marico	A. C. Strauss	083 2695 990
187. Kwarriefontein	Marico	C. F. Strydom	083 264 2127
188. Koedoesfontein	Marico	J. Turnbull - Kemp	082 556 2570
189. Zyferkuil	Marico	D. de Beer	083 775 7751
190. Medfordpark	**Marico**	**C. de Melim**	**082 853 5542**
191. Vriendskap	Marico	F. A. de Paiva	083 377 7128

192. Brakfontein 6	Marico	C. de Roo	083 872 0785
193. Brakfontein	Marico	J. H. du Plessis	018 367 2821
194. Klein Marico Poort	Marico	P. H. van Rooyen	082 627 1505
195. Driefontein	**Marico**	**J. N. L. van Staden**	**018 381 5914**
196. Olyvenbult	Marico	C. van Straaten	082 578 1018
197. Cyfergat	Marico	G. van Vuuren	018 642 1784
198. Draailaagte	Marico	M. van Wyk	083 288 6749
199. Logaga	Marico	C. A. van Zyl	014 412 5555
200. Rietvallei	**Marico**	**C. J. v der Merwe**	**082 979 4928**
201. Rykvoorby	Marico	J. D. v der Merwe	082 574 3874
202. Paardenvallei	Marico	M. P. v der Merwe	082 975 2688
203. Kleinfontein	Marico	P. S. v der Merwe	083 628 5515
204. Palmietfontein	Marico	W. L. v der Merwe	082 785 0592
205. Buffelshoek	**Rustenburg**	**A. J. Behrens**	**014 537 2201**
206. Klipkopspruit	Rustenburg	L. Bosman	082 490 8945
207. Buffelshoek	Rustenburg	J. P. Breytenbach	014 592 0424
208. Kromrivier	Rustenburg	J. L. Cilliers	083 269 9954
209. Elandsfontein	Rustenburg	L. E. Coetzer	083 633 4905
210. Leeuwpoort	**Rustenburg**	**S. P. Combrinck**	**014 577 3772**
211. Wagenpadspruit	Rustenburg	M. Daya	082 454 6708
212. Shylock	Rustenburg	N. Demetriades	083 451 4444
213. Vlakplaats	Rustenburg	G. V. R. Els	012 1150 2642
214. Swaarverdiend	Rustenburg	B. Few	014 573 3554
215. Onderstepoort	**Rustenburg**	**H. Few**	**082 397 7707**
216. Avondale	Rustenburg	N. B. Fowler	011 728 4862
217. Frisgewaagd	Rustenburg	J. C. Grobler	082 922 1579
218. Rhenosterfontein	Rustenburg	C. J. Herselman	011 883 9958
219. Buffelsfontein	Rustenburg	C. F. Huckell	011 478 2803
220. Spitskop	**Rustenburg**	**H. W Janse v Rens**	**083 325 3177**
221. Kortbegrip	Rustenburg	H. B. Klopper	011 804 2160
222. Waterval	Rustenburg	G. Klug	083 409 3737
223. Koedoesfontein	Rustenburg	H. Legoale	014 597 4905
224. Tweeriviere	Rustenburg	A. J. S. Lessing	082 600 7622

225. Sandfontein	**Rustenburg**	**M. J. Moeng**	**082 808 0248**
226. Elandsdrift	Rustenburg	S. A. Naude	083 656 3585
227. Shylock	Rustenburg	S. J. Naude	083 626 7582
228. Klipkopspruit	Rustenburg	J. D. Nel	012 252 6030
229. Kommissiedrift	Rustenburg	D. E. H. Pape	082 896 9155
230. Boschfontein	**Rustenburg**	**H. Parisis**	**014 577 3713**
231. Avondstond JQ	Rustenburg	J. A. Richter	082 808 8347
232. Doornlaagte	Rustenburg	E. Roets	011 836 8514/7
233. Olievenfontein	Rustenburg	M. J. Roets	016 989 7043
234. Rhenosterfontein	Rustenburg	A. Rough	083 391 6849
235. Duikerbult	**Rustenburg**	**J. J. Serfontein**	**083 676 5383**
236. Tweeriviere	Rustenburg	B. G. Smit	082 444 9904
237. Stoomrivier	Rustenburg	F. A. Smit	082 652 3833
238. Roodewal	Rustenburg	G. Upton	082 444 3910
239. Swaarverdiend	Rustenburg	C. J. D. Venter	082 415 6241
240. Buffelshoek	**Rustenburg**	**T. A. Wenhold**	**082 785 5255**
241. Doornlaagte	Rustenburg	J. J. Wessels	082 451 1656
242. Roodewal	Rustenburg	J. J. Wessels	082 451 1656
243. Selonskraal	Rustenburg	C. A. L. Willemse	072 429 8014
244. Hartebeesfontein	Rustenburg	J. I. N. de Wet	082 920 8201
245. Roodewal	**Rustenburg**	**M. du Plessis**	**082 854 3542**
246. Elandsfontein	Rustenburg	P. L. van Aswegen	082 412 8433
247. Buffelspoort	Rustenburg	C. P. J. v Rensburg	082 575 2099
248. Rhebokhoek	Rustenburg	S. J. van Rooyen	082 569 6854
249. Buffelspoort	Rustenburg	W. J. v Schalkwyk	082 773 8095
250. Roodewal	**Rustenburg**	**A. van der Nest**	**083 634 7675**
251. Melrose	Swartruggens	D. K. K. Basson	082 800 4452
252. Eensaamheid	Swartruggens	D. J. Bishop	082 458 8409
253. Melrose 3	Swartruggens	E. C. Blaauw	082 441 3530
254. Lemoenfontein	Swartruggens	P. A. Bosman	083 653 2923
255. Rietvly	**Swartruggens**	**H. T. Botha**	**082 284 5588**
256. Woodstock	Swartruggens	D. W. Brothers	082 453 6132
257. Slypsteenkop	Swartruggens	W. H. Byleveld	014 533 0057

258. Roodewal	Swartruggens	N. A. Cajee	014 538 0845
259. Bestershoek	Swartruggens	G. C. Cloete	083 458 5332
260. Vlakplaas	**Swartruggens**	**H. P. Cloete**	**082 920 8081**
261. Vlakte	Swartruggens	J. H. P. Coertze	083 456 8046
262. Melrose	Swartruggens	C. H. Collins	083 653 2717
263. Eenzaamheid	Swartruggens	J. J. Combrink	083 657 2339
264. Rietvly	Swartruggens	A. P. C. Cronje	082 680 1779
265. Hoogeboomen	**Swartruggens**	**S. J. Cronje**	**084 552 1689**
266. Tulanie	Swartruggens	R. T. K. Domann	082 458 8153
267. Sekwa Ditholo JP	Swartruggens	P. S. Els	083 459 3800
268. Rietfontein	Swartruggens	R. Engelbrecht	082 375 4408
269. Wysfontein	Swartruggens	J. F. Enslin	082 460 3311
270. Koornfontein	**Swartruggens**	**J. Geyer**	**082 473 9193**
271. Swartkoppies	Swartruggens	D. J. R. Hattingh	082 779 1242
272. Brakfontein	Swartruggens	H. Janse v Rensburg	082 323 3211
273. Toelanifontein	Swartruggens	J. Janse v Rensburg	082 739 9077
274. Eenzaamheid	Swartruggens	E. C. Klonaridis	083 441 1443
275. Bokfontein	**Swartruggens**	**G. A. J. Kloppers**	**082 773 1563**
276. Driefontein	Swartruggens	H. V. B. Le Roux	082 371 9761
277. Bokfontein	Swartruggens	D. F. Malan	082 455 7489
278. Vlaklaagte	Swartruggens	A. Maree	083 629 3458
279. Kaalrand	Swartruggens	J. H. Naude	083 627 9974
280. Waterval	**Swartruggens**	**H. Odendaal**	**082 443 0008**
281. Waterval 8	Swartruggens	D. P. C. Olivier	011 425 0460
282. Tulanie	Swartruggens	R Pilkington	083 455 2757
283. Lindleyspoort	Swartruggens	P. J. Potgieter	083 339 1360
284. Bulhoek	Swartruggens	J. L. L. Pretorius	083 411 2777
285. Dwarsspruit	**Swartruggens**	**J. L. Scheepers**	**083 637 7040**
286. Waterval ptn 1	Swartruggens	H. C. Schoeman	082 893 6070
287. Waterval ptn 9	Swartruggens	E. M. Smith	083 306 3314
288. Lemoenfontein	Swartruggens	A. J. Spies	082 667 7339
289. Wysfontein	Swartruggens	D. M. Swart	083 252 0264
290. Bulhoek	**Swartruggens**	**P. Venter**	**014 262 ask 1521**

291. Melrose	Swartruggens	A. Vermaak	083 628 8920
292. Waterval	Swartruggens	F. J. Vermaak	082 783 1931
293. Bestershoek	Swartruggens	L. J. Visser	083 229 9053
294. Schoongesicht	Swartruggens	L. J. Visser	083 229 9053
295. Eenzaamheid	**Swartruggens**	**I. Waldeck**	**072 286 7775**
296. Grootwagendrift	Swartruggens	P. J. L. Weyer	083 655 5002
297. Nooitgedacht	Swartruggens	J. C. Weyers	083 444 8030
298. Lindleyspoort	Swartruggens	K. T. Whiley	083 412 6003
299. Wysfontein	Swartruggens	B. J. J. Willemse	082 449 9472
300. Rhenosterfontein	**Swartruggens**	**D. du Preez**	**082 453 1418**
301. Hoogeboomen	Swartruggens	P. J. du Toit	082 336 9268
302. Olivenskloof	Swartruggens	H. J. le Roux	083 310 0280
303. Vlakte	Swartruggens	F. P. van Dyk	083 306 3317
304. Ontevreden	Swartruggens	W. J. van Heerden	072 313 0406
305. Rothschild	**Swartruggens**	**A. M. van Straten**	**014 544 2710**
306. Tulanie	Swartruggens	P. M. van Zyl	083 650 5240
307. Koornfontein	Swartruggens	D. J. van den Berg	083 653 1068

2. Bophirima Region.

Farm Name	**District**	**Owner**	**Contact no.**
1. Pering	Vryburg	G. C. Ackermann	082 417 6910
2. Welverdiend	Vryburg	H. J. Bester	083 284 3406
3. Edinburgh	Vryburg	I. D. Blackwood	072 287 4320
4. Middelkop Hoopvlei	Vryburg	I. L. Blackwood	072 287 4320
5. Buccleugh	**Vryburg**	**W. P. Bloem**	**083 448 0791**
6. Buckreef	Vryburg	W. P. Bloem	083 448 0791
7. Thlaping Catharina	Vryburg	P. Bonnet	082 770 1058
8. Newry	Vryburg	D. S. Bothma	082 388 2800
9. Leeuwbosch	Vryburg	E. Bothma	083 441 5909
10. Salem	**Vryburg**	**E. Bothma**	**083 441 5909**
11. Dwaalvlakte	Vryburg	B. Bredenkamp	082 339 7387
12. Gladdefontein	Vryburg	B. Bredenkamp	082 339 7387

13. Dwaling	Vryburg	J. G. Bredenkamp	053 972 1823
14. Sekretarisvlakte	Vryburg	W. W. Brink	072 442 1555
15. Sekretarisvlakte	**Vryburg**	**W. W. Brink**	**082 338 4727**
16. Aandrus	Vryburg	C. W. P. Bruwer	082 751 4397
17. Lafras	Vryburg	P. L. Bruwer	082 784 6386
18. Klipdraai	Vryburg	J. S. Burger	082 333 0915
19. Moorfield	Vryburg	J. S. Burger	082 333 0915
20. Therons Rust	**Vryburg**	**L. M. Butler**	**082 644 7631**
21. Montreal	Vryburg	H. H. J. Byleveld	082 410 2073
22. Fairclough	Vryburg	J. P. Claassens	082 331 0139
23. Cremona	Vryburg	M. J. Cloete	083 388 3857
24. Dethick	Vryburg	B. A. Cohen	082 452 1803
25. Klippan portion	**Vryburg**	**C. F. Crafford**	**082 418 0558**
26. Radnor & Wells	Vryburg	J. Cronje	082 374 5031
27. Twickenham	Vryburg	J. Cronje	082 820 1013
28. Kerry	Vryburg	J. F. Cronje	082 787 4507
29. Goedgedacht	Vryburg	M. Croucamp	082 373 5081
30. Sherwood	**Vryburg**	**W. I. Dreyer**	**082 495 3413**
31. Leeubosch	Vryburg	G. J. J. Engelbrecht	083 452 7410
32. Olifantshoek	Vryburg	G. J. J. Engelbrecht	083 452 7410
33. Klagare	Vryburg	C. M. Erasmus	082 555 2973
34. Kareebult	Vryburg	G. C. Fincham	082 780 4956
35. Cumnor – Camp A	**Vryburg**	**E. C. Fletcher**	**082 773 7854**
36. Cumnor – Camp B	Vryburg	E. C. Fletcher	082 773 7854
37. Sandhurst Camp A	Vryburg	E. C. Fletcher	053 932 1412
38. Excelsior	Vryburg	P. M. Fourie	082 770 7607
39. Kallinora	Vryburg	G. J. Fullard	082 567 8633
40. Kallinora	**Vryburg**	**J. T. Geldenhuys**	**082 771 1529**
41. Denmark	Vryburg	A. F. Gerber	082 864 4670
42. Blanco	Vryburg	C. Q. Gibbons	083 263 6116
43. Omega - Colorado	Vryburg	E. D. Graupner	082 826 2444
44. Omega - Harmonie	Vryburg	E. D. Graupner	082 826 2444
45. Harmonieshof	**Vryburg**	**E. D. Graupner**	**082 379 2000**

46. Brenton	Vryburg	D. B. Grobbelaar	053 932 ask 1003
47. Lebera	Vryburg	P. Grobbelaar	083 388 5255
48. Glaudina	Vryburg	J. A. Grove	083 391 7467
49. Redmonshoek	Vryburg	J. B. Haasbroek	083 335 7353
50. Brisbane	**Vryburg**	**P. J. Haasbroek**	**083 552 9510**
51. Terra Firma	Vryburg	P. J. Haasbroek	053 932 4312
52. Vrede	Vryburg	W. Hamilton	012 997 1340
53. Senlac	Vryburg	F. J. Hamman	082 773 7860
54. Erfpag	Vryburg	J. F. Hamman	053 932 ask 1603
55. Klagare	**Vryburg**	**J. F. Hamman**	**053 9362 ask 1603**
56. Stonehenge	Vryburg	E. G. Harvey	082 371 8154
57. Watersend Camp1	Vryburg	W. J. Holtzhauzen	082 444 7640
58. Watersend Camp 2	Vryburg	W. J. Holtzhauzen	082 444 7640
59. Rooi Dam	Vryburg	C. L. Janse v Rensb	053 927 2869
60. Kareebult	**Vryburg**	**J. J. Janse v Rensb**	**082 786 8490**
61. Wilzdale	Vryburg	B. A. Jonker	
62. Mokopong	Vryburg	P. J. Jonker	0020 Vosterhoop 20
63. Mokopong	Vryburg	P. J. Jonker	082 781 6394
64. Schaapbosvlakte	Vryburg	J. H. Jordaan	082 806 8888
65. Uitspan	**Vryburg**	**B. B. Joubert**	**082 555 0909**
66. Bradbury	Vryburg	P. J. Kinnear	082 904 2000
67. Senegal	Vryburg	H. B. L. S. Knipe	082 787 2390
68. Wilzenau	Vryburg	Z. J. Koekemoer	082 453 1134
69. Homeward	Vryburg	P. Kotze	083 453 0544
70. Bothmanspoort	**Vryburg**	**T. S. Kruger**	**053 927 4389**
71. Rondekuil	Vryburg	J. J. Labuschagne	083 298 1063
72. Bordeaux	Vryburg	F. J. P. Lategan	053 927 5316
73. Ormonde	Vryburg	J. McGuire	082 578 9792
74. Ferndale	Vryburg	C. P. Meyer	083 447 0135
75. Nottingham – 29	**Vryburg**	**C. P. Meyer**	**083 447 0135**
76. Nottingham - 31	Vryburg	J. F. Meyer	083 447 0101
77. Nottingham – 31 / 1	Vryburg	J. F. Meyer	083 447 0101
78. Nottingham - 23	Vryburg	T. N. Meyer	083 447 0101

79. Waagstuk	Vryburg	D. Nel	082 339 4365
80. Choga Amoet	**Vryburg**	**J. Nel**	**082 782 2972**
81. Covan	Vryburg	B. J. Niemand	053 900 Vosterhoop
82. Bath 1	Vryburg	E. J. Niemand	053 900 Vosterhoop
83. Kalkpan	Vryburg	E. J. Niemand	053 900 Vosterhoop
84. Hethford	Vryburg	H. Niemand	053 900 Vosterhoop
85. Bath 2	**Vryburg**	**H. A. S. Niemand**	**053900 Vosterhoop**
86. Melrose	Vryburg	E. P. Niemann	082 560 2880
87. Wilzdale	Vryburg	N. J. Niemann	053 91 4236
88. Quarreefontein	Vryburg	J. H. Nieuwoudt	053 932 ask 502
89. Baviaanskloof	Vryburg	J. H. A. Niewoudt	082 375 0235
90. Malta Ranch	**Vryburg**	**J. H. A. Niewoudt**	**083 462 7167**
91. Wegdraai	Vryburg	P. L. Olivier	053 927 1931
92. Dublin	Vryburg	J. J. C. Oosthuizen	082 892 7659
93. Kinderlachen	Vryburg	P. W. J. Otto	082 871 5344
94. Valencia	Vryburg	S. Peweker	083 264 1268
95. Leon Taljaard NR	**Vryburg**	**H. W. Pienaar**	**053 927 4261**
96. Jeanette	Vryburg	D. J. Pieterse	082 331 6055
97. Helpmekaar	Vryburg	J. W. Pieterse	1202 Bray
98. Montana	Vryburg	J. W. Pieterse	053 922 ask 1202
99. Blackheath	Vryburg	F. J. Pretorius	082 492 7021
100. Freedom	**Vryburg**	**R. A. Pretorius**	**082 779 0969**
101. Doornbult	Vryburg	W. Pretorius	083 381 6147
102. Donegal	Vryburg	A. K. Reynecke	082 556 0760
103. Voorspoed – IT	Vryburg	A. K. Reynecke	082 556 0760
104. Voorspoed - Cam	Vryburg	A. K. Reyneke	082 556 0760
105. Erfenis	**Vryburg**	**N. J. Roets**	
106. Kan Kwe Klippies	Vryburg	J. J. Roos	015 296 2556
107. Versteldwaal	Vryburg	J. S. Roos	083 444 7987
108. Frylinck	Vryburg	F. C. D. Scheepers	082 456 8047
109. Nonen Ranch	Vryburg	R. V. Schulze	053 982 ask 8131
110. Tweelingshoek	**Vryburg**	**J. S. Smit**	**073 448 5781**
111. Middelweg	Vryburg	A. Steyn	082 829 0030

112. Beaufort	Vryburg	J. Steyn	053 972 1731
113. Leniesdeel	Vryburg	R. Steyn	082 944 0599
114. Grassbank	Vryburg	G. H. Stolts	082 781 1007
115. Doornbult	**Vryburg**	**L. J. Strauss**	**082 578 7614**
116. Marlborough	Vryburg	G. L. Strydom	053 932 330
117. Grootboom	Vryburg	W. A. F. Strydom	053 973 0002
118. Schuinshoogte	Vryburg	H. J. Swanepoel	082 328 4722
119. Hurley	Vryburg	J. J. J. Swanepoel	082 579 1082
120. Ormonde	**Vryburg**	**J. J. J. Swanepoel**	**082 577 9040**
121. Fouriestrust	Vryburg	J. T. Swanepoel	084 583 8450
122. Chislehurst	Vryburg	P. A. Swanepoel	083 440 1423
123. Madiakgama	Vryburg	J. J. Taljaard	082 684 2228
124. Forres	Vryburg	H. L. Theunissen	082 770 0248
125. Kolokolani	**Vryburg**	**P. A. Theunissen**	**082 550 7128**
126. Mortlake	Vryburg	J. L. Uys	082 371 6470
127. Clober	Vryburg	P. S. Vercueil	083 441 5761
128. Lester	Vryburg	J. J. Viljoen	082 907 7790
129. Arizona	Vryburg	M. J. Viljoen	Vorstershoop 1302
130. Klein Quagga Blatt	**Vryburg**	**D. Viviers**	**053 927 1405**
131. Waterbron	Vryburg	J. L. Vorster	082 417 1041
132. Donkerhoek	Vryburg	S. P. Wessels	083 763 7209
133. San Souci	Vryburg	A. G. Whitehead	083 287 7376
134. Maidstone	Vryburg	B. J. de Beer	082 450 1114
135. Koodooskop	**Vryburg**	**I. de Beer**	**072 231 2151**
136. Josephsdal	Vryburg	T. de Jager	082 774 4777
137. Doornhaag	Vryburg	W. de Jager	082 565 5445
138. Wilzenau	Vryburg	J. C. De Klerk	082 828 4899
139. Middelweg	Vryburg	C. F. de Lange	082 781 7905
140. Bouwel	**Vryburg**	**P. W. de Vos**	**083 752 2739**
141. Kameelfontein	Vryburg	R. J. de Vos	082 410 8232
142. Cherwell	Vryburg	J. D. de Vries	018 467 5745
143. Mayfair	Vryburg	J. J. du Preez	082 331 6045
144. Twitkerham	Vryburg	J. J. du Preez	082 331 6045

145. Vrede	**Vryburg**	**F. du Toit**	**082 750 2979**
146. Kameelbult	Vryburg	J. F. le Roux	083 441 5771
147. Kleinvlakfontein	Vryburg	F. A. J. van Heerden	082 926 6353
148. Nyatsifontein	Vryburg	F. J. van Heerden	082 775 5481
149. Sherwood	Vryburg	H. P. van Heerden	082 372 0199
150. Borthwick	**Vryburg**	**C. van Rensburg**	**083 988 2674**
151. Taree	Vryburg	P. J. van Rooyen	0020 ask 1630
152. Forres 2	Vryburg	A. van Vuuren	082 924 8803
153. Uitnood	Vryburg	M. J. G. v Wyngaart	083 279 2573
154. Esperance	Vryburg	F. D. van Zyl	082 379 1217
155. Elibank	**Vryburg**	**A. van der Merwe**	**082 899 6187**
156. Duinwal	Vryburg	D. M. J. v/d Merwe	053 963 2419
157. Wilzenau	Vryburg	D. S. v/d Merwe	014 452 ask 1504

3. Central Region.

Farm Name	**District**	**Owner**	**Contact no.**
1. Leeuwkop	Delareyville	S. H. Erasmus	053 922 7822
2. Zoutpan	Delareyville	H. S. J. van Niekerk	082 508 9433
3. Abjaterskop	Lehurutshe	J. P. Smith	043 841 1615
4. Ruigtelaagte	Lichtenburg	P. W. Carroll	014 452 2021
5. Rietpan	**Lichtenburg**	**I. P. A. Liebenberg**	**082 854 6501**
6. Klipbankfontein	Lichtenburg	A. Matthee	083 326 8721
7. Trekdrift	Lichtenburg	I. J. Roodt	014 412 5452
8. Wonderfontein	Lichtenburg	K. Viviers	014 441 606
9. Holfontein	Lichtenburg	T. G. J. van Rensbur	014 452 1822
10. Bultfontein	**Molopo**	**S. L. Booysen**	**083 310 0464**
11. Onverwaght	Molopo	H. D. Moolman	053 949 0916

4. Southern Region.

Farm Name	District	Owner	Contact no.
1. Prairiebird	Bloemhof	P. J. W. Buys	082 463 7535
2. Eerstegeluk	Bloemhof	L. D. Grobbelaar	082 676 0276
3. Vuurfontein	Bloemhof	F. Pieterse	053 963 2113
4. Kareepan	Bloemhof	J. C. M. Roos	053 963 2427
5. Berendina	**Christiana**	**J. P. Jonker**	**082 800 3467**
6. Honeyskop	Christiana	S. J. Mostert	082 854 3341
7. Kromelenboog Aventur	Christiana	P. J. Stoltz	083 309 4636
8. Graspan	Christiana	C. S. Swan	082 802 2112
9. Blesbokfontein	Christiana	J. F. van Heerden	082 464 5434
10. Surrey	**Christiana**	**P. van der Hoff**	**053 441 2308**
11. Leeuwpoort	Fochville	J. H. Botha	018 771 2352
12. Kraalkop	Fochville	T. J. Duvenhage	082 551 2463
13. Deelkraal	Fochville	C. D. P. Ras	016 987 3861
14. Doornplaat	Klerksdorp	B. D. B. Botha	082 441 4465
15. Goedgevonden	**Klerksdorp**	**A. J. Coleman**	**083 456 0845**
16. Schoemansfontein	Klerksdorp	A. J. Fourie	082 777 1726
17. Bultfontein	Klerksdorp	J. H. Jacobs	082 571 4168
18. Buisfontein	Klerksdorp	J. P. Jansen v Rens	018 468 7401
19. Rhenosterspruit	Klerksdorp	D. J. Laubscher	082 977 2115
20. Benekraal	**Klerksdorp**	**D. Leonard**	**083 631 4251 / 5**
21. Buisfontein	Klerksdorp	M. J. Lourens	083 441 0207
22. Syferfontein	Klerksdorp	J. A. Pretorius	018 431 2153
23. Goedgevonden	Klerksdorp	J. S. Rossouw	083 266 2525
24. Witpoort	Klerksdorp	P. G. Southwood	082 449 0029
25. Schoemansfontein	**Klerksdorp**	**J. Styger**	**082 460 8443**
26. Vaalkop	Klerksdorp	C. J. Taylor	083 225 6623
27. Buffelsfontein	Klerksdorp	J. C. Visagie	018 462 9311
28. Tevreden Vlaklaagte	Klerkdorp	F. E. Vlok	083 626 1826
29. Rheeboksfontein	Klerksdorp	R. F. Welgemoed	083 520 7728
30. Lemoenfontein	**Klerksdorp**	**J. Wilkens**	**083 626 3850**

31. Doornfontein	Klerksdorp	N. Wilkens	083 273 7824
32. Rheebokfontein	Klerksdorp	H. C. du Plessis	018 462 2416
33. Palmietfontein	Klerksdorp	N. J. du Toit	083 292 2526
34. Rhebokfontein	Klerksdorp	J. H. van Wyk	082 576 3662
35. Rhebokfontein	**Klerksdorp**	**M. J. v/d Merwe**	**018 468 7595**
36. Rietfontein	Potchefstroom	J. L. P. Botha	083 626 6490
37. Buffelsvlei	Potchefstroom	G. Brenkman	072 264 4945
38. Taaiboschbult	Potchefstroom	J. G. Erasmus	082 573 2656
39. Naauwpoort	Potchefstroom	H. C. J. Fourie	082 783 1327
40. Buffelshoek	**Potchefstroom**	**J. D. Geldenhuys**	**018 468 6673**
41. Nooitgedacht	Potchefstroom	M. C. Gerber	082 442 1971
42. Roodekraal	Potchefstroom	H. O. Hoogenboeze	018 293 0202
43. Hartebeesfontein	Potchefstroom	D. F. Jeppe	082 787 9977
44. Rietfontein	Potchefstroom	L. Lubbe	082 554 2350
45. Buffeldoorns	**Potchefstroom**	**D. S. E. Maree**	**082 773 9307**
46. Rietpoort	Potchefstroom	A. P. Muller	08 627 0567
47. Rietfontein	Potchefstroom	H. J. Potgieter	082 335 4744
48. Brakfontein	Potchefstroom	J. C. Schoeman	083 266 3808
49. Snymanshof	Potchefstroom	P. J. Snyman	082 900 5122
50. Viljoensrus	**Potchestroom**	**G. P. Viljoen**	**083 527 2500**
51. Hartebeespoort	Potchefstroom	P. N. A. du Plessis	082 574 6077
52. Buffelsdoorn	Potchefstroom	J. A. B.le Roux	072 253 7808
53. Bronkhorstfontein	Potchefstroom	N. J. van Eeden	083 779 4563
54. Italie	Schweizer Re	P. A. Earle	018 024 1545
55. Morgenson	**Schweizer Re**	**H. L. Ferreira**	**082 338 4725**
56. Kleindoorns	Schweizer Re	D. J. Fourie	083 448 9244
57. Mimosa	Schweizer Re	J. M. Fourie	082 922 3678
58. Abelskop	Schweizer Re	F. A. Gerber	083 285 2470
59. Schoonheid	Schweizer Re	S. P. Kriek	082 448 8011
60. Morgenson	**Schweizer Re**	**J. Smit**	**053 963 2344**
61. Boschplaas	Schweizer Re	A. C. Strauss	053 963 2496
62. Rietfontein	Schweizer Re	A. J. Strauss	053 963 2077
63. Doornpan	Schweizer Re	F. J. Strauss	053 963 2077

64. Kareeput	Schweizer Re	F. J. Strauss	053 963 2077
65. Makouspan	**Schweizer Re**	**F. J. Strauss**	**053 963 2077**
66. Rykertshof	Schweizer Re	L. de Jager	083 709 622
67. Vaalpoort	Schweizer Re	P. G. van Zyl	082 496 3644
68. Langverwacht	Schweizer Re	E. H. Oertel	082 565 7227
69. Makokskraal	Ventersburg	F. J. Badenhorst	018 468 2721
70. Oog va Schoonspruit	**Ventersdorp**	**E. D. J. Bleeker**	
71. Rooipoort	Ventersdorp	A. J. Dreyer	082 559 8920
72. Biezensput	Ventersdorp	J. C. Greyling	083 627 3687
73. Vogelstruispan	Ventersdorp	R. H. L. Jones	082 335 6652
74. Witkrans	Ventersdorp	E. H. Kotze	083 258 8775
75. Kafferskraal	**Ventersdorp**	**C. B. Loulan**	**083 700 9050**
76. Palmietfontein	Ventersdorp	M. J. Lourens	083 305 3361
77. Doornfontein IP	Ventersdorp	H. F. Stols	082 651 1845
78. Vlakfontein	Ventersdorp	X. D. Yssel	082 322 3449
79. Witkrans	Ventersdorp	P. J. de Beer	082 430 0455
80. Eileen's Home	**Ventersdorp**	**J. D. le Roux**	**018 673 0036/ 1776**
81. Doornfontein	Ventersdorp	J. C. van Niekerk	083 233 4840
82. Weltevrede	Wolmaransstad	P. W. Coen	018 596 2516
83. Klipfontein	Wolmaransstad	M. W. Coetzer	083 656 7891
84. Kareeboschkuil	Wolmaransstad	P. F. Ernst	018 468 3125
85. Bezuidenhoutskraal	**Wolmaranssta**	**M. G. Fouche**	**083 656 9096**
86. Vaalboschfontein	Wolmaransstad	D. Lindbergh	018 596 2048
87. Klipfontein	Wolmaransstad	L. Louw	018 847 01
88. Bezuidenhoutskraal	Wolmaransstad	W. S. P. Lubbe	018 597 4701
89. Spioenkop	Wolmaransstad	J. H. A. Niewoudt	083 462 7167
90. Buisfontein	**Wolmaranssta**	**F. P. Oosthuizen**	**018 598 6704**
91. Rietkuil	Wolmaransstad	D. A. L. Uys	082 853 4366
92. Hartzhoogte	Wolmaransstad	A. J. B. v Greuning	082 770 7593
93. Rietfontein	Wolmaransstad	J. J. van Zyl	083 324 3634

Appendix 2

RESEARCH PROJECT DONE UNDER THE AUSPICES OF THE GRADUATE SCHOOL (UNIWEST) AND THE DEPARTMENT OF CONSERVATION & ENVIRONMENT. SERIAL CODE: _____ DATE FILLED: _____

QUESTIONAIRE

THEME : MANAGEMENT OF GAME FARMS & GUEST HOUSES.

PERIOD : 15 NOVEMBER – 15 JANUARY 2004.

1. GAME FARMER.

1.1 NAME OF GAME FARM :_____(optional).

1.2 GENDER

MALE	FEMALE

1.3 AGE GROUP

17 - 38	39 - 58	59 & ABOVE

1.4 RACE

17 - 38	39 - 58	59 & ABOVE

1.5 NATURE OF BUSINESS

HUNTING	
ECOTOURISM	
TROPHY HUNTING	
COMBINATION	
OTHER	

1.6 DISTRICT MUNICIPALITY

BOJANALA	
BOPHIRIMA	
CENTRAL	
SOUTHERN	

1.7 SIZE OF GAME FARM

500 ha & less	
500 ha – 1000 ha	
1000 ha – 1500ha	
1500 ha & above	

1.8 GAME SPECIES KEPT

1 -5	
6 - 10	
11 - 15	
15 & ABOVE	

1.9 WHAT PROMPTED YOUR INVOLVEMENT IN GAME FARMING?

INVESTMENT	
CONSERVATION	
RETIRED	
OTHER	

1.10 WHERE DID YOU GET THE CAPITAL TO START GAME FARMING?

OWN CAPITAL	
INHERITANCE	
LOANS	
OTHER	

1.11 DO YOU FIND GAME FARMING PROFITABLE?

YES	NO

1.12 REASON FOR ANSWER IN 1.8

VARIETY OF ACTIVITIES	
MARKET TARGETED	
CUSTOMER CARE	
OTHER	

1.10 DO YOU BELONG TO ANY GAME FARMING ASSOCIATION:

YES	NO

1.13 REASON FOR ANSWER IN 1.10:

NOT INTERESTED	
TOO BUSY	
FAVOURABLE SUPPORT	
OTHER	

2. TRANSACTIONS / STATISTICS.

2.1 HUNTING A) QUANTITY HUNTED 2002: _____ VALUE: _____

B) QUANTITY HUNTED 2003: _____ VALUE: _____

C) QUANTITY HUNTED 2004: _____ VALUE: _____

2.2 LIVE SALES A) QUANTITY SALES 2002: _____ VALUE: _____

B) QUANTITY SALES 2003: _____ VALUE: _____

C) QUANTITY SALES 2004: _____ VALUE: _____

3. GAME FARM DETAILS

3.1 GAME ANIMALS BOUGHT (FUNDS SPENT)

R 5 000 & LESS	
R 5 000 – R 10 000	
R 10 000 – R 20 000	
R 20 000 & MORE	

3.2 TYPE OF GAME ANIMALS KEPT

MAINLY CITES LISTED	
INCLUSIVE OF BIG 5	
MAINLY COMMON GAME	
COMBINATION OF ABOVE	

3.3 NUMBER OF EMPLOYEES

SECRETARIAL	
TECHNICAL	
SEMI SKILED/UNSKILLED	
OTHER	

3.4 OWNERSHIP / SHAREHOLDING

ONE MAN BUSINESS	
JOINT VENTURE	
FAMILY BUSINESS	
OTHER	

3.5 TRAINING / OCCUPATIONAL BACKGROUND

AGRICULTURAL	
CONSERVATION	
PROFESSIONAL	
OTHER	

3.6 NUMBER OF GAME FARMS PURCHASED / OWNED

ONLY 1	
MORE THAN 1	

3.7 RACIAL PROFILE OF CLIENT BASE

MAINLY WHITE	
MAILY BLACK	
RACIAL MIX	

3.8 ACTIVITIES ON FARM

STRICLY HUNTING	
ECO TOURISM	
ADVENTURE & LEISURE	
COMBINATION	

4. MARKETABILITY

4.1 TARGET MARKET

MAINLY FOREIGN CLIENTS	
MAINLY LOCAL CLIENTS	
COMBINATION OF THE TWO	
OTHER	

4.2 REASON FOR ANSWER IN 4.1: _____

4.3 HOW DO YOU MARKET YOUR SERVICES

EXCLUSIVE PUBLICATIONS	
LOCAL NEWSPAPERS / MAGEZINES	
INTERNET / EXHIBITIONS	
COMBINATION	

4.4 REASON FOR ANSWER IN 4.3: _____

5. FINANCIAL STATUS.

5.1 HOW LONG HAS THIS BUSINESS BEEN IN OPERATION ?

LESS THAN 2 YEARS	
2 – 5 YEARS	
6 – 9 YEARS	
MORE THAN 9 YEARS	

5.2 DO YOU DO EFFECTIVE BOOKKEEPING

YES	NO

5.3 IF SO, WHO DOES IT ?

OWNER	
GAME FARM STAFF	
INDEPENDENT BOOKKEEPER	
OTHERS	

5.4 WHAT DO YOUR FINANCIAL RECORDS SUGGEST

EXCEPTIONAL GROWTH	
NORMAL GROWTH	
STAGNANT	
DECLINING	

5.5 WHICH WEAK POINTS DID YOU IDENTIFY

POOR SERVICE STANDARDS	
DECREASING CLIENTELE	
HIGH OPERATING COSTS	
OTHER	

5.6 HOW CAN THEY BE RECTIFIED ?

IMPROVE CUSTOMER FOCUS	
IMPROVE GENERAL MANAGEMENT	
REDUCE COSTS	
OTHER	

5.7 ARE YOU ABLE TO MEET YOUR :

I. SHORT TERM FINANCIAL OBLIGATIONS (e.g labour, rent, bills, salaries, etc)

YES	NO

II. MEDIUM TERM FINANCIAL OBLIGATIONS (eg equipment purchases, depreciation, etc)

YES	NO

III. LONG TERM FINANCIAL OBLIGATIONS (eg land, property, etc)

YES	NO

3.19 ANY OTHER GENERAL COMMENT:

_____

_____

_____

THANK YOU.