

UNIVERSITY OF THE WESTERN CAPE

**TOWARDS A TENURE SYSTEM FOR SUSTAINABLE NATURAL
RESOURCE MANAGEMENT FOR THE COMMUNAL AND
COMMONAGE LAND OF THE LELIEFONTEIN RURAL AREA,**



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I declare that



TOWARDS A TENURE SYSTEM FOR SUSTAINABLE NATURAL RESOURCE MANAGEMENT FOR THE COMMUNAL AND COMMONAGE LAND OF THE LELIEFONTEIN RURAL AREA, NAMAQUALAND is my own work and that I have acknowledge all sources that I have used through complete referencing.

Signed on _____ 2005 at Kimberley

Abstract

The aim of this research is firstly, to determine the impact of the current practiced tenure system in the Leliefontein Rural Area on the use of the natural resources and secondly, to devise and establish the most appropriate tenure system that will ensure the sustainable natural resource management on the communal and commonage land of the mentioned area.

Quantitative questionnaires, review of relevant literature from documentation, research studies and reports were used to gather information and provide contextual insights. A wide spectrum from the Leliefontein Rural area specifically, Namaqualand in general and other semi-arid and communal areas in Southern Africa were covered with the gathering of the secondary data.

From the study it emerges that although land conservation is practiced in the Leliefontein Rural Area the implementation thereof is not coordinated between individual farmers, rotational grazing is applied on the communal land but not on the commonage farms, the system of rotational grazing is not enforced by any institution and stock reduction is only implemented on the commonage farms. Individual farmers were identified as the most important institution responsible for land conservation. Rotational grazing is not applied on the commonage farms although it is prescribed by the Land Use Management Plans. Very significantly was the finding that farmers do not invest in the land in terms of the prevention of erosion, planting of vegetation etc. The management institution currently responsible for the administration and management of the communal and commonage land is not in a position to take action against transgressions due to a lack of financial and human resources. One of the most significant findings was that nearly half of the respondents interviewed preferred private ownership. The communal ownership of the land was identified as a major obstacle preventing investment in the land but the crucial role of communal tenure in the livelihoods of the poor was also reiterated by the findings of the study.

Based on the findings from the research study as well as the review of relevant literature certain recommendations were made. In order to provide a safety net for the poor and incentives for the more commercially orientated farmers to invest in the land, the Leliefontein Rural Area should be communally owned but managed on the basis of a leasehold tenure system. All users will enter into a lease management agreement. A differential fee structure for subsistence and the more commercially orientated farmers whereby the subsistence farmers pay less for grazing should be introduced. Commercial or entrepreneurial bona fide farmers will be allowed to keep more livestock. The lease period should be five years but the leases should be reviewed on a yearly basis. A co-management institution consisting of the Commonage Committee and the Kamiesberg Municipality will be responsible for the management of the communal and commonage land of the Leliefontein Rural Area. All the available communal land of Leliefontein should be brought into production through the construction of access roads and the erection of water points. Commercially orientated farmers should be provided with incentives and encouraged to purchase their own private land with subsidies from the Department of Land Affairs.

It is important to note that any sets of proposals of a new tenure system should not only be viewed in terms of its economic value or implementation criteria but also viewed against a set of social realities operating in the Leliefontein Rural Area. Furthermore the key to the sustainable use of the natural resources of the Leliefontein area is to find a balance between the rights of the current users, improve the management and administration of the communal and commonage land and provide incentives for the better resourced farmers to invest in the land.

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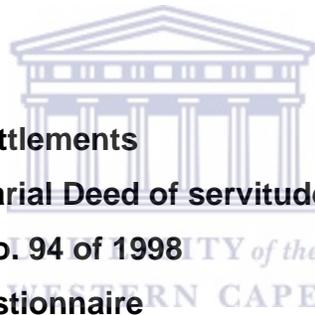
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1

INTRODUCTION

Our land is a precious resource. We build our homes on it; it feeds us; it sustains animal and plant life and stores our water. It contains our mineral wealth and is an essential resource for investment in our country's economy. Land does not only form the basis of our wealth, but also our security, pride and history. Land, its ownership and use, has always played an important role in shaping the political, economic and social processes in the country (White Paper on S A Land Policy: DLA 1997: 7).

In the Bill of Rights of the Constitution of South Africa it is stated that everyone has the right to have the environment protected, for the benefits of present and future generations, through reasonable legislative and other measures that –

- prevent pollution and ecological degradation;
- promote conservation; and
- secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development (Constitution of the Republic of South Africa, 1996: 11).

It is further stated in the Bill of Rights that a person or community whose tenure of land is legally insecure as a result of past racially discriminatory laws or practices is entitled, to the extent provided by an Act of Parliament, either to tenure which is legally secure or to comparable redress (Constitution of the Republic of South Africa, 1996: 12).

Current land ownership and land development patterns strongly reflect the political and economic conditions of the apartheid era. Racially-based land policies were a cause of insecurity, landlessness and poverty amongst black people, and the cause of inefficient land administration and land use (The White Paper on the S A Land Policy, 1997: v).

In the Reconstruction and Development Programme (Policy Framework, 1994: 19-20) it is stated that Apartheid policies pushed millions of black South Africans into overcrowded and impoverished reserves, homelands and townships. In the same document it is further stated that a national land reform programme is the central and driving force of a programme of rural development. This programme aims to redress effectively the injustices of forced removals and the historical denial of access to land of the vast majority of the population of South Africa. It aims to ensure security of tenure for rural dwellers.

The land reform programme, which aims to redress racially inspired legislation that led to landlessness, reduce poverty, diversify sources of income and allow people more control over their lives and their environment, is also expected to reduce the risk of land degradation. Land pressure must also be relieved without extending environmental degradation over a wider area.

Land tenure reform specifically is faced with the challenge of how to strengthen the beneficial aspects of communal tenure systems and at the same time bring about changes to practices which have resulted in the erosion of tenure rights and the degradation of natural resources (DLA, 1997: vii-viii).

The White Paper on the South African Land Policy (1997) and The Bill of Rights (Constitution of the Republic of South Africa, 1996) is explicit on the two issues that form the focus of this study namely security of tenure and the sustainable use of the natural resources. The

relationship between the two variables is very important. The aim of the study is to devise and establish the most appropriate tenure system that will ensure the sustainable natural resource management on the communal and commonage land of the Leliefontein Rural Area. It is, however, important firstly to look at the historical and geophysical background to place the developments in the Leliefontein area within a specific context.



2

BACKGROUND

2.1 DEMARCATION OF THE STUDY AREA

The Leliefontein Rural Area with a population of $\pm 4\ 825$ (SPP, 2003: 4) is one of the six Rural Areas in Namaqualand administered in terms of the Rural Areas Act, Act 9 of 1987. Namaqualand is situated in the northwestern part of the Northern Cape Province of South Africa. The Leliefontein Rural Area that forms part of the Namaqua District Municipality is situated between Garies and Kamieskroon. This area is bisected by the national road (N 7) to Namibia that runs in a North South direction (**Annexure 1: Location Map**).

The Leliefontein Rural Area is administered by the Kamiesberg Municipality. It consists of ten settlements namely, Leliefontein, Paulshoek, Rooifontein, Kamassies, Nourivier, Kharkams, Klipfontein, Spoegrivier, Tweerivier and Kheis. Communal grazing and dryland plots surround these settlements (**Annexure 2: Location of settlements**). The total extent of the Leliefontein Rural Area is vast and covers a total of 159 182 ha (the farm Leliefontein No. 350). The total size of all the mentioned settlements is $\pm 373\ 49$ ha (SPP, 2003: 4).

In the Union Gazette (1912: 6) the extent of the Leliefontein Rural Area is described as follows:

“The Communal Reserve of Leliefontein in extent 219, 500 morgen more or less, situate in the Field Cornetcy Kamiesberg, Division of Namaqualand, granted by certificate of occupation to the tribe of Little Namaqua Hottentots on the 22nd May, 1854, and bounded as follows: -

From the most southerly beacon of the farm Rietkloof common to it and the farm Twee Fontein; thence along the boundaries of the following farms so as to exclude them from this area: Tweefontein, Olyven Fontein, Hoorngat alias Vrede en Lust, De Kuilen, Pedros kloof, Rooi Doorn Kloof, Inkruij, Stof Kraal, Dik Matje, Boesman Plaat, Papkuils Fontein, Comagie Fontein, De Riet, Roode Kloof Hoek, Remhoogte, Pauls Kraal, Ezel Fontein, Twee Rivieren, Rheeboek Fontein, Annex Rheeboek Fontein, Annex Roodebergs Kloof, Modder Fontein alias Wilgehout Fontein, Schuins Kraal, Brak Fontein and Uitkomst, Kromme Fontein, Zand Kraal, Kameel Boom aan de Waterval, Weltevreden, Horeas, Groot Berg, Ellenboog Fontein and Riet Kloof to the beacon first named”

2.2 DESCRIPTION OF STUDY AREA

The various settlements in the Leliefontein Rural Area are connected by gravel roads. Kamassies, Rooifontein and Nourivier are situated in the north eastern part of the Leliefontein area, Paulshoek in the south eastern part, Tweerivier in the central part while Spoegrivier, Klipfontein and Kharkams are situated in the western part of the area. The distance from Spoegrivier to Paulshoek and Kamassies is 105 and 100 km respectively and the distance from Kheis to Rooifontein and Kamassies is 114 and 119 km respectively.

Contact between the different settlements is very difficult in the absence of a public transport system. The residents are dependent on private transport that may vary from donkey carts to motor vehicles and minibus taxis. All the settlements are connected by automatic telephone exchange with mobile phone reception only possible in Kharkams. Water for domestic use is provided from boreholes. In most of the settlements waterborne toilets are provided only at public buildings because of the scarcity of water.

Primary education is provided in all the settlements with only one secondary school in Kharkams. All the settlements are served by mobile clinics while the nearest hospital is in Garies. Small shops that sell basic food stuff and household goods are present in all the settlements, the residents travel to Springbok, Garies and Kamieskroon to purchase goods that are not available in the settlements. No banking facilities are available in the Leliefontein Rural Area.

2.3 HISTORICAL BACKGROUND

The original inhabitants of Namaqualand were San hunter-gatherers and Khoi pastoralists (owning cattle and sheep) who moved freely throughout the area. According to Cowling and Pierce (1999: 41) clans of Bushman (San) had developed transhumance patterns, moving from the coast to the hinterland, and between Namaqualand and Bushmanland, in ever search of game, shellfish and succulent bulbs.

The San lived in small loosely-knit patrilineal bands ranging from twenty to two hundred people. They were highly mobile on the account of their dependence on game. Their political organisation consisted of very rudimentary chiefs with basically no institutional authority (Davenport, 1978: 4).

About 2000 years ago the Khoi, who originated from the present-day northern Botswana, invaded Namaqualand bringing with them a concept of wealth and power in the form of domestic livestock. Redlinghuis (1981: 67) indicated that the Khoi society was not based on land ownership, but on small family groups. Political power on tribe level was weak and individual merit played a much bigger role than political position.

According to Elphick (1977: 23) the ensuing relations between the new comers (Khoi) and the hunters (San) entailed war, trade, clientage and

intermarriage, and resulted, over time, in the widespread transfer of cultural traits from one society to another.

Simon van der Stel's expedition in 1685 into the hinterland founded that the Kamiesberg, where Leliefontein is situated, was the heartland of the Namaqua-Khoi. In 1771 an application for a farm in the Leliefontein area from Herman Engelbrecht a Dutch farmer was refused by the Governor because he was informed that a kraal of Captain Wildschut, a Nama leader was situated there (SPP, 2003: 12). This was also confirmed by Shaw (1840, pp 90-91) when stated "After much difficulty in ascending and descending, we arrived at Lily fountain, or Khamies Mountain, the residence of the Namaquas".

With the gradual encroachment of European settlers in their traditional hunting and grazing areas the indigenous population was forced into small areas of land surrounding the mission stations. In 1816 the Wesleyan missionary Shaw was approached by Captain Wildscut to establish a mission station at Leliefontein. In the 1820's the land was registered in the name of the Mission Association. In 1854 a "Ticket of Occupation" was issued for the tribe of the Little Namaqua Hottentots in the Leliefontein area (SPP, 2003: 12).

After the passing of the Mission Stations and Communal Reserves Act (Act 29 of 1909), Leliefontein which had previously been under mission administration, came under the direct control of the state in the form of the Department of Native Affairs when it was proclaimed as a reserve (DLA, 2001: 4).

In 1952 the Rural Areas were put under the administration of the Department of Coloured Affairs. In 1963 the Act on Rural Coloured Areas (Act No. 24 of 1963) was promulgated. This act made provision for a new institutional development with the establishment of management councils. These management councils were tasked to play a limited role in the management and control of the area and its

resources. In 1979 this act was replaced by the Act on Rural Areas (Act No. 1 of 1979). In 1987 this act was replaced by the Act on Rural Areas (Act No. 9 of 1987) that made provision for the allocation and administration of land use rights.

According to Lebert (2004: 4) the overall trend in the changing of the legislation had been towards greater cooption and control over the residents of the reserves by the state. It started with the formalization and regulation of settlements, land use and land management and the end result was the movement towards the privatization of the communal land. The privatization of the communal land was seen as aiming, benefiting and maintaining a Coloured middle class in the communal areas of Namaqualand. These developments had serious implications on the economic and survival strategies of the poor. In the rationale for the study more attention is given to this aspect.

2.4 GEOPHYSICAL BACKGROUND

The Leliefontein Rural Area consists of three distinct geophysical areas. The first is the coastal plain (Sandveld) west of the Spoeg River. The second area is the western escarpment (Hardeveld), a more-or-less unbroken arc of mountainous terrain that separates the inland plateau from the coastal plain.

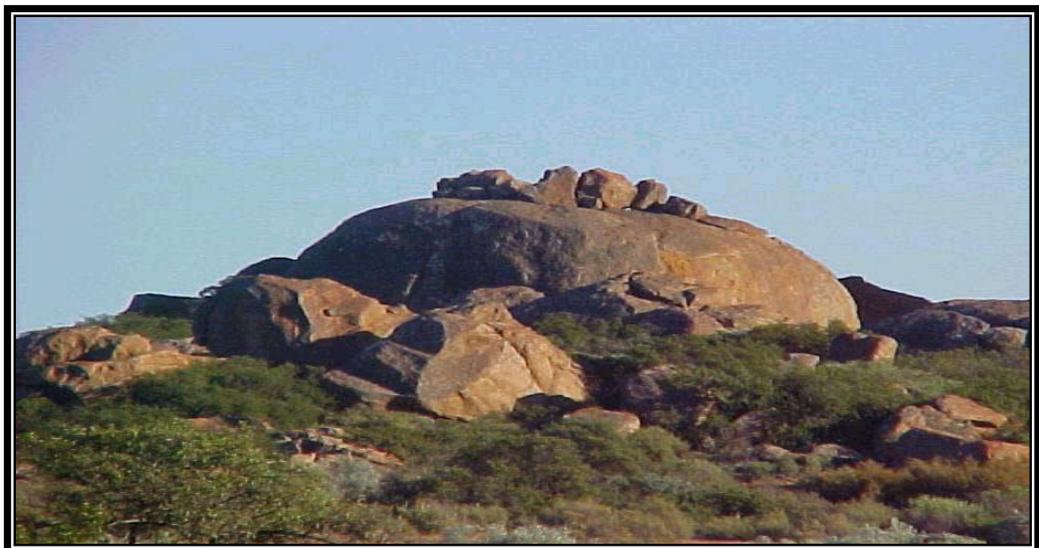


Photo 2.1: example of a granite dome in the Leliefontein area

It includes the massive granite domes of the Kamiesberg rising to nearly 1 800 m above sea level (Cowling & Pierce, 1999: 18) as well as parts of the interior plateau. The Hardeveld represents the southwestern sector of Southern Africa's great escarpment.

The peaks of the Kamiesberg are the highest in Namaqualand and also, very significantly receive the highest annual rainfall in this very dry region. The average annual rainfall exceeds 400 mm on the upper sea facing slopes. The eastern part of the Leliefontein Rural Area (east of Rooifontein, Leliefontein and Paulshoek) forms part of the interior plateau. This area consists of the sand plains of Bushmanland broken by granitic inselbergs (Cowling & Pierce, 1999: 18).

The Leliefontein Rural Area is an arid to semi-arid area, with annual precipitation of between 100 and 350 mm (Lebert, 2004:3). The Leliefontein Rural Area is drained by the following non-perennial highly seasonal rivers namely: the Kys, Brand, Spoeg, Augabies, Buffels, Papkuils, Kraai and the Gasab [Topographic maps: 1:50 000: 3017 BD (1978) Karkams & 3018 AB (1986) Rooifontein].

In plant geographical terms Namaqualand can be described as Succulent Karoo. The distinctive characteristics of the Succulent Karoo are the presence of dwarf shrubs with succulent leaves (vygies), plants with succulent stems, geophytes (seasonally active plants which store reserves (water, food etc.) in below ground organs such as bulbs) and annuals. Some of the 35 tree species distinctive of the Succulent Karoo are also present in the Leliefontein Rural Area including one tree succulent, namely the internationally renowned quiver tree (Cowling & Pierce, 1999: 21-22). Typical trees of the Succulent Karoo that are common in the Leliefontein area include the taaibos, wild olive and resin.

Annual plants like daisies are an integral part of the Succulent Karoo biome. The mass display of the annual daisies is the result of human interference with the environment. Annuals thrive in disturbed areas where the competition from shrubs has been eliminated by ploughing. Annuals survives the summer drought whereby the parent plant dies at the end of spring after producing seeds which lies dormant through the

summer and germinate in autumn (Paxton, 2000: 3). The Leliefontein Rural Area like the rest of Namaqualand is known worldwide for the spectacular display of flowers (especially daisies) during spring.

The flower spectacle during spring plays a major role in the tourism industry of Namaqualand. Unfortunately the residents of the Leliefontein Rural Area like the residents of most, if not all the Rural Areas in Namaqualand benefit little from the influx of tourist to the area. The lack of infrastructure like access roads, guest houses, as well as a lack of entrepreneurship and business acumen is some of the main reasons why the Leliefontein Rural Area and other similar areas do not benefit substantially from this valuable and strategically important source of income.

2.5 RATIONALE FOR STUDY

The Leliefontein Rural Area, like the other Rural Areas in Namaqualand has been farmed communally for time immemorial. Extensive small stock farming and dry land cropping have been the dominant land uses. The agricultural activities in the area has traditionally been and are still predominantly for subsistence purposes, part of survival methods in times of unemployment and to supplement household income Lebert (2004: 43).

Over the last number of decades the agricultural sector of the Leliefontein Rural Area has had to confront a number of challenges. The increase in inhabitants over the last 50 years, combined with a stagnant local economy, resulting in lack of sustainable employment opportunities and an increase in unemployment meant that households increasingly had to rely on local natural resources for their survival. A debilitating aspect and characteristic of the agricultural sector of these Rural Areas is the absence of proper agricultural management practices and local institutional structures and arrangements to secure and support a viable and sustainable agricultural sector.

This lack of proper management includes a lack of control over stock numbers, coordination of rotational grazing, payment of grazing fees. The maintenance of the existing infrastructure is also non-existent.

Over the last five decades overstocking and overgrazing led to the general degradation of the natural resources (Rohde, Benjaminsen & Hofmann, 2002: 256). Cowling and Pierce (1999: 43) also support this view: “The farming that is practiced on the communal lands has resulted in severe overgrazing, especially in accessible low-lying areas, owing to high rates of stocking and limited opportunities for herd rotation”. This situation was forced upon by the lack of alternative employment opportunities in the areas that forced large numbers of people into agriculture as a means of survival, as mentioned earlier.

It is commonly believed that overgrazing is caused by too many animals grazing in an area. However, animal numbers alone do not contribute to overgrazing. The problem is primarily a result of the time of the year the veld is grazed and the recovery period allowed for the veld. Severe grazing of veld during the plants growing period, without a rest period will reduce plant growth (Paxton, 2000: 1).

Overgrazing can also lead to desertification that can be describe as the process which turn productive land into non-productive desert as a result of poor land management. This process of desertification often has a severe economic impact on local communities who choose to farm in this marginal agricultural area.



Photo 2.2: overgrazed area in the Leliefontein Rural Area

Marais (1957: 83) indicated that there were already deliberations and discussions around the 1890's concerning the granting of full individual ownership of agricultural land in the Rural Areas of Namaqualand. This would also have included the right of alienation of the land. Mellville, the assistant surveyor general appointed to investigate the mission station in Namaqualand, supported individual ownership on the basis that he accepted the notion that communal farming was responsible for the poverty on the local mission stations.

The missionaries opposed the recommendation on the basis that the majority of the occupants would lose their land under such a system. They were supported by the civil commissioner for Namaqualand, Scully that indicated that individual ownership is unsustainable in a climatic region suitable for only nomadic stock farming (SPP, 2003: 5).

In chapter 2.21 of the Report of the Inter-Departmental Committee of Inquiry of Coloured Affairs in Coloured Mission Stations, Reserves and Settlements of 1947, it was stated that the land has greatly deteriorated over the past years due to overstocking and injudicious ploughing.

General signs of soil erosion were present and boundary fences were almost non-existent.

The Government decided during the 1980's to implement a development strategy aimed to divide communal land into economic units. The economic units would then be leased to individual farmers. The system was only applied in the larger Rural Areas like Steinkopf, Richtersveld and Leliefontein. The implication of the implementation of the economic units was that the majority of the residents of the mentioned areas lost their access to grazing areas and dry land plots important for their survival (SPP, 2003: 7).

The majority of the residents of the Rural Areas were opposed to the economic units and with the help of SPP and the Legal Resources Centre the decision was challenged in the Supreme Court which ruled in their favour on 21 April 1988.

In the 1997 Namaqualand District Planning and Management Project done by SPP (1997: 24) it was indicated that there were $\pm 5\ 404$ large stock units (LSU) in the Leliefontein Rural Area while the carrying capacity was $\pm 4\ 000$ LSU. This should be seen against the background of the overall semi-arid and vulnerable nature of the area with its low precipitation and regular drought periods. This area is clearly a marginal agricultural region with modest natural resources. Overgrazing in this context and under these circumstances has disastrous consequences for sustainable farming. It results inter alia in the decrease of palatable shrubs, particular leaf succulent shrubs, while annual plants and unpalatable shrubs such as the toxic galena Africana (kraalbos) have experienced an increased (NBI, 2001: 3).

The reduction in plant cover caused by overgrazing can also lead to accelerated soil erosion by wind and water, reduction in the quantity of humus and plant nutrients in the soil which results in the further drop in plant production leading to desertification (Paxton, 2000: 1).



Photo 2.3: Galena Africana (kraalbos)

It is against this background of a lack of coherent agricultural management practices and institutions in the Leliefontein Rural Area that lead to a range of farming and environmental problems and malpractices and that are associated in some circles with the unique and specific type of land tenure that the importance of and need for this research must be viewed. The present situation regarding farming and the use of the natural resources is clearly unacceptable and unsustainable on different levels. This study will play an important role in illuminating problems regarding land tenure and current farming practices, as well as suggesting an alternative tenure system to address this.

2.6 LAND REFORM IN NAMAQUALAND

During 1994 the SPP facilitated a consultation process in Namaqualand whereby Land Committees were elected in communities interested in the land reform process. The communities of the Rural Areas in Namaqualand, including Leliefontein lost their land through dispossession before 19 June 1913, which is the cut off date for land claims in terms of Section 25 (7) of the Constitution of the Republic of South Africa.

It is stated in the above-mentioned section that “A person or community disposed of property after 19 June 1913 as a result of past discriminatory laws or practices is entitled by an Act of Parliament, either to restitution of that property or to equitable redress. It was, therefore, decided by the communities of the Rural Areas in Namaqualand to make use of the redistribution programme to buy back as much of the land in the possession of white owners as possible, which had been lost through dispossession (SPP, 1999: 11).

On 12 June 1997 the Minister of Land Affairs approved the inclusion of the municipal commonage as part of the Provision of Land and Assistance Act, (Act No. 126 of 1993) (DLA, 2002: 4). This was an important step as it meant that a Land Acquisition Grant could be made available to Local Authorities to purchase land to create or extend commonage for the use by the poor and disadvantaged residents for agricultural purposes (White Paper on S A Land Policy: DLA 1997: 49).

The communities of the Rural Areas in Namaqualand, in 1994 decided through the Land Committees to use the municipal commonage policy to purchase land because of the following reasons:

- Land that cannot be claimed by a community because it has been lost before 1913 can now be returned to the community.
- There is no need to set up new legal entities because the land is transferred to the local authority.
- A notarial deed is registered that prevents the local authorities from disposing of the land without the approval of the Premier of the Province (SPP, 1999: 16).

2.7 COMMONAGE LAND PURCHASE FOR THE LELIEFONTEIN COMMUNITY

For the sake of conceptual clarity it is important that a clear distinction is made between communal and commonage land. The communal land of the Leliefontein Rural Area (159 182 ha) is communally owned and currently held in trust by the Minister of Agriculture and Land Affairs. New land developments on the communal land outside the

residential areas can only occur with the consent of the mentioned Minister.

From 1998 to 2000 four farms were bought by the Department of Land Affairs to be used as commonage by the inhabitants of the Leliefontein Rural Area. The land was bought through the Provision of Land and Assistance Act, Act 126 of 1993. The land was transferred to the Leliefontein Transitional Local Council (TLC). After the finalization of the demarcation process in 2000, the Kamiesberg Municipality became responsible for the management of the purchased land together with the communal land of the Leliefontein Rural Area (159 182 ha).

In 1998 Portions 1 & 2 of the Farm De Riet No. 383 (5 810, 8993 ha in extent) and the Farm Papkuilsfontein No. 363 (5060, 3911 ha in extent) were bought. In 2000 the Remainder of the Farm Tweefontein No. 248 (14 799, 9212 ha in extent) and the Farm Boesmansplaat No. 365 (6 955, 9896 ha in extent) were bought. The total extent of the purchased land is 32 627, 2012 ha. These purchases significantly increased the available land that can be used for commonage purposes.

The purchased land was granted to the Local Authority (LA) under certain conditions stipulated in a Notarial Deed of Commonage Servitude attached to the title deed of the land.

One of the conditions in the Notarial Deed of servitude states:

“The owner must establish a representative management body comprising of the owner, beneficiary group and experts or members of relevant bodies such as the Department of Agriculture agreed to by the owner and the beneficiary group members. The management body must formulate a Land Use Management Plan which will set out conditions of use and how these shall be monitored and enforced”
(Annexure 3: Copy of a Notarial Deed of servitude).

It was decided that stockowners may apply to lease camps on the commonage farms for 12 months. Research by Smit (2002: 36) has shown that the lessees do not undertake improvements on the leased land. The twelve-month period is considered by stockowners to be too short to recover the cost of possible investment in the land. As

mentioned earlier the long-term sustainable use of the natural resources is dependent on adequate investment in and responsible and sound management of the land (prevention of overgrazing, erosion control measures, re-vegetation etc.).

Other problems experienced on the commonage and/or communal land of the Leliefontein Rural Area as highlighted by Smit (2002: 36) are:

- The non payment of grazing fees to the Kamiesberg Municipality (communal and commonage land).
- The removal of trees for firewood. In relatively dry areas that receive summer rainfall trees play an important role during the pre-season dry period in terms of browsing.
- The infrastructure on the communal land (access roads, windmills, pipelines etc.) are inadequate or in some instances non-existing.
- The lack of a proper land use management plan for the communal land.
- The difficulty to implement the existing land use management plan for the commonage farms. Rotational grazing forms an integral part of the land use management plan but farmers are allocating land according to their stock numbers and no provision is made for rotational grazing. The lack of enforcement and monitoring also contributes to the problems.

It would appear that a substantive part of the problems experienced with the inappropriate natural resource usage may be associated with the current tenure system in operation. It may therefore be argued that a change in the tenure system may lead to an environment more conducive to more sustainable natural resource management.

The Department of Land Affairs is currently busy with the implementation of the Transformation of Certain Rural Areas Act, Act No. 94 of 1998. This Act provides for a facilitation process whereby the residents of the Rural Areas including Leliefontein can decide on the legal entity to hold and manage the land currently held in Trust by the Minister of Agriculture and Land Affairs.

The implementation of the above-mentioned Act is envisaged as a process consisting of distinct but overlapping phases that deal with the following issues:

- Preparation of the residents for transformation
- Land rights enquiry
- Land use planning
- Tenure management plan
- Choice of legal entity (CPA, Trust, private ownership etc.)

The following is stipulated in the introduction of the Act: “To provide for the transfer of certain land to municipalities and certain other legal entities; the removal of restrictions on the alienation of land; matters with regard to minerals; the repeal of the Rural Areas Act, 1987 and related laws; and to provide for matters connected therewith.”

(Annexure 4: Copy of Act No. 94 of 1998)

Act No. 94 of 1998 has been designed to give content to Section 25 (6) of the Constitution of the Republic of South Africa, that states that a person or community whose tenure of land is legally insecure as a result of past racially discriminatory laws or practices is entitled, to the extent provided by an Act of Parliament, either to tenure which is legally secure or to comparable redress. If the Minister of Agriculture and Land Affairs is satisfied that the recommendations suitably provide for a balance of security of tenure rights and protection of rights of use

as referred to in Section 3 (2) of Act 94, steps will be taken to transfer the land to the entities concerned.

The outcome of the implementation of the Transformation of Certain Rural Areas Act will reflect the views of the residents of the Rural Areas regarding issues of natural resource management and ownership of the communal land. The views and opinions of the people using the land and dependent on the natural resources for their livelihoods is very important in terms of the future land ownership systems or tenure arrangements for the Rural Areas and especially for the Leliefontein Rural Area.

It becomes clear that communal ownership of the land over a long period of time had an impact on the natural resource use. As highlighted in this chapter the inappropriate natural resource usage, inadequate infrastructure, reluctance to invest in the land and other relevant matters can be linked to the communal ownership of the land. In the following chapter the concepts of natural resource management and land ownership are investigated and also whether a relationship exists between the two variables. Legislation developed by the Government for the Rural Areas prior to 1994 was generally towards the promotion of private ownership of the communal land. This strategy was seen by the previous Government as a way to enhance the improved and responsible usage of agricultural land in the research area.

3

Literature Review

3.1 SUSTAINABLE RESOURCE MANAGEMENT

In the previous chapter problems were highlighted experienced in the Leliefontein Rural Areas from the establishment as a mission station in 1816 up to the present. Basically all these problems relates to either natural resource management and land ownership or the interplay between the two variables. It is therefore important to critically look at the literature in this regard to ascertain what relationship has been established in comparable research undertaken into resource management and land ownership and whether a possible relationship exist between them.

Critchby and Turner (1996: 1-17) highlighted the conditions for sustainable natural resource management as identified by the Associates in Rural Development. These conditions include the following:

- Incentives for users to govern and manage natural resources sustainable are present.
- A recognized capacity to control access to and management of the resource.
- The existence of self governing institutions.
- Members are given some say in natural resource management decision making.

It is evident that the benefits from sustainable natural resource management should exceed the costs. Incentives may be perceived in different ways according to resource characteristics, local institutional arrangements and the individual's own economic and social circumstances (Critchby and Turner, 1996: 4).

In the executive summary of the White Paper on Land Reform (DLA, 1998: vii) it is stated that the land reform programme, which aims to reduce poverty, diversify sources of income and allow people more control over their lives and their environment, is expected to ultimately reduce the risk of land degradation. Turner (2002: 1-4) also supports this view by stating that effective land reform is the core condition for sustainable rural development and poverty reduction.

If people consider their rights to natural resources to be insecure or if they perceive themselves to be unfairly excluded from some of the resources they are less likely to use the natural resources in a sustainable fashion. Lahiff (2001: 1-6) further states that tenure reform is the necessary first step that can pave the way for inward investment, and more effective use of natural resources.

Adams et al (2000: 112) are of the opinion that the nature and strength of property rights profoundly condition economic decision making through their effect on people's expectations of a return on their investment of labour and capital. It can therefore be deduced that users will only invest in land significantly if they do have secure tenure rights. Proper and adequate tenure rights may increase the possibility of return on investments.

Whiteside (1998: 123) argues that in order for farmers to feel that it is worth their while to invest time and money in maintaining and building up the resources of their land (soil fertility, erosion control structures, etc.) they need to feel confident that they, or their families, will benefit in the medium - and long run from this effort. This does not necessarily

mean that they have to own the land in a legal sense but they need tenure security over the land and enjoy the benefits flowing from their good husbandry.

In Critchby & Turner's (1996, 53-70) analysis of the reclamation of dongas and gullies during the implementation of the Matitile Rural Development project in western Lesotho, the most striking feature of the project was the emphasis on individual ownership of the gullies and dongas. Before the reclamation work started individual ownership of the gullies/dongas had to be demonstrated by the presentation of the standard documentation of land rights under Lesotho's tenure system.

During the assessment of this project the participants indicated that the reasons for their involvement were the following:

- 
- to protect the productivity of their agricultural land,
 - to acquire new productive land, and
 - to provide extra land to be used as residential sites.

Few of the reclaimed dongas have been planted with vegetables because it has traditionally been used as communal latrines. General purpose wood and fodder trees have predominantly been planted, limiting the economic potential of the reclaimed land (Critchby & Turner, 1996: 62).

Whande (2002: 14) also supports the view that control over land and the resources occurring on such land and the way in which the land and the resources are held or not held, individually or collectively, are crucial to the way such resources are utilized, cared for and managed.

It is further stated in the official South African Yearbook (2001/02: 401) that tenure reform is also essential if people are to invest in the land and use it in a sustainable manner. From this it is clear that the South

African Government need not to be persuaded of the strategic importance of acceptable tenure arrangements in responsible land utilization and management. This of course represents a radical paradigm shift from the land policy that the previous political regime in South Africa espoused as far as black farmers were concerned.

The Namibian case study illustrates forcefully how careful one should be in changing access to land through legislation and subsequent measures. In the communal areas of Namibia land was fenced off from the mid 1980's. Farmers who erected fences obtained exclusive rights of access to rangelands resources, and they were also allowed to utilize dual grazing rights on the remaining communal land in terms of their traditional rights. Most of the enclosed areas included watering pans which made access to water for some communal farmers inaccessible. This obviously has disastrous consequences for the affected farmers as well as for the environment and eco system. It further led to the displacement of small-scale communal farmers and increased the pressure on the rest of the communal land and also forced people to relocate to areas reserved for other land uses e.g. wildlife (Adams, 2000: 3).

The allocation of exclusive rights to individuals in the communal areas of South Africa can be seen as a possible solution to the unsustainable use of the resources in these areas. It is, however, important to note that the negative impacts on the small-scale communal farmers by the subdivision of the communal land in Namibia could be repeated in South Africa.

The Agricultural Land Reform Act of 1995 and the Communal Land Reform Bill of 1999 of Namibia makes provision for the subdivision of communal land into alienated land holdings (Twyman et al, 2002: 127-140). Any person holding recognized rights to communal land is entitled to convert such holding into leasehold tenure (99-year lease) subject to local customary law.

“Vacant” communal land may also be delineated and allocated as economic units. The definition of vacant communal land in semi-arid areas where the movement of stock between agro-ecological zones is employed as a survival strategy in itself becomes problematic. Against this background it is clear that the fencing in of communal land have potential negative impacts on marginalised groups including emergency borehole users, landless people and nomadic San.

It is also argued by influential international players in the development field that an association exists between secure tenure and the degree to which individuals and groups are willing to invest in the land (United Nations Economic Commission for Africa: South African Office, 2003: 6). Secure tenure will, according to this commission impact on the degree to which the individual feels that he/she may benefit from his/her investment in the land. Investment in the land may include improvements on the land and the sustainable use of the natural resources.

Research conducted in Thailand has indicated that a correlation or linkage exists between private property rights and agricultural productivity or land resource conservation. Greater security of tenure leads to higher productivity through increased incentives for investment on the part of the land owner. The security of ownership also increases the supply of credit through provision of tradable collateral (Maxwell & Wiebe, 1998: 21).

Research done in Kenya (Maxwell & Wiebe, 1998: 22) also suggested a correlation between titled land ownership and productivity or land resource conservation. Differential access to land, labour, capital and insurance however played a bigger role than tenure security in this regard.

In the highland parts of Bolivia a prehispanic system of land tenure called the ayllus exists. This is a mixture of both ownership and

usufruct rights (Goodale & Sky, 2000: 3). Individuals have an ownership-like relationship to divided lands but individual members cannot sell their land. The 1952-1953 National Revolution and Agrarian Reform resulted in the abolition of haciendas or large landed estates.

The estates were redistributed among Indian communities and land titled and registered. One unintended consequence of the titling was the disintegration of ayllu land tenure in areas where hacienda and ayllus co-existed. The reason for this was that land tenure had to conform to the State's notion of property. The indigenous patterns of land tenure that also provided a rural-urban safety net were weakened in the process of tenure reform (Goodale & Sky, 2000: 5).

As stated earlier Adams (2000: 3) differs with the position that sound environmental management practices is more likely where individual property rights are secure. He states that in semi-arid and savanna pastoral environments, the subdivision of communal rangelands into productive family stock farms has not been a success. He argues that in semi-arid environments large tracts of land are needed to sustain an individual livestock unit. It is costly to fence off large areas, subdivide into camps, and provides other infrastructure like water points and to maintain this infrastructure over the long-term. The economic returns are relatively low in relation to the input (Adams, 2000: 3).

He further points out that there are also likely to be far-reaching negative environmental effects associated with the subdivision of semi-arid rangelands in individual livestock units. Small herds are difficult to manage as commercial units on fenced farms in dry savanna areas, primarily due to the uneven spatial distribution of rainfall and the unavailability on a small ranch of fall - back areas in times of drought. In the narrow confines of a family farm, grazing pressure is intense and continuous, to the detriment of the animals, the pastures and in some areas the soils (Adams, 2003: 3).

In this chapter comparable research undertaken in resource management and land ownership was investigated. More important was to critically look at the literature to ascertain whether a possible relationship exist between resource management and land ownership. In the next chapter sustainable natural resource management and land tenure is firstly defined before the relationship between the two variables is explored.



4

Land Tenure: A Theoretical Framework

In this study it is argued that the way in which land is held or not held (tenure) will impact on the usage of the natural resources. For the purpose of this study natural resources will include the land and the biological resources that occur on it. As was mentioned earlier there is widespread belief that individuals with secure tenure are more likely to use their natural resources in a more sustainable fashion than individuals with insecure tenure.

The reason for this belief is that individuals with secure tenure feel that they will benefit in the medium and long run from investment in the land and/or the resources on the land. Secure tenure does not necessarily mean private ownership. Tenure can also mean or include control over resources, exclusive rights to land and all or parts of the natural resources upon it (Rihoy, 1998: 1).

As was pointed out the sustainable use of the natural resources will also include investment in the land. Investment in the land may include the erection of erosion control structures, rehabilitation of land, re-vegetation of areas and the filling of gullies. The sustainable use of the resources will impact positively on the return from the land over the long-term. This then also implies that investment in the land will impact positively on the returns from the land.

In the case of small stock farming (the predominant type of farming in the research area) sustainable use of the resources and investment in the land implies that quality grazing (variety and quantity of species

etc.) will lead to higher survival rates of the offspring and offspring with a higher weight at a younger age (Rohde, Benjaminsen & Hoffman (2000: 258). This will result in a higher income for the farmer. This, however, also depends on other variables like quality of the animal breed and the administration the necessary medicine.

There is, however, as was pointed out already also evidence that the subdivision of communal and commercial land into smaller portions in semi-arid and savanna environments has not been a success. The cost of settling individual farmers is high and the economic returns are relatively modest in comparison with the expenditure.

It is thus clear that no unanimity exists over the question whether it is morally defensible, practically possible and economically viable to change or transform a vital aspect like the traditional tenure of land, particularly if the land is located in a semi arid and marginal region.

This chapter will unpack and discuss some of the central concepts that this study deals with. It will first offer a definition of tenure and sustainable natural resource management before looking in detail at the relationship between the two variables.

4.1 WHAT IS LAND TENURE?

The term tenure should be understood in terms of its historical origins. According to Bruce (1993: 1) tenure developed from the terminology of English Feudalism after the Norman Conquest of England in 1066 A.D. The Norman's declared all previous land rights void, and replaced them with grants that specified the rights of the grantee and the duties to the Norman King.

The English word tenure is derived from a Latin term which mean "holding or possessing" and land tenure means the terms or conditions on which land is held, the rights and obligations of the holder of the

land. Tenure is a legal term, and means the right to hold land rather than holding or possessing land. Rihoy (1998: 1) describe tenure as control over resources or the way in which people hold, or do not hold, individually or collectively, exclusive rights to land and all or part of the natural resources upon it.

Tenure consists of two components namely property rights and property rules. Property rights are entitlements defining rights and duties in the use of the natural resources. Property rules are the rules under which those rights and duties are exercised (Rihoy, 1998: 2).

According to Bruce (1993: 1) tenure means the terms on which land is held, the rights and obligations of the holder of the land. It can further be defined as the terms and conditions under which land is held, used and transacted (Adams, Cousins & Manona, 2000: 112).

Tenure is commonly associated with four sets of rights:

- use rights: rights to grow crops and raise other resources, livestock or wildlife, and harvest the products of these.
- transfer rights: rights to transfer the land or use rights – rights to sell, give mortgage, lease, and rent or bequeath.
- exclusion and inclusion rights: rights by individual, group or community to determine who to exclude or include from rights.
- enforcement rights: refer to the legal, institutional or administrative provisions to guarantee rights (Rihoy, 1998: 2).

Rihoy (1998: 2) identifies four major categories of tenure namely:

- State property - the Public Sector exercises rights over resources.
Common property – rights are exercised by a defined group.
Bruce (1993: 4) defines a common as an area of land, such as a

pasture on which all landholders of a village had a right to graze their stock, or a forest where all members can gather wood. The term 'commons' were used loosely in the social science literature until a 1968 article by a socio-biologist, Garrett Hardin, introduced the concept "tragedy of the commons". He argued that a commons will eventually and inevitably be overused and degraded because each user has every incentive to use as much of the resource as possible (Bruce, 1993: 4).

- In the South African context communal tenure is sometimes used interchangeable with common property. The community, which may be a village or a descend group such as a clan or lineage, is regarded as owning the land. Use rights can be allocated to households or individuals and common property rights in other resources e.g. grazing. Long term rights may be allocated to individuals/households that may include inheritance rights, but it does not imply a right to sell the land (Bruce, 1993: 5).
- Private/ freehold property - Can an individual entity has rights. Leasehold is related to private property. The owner of the land gives it to someone else to use temporarily in return for a payment called rent. A lease, the agreement creating the leasehold must specify a termination, although the lease can be renewed.
- Open access – land where no one has defined rights.

4.2 WHAT IS SUSTAINABLE NATURAL RESOURCE MANAGEMENT?

Sustainable natural resource management can be defined as land use activities conducted in such a way that the natural resource base and ecological systems are not degraded beyond their natural ability to recover (DLA, 2001: 4).

Sustainability is a complex and multi-dimensional concept. It refers at the same time to limits in resource availability, environmental impact, social, economic viability and biodiversity (DLA, 2001: 25). Tyler Miller (2000: 10) defines sustainability as meeting present needs without preventing future generations of humans and other species from meeting their needs. This ethical concept that future generations should receive undiminished earth capital and economic opportunities is called intergenerational equity or fairness.

According to Rihoy (1998: 1) natural resources refers to land and the biological resources that occur on it. Natural resources would include renewable and non-renewable resources. Tyler Miller (2000: 11) describes a renewable resource as a resource that can be replenished fairly rapidly (hours to several decades) through natural processes. Examples of renewable resources would include soil, water etc. An important renewable resource is biodiversity that includes genetic, species and ecological diversity. The highest rate at which renewable resources can be used indefinitely without reducing its available supply is called its sustainable yield.

Non - renewable resources are resources that exist in a finite or fixed quantity in the earth's crust and can thus theoretically be completely used up. Examples of non - renewable resources would include coal, diamonds and iron ore. On a time scale of million to billions of years, these resources can be renewed by geological processes (Tyler Miller, 2000: 16).

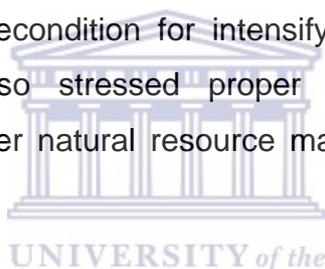
It is important to see sustainable resource management within the broader framework of sustainable development. In the National Environmental Management Act (Act No. 107 of 1998) sustainable development is defined as the integration of social, economic and environmental factors into planning, implementation and decision making as to ensure that development serves present and future generations.

Sustainable development is directly linked to the fertility of this planet. To ensure this fertility, three basic objectives must be met:

- Essential ecological processes and life-support systems must be maintained;
- Biological diversity must be preserved, and
- Natural resources or ecosystems must be used sustainably (Yield, 1997: 9).

4.3 THE RELATIONSHIP BETWEEN TENURE AND SUSTAINABLE NATURAL RESOURCE MANAGEMENT

In the foreword of the publication of the Economic Commission for Africa: United Nations (2003: ii) the provision of security of tenure is often seen as a precondition for intensifying agricultural production. The publication also stressed proper security of tenure as a prerequisite for better natural resource management and sustainable development.



It is further stated that farmers will be more likely to make medium to long-term land improvements if their tenure is secure because they will be more likely to benefit from such investment. Tenure is also seen as one of the principal factors determining the way in which resources are managed and used and the manner in which benefits are distributed.

The same publication emphasizes the importance of individual tenure by declaring that whether the frame of reference for the system of land tenure is the community or the individual, there is widespread evidence that investment in tree planting, manuring, soil and water conservation and other land improvements is more likely where individual property rights are secure (Economic Commission for Africa: United Nations, 2003:6).

Amongst some scholars the belief is held that such investment does not necessarily depend on formal registered title, but on the confidence of the rights holder that society supports their entitlement to harvest the benefits of their investment and individual labour. The nature and strength of property rights profoundly condition economic decision making through their effects on people's expectations of a return on their investments of labour and capital (Adams et al, 2000: 112-113).

Kepe and Cousins (2002: 4) also supports the view that secure tenure will lead to investment in the land. They are of the opinion that when people's land and resource rights are secure, and their income are beyond the bare minimum, they are much more likely to invest effort and resources in conservation and land use practices which 'meet the need of the present, without compromising the ability of future generations to meet their own need'.

All these authors make the same central point. When people are uncertain about their long-term rights to land or resources, their immediate needs take precedence, which may lead to severe resource exploitation, subsequent neglect and degradation. The financial position, capacity or ability of the land users is of course important and the way how income /financial security relate with investment in the land. The question can be posed whether somebody would invest in the land in terms of resource use and land use practices if they are barely able to provide in their daily basic needs?

The Economic Commission for Africa: United Nations (2003: 21) felt that there is a strong relationship between tenure security and the quality of resource management. Overexploitation and degradation of natural resources, such as deforestation and soil erosion, are often related to incomplete, inconsistent or non-enforced property rights, as the cost are borne by society as a whole, whereas benefits accrue to individuals.

A dominant perception that prevails amongst researchers is that individual tenure is more progressive, modern, efficient and better for economic growth than indigenous communal tenure (Economic Commission for Africa: United Nations, 2003: 7). The arguments in favour of individual titling is that customary tenure leads to a situation of insecurity for the small farmer and provides no incentive for land improvement. Bruce (2004: 127-137) also supports this view by stating that to the extent that the community withholds the full rights that we associate with individual ownership, or takes action that undermine security of tenure, incentives are diluted. At worst, community jealousy of successful individuals can sometimes actually penalize enterprise.

This is in line with the common belief that exists amongst a powerful lobby that under communal tenure costs are borne by the majority while the individual benefits. Communal tenure prevents land from being used as collateral for credit and in addition it prevents or complicates the transfer of land from inefficient users to efficient ones.

On the other hand, however, it is important to keep focus of the strategically crucial role communal areas have been playing for centuries and are still playing in providing the poor that live on this land with goods and services and also provide a safety net to these vulnerable people.

In the Monitoring and Evaluation Newsletter of the Department of Land Affairs (2001: 9) this Department makes no secret of where it stands regarding this type of tenure it wants to advocate when it is states: "individual ownership bring with it pride and responsibility of owning a title deed". This statement supports the belief that sound environmental management practices like soil and water conservation is more likely where individual property rights are secure. It is also stated in the White Paper on South African Land Policy that tenure security is a precondition for people to invest in land improvements and

encourage environmentally sustainable land use practices (DLA, 1998: 13).

From a review of the literature on land tenure it is thus becoming increasingly clear that there is a strong belief amongst significant players in the process of land reform in South Africa, be it the relevant Government Department, the NGO sector and amongst certain academic researchers that a correlation exists between tenure security and environmental sustainable land use practices. Individual tenure is also seen to be more conducive for sustainable natural resource management. The possible returns from the land serve as incentives to individuals to conserve the resources.

At this point it is important to highlight once again the argument of Adams (2000: 3) that differs with the position that sound environmental management practices are more likely where individual property rights is secure. He states that in semi-arid and savanna pastoral environments, the subdivision of large commercial ranches (or communal rangelands) into productive family stock farms have not been a success. The costs of settling families with small herds and flocks on individual farms, with reasonable standards of social and economic infrastructure, are very high and the economic return is almost certainly negative.

In semi-arid environments large tracts of land are needed to sustain an individual livestock unit. It is also extremely costly to fence off large areas to subdivide these areas into camps and provide additional essential infrastructure like water points as well as to maintain the infrastructure over the long-term. The economic returns are relatively low in relation to the input (Adams, 2000: 3).

The sub division of communal areas into individual farms is also likely to have far-reaching negative environmental effects. Small herds and flocks are difficult to manage as commercial units on fenced farms in

dry savanna areas. This is primarily due to the uneven spatial distribution of rainfall and, very important on a small ranch, the existence of fall back areas in times of drought. In the narrow confines of a family farm, grazing pressure is intense and continuous, to the detriment of the animals, the pastures and in some areas the soil.

The central research question addressed in this study investigate this correlation or relationship between tenure and sustainable land use by comparing the suitability of the two opposing models or types of titling i.e. individual and communal tenure within the context of the Leliefontein Rural Area.

As previously discussed the Leliefontein Rural Area can be described as semi-arid. This area is characterized by a delicate ecosystem that is vulnerable to over utilization and exploitation. It is important to keep this in mind when considering the most appropriate tenure system for the Leliefontein Rural Area. A choice between individual and communal tenure should be seen against the background of its unique and semi-arid climatic conditions and above-mentioned reservations about the division of communal land in individual holdings in these areas.

From a review of the literature it has become clear that there is a link between secure tenure and willingness of investment in resource use and land use practices. Opinions differ, however, whether secure tenure implies individual ownership.

In addition there is not complete consensus whether:

- individual ownership of land as a rule leads to environmentally more sustainable farming practices, and
- whether individual or communal ownership is more practical, economically viable and appropriate in semi-arid areas.

In this chapter the concepts of sustainable natural resource management and land tenure are firstly defined before the relationship between the two variables are explored. It becomes evident from literature across a wide spectrum that there is a link between secure tenure and sustainable natural resource management. There are, however, different opinions whether secure tenure necessarily implies individual ownership.



5

Research Design

5.1 CHOOSING THE APPROPRIATE RESEARCH METHODOLOGICAL APPROACH

This chapter deals with the research design and methodology that has been used in this study. In contemporary social research there are a number of methodological paradigms or - approaches available to the researcher to form the intellectual and scientific scaffolding to execute her or his specific research.

The dominant paradigms in the social sciences are the quantitative-, the qualitative and the participatory action research paradigm (Babbie & Mouton, 2002: xxv). These modern methodological approaches all had their intellectual roots in historical intellectual traditions: the quantitative approach in the positivism, the qualitative in the phenomenology and lastly the participatory action paradigm that had its roots in critical theory (Babbie & Mouton, 2002: xxv).

Which of these methodological paradigms (or a combination of more than one) one is going to use in a research study is dependent on a number of considerations. These include:

- the aims and objectives of the study
- the nature of the research question, including the character and nature of the research problem to be investigated. (Leedy, 1993: 139)

Given the nature of the central research question developed in this study, the specific set of aims and objectives flowing from it, it is clear that the quantitative methodological approach is the most appropriate to use in the execution of this research. The survey is used as research tool and specifically using a classical quantitative technique – questionnaires that results in quantitative analysis (percentages etc.).

This study sets out to establish the prevailing attitudes and perceptions amongst a representative sample of farmers towards the best model or type of tenure of agricultural land. The quantitative paradigm, with its set of methodological tools is the most appropriate approach to realize the set goals

5.2 QUANTITATIVE METHODS

Within the quantitative social research paradigm the dominant and most often used research design and technique is the survey. The history of surveys in South Africa dates back to the 17th century when for the first time demographic details pertaining to the population in the Cape was collected (Shell, 1994: 439). The most well known example of survey research is probably the census that are periodical conducted amongst the total South African population to establish a wide spectrum of demographic, economic and social indicators.

Social Surveys are flexible and can be used in research designs with an exploratory, descriptive and explanatory purpose. Surveys are a very appropriate research method for the generation of original or primary data from a population too large to observe directly. Babbie and Mouton describe surveys as “excellent vehicles for measuring attitudes and orientations in a population” (2002, 232).

Although surveys have entrenched itself as a legitimate research tool or technique internationally, questions regarding its applicability in a multi - cultural or – ethnical (developing) society have been raised.

Critical issues that have been identified include the linguistic- semantic and cultural gap that often exists between those who develop and administer the survey and those on whom the survey is focused (Russel and Mugenyi, 1997: 27).

The issue here is the possibility for mis – understanding of concepts and specific terminology, which is a normal and accepted problem that exists between different social classes in a society. It refers rather to an absence of what Babbie and Mouton refers to as “an overarching framework of shared meanings: Typical examples of these refer to basic sociological concepts like “*Family, household, married and employed*”. These concepts, the authors point out, are not viewed as problematic and ambiguous in uni - cultural societies as are often the case in the West (Russel and Mugenyi, 1997: 27).

However, in a country like South Africa, with the diverse sociological and cultural landscape specific concepts can hold very diverse semantic interpretations and meanings. Under these circumstances it becomes tricky to establish linguistic equivalence for example in a questionnaire, which is a prerequisite when conducting a survey.

The main methodological instrument that is used in survey research is the questionnaire, the unit of analysis and the sample. In the following section these instruments and concepts are discussed as well as the different stages in the research process.

5.3 RESEARCH PROCEDURE

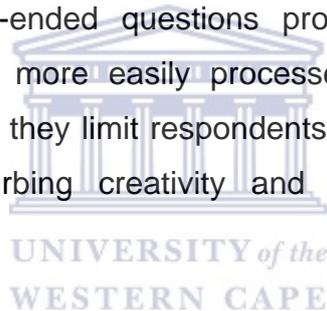
5.3.1 THE QUESTIONNAIRE

The questionnaire is a standardized measuring instrument that is used to gather primary data from the respondents. In the execution of social research variables are operationalized when researchers ask people questions as a way of getting data for analysis and interpretation

(Babbie & Mouton, 2002: 233). Questionnaires are used to collect statistics and characteristics about people (e.g. their age, income and educational level) as well as to establish attitudes, opinions and perceptions.

In formulating and formatting questions, researchers have two options. They may ask open-ended questions where the respondent is asked to provide his or her own answer to a question. The major advantage of open-ended questions is that they give the respondent the necessary space and opportunity to answer in a way that he or she chooses to.

An important disadvantage of these types of questions is that their analysis can be time consuming and costly. In close-ended questions, the respondent is asked to select an answer from a list provided by the researcher. Close-ended questions provide greater uniformity of responses and are more easily processed. However, their major disadvantage is that they limit respondents to a fixed set of alternative responses thus curbing creativity and diversity of opinions and attitudes.



In the research both open-ended and close-ended questions were included in the questionnaire. Close ended questions were mostly used where it was possible to anticipate and include all the expected possible responses. The questionnaire was divided into five sections dealing with the following information **(See Annexure 5: Copy of a questionnaire)**:

- Demographics
- Land use
- Land conservation
- Rotational grazing
- Land ownership

5.3.2 UNIT OF ANALYSIS

The unit of analysis refers to the research subject that the research focuses on to obtain the information the researcher wants. This can be an object, phenomenon, entity, process or event (Babbie & Mouton, 2002: 84). In social surveys individuals, households or both are often the unit of analysis. Often the head of the household is used as the unit of analysis. In this study land users were selected as the unit of analysis. This includes both bona fide farmers (i.e. full time farmers) as well as those land users that are also involved in off-farm activities.

5.3.3 SAMPLING

Sampling is a standard technique and procedure used in surveys. It is used in cases where it is not necessary or possible to interview every case or unit in the research population because of the limitations inherent to the study. Two types of sampling can be distinguished, probability and non - probability sampling. What type of sampling is used depends on whether the researcher wants to generalize her or his results to the population the sample is drawn from.

Given the constraints relating to human and financial resources of this study it was not possible to include the entire population of farmers in the research area. It was thus decided to draw a sample of farmers. The respondents to be included in the sample were selected by means of the systematic sampling technique. This method of sampling is based on the principle of randomization and probability.

This method is used to ensure that each unit in the population has a known chance of being selected in sample. The total number of cases that qualified for inclusion in the sample frame was 491. The critical variables considered and operationalized for inclusion in the sample were the different types of farming in which farmers were involved in

and the geographical distribution of these farmers. Care was taken to ensure that all cases were listed on the sample frame.

The different types of farming activities included were stock farming, sowing and gardening. Respondents were selected randomly from the record lists compiled by the Kamiesberg Municipality. The record lists indicated stock owners and individuals allocated sowing plots in the Leliefontein Rural Area. Gardening is practiced on a very small scale in the Leliefontein Rural Area due to water shortages, therefore garden plots are not officially recorded registered and no fees are paid for the right to use a garden.

A total of 59 cases were selected out of a population of 491 farmers. This represents 12 % of the research population. This is deemed adequate given the high level of homogeneity in the population. In order to avoid and prevent human bias the first sample element was selected at random. Thereafter every 8th respondent is selected at fixed intervals from the provided lists. Proportional -stratified sampling was applied to ensure that appropriate numbers of elements are drawn from homogenous subsets of the population.

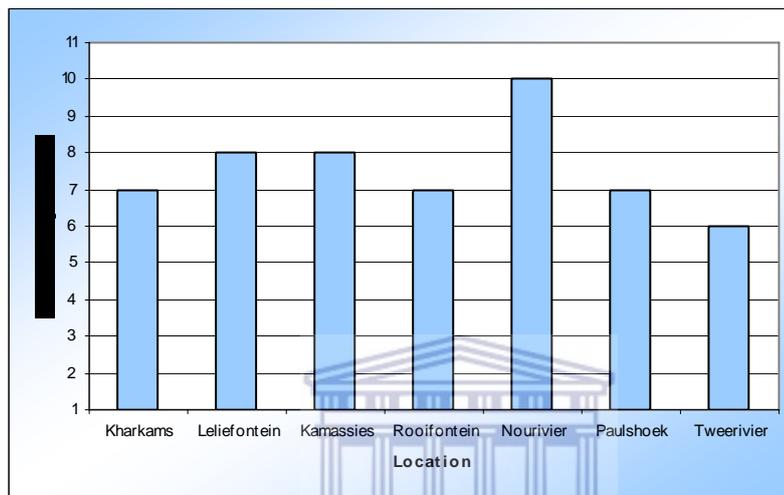
Respondents were selected separately from the list containing the stockowners and the list containing individuals that had sowing plots allocated. In some cases these individual were not directly involved in the farming because they were employed elsewhere. In these cases the individual responsible for the day to day farming were used as the unit of analysis and interviewed. The questionnaires were administered by the researcher and three tertiary students trained by him from 21 to 24 June 2004.

The other important sampling consideration in the selection of the respondents was the geographical distribution within the Leliefontein Rural Area. Respondents were interviewed in the following settlements: Kharkams, Leliefontein, Kamassies, Rooifontein,

Nourivier, Paulshoek, Tweerivier and Kheis. Only two settlements Spoegrivier and Klipfontein were excluded.

The number of available respondents identified in the two settlements, and distances away from the other settlements was the deciding factors in excluding the two settlements.

Figure 5.3.1: Distribution of respondents in the Leliefontein Rural Area



No major problems were experienced with the conducting of the interviews besides that during the interviews it was discovered that the sections on mining and gardening were not relevant. The respondents indicated that the impact of mining and gardening on the vegetation and water resources is not important because there were no mining activities in the Leliefontein Rural Area and that gardening was insignificant in its extent.

The distance between the various settlements are huge and the condition of the access roads can be described as atrocious. These factors posed a challenge in terms of logistical arrangements when conducting empirical research. The distance from Spoegrivier to Paulshoek and Kamassies is 105 and 100 km respectively and from Kheis to Rooifontein and Kamassies 114 and 119 km respectively.

5.3.4 DATA ANALYSIS

The data gathered with the conducting of the interviews was categorized, analyzed and interpreted by the researcher in relation to the overall research question and the specific research aims. Statistical analysis was performed where applicable and the data is presented in the form of figures and graphs. The data is complemented by secondary data and inferences by the researcher.

5.3.5 SECONDARY DATA

Secondary data relevant to the study was also incorporated in the research. This includes the review of relevant literature from documentation, research studies, and reports from the following institutions:

- Department of Land Affairs
- Provincial Department of Agriculture
- Kamiesberg Municipality
- Surplus People Project
- Researchers from various institutions

Some of the literature deals specifically with the Leliefontein Rural Area, some with Namaqualand in general and other with semi-arid and communal areas in Southern Africa. Information emanating from those sources relates to communal ownership, tenure reform, and natural resource management, historical and geophysical information. Secondary data is important in the sense that the background information gathered provide valuable contextual insights. It can complement primary data. Information provided by respondents can also be tested for its validity if compared with trends and findings that have been established in comparable previously executed studies.

5.4 THE RESEARCH PROBLEM

The overall research question developed in this study is:

“What is the most appropriate tenure system to ensure sustainable natural resource management on the communal and commonage land of the Leliefontein Rural Area?”

The study makes the assumption that the existing system of tenureship i.e. communal can be related to the current problems experienced in the Leliefontein Rural Area concerning issues of land usage and land management. This led to the general degradation of the natural resources over time. The absence of proper agricultural management practices and institutional arrangements to secure and support a viable and sustainable agricultural sector exacerbated the existing problems.

Some of the most critical issues and problems that need attention and intervention include non - existing or inadequate control over a number of critical farming related issues, i.e. stock numbers, rotational grazing, payment of grazing fees and the inadequate level of maintenance of infrastructure.

The users of the land also do not invest in the land in the form of improvements. Improvements would include soil conservation and rehabilitation, fencing, roads and also water conservation.

There appears to be widespread agreement amongst researchers that there is a relationship between secure individual tenure and sustainable environmental management (Whande (2002: 14) and Whiteside (1998: 123). Following on this it is argued that by changing the tenure system the problems identified relating to both irresponsible and inadequate farming practices may be solved.

Flowing from this, the following specific research questions have been operationalized and formulated in this research:

1. What is the impact of the current practiced tenure system in the Leliefontein Rural Area on the use of the natural resources?

A number of relevant issues will be investigated:

- ❖ Do the users of the natural resources invest in the land in the form of the prevention of erosion, fencing, re-vegetation etc?
- ❖ Is rotational grazing practiced in the Leliefontein Rural Area?
- ❖ What is the extent of overgrazing in the Leliefontein Rural Area and what are possible reasons for this?

2. Which tenure system(s) according to the respondents and the researcher will be the most appropriate model to implement to ensure the sustainable use of the natural resources in the Leliefontein Rural Area?

- ❖ How will issues like overgrazing and the prevention of erosion be addressed under the various tenure systems?
- ❖ What sanctions can be implemented under the different tenure systems to ensure the sustainable use of the natural resources?
- ❖ What incentives can be implemented to encourage users to invest in the land in the form of the prevention of erosion etc?

3. Which tenure system is proposed to ensure sustainable use of the natural resources in the research area?

- ❖ How will the proposed system ensure the sustainable use of the natural resources?
- ❖ What is the motivation for the chosen/ recommended system?
- ❖ How will the proposed system encourage investment in the land by land users?

- ❖ How will the proposed system address issues like overgrazing and the prevention of erosion?

These pertinent questions, along with a limited set of questions dealing with socio-demographic variables formed the backbone of the questionnaire.

5.5 RESEARCH PROCEDURE

The execution of the research process followed certain steps that follow one another. This is referred to as the research procedure or sequence. The following steps are identified (Babbie & Mouton, 2002: 99 – 101):

- Conceptualization and establishing research problem.
- Flowing from this developing the appropriate research design and methodology and development of research tools and procedures, i.e. construction of questionnaires, delimitation of research population, sample frame as well as the establishment of size and type of sample and drawing of sample.
- Empirical phase that involves the conducting of the actual survey, depth interviews or panel discussions.
- Systemization, organization, analysis and interpretation of data. If a hypothesis had been developed the results will either confirm or reject the research hypothesis.
- Writing a report or thesis.

The nature of the research process is inherently cyclical, i.e. the generation of the findings and results that represents the last phase feeds back to and address the research problem that was formulated in the first phase of the research cycle.

The following chapter deals with the results emanating from the empirical survey. Results are presented, where applicable, in graphical format to

make it more comprehensible and clear. The results are discussed and explained with the aid of a narrative text.



6

Study Results

This chapter deals with an analysis of the responses from the empirical study that were conducted in the Leliefontein Rural Area. The data collected for this investigation is presented in figures and graphs and discussed in the paragraphs that follow. The data represent the opinions, choices and preferences of the respondents regarding the issues operationalized in the questionnaire and investigated by this research. The data was gathered during the interviews conducted with the aid of the questionnaires (see annexure 5).

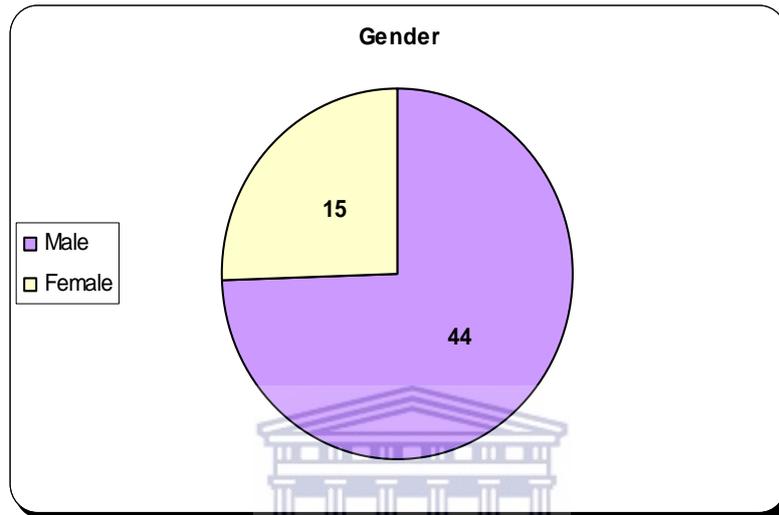
As indicated in the previous chapter the sample units or unit of analysis used in this study was the individuals identified on the lists of the Municipality either as a stock owner or having a sowing plot allocated. Individuals with garden plots allocated were not considered in the study because gardening is not practiced on a large scale in the area due to the shortage and unpredictable nature of water resources. During investigation by SPP on the presence of irrigation and garden plots in the Leliefontein Rural Area it was only possible to identify 5 such plots (SPP, 2003: 36).

Some of those included in the sample were not directly involved in the farming practice because they were absent. In these cases it was decided to interview the individual responsible for the day to day farming as they were intimately involved in the agricultural activities and related problems and challenges.

The sub-sections in this chapter corresponds with the distinctive sub-sections in the questionnaire namely demography, land use, land conservation, rotational grazing and land tenure.

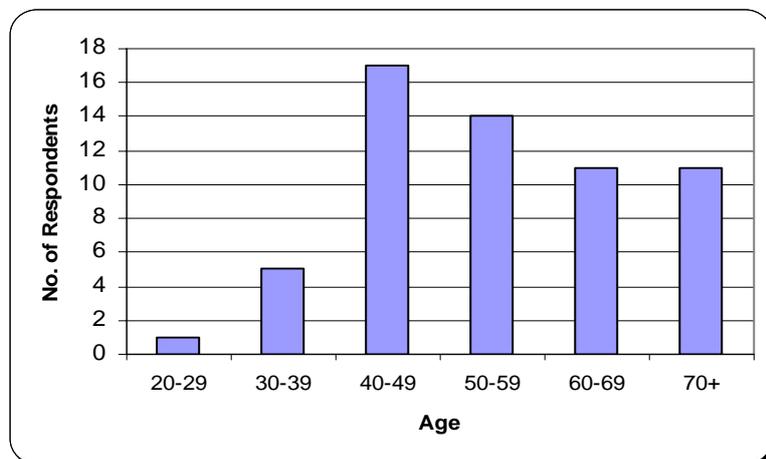
6.1 DEMOGRAPHY

Figure 6.1.1: Gender



Forty four (74 %) of the respondents are male. This is in line with the trend in the area that males are predominantly responsible for farming. The females interviewed represent single female headed households or where the males are absent mainly because they are employed outside the area.

Figure 6.1.2: Age distribution

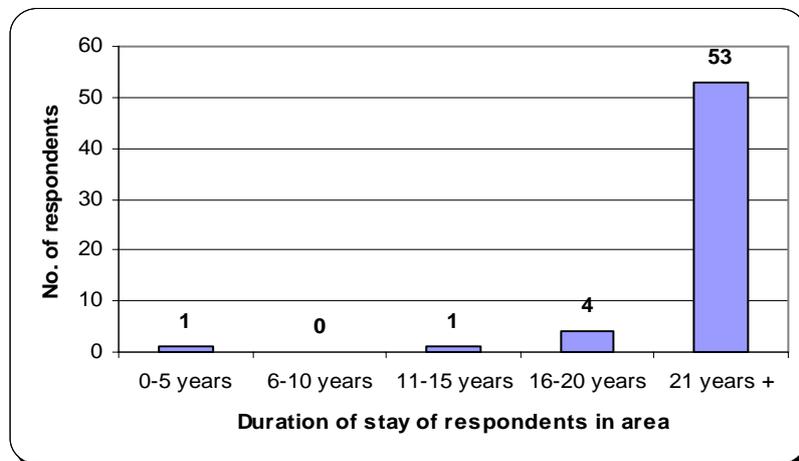


Thirty six (61 %) of the respondents are older than 50 years with 22 (37 %) older than sixty years. This is a relatively old farming population. A high percentage of the younger economically active population, work outside the Leliefontein Rural Area. The reason for the high percentage of old age farmers according to Lebert (2004: 43) is that many of these migrant workers invest their savings in livestock which is kept by family members residing in the reserve.

It is only on eventually returning to the Leliefontein Rural Area that these individuals become “farmers” as such and even then many derive income from other sources such as state pensions or other welfare payments, or other off - farm enterprises. Workers tend to return to the reserve in late middle-and old age to see out their ‘retirement’ (Lebert, 2004: 43).

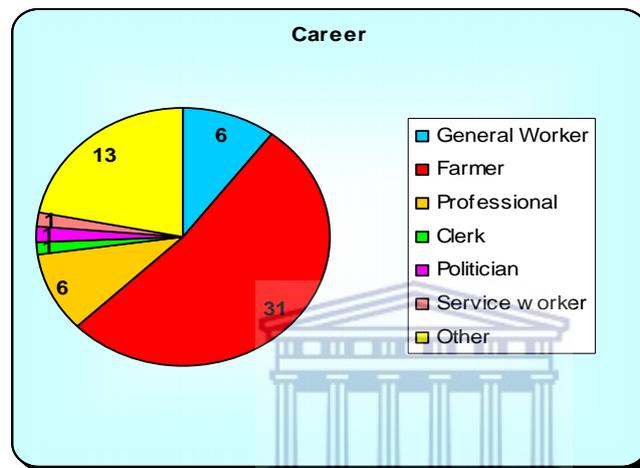
Age may also impact on the extent to which land users are willing or can invest in the land. Age can also be a very important variable in terms of the capacity of the farmers to change, innovate or adapt to new and unknown farming methods. There exists a generalized belief that younger farmers are more progressive in their thinking and more willing to try new innovative methods.

Figure 6.1.3: Duration of stay of respondents in area



Fifty three (89 %) of the respondents indicated that they have been living in the Leliefontein Rural Area for more than 20 years although it does not necessarily mean that all of them have been farming for this period. It can thus be assumed that the respondents are well informed about the area with its unique vagaries and are subsequently in a position to provide informed and reliable information on the research questions.

Figure 6.1.4: Occupation



Slightly more than half of the respondents interviewed, i.e. 31 (53 %) identified their occupation as farming, while 13 (22 %) of the respondents were recipients of different types of grants (pension etc.) from the Government and other institutions like mining companies, are unemployed or are involved in home keeping. The professionals and general workers covered 20 % of the respondents respectively and politicians, clerical workers and service workers 5 %.

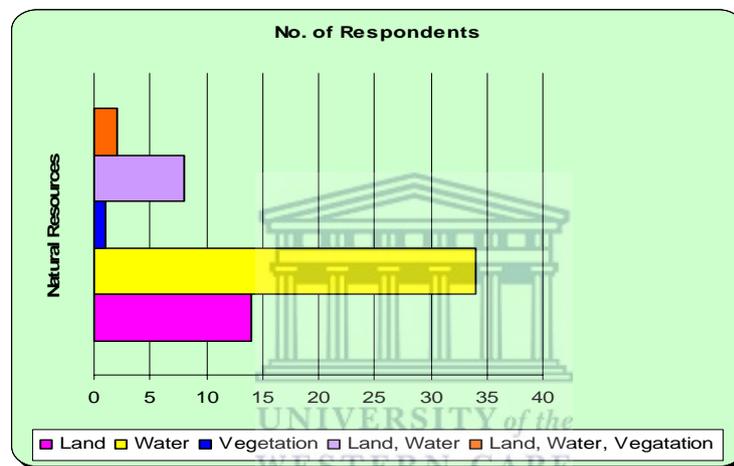
The professional sector includes teachers and administrative personnel while the general sector includes unskilled and semi-skilled workers. The respondents basically represent the whole spectrum of farming from full time, part time, subsistence and commercial orientated. The approach to farming could also to an

extent be a determining factor whether an individual is entirely dependent on farming or whether there is an additional income.

6.2 LAND USE

The appreciation and use of natural resources of the area is of central importance to this study. The respondents were requested to indicate the most important natural resource in the Leliefontein Rural Area and also the most important land use.

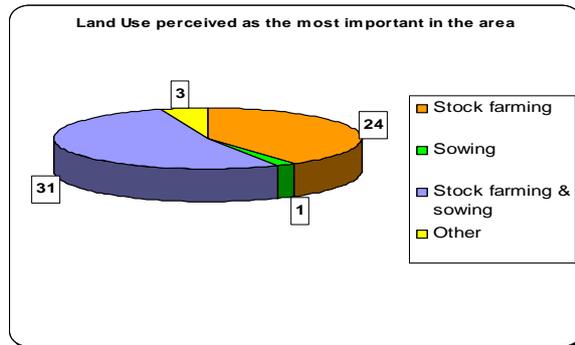
Figure 6.2.1: Most important Natural Resources



Respondents had to indicate which natural resource they value the most. Water is perceived by 34 (57 %) respondents as the most important natural resource, 14 (23 %) see land as the most important resource and eight (13 %) see land and water as the most important resource and two see land, water and vegetation as the most important natural resource.

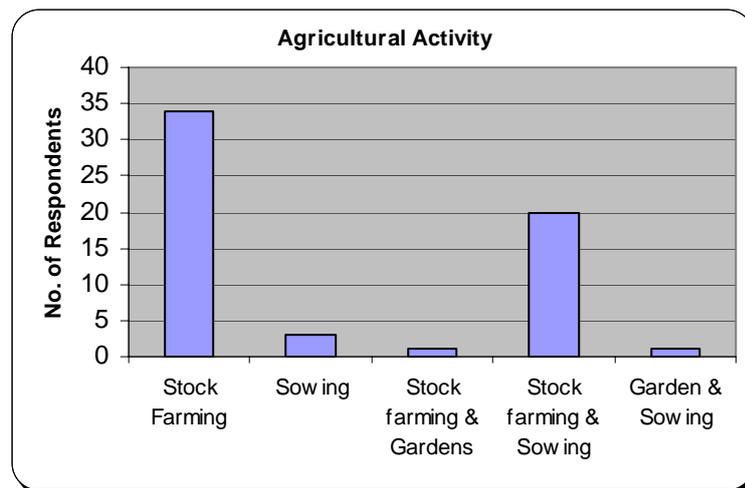
The relative importance of water compared to the other resources should be seen in terms of its scarcity over protracted periods and the unpredictability in terms of availability in the semi-arid nature of the Leliefontein Rural Area as well as the unavailability because of non-functional infrastructure (i.e. pumps, pipes and windmills).

Figure 6.2.2: Most important Land Use perceived



Respondents had to indicate what they perceived as the most important land use in the area. Thirty one (53 %) respondents are of the opinion that a combination of stock farming and sowing are the most important land uses in the area, while another 24 (41 %) regard stock farming as the most important land use in the area. The view of the respondents regarding the most important land use corresponds with and is consistent with the agricultural activities in the area as is evident from the graph below.

Figure 6.2.3: Agricultural activities



From the results of this survey it is clear that small stock farming is the dominant agricultural activity. Of the respondents interviewed 34 (57 %) indicated that they are involve in stock farming and 20 (34 %) indicated that they are involve in stock farming and sowing.

indicated that they are involve in multi – culture farming, i.e. stock farming and sowing.

6.2.1 TYPE OF FARMING AND IMPACT ON RESOURCES

The type of farming practiced may have impacts on the natural resources that can be positive or negative. It is therefore important to determine the opinions of users on the diverse impact on the natural resources of the type of farming practiced in the Leliefontein Rural Area. Twenty one (35 %) respondents indicated that stock farming have a negative impact on the veld.

Overgrazing by sheep, goats and donkeys and related degradation and subsequent erosion of the topsoil were identified as major negative outcomes of stock farming during the survey and also in the literature review. The concentration of stock near human settlements (villages) was also identified as having a negative impact on the vegetation in conjunction with the presence of donkeys.

Ten (16 %) respondents indicated that the stock in the Leliefontein Rural Area is within the carrying capacity of the available veld. They were of the opinion that natural reduction of stock will occur because of regular drought experienced in the area. There is also variation in stock numbers between winter and summer. Stock is also sold at the end of every year.

Sixteen (27 %) respondents indicated that water is a scare resource and that stock farming definitely has an impact on this resource. Five (8 %) respondents are of the opinion that it is difficult to determine the impact because all water infrastructures are not functional. Fourteen (23 %) respondents indicated that stock farming only has an impact during drought periods when the underground water is not replenish.

All the respondents indicated that gardens and mining does not have any impact on the vegetation. Gardening is practiced on a very small scale seasonally and no mining activities occur in the area.

Nineteen (32 %) respondents are of the opinion that sowing (wheat and barley farming) has a positive impact on the natural vegetation in the sense that the wheat/barley that is harvested can be used as fodder during summer. Livestock can also graze on the harvested fields. In this way pressure is relieved on the natural vegetation. The existence of sowed lands makes provision for rotational grazing on a limited scale. Individuals allocated sowing plots graze their animals on the stubs after harvesting.

Fourteen (23 %) respondents indicated that sowing does not really have an impact because the unpredictability of the rainfall resulted in the rapid decrease in the practice of sowing. Seven (12 %) respondents indicated that sowing has a negative impact in terms of biodiversity because natural vegetation is removed to plant wheat or barley. It should, however, be taken into consideration that the stubs on the sowing lands that are ploughed back after harvesting may have a positive impact in terms of the fertilization of the soil.

Twenty one (36 %) respondents identified water as an obstacle in the use of the natural resources. The availability of water impacted on the areas in the Leliefontein Rural Area that can be used for grazing. This includes the quality of the water, its unavailability (because the infrastructure is not functional) and the geographical distribution of water within the area.

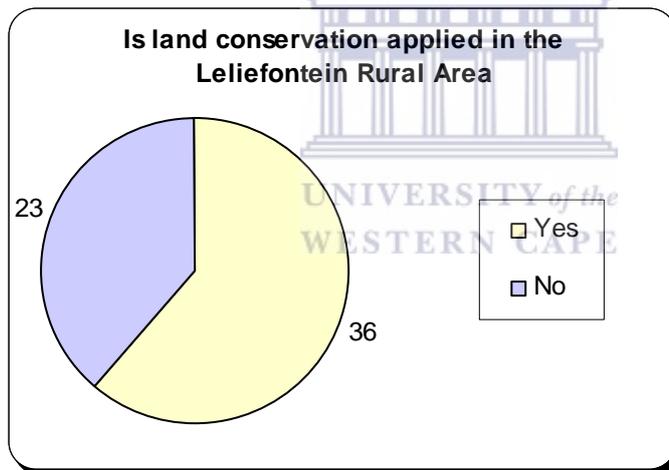
Nine (15 %) respondents identified droughts as a problem and eight (14 %) respondents indicated that there is not enough grazing available because of drought. The seasonal variation in the availability and quality of grazing was highlighted by four (7 %) respondents while nine

(15 %) indicated that they do not experience any problems with the use of the natural resources.

6.3 LAND CONSERVATION

Whether or not the users of the natural resources invest in the land in the form of the prevention of erosion, erection of fencing and re-vegetation of overgrazed areas was one of the key research questions and issues to be investigated in this the study. A number of questions were subsequently developed to determine whether respondents do apply land conservation measures, and if so, the type or range thereof. The research also established the opinions of the respondents regarding the relative success of these measures.

Figure 6.3.1: Application of land conservation



Thirty six (61 %) respondents stated that land conservation is practiced in the Leliefontein Rural Area, while 23 (39 %) of the respondents thought that land conservation is not practiced. The majority of the respondents knew the meaning of the concept land conservation. The following aspects were included by the respondents as part of the term: rotational grazing, sustainable use of the land, prevention of overgrazing/ erosion and the use of appropriate agricultural practices and land uses.

Respondents were asked to supply the names of the institutions they thought to be responsible for land conservation in the area. The following institutions were identified by the respondents as responsible for land conservation: individual farmers, Kamiesberg Municipality, commonage committee, the Department of Agriculture and the National Botanical Institute (only in Paulshoek). It was interesting that individual farmers were also identified by the majority of the respondents as the most important institution responsible for land conservation although they alluded to the fact that the implementation is not coordinated between the individual farmers.

The following activities were identified by the respondents as part of land conservation in the Leliefontein Rural Area. The activities are executed by the farmers, the Local Authority, the Department of Agriculture and the National Botanical Institute:

- The traditional movement of stock between high-lying (summer) and low-lying (winter) areas.
- Reduction of stock
- Erection of camps
- Experimental planting of drought resistant plants
- Environmental education
- Appropriate ploughing methods

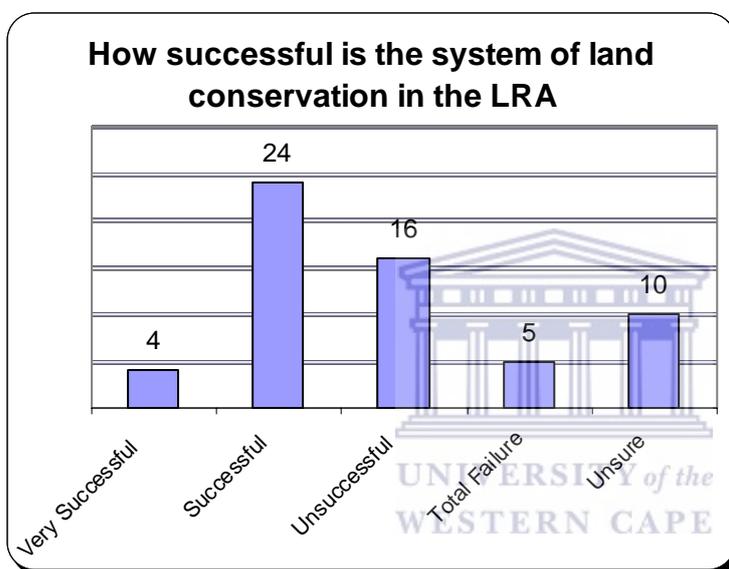


It is clear that the activities identified cover the wide spectrum of traditional knowledge and indigenous farming practices transferred from generation to generation in the area as well as the more modern methodologies and practices prescribe by agricultural extension services and related institutions.

It is disturbing that very few respondents. i.e. 4 (7 %) indicated that the application of the system of land conservation in the Leliefontein Rural Area is very successful. The highest percentage (41 %) were of the

opinion that it was successful, 16 (27 %) regard it as unsuccessful, five (8 %) saw it as a total failure while 10 (17 %) were unsure on this issues. The opinions of the respondents may be influenced by the application of land conservation in the past whereby the responsible Departments (House of Representatives) took total responsibility for implementation inclusive of the provision of labour and financial resources. Currently the focus of the Department of Agriculture is more on providing advice in terms of land conservation practices.

Figure 6.3.2: Opinion of success rate of land conservation

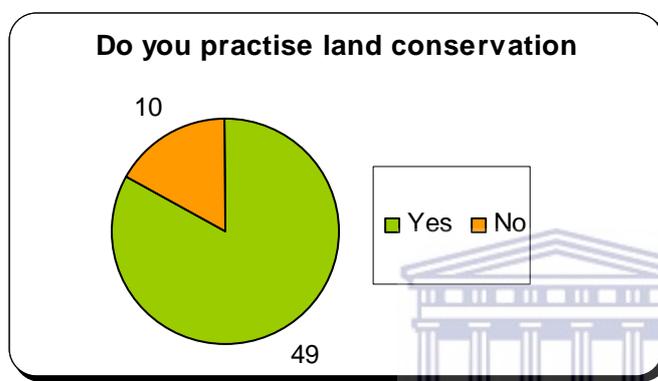


It was indicated by 49 (83 %) respondents that they personally practiced land conservation while another 10 (17 %) indicated that they do not practice land conservation. Those respondents that indicated they practiced land conservation identified the following as part of the implementation:

- keeping within the carrying capacity of the land,
- not grazing near settlements to prevent the concentration of animals,
- feeding livestock during summer, and
- not removing trees and shrubs.

Trees and shrubs play a crucial role in terms of browsing especially in the summer rainfall areas of the Leliefontein Rural Area. The respondents that indicated that they do not practice land conservation said that the Local Authority and commonage committee were not serious about the implementation and regulation of this practice. It is clear that they do not see themselves play an important role in the application and implementation of land conservation. This is obvious a disturbing finding.

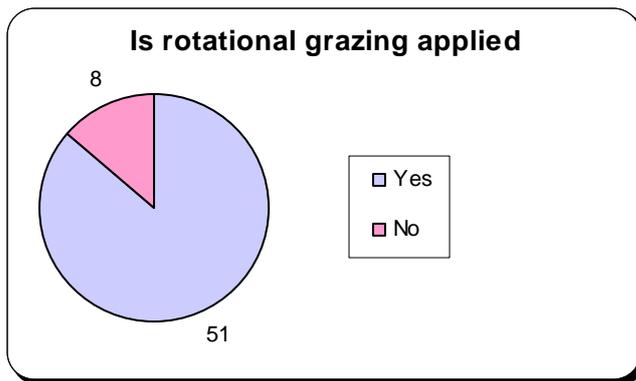
Figure 6.3.3: The practice of land conservation



6.4 ROTATIONAL GRAZING

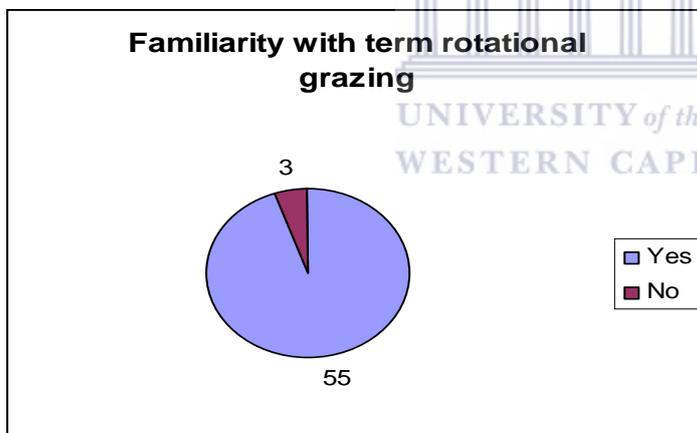
Continuous grazing, usually results over time in a plant community of less-desirable species. When livestock graze without restriction, they eat the most palatable forage first. If these plants are repeatedly grazed without allowing time for their roots to recover and leaves to regrow, they will eventually face extinction with disastrous consequences for the bio diversity and the sustainability utilization of the plants. This is why rotational grazing is so crucially important. Rotational, managed or controlled grazing preserves the veld by periodically moving livestock to fresh paddocks, to allow pastures to regrow (Beetz, 2004: 2).

Figure 6.4.1: The application of rotational grazing



Fifty one (86 %) of the respondents indicated that rotational grazing is applied in the area and 8 (14 %) indicated that rotational grazing is not applied. It should be noted that the opinion of the respondents may be subjectively based on own practice and experience in the particular area of Leliefontein where they graze.

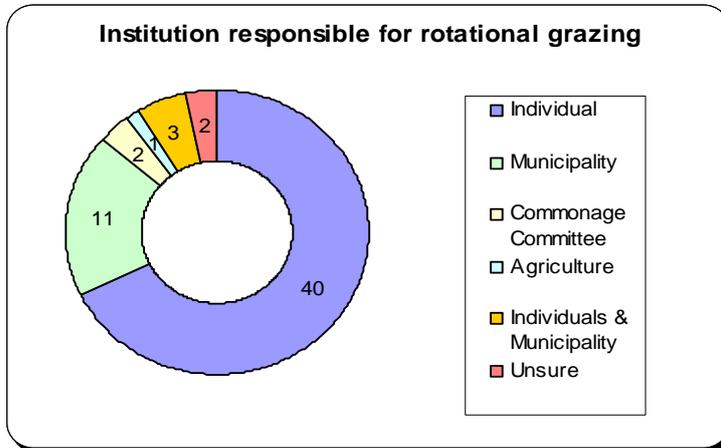
Figure 6.4.2: Familiarity with term rotational grazing



Fifty five respondents (93 %) indicated that they are familiar with the term rotational grazing. The following aspects were included by the respondents as elements of rotational grazing: the movement between grazing areas or stock posts that may vary between daily or seasonally. The grazing of the stubs after harvesting on allocated sowing plots was also identified as an important element of rotational grazing. Only three (4 %) of the respondents indicated that they are

unsure about the meaning of the term and two (3 %) did not respond to the question.

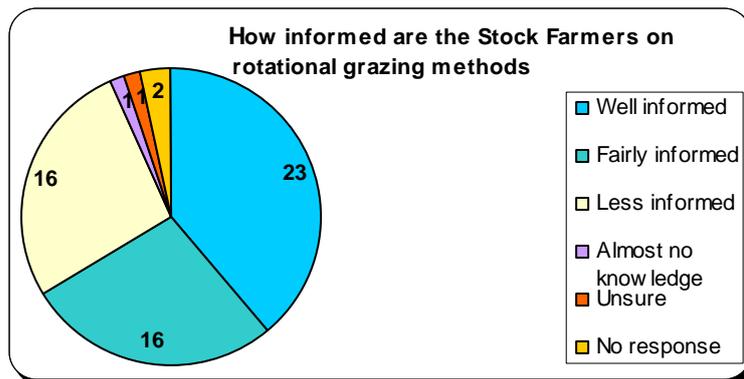
Figure 6.4.3: Institutions responsible for rotational grazing



A crucial aspect of this study was to interrogate concerns with whom the responsibility rests to institute and practice rotational grazing. The results were illuminating. Forty respondents (68 %) thought that individual farmers are responsible for rotational grazing. Another 11 (18 %) indicated that the Municipality are responsible, two (3 %) argued that the responsibility lies with the commonage committee, while 3 (4 %) were of the opinion that the individual farmers and the Municipality are jointly responsible while 2 (3 %) of the respondents were unsure. The respondents did not differentiate between the various aspects and phases of rotational grazing like implementation, education and monitoring.

Of the 59 respondents interviewed, 23 (39 %) indicated that the stock farmers in the Leliefontein Rural Area are well informed regarding rotational grazing methods, 16 (27 %) indicated that stock farmers are fairly well informed while 16 (27 %) were of the opinion that the stock farmers are ill-informed and 1 (2 %) respondent was unsure.

Figure 6.4.4: How informed are stock farmers on rotational grazing methods



The respondents supplied the following information on, and description of rotational grazing, as well as how it is practiced in the area. The most important responses were:

- Rotational grazing is based on the need and availability of grazing.
- It entails the traditional seasonal movement between high-lying (summer) and low-lying (winter) areas. More grazing is available in the low-lying areas during winter due to the rainfall and the temperature is also higher during this season in the lower areas.
- The movement away from the high-lying areas during winter is also to prevent stock losses due to low temperature and occasional snow falls.
- All the stock farmers do not necessarily move their stock. Movement is also restricted due to certain factors. Firstly water is not everywhere available and secondly often the lack and the condition of roads make certain parts of the area inaccessible. Traditionally it is also the practice that stock farmers move from areas where adjacent farmers have sown on dry land plots.
- Rotational grazing can also occur on a daily basis where farmers have their animals graze in different directions away from settlements.

Currently rotational grazing is not applied on the commonage farms although it is indeed prescribed by the land use management plans. Farmers who entered into lease agreements on the commonage land are allocated camps according their stock numbers. However, no provision is made for extra camps to allow for rotational grazing.

Amongst individual farmers on the communal land the main motivation for rotational grazing may often not be to ensure the sustainable use of the natural resources but rather to sustain their stock for financial benefit. Movement of stock is also dependent on the available financial and human resources of individual farmers.

Figure 6.4.5: How successful is the application of rotational grazing



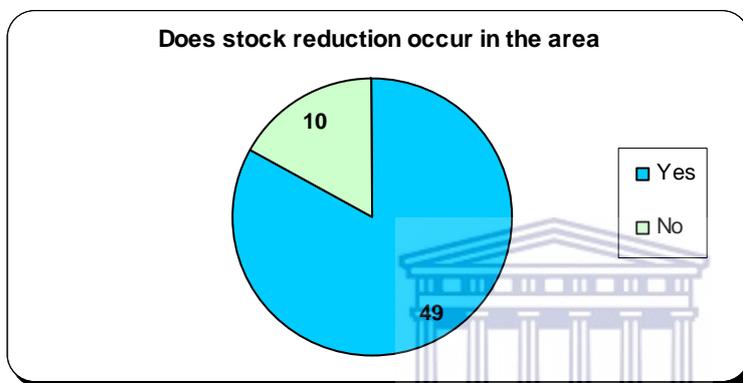
Of the 59 respondents interviewed, 10 (17 %) sees the application of the rotational grazing system as very successful in the area, 31 (53 %) are of the opinion that the system is applied successfully and 13 (22 %) regard the application of the rotational grazing system as unsuccessful.

Respondents were asked to provide reasons why they think rotational grazing is not applied in the area. The following reasons were provide by the respondents why rotational grazing is not practiced:

- No institution is currently enforcing the system of rotational grazing.

- There is not enough grazing available to allow all stock owners to practice rotational grazing.
- Water is not generally available.
- Transport and financial constraints prohibiting the implementation of rotational grazing.
- Commonage farms fall within summer rainfall area and communal land mostly in winter rainfall area. Currently stock owners may not graze their stock on both areas.

Figure 6.4.6: Stock reduction



Amongst stock farmers deliberate stock reduction programmes are the most common method to keep stock numbers within the carrying capacity of grazing areas. Pearmain and Williams (2004: 1-8) also identified alternative methods of feeding the stock and early weaning of offspring as other methods often applied to keep within the carrying capacity of grazing areas. The reduction of stock is very important because too many animals on the land will eventually lead to overgrazing and the lost of biodiversity.

Under favourable farming conditions the reduction of stock is a continuous process. Stock increases due to natural growth. The management of stock numbers is consequently indispensable for sustainable farming practices. Many stock reduction methods can be used. In the Leliefontein Rural Area the selling or bartering of stock are popular methods or strategies to keep stock numbers down.

The Department of Agriculture through their extension services (farmer days, information sessions) encourages farmers to reduce their stock to prevent overgrazing. Traditionally farmers also sell some of their stock at the end of the year. Stock is further reduced naturally through drought, shortage of water and grazing, and through losses when stock is caught by jackals, caracals and leopards and also theft.

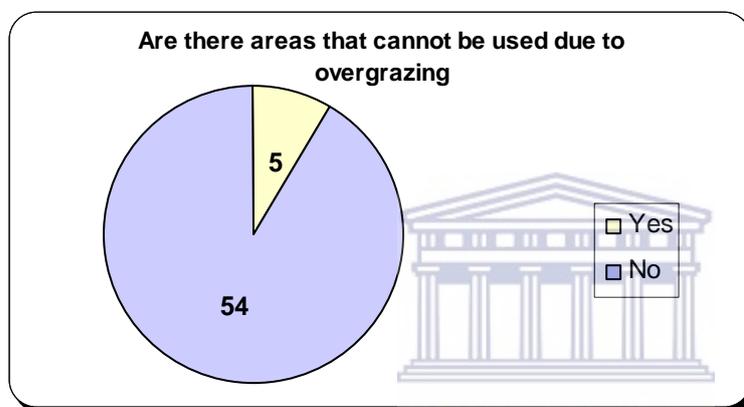
The overwhelming majority of the respondents (83 %) indicated that stock reduction occur in their area. Individual farmers, the Kamiesberg Municipality and the Department of Agriculture were identified as the institutions responsible for the implementation of stock reduction programmes. This responsibility may vary from education on stock reduction, provision on guidelines to the actual implementation. The reality is that stock reduction can only effectively be implemented on the commonage farms because lessees pay per stock unit.

The reason for this is that farmers pay grazing fees for every livestock unit that is on the commonage farms. Currently no fees are paid for livestock on the communal land. Some farmers therefore prefer to keep their stock on the communal land because they do not have to pay for grazing their animals on this land. This is potentially a tricky situation because grazing fees generate the funds that are needed to manage and maintain the farms in terms of administration and infrastructure. Lebert, (2004: 30) however, is of the opinion that the commonage farms are overstocked due to natural herd growth and the absence of any form of enforcement of stocking rates by the responsible management institution.

The respondents that indicated that stock reduction does not occur indicated that the main reason for this is the fact that no institution is responsible for implementation of such a policy. In their opinion the Municipality also does not enforce stock numbers. Various reasons were given for the lack of action on the side of the Municipality to enforce a stock limit.

The opinion of the respondents was that the Municipality is not willing to enforce stock numbers. The fact that the Municipality lacked financial and human capacity and resources to enforce stock reduction also contributes to the state of affairs. The respondents are of the opinion that the regulation of stock numbers was left entirely to the individual farmers. However, it is not necessarily in the immediate interest of the farmers to reduce stock numbers. Often large herds are used by stock owners as a survival mechanism because of periodic droughts in the area.

Figure 6.4.7: Opinion on overgrazed areas



The vast majority of the respondents (92 %) indicated that they are not aware of any area that cannot be used for grazing due to overgrazing. Observation by the researcher over a period of six years, however, has shown that stock is concentrated near the existing water points and settlements. This has a detrimental effect on the natural resources and leads to the overgrazing of these areas. Most of the respondents also indicated that there were no efforts to withdraw any area from grazing.

The few respondents (8 %) that did indicate that there are areas that cannot be use for grazing due to overgrazing identified the following as reasons for the overgrazing of the veld:

- No control is exercised over stock numbers by any official body.
- Individual farmers are responsible for stock numbers.

- There is no action against transgressions (overstocking etc.) by the local authority.
- Grazing tends to occur near settlements due to transport problems and lack of financial resources to establish water points in more remote areas. Stock owners who do not have transport and can not afford to employ herders will graze their animals near settlements.

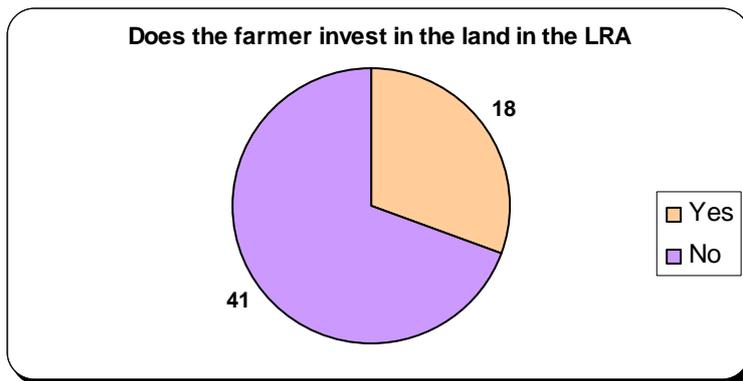
Some of the respondents recall that there were efforts during the 1980's to withdraw overgrazed areas from grazing. This happened when the area was still managed by the Department of Local Government, Housing and Agriculture of the previous House of Representatives. Areas were fenced off, animals withdrawn and areas allowed to rest.

The same method was applied to rehabilitate overgrazed areas. It should be noted that rehabilitation of the veld in a semi-arid area is a very slow process. It literally takes years for the veld to be restored to its natural condition. For example, Rohde, Benjaminsen & Hoffman (2000: 262) are of the opinion that the loss of natural capital in the Paulshoek area is recoverable over protracted periods of time estimated to between 30 and 50 years under controlled grazing conditions.

6.5 VOLUNTARY INVESTMENT IN THE LAND

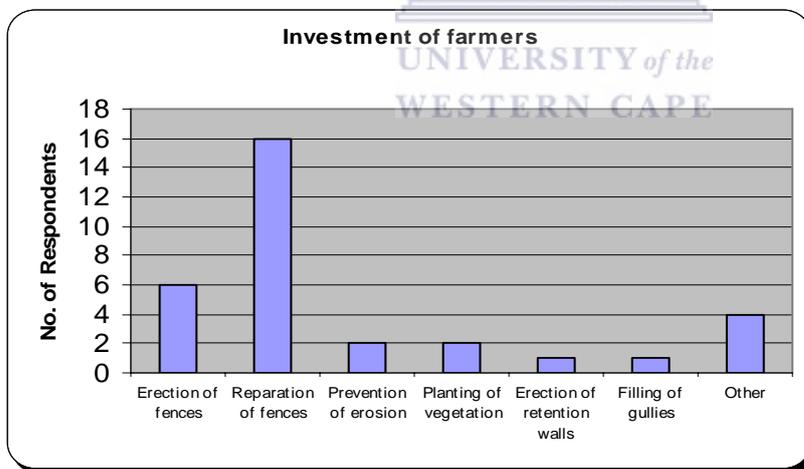
To establish whether or not the users invest in the land and what are the reasons why they invest or are not investing in the land are of central importance to this study. The respondents were also requested to identify the type of investment that are undertaken in the Leliefontein area and indicate more specifically the type of investment in the land that they themselves have undertaken.

Figure 6.5.1: Opinion on investment in the land



The majority of the respondents (69 %) indicated that farmers do not invest in the land. Thirty one percent of the respondents indicating that farmers do invest in the land are of the opinion that investment is mostly in the areas of the reparation and erection of fences. This type of investment is mostly beneficial to the individual farmer because of the financial benefit.

Figure 6.5.2: Investment of farmers in farm operations



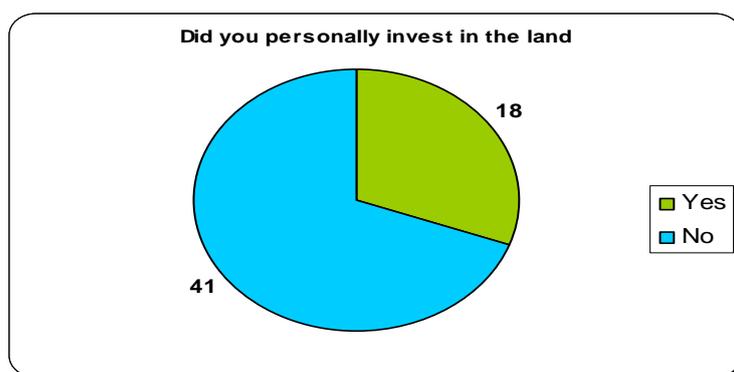
As mentioned above the majority of the respondents (69 %) indicated that farmers do not invest in the land. Respondents furnished the following reasons why they believe farmers do not engage in this practice:

- Farmers do not have the necessary funds to invest in the land and the material (fencing material, water pipes) that they need is very expensive.
- Communal ownership was also identified as a major obstacle preventing investment in the land. Under this system everybody has access to land in which one individual has invested. If an individual farmer makes improvements on the communal land other users may also benefit without having to invest capital or human resources. This in essence is the nature of the communal system of land ownership.
- The Municipality is viewed by the farmers as the responsible party for investment in the land, and not the users of the land.
- The income from farming is too low to invest in the land. The farmers do not regard investment cost effective.
- There is uncertainty on the possible future availability of the land by the individual who may want to invest in the land.

The respondents that indicated that farmers do invest in the land (31 %) identified the following activities as part of the investment:

- Erection of fences, reparation of fences and windmills.
- Planting of wheat as fodder and grazing for stock.
- Removal of shrubs from dry land plots.
- Planting of thorn trees and prickly pears for browsing.
- The prevention of erosion by filling gullies with branches.

Figure 6.5.3: Personal investment by farmers



The estimated cost of the investment in the land as indicated by the respondents varied overall between R 100-00 to R 500-00 per year. One respondent indicated that R 10 000-00 was invested over an extended period. The money was mostly spent on labour. It is clear from information gathering during this research that farmers are more willing to fund investments that are necessary for their farming activities and personally benefit them (fencing), than investing in activities that is more beneficial to the general environment through the sustainable use of the natural resources of the area (re-vegetation).

Those respondents that have not invested in the land and did intend doing it offered the following reasons for their unwillingness:

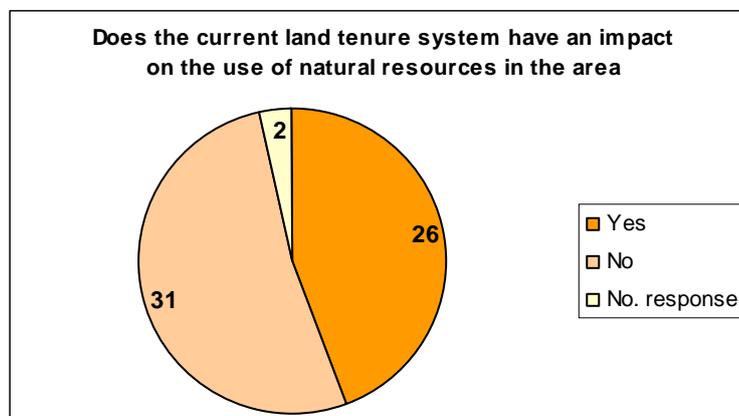
- It is not beneficial or cost effective for the individual farmer to invest in the land. The profit that an individual farmer or land user can potentially generate from the land is perceived to be too low to justify investment in the land.
- They do not have the necessary funds to invest – lack of access to credit.
- They are too old to benefit financially from investing in the land. Investment in land where extensive small stock farming is practiced can only be recovered over a long period.
- The land is communally owned and everybody has access to the land and thus benefits from an individual farmer's investment.
- The Municipality as owner of the land should take the responsibility to fund the necessary improvements and not individual land users. It is argued that just as private owners are taking most if not all the responsibility for their property the Municipality should take the financial responsibility for the land that it owns. The perception that the Municipality should take total responsibility probably emanates from the practice of three decades ago. During that period the State Department that was legally and otherwise accountable, i.e. the Department of Local Government, Housing and Agriculture of the

previous House of Representatives took the responsibility for all improvements and reparations of the Rural Areas. The fact that the present local Municipality firstly does have limited financial capacity and secondly does not benefit directly from using the land is overlooked by the present land users that want it to take financial liability.

6.6 LAND OWNERSHIP – IMPACT ON LAND MANAGEMENT

From the responses presented above, it is clear that land ownership status is a crucial variable in the attitude towards and proper usage of the natural resources. Respondents had different opinions on whether the current tenure system has had an impact on the use of the natural resources. A strong view that was expressed was that the tenure system currently operational in the Leliefontein Rural Area is impacting negative on the use of the natural resources. This is because individual farmers do not want to engage in the requisite land management protocols and are instead more inclined to implement their own land use plans on land that are used communally. There are also no attempts from individual farmers to integrate the different land use plans although the same land is used.

Figure 6.6.1: Impact of current tenure system on use of natural resources



It may happen that the individual land use plans of the different farmers on the same land may not necessarily be compatible with each other. The result will be that the implementation of the land use plans is ineffective. The absence of a land use management plan for the use of the natural resources may lead to the Leliefontein Rural Area functioning as a so called *open access area*. If stock owners can graze their livestock wherever they choose at any given time and a specific portion of land is not allocated to a defined individual it will have a detrimental effect on the natural resources.

As indicated earlier land conservation and rotational grazing cannot be effectively implemented under the current system of land use and ownership. The overstocking of available land and subsequent overgrazing of the land occur in the area under conditions of virtually no control over the movement of livestock. Individual land users often appear to want to maximize resource usage with the absolute minimum input. If an individual farmer decides to save grazing by withdrawing stock from an area another farmer will graze there. The result of this is that no incentive exists for the individual farmer to implement land conservation methods.

Everybody has user rights but the responsibility for the maintenance of the infrastructure and the sustainable use of the natural resources is not shared amongst the users. The unabated removal of trees for firewood to supply energy for domestic purposes is an example of the misuse, under the present tenure system, of a strategic natural resource. Trees play a critical role in terms of browsing in summer rainfall areas. According to Smit (2002: 56) in relatively dry areas that receive summer rainfall the browsing capacity is often determined by the amount of food available during the dry months just before the onset of the new rain season. Usually no action is taken against transgressions. This situation is unhealthy, untenable and ultimately unsustainable.

In addition, basic infrastructure indispensable for the implementation of responsible grazing practices like fencing and windmills are also not repaired or maintained. The water points are mostly situated on dry land plots of the communal land. The dry land plots are allocated to individuals but adjacent farmers are allowed to use the water points situated on the plots. The movement of livestock to and from water points over the allocated dry land plots leads to overgrazing and degradation and also infringes on the rights of the holder of the plots.

6.6.1 PREFERRED TENURE SYSTEM

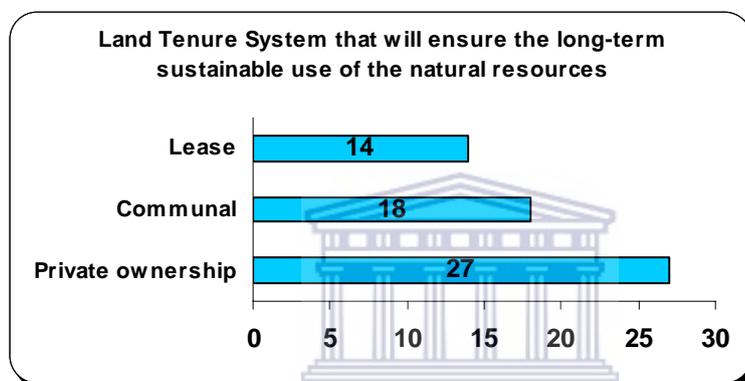
One of the main research goals was to investigate the most appropriate land tenure system that will result in the responsible use of natural resource utilization and sustainable natural resource management on the communal and commonage land of the Leliefontein Rural Area. It is therefore important to establish and consider the preferred tenure system of the present users of the said land, and more importantly the reasons why they opt or prefer a specific tenure system. The opinions and views of the users regarding the appropriate tenure system are very important because any future system can only be successfully implemented if generally accepted by the majority of the users.

Nearly half of the respondents interviewed (46 %) indicated that they prefer private ownership, while another 30 % indicated that they prefer communal ownership. Twenty four percent opted for a leasehold land tenure system. The questionnaire demanded from respondents to elaborate on their specific choice of tenure. For example, respondents had to motivate why they prefer a specific tenure system.

Respondents were also requested to explain or indicate how their preferred tenure system will operate, address serious contemporary local challenges like stock reduction programmes, approach unacceptable practices like overgrazing and how the long-term use of

the natural resources will be established. They were also asked what incentives (if any) their system will devise to encourage investment in the land and what punitive measures will be instated and steps taken against transgressions and specifically whether farmers will lose “user-rights” under their preferred tenure system. The following paragraphs reflect the opinions and sentiments of respondents regarding different aspects of land ownership.

Figure 6.6.2: Preferred tenure system to ensure the long-term sustainable use of the natural resources



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6.6.2 PRIVATE OWNERSHIP

Private ownership was chosen by nearly half of the respondents as their preferred tenure system to address the current problems experienced in the Leliefontein Rural Area under the present communal tenure system concerning issues of land usage and land management.

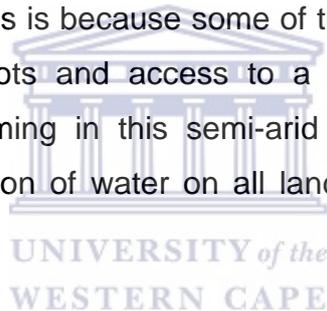
6.6.2.1 REASONS WHY THIS TENURE SYSTEM IS PREFERRED

The individual farmers are responsible for use of the natural resources on their land without interference from other parties. The income from the farming enterprise will belong to the individual farmer. The farmers will have incentives to invest in the land and undertake improvements

because only they and their families will directly benefit from their inputs. Private ownership will ensure better management and long-term planning. The land can be used as collateral to secure loans; this will lead to a more economically viable farming practice and system.

6.6.2.2 HOW WILL THIS TENURE SYSTEM OPERATE?

The existing communal land should be divided into economic units. The existing commonage farms must be subdivided. In addition more land should be purchased to accommodate farmers who intend to farm commercially. Land should be sold to farmers at a price that reflects its productive value with reasonable repayment period and interest rates. An important limiting condition of this system is that ownership should only be applicable to the grazing land and not dry land plots of the communal land. This is because some of the water points are situated on the dry land plots and access to a reliable water source is a prerequisite for farming in this semi-arid area. Another alternative could be the provision of water on all land to be disposed to private owners.



6.6.2.3 HOW WILL THIS TENURE SYSTEM ADDRESS STOCK REDUCTION?

Private ownership may automatically lead to stock reduction. The farmers are limited to a specific portion of land. It will thus be in their own interest to reduce stock because of long-term economic reasons. Stock reduction will impact positively on the available grazing which will impact on the quality of the stock produced and the long-term sustainability of the veld.

6.6.2.4 HOW WILL THIS TENURE SYSTEM ADDRESS OVERGRAZING?

Rotational grazing can be implemented effectively under private ownership, because the individual farmer can make decisions without

interference from other users. Individual farmers are restricted to their land. For this reason they will manage their grazing effectively. If they fail to manage their grazing it will have severe economic implications and could lead to financial ruin.

6.6.2.5 HOW WILL THIS TENURE SYSTEM ADDRESS THE LONG-TERM USE OF THE NATURAL RESOURCES?

- Under private ownership the natural resources will be used in a sustainable manner first and foremost for economic reasons. It is argued that the majority of private owners would not risk losing income by the over exploitation of the natural resources.
- The long-term income of the owner is dependent on how the natural resources are used.

6.6.2.6 INCENTIVES UNDER TENURE SYSTEM TO ENCOURAGE USERS TO INVEST IN THE LAND

- The owner will be the only person benefiting from the investment in the short and long-term.
- Investment in the land may result in higher yields and concomitant income.

6.6.2.7 POSSIBLE STEPS THAT CAN BE TAKEN AGAINST TRANSGRESSIONS (OVERGRAZING, OVERSTOCKING)

- Individual farmers will be the owners of the land. Private ownership in itself will minimize the possibility of transgression.
- Under private ownership transgressions will be detrimental to the individual farmer.
- There is no possibility of institutional action by the Municipality.

6.6.3 COMMUNAL OWNERSHIP

The second type of tenure system that was chosen by the respondents in order of preference was communal ownership. This is the system currently in operation in the Leliefontein Rural Area.

6.6.3.1 REASONS WHY COMMUNAL TENURE IS PREFERRED

Those respondents that opted for this tenure system thought that the Leliefontein Rural Area is too small to divide into individual farms. In addition to this they were of the opinion that the land belongs to the community and not individuals. Communal ownership will ensure that everyone living in the area will have an income and livelihood.

Private ownership will lead to poverty amongst those users who are going to lose their rights to use the natural resources. At the moment farmers are sharing water points and it is thus not in everybody's interest to allocate water points to individuals. Another reason for opting for communal tenure is that it is more cost effective to maintain infrastructure collectively under this system. Furthermore it is mentioned is that under individual ownership farmers will be restricted to a specific piece of land that may have devastating consequences for the individual during periods of protracted drought.

6.6.3.2 HOW WILL THE COMMUNAL TENURE SYSTEM OPERATE?

The infrastructure should be maintained communally with the help of the Local Authority. The farmers will contribute financially and provide labour when it is necessary to do infrastructural maintenance and reparation. The stock numbers should be controlled by a co-management structure of the Local Authority and the commonage committee.

6.6.3.3 HOW WILL THE COMMUNAL TENURE SYSTEM ADDRESS STOCK REDUCTION?

The Kamiesberg Municipality in consultation with the users will agree on the realistic and responsible stock numbers for the land in question. The carrying capacity of the land as determined by the Department of Agriculture will be taken into consideration when determining stock numbers. Transgressions should be penalized either by impoundment, fines or the suspension of user rights.

6.6.3.4 HOW WILL THE COMMUNAL TENURE SYSTEM ADDRESS OVERGRAZING?

- More fences should be erected on the communal land.
- A rotational grazing system should be introduced that is applicable to all the users.

6.6.3.5 HOW WILL THE COMMUNAL TENURE SYSTEM ADDRESS THE LONG-TERM USE OF THE NATURAL RESOURCES?

- The implementation of an overall land use management plan.
- The improvement of the management and planning system.
- The removal of all donkeys and horses without registered owners.

6.6.3.6 INCENTIVES UNDER THE COMMUNAL TENURE SYSTEM TO ENCOURAGE USERS TO INVEST IN THE LAND

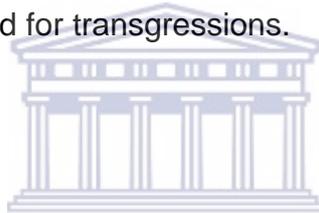
The acknowledged of historical user rights. Previous investment by applicants in the land should be taken into consideration with the allocation of land. Payment for grazing rights by all users. This will ensure that an economic value is attached to natural resources. Currently an economic value is only attached to the infrastructure and the grazing fees paid are therefore only for the maintenance of the

infrastructure. Users who want to invest in the land should be subsidized by the Local Authority. It must be mentioned that the current financial position of the Local Authority was not necessarily considered in this particular recommendation.

6.6.3.7 POSSIBLE STEPS THAT CAN BE TAKEN AGAINST TRANSGRESSIONS (OVERGRAZING, OVERSTOCKING)

The respondents that opted for this tenure system offered the following steps against those not adhering to regulations.

- Impoundment of stock.
- Warnings should be issued.
- Cancellation of user rights.
- Users should be fined for transgressions.



6.6.4 LEASEHOLD

A third model of a possible tenure system considered by the respondents was leasehold. This system is currently in operation on the commonage farms of the Leliefontein Rural Area.

6.6.4.1 REASONS WHY THIS TENURE SYSTEM IS PREFERRED

The respondents that supported this option stated that if people pay for the use of the land it will serve as an incentive to use the natural resources in a sustainable way and maintain the existing infrastructure. Another important reason for choosing this option is that leasehold is more affordable to the local population than private ownership. It is not possible for the farmers of the Leliefontein Rural Area to purchase private land and maintain the infrastructure on the land if the cost of the repayment of the bond and maintenance are considered.

6.6.4.2 HOW WILL THIS TENURE SYSTEM OPERATE?

Land will be leased on a yearly basis from the Kamiesberg Municipality. The current lessee can lease the land again if no serious transgressions were reported during the lease period. Existing camps should be subdivided to make provision for rotational grazing.

The management and enforcement of the leases by the Local Authority should be improved. The upgrade of the infrastructure on the commonage land will also contribute to the sustainable utilization of all the land. The communal land must be upgraded and divided into camps so that leasehold can be extended. Eventually the leasehold system should be instituted and applied on all available land in the Leliefontein Rural Area.

6.6.4.3 HOW WILL THIS TENURE SYSTEM ADDRESS STOCK REDUCTION?



A finite number of livestock will be an integral component of the lease agreement. The lease agreement and grazing regulations should be enforced by the Local Authority. Farmers will also pay in advance (yearly) for the total number of stock on the land. Transgressions will be viewed as a breach of the lease agreement that will result in the suspension of the agreement.

6.6.4.4 HOW WILL THIS TENURE SYSTEM ADDRESS OVERGRAZING?

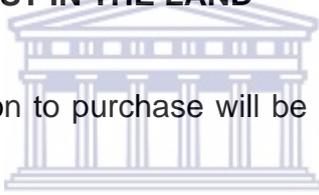
The lease agreement will make provision for rotational grazing. This implies that individual farmers should be allocated more than one camp or piece of land. The lease agreements must be enforced by the Local Authority. The stock numbers of the individual farmers should correspond with the carrying capacity of the land allocated to them. Transgressions, especially overstocking should be viewed in a serious

light and the suspension of lease agreements might be one of the measures.

6.6.4.5 HOW WILL THIS TENURE SYSTEM ADDRESS THE LONG-TERM USE OF THE NATURAL RESOURCES?

Lease agreements should be enforced to ensure compliance. Transgressions may result in the suspension of lease agreements. Leases are renewed annually. This will make it easier to withdraw farms or camps from grazing. If lessees do not comply with the requirements as stipulated in the lease agreement their leases are not renewed and their livestock should therefore be removed from the land.

6.6.4.6 INCENTIVES UNDER TENURE SYSTEM TO ENCOURAGE USERS TO INVEST IN THE LAND

- 
- Leases with an option to purchase will be an incentive to invest in the land.
 - Investment in the land should be taken into consideration when users apply for the renewal of leases. Individual that had invested in the land should be allowed to lease the same land for another term.

6.6.4.7 POSSIBLE STEPS THAT CAN BE TAKEN AGAINST TRANSGRESSIONS (OVERGRAZING, OVERSTOCKING)

The respondents that supported leasehold as an option identified the following as measures that could be taken against transgressions:

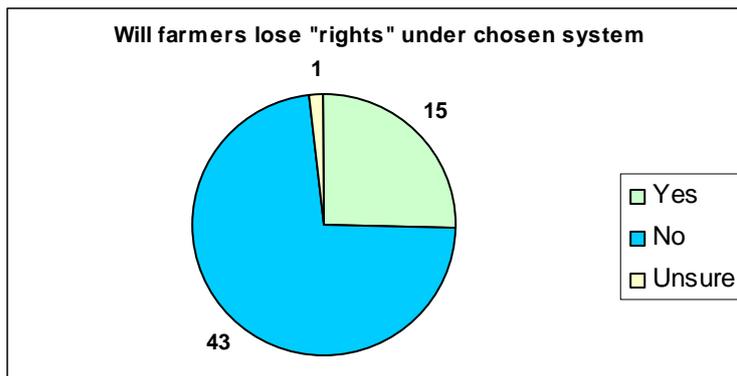
- Impoundment of stock by Local Authority.
- Fines for transgressions.
- Cancellation of lease agreements by Local Authority and allocation of land to other applicants.
- The non-renewal of lease agreements.

6.7 USER RIGHTS UNDER CHOSEN TENURE SYSTEM

Historically, residents from the different Rural Areas in Namaqualand had certain land-use rights. An individual with registered occupier status could also apply for grazing and/or sowing rights (SPP, 2003: 6). Over recent years the administration and registration of rights were not implemented because of the decrease in the administrative and financial support from the responsible Government Departments for the Rural Areas and the constant changes in local government structures and systems. Problems and tension were experienced especially around the allocation of sowing rights (SPP, 2003: 8).

This research wanted to establish how respondents expected the present status and security of their existing land use rights to change if the tenure system they prefer was to be implemented. Of the respondents interviewed 43 (73 %) was of the opinion that no farmer would lose some of their current user rights under their preferred system. Only 15 (25 %) believe that some farmers will lose some of their rights. This does not correlate with the indicated preferred tenure system by some respondents: forty six percent of the respondents indicated that they prefer private ownership. It can surely be taken for granted that under the private ownership tenure model some farmers will definitely lose their land user rights. This anomaly would suggest that some of the respondents that opted for private ownership do not comprehend the full implications of this model or have not adequately taken the consequences into consideration.

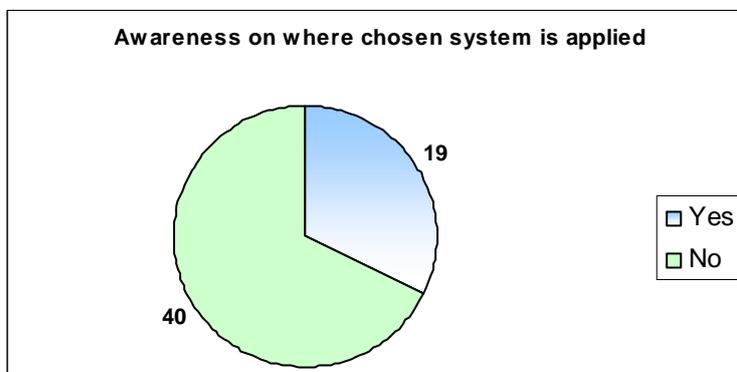
Figure 6.7.1: Will farmers lose rights under chosen system



Those respondents (15 %) who indicated that some of the farmers will lose some user rights should their choice of land tenure be implemented gave the following reasons:

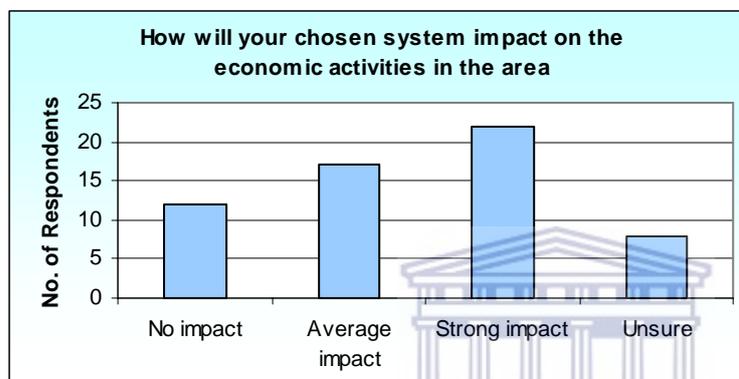
- The land is too small to divide into economic units to accommodate all the existing farmers.
- Farmers will be restricted to a specific area and will not be allowed to move around in search of grazing as is currently the case.
- Farmers would not be allowed to use water points on land allocated to a specific individual.
- If farmers default on payments to financial lending institutions (in the case of private ownership), the land may be sold to outsiders to recover losses.

Figure 6.7.2: Example of chosen system



The research wanted to ascertain whether respondents were aware and could cite examples where their preferred model of land tenure had been implemented. It is interesting and perplexing to note that 40 (67 %) of the respondents indicated that they were not aware of any example where their chosen system had been applied even though the communal and leasehold systems are operational in the Leliefontein Rural Area and private ownership on the surrounding neighboring farms.

Figure 6.7.3: Impact of chosen system on economic activities



Of the 59 respondents interviewed 22 (37 %) indicated that their chosen tenure system will have a strong impact on the economic activities in the Leliefontein Rural Area, Seventeen (29 %) indicated a moderate positive economic impact. Twelve (20 %) of the respondents indicated that there will be no impact while 8 (14 %) were unsure about the impact.

Only the respondents that preferred private ownership provided motivations that explained the perceived possible outcomes of their model of land-use. The positive economic impacts identified by the respondents were:

- Farmers will be more willing to invest in the land within the framework of possible higher income from farming.
- The output from farming will increase in terms of quantity and quality.

- More employment opportunities will be created.
- The higher income per individual farmer will have a positive impact on the economic activities in the area overall.
- The only negative economic impact associated with private ownership that was stated concerned the fact that farmers will be restricted to a specific piece of land. This may have a detrimental impact on their livelihoods during extended drought periods.

This chapter dealt with some crucial aspects of this research. The opinions, views and preferences of the respondents on land conservation, rotational grazing, stock reduction, investment in the land and preferred tenure system provided a valuable insight into the thoughts of the land users in the Leliefontein Rural Area regarding these important issues.

The respondents indicated that land conservation is practiced in the Leliefontein Rural Area but the implementation thereof is not coordinated between individual farmers. Rotation grazing is applied on the communal land but not on the commonage farms. The system of rotational grazing is also not enforced by any institution. Access to transport, the severity of financial constraints and the availability of water in different parts of the area has a major influence on whether rotational grazing will be practiced by individual farmers.

Stock reduction is also only implemented on the commonage farms because lessees pay grazing fees for every livestock unit on the commonage farms. The majority of the respondents indicated that farmers do not invest in the land. The respondents also indicated that they have not personally invested in the land.

The respondents were divided on whether the current tenure system has a negative impact on the use of the natural resources. Respondents also were requested to indicate the tenure system that

they prefer to ensure the sustainable natural resource management. Nearly half of the respondents preferred private ownership, 30 % communal ownership and 24 % leasehold.

The majority of the respondents (73 %) were of the opinion that no farmer will lose any of their current user rights under their preferred system. This, however, does not correlate with the tenure system preferred by the majority of the respondents, namely private ownership. Under private ownership some farmers will definitely lose existing user rights on the land.



7

Current Tenure System

Within the context of the central research question and subsequent focus of this study it is necessary to evaluate the current tenure system operational in the Leliefontein Rural Area in terms of its effectiveness of ensuring the sustainable use of the natural resources in the area.

As previously discussed the propositions identified as crucial for the sustainable use of the land in the research area include rotational grazing, stock reduction, rehabilitation of the land, investment in the land as well as sanctions against transgressions of rules and measures that regulate the use of the natural resources. It is, however, important to look how the current system has historically developed over years before looking at the institutional and social arrangements that are in place to regulate the use of the natural resources in the area.

7.1.1 HISTORICAL DEVELOPMENT OF THE LELIEFONTEIN RURAL AREA

The Leliefontein Rural Area developed when the encroachment of the European settlers in the 1800's onto their traditional hunting and grazing areas of the indigenous population forced them off their ancestral land and compelled them to concentrate around the Leliefontein mission station. In 1854 a "Ticket of Occupation" was issued for the tribe of the Little Namaqua Hottentots (sic). The certificate of occupation made provision for the land to be kept in trust for and on behalf of the indigenous Nama inhabitants and their descendants (SPP, 2003: 5).

During the 1900's Leliefontein was managed by various Government Department until it was put under the administration of the Department of Coloured Affairs in 1952. The area was exclusively reserved for the occupation and holding of "Coloureds" as a logical ramification and development of the ideology of Apartheid. The communal ownership of the land continued over the years with subsistence stock farming the major economic activity in the area.

During the 1980's the Department of Coloured Affairs decided to divide the communal land into economic units and lease it to individual farmers. The decision was challenged in the Supreme Court because the majority of the residents were opposed to the introduction of the economic units, and the Court ruled in the favour of those opposed to the introduction of the economic units (SPP, 2003: 7). The land is therefore currently still communally owned under the Trusteeship of the Minister of Agriculture and Land Affairs.

7.2 INSTITUTIONAL ARRANGEMENTS

In 1909 the Mission Stations and Communal Reserves Act, (Act No. 29 of 1909) was promulgated. This act stipulated that only individuals acknowledged as 'registered occupiers' had permission to reside in the Rural Areas. The allocation of registered occupier status made provision for grazing, sowing rights and in certain cases for gardens (SPP; 2003: 6)

From 1963 the Leliefontein Rural Area was managed in terms of Act No. 24 of 1963 (Act on Rural Coloured Areas). This act made provision for the establishment of Management Boards. The establishment of these Boards was an important development as they were given strategically crucial tasks: they were responsible for the allocation of occupational and use rights as well as the proper and responsible management of the resources in this Rural Area (Lebert,

2004: 5). The Boards were also responsible for the collection of grazing fees.

In 1979 Act No. 24 of 1963 was replaced by the Act on Rural Areas (Act No. 1 of 1979), while the latter were replaced by in 1987 by Act 9 (Act on Rural Areas). The allocation and administration of land use rights was controlled by regulations promulgated in terms of the mentioned legislation. Act 9 of 1987 is still applicable on the Rural Areas and will be repealed in terms of Act No.94 of 1998 (Transformation of Certain Rural Areas Act) after the completion of the Transformation Process whereby the residents of the Rural Areas have to decide on the legal entity to hold and manage the communal land in the future. Recommendations have been made to Minister of Agriculture and Land Affairs in terms of the legal entities to hold and manage the communal land. After approval by the said Minister the land will be transferred to chosen legal entities.

During the last two decades of the previous century the Department of Coloured Affairs and later the Department of Local Government, Housing and Agriculture of the House of Representatives funded improvements and upgrading of the infrastructure on the communal land. With the dissolution of the House of Representatives after 1994 the funding and management support for the Rural Areas, including Leliefontein, decreased. The Northern Cape Provincial Department of Local Government and Housing became the legal entity responsible for the Rural Areas in Namaqualand.

As indicated above towards the end of the last decade of the previous century, Government support for the maintenance and administration of the communal land was gradually phased out. The Kamiesberg Municipality became responsible for the Leliefontein Rural Area after the finalization of the municipal demarcation process in 2000. Besides the management and administration of the communal land of Leliefontein, the Municipality was now also responsible for the

management and administration of commonage land, as well as for the execution of other municipal tasks in Kamieskroon, Garies, Soebatsfontein within its administrative area including Hondeklip Bay and Lepelsfontein.

In 1999 a community based Commonage Committee was established to co-manage the Leliefontein communal and commonage land with the Kamiesberg Municipality. The co-management approach was adopted to ensure that the management of the commons moves away from a top-down and remote style of control, with unilateral rule-making and enforcement to a more democratic style that incorporates participative rule-making with land users or beneficiaries centrally involved in the management process (Pienaar & May, 2003: 7).

In 2003 the Commonage Committee, that basically functioned as a voluntary non-governmental organization at this stage, was converted into a municipal entity in terms of section 82(2) (a) of the Municipal Systems Act of 2000. In terms of a Service Delivery Agreement between the Leliefontein Commonage Committee and the Kamiesberg Municipality, the Commonage Committee became officially responsible for the management of the communal and the commonage land on behalf of the municipality, in terms of the Management Plan and Grazing Regulations.

As part of the 1997-1999 Namaqualand District Planning Project facilitated by Surplus People Project (SPP), a Management Plan for the Leliefontein Rural Area was developed. All the relevant stakeholders e.g. Local Authorities, Department of Agriculture, farmers and other State Departments were involved in this interactive process.

The following institutions are represented on the Commonage Committee:

- Commonage sub-committees established in the different settlements of Leliefontein.
- Northern Cape Provincial Department of Agriculture
- Kamiesberg Municipality represented by the Development Officer

In total the Commonage Committee consists of 22 members, comprising of 2 members each of the 10 settlements committees and the one representative respectively of the Municipality and Department of Agriculture. Within the Commonage Committee a Management Committee was elected that is mandated to deal with the day to day business including the evaluation of local farmers and land users to use the commonage farms. Before the signing of the Service Delivery Agreement the Commonage Committee did not have any legal authority to enforce the Management Plan and Grazing Regulations. The Committee only had advisory power.

Due to the lack of financial and human resources the Municipality is not in a position to enforce the Management Plan. Although the Commonage Committee does have the legal authority to manage the commonage land communal land of Leliefontein after the signing of the Service Delivery Agreement the lack of financial and human resources made the implementation and enforcement of the Management Plan and Grazing Regulations ineffective. Important tasks like regular stock counts, enforcement of rotational grazing cannot be performed.

7.3 IMPLEMENTATION MODALITIES

In order to analyze the ability of the current tenure system to ensure the sustainable use of the natural resources it is important to see how strategically important processes like stock reduction, rotational grazing and investment in the land are addressed at the moment.

7.3.1 STOCK REDUCTION

Although the majority of the respondents surveyed in this study indicated that stock reduction does indeed occur in Leliefontein Rural Area, other research indicated that the area is overstocked (SPP, 1997: 4). The control of stock on the commonage farms is better than the control on the communal land because of the payment of grazing fees in the case of the first mentioned. The fact that at present no institution besides the individual farmer is in effect responsible for stock reduction makes the coordination of stock reduction difficult. As mentioned earlier the Commonage Committee does have the legal authority to manage the commonage and communal land of Leliefontein which also include stock reduction. However, the lack of financial and human resources makes enforcement ineffective.

The communal ownership of the land with land user rights to all the residents of the Leliefontein Rural Area also makes the control of the stock numbers very difficult. Individuals can decide at any given moment that they want to start with stock farming or terminate their farming enterprise. The reduction and sometimes closure of the mining operations in Namaqualand contributes to this uncontrolled entry in stock farming in Leliefontein.

At the moment the Leliefontein Commonage Committee cannot undertake regular stock counts due to the lack capacity, notably financial and human resources. The ability of the management institution to take action (legal action, impoundment etc.) against transgressions (e.g. overstocking) is also curbed by this incapacity. It is also not necessarily in the short term interest of the individual farmers to reduce their stock numbers, because large stock numbers are also used as a survival mechanism during periodic drought periods.

7.3.2 ROTATIONAL GRAZING

The majority of the respondents (93 %) indicated that they are familiar with the practice and term rotational grazing, while (86 %) thought that rotational grazing is applied in the area. Sixty eight percent of the respondents indicated that individual farmers are primarily responsible for rotational grazing and not other institutions. However, from the findings of this research, other research initiatives (Rohde, Benjaminsen & Hofmann, 2002: 256, Cowling and Pierce, 1999: 43), as well as from personal observation by the researcher, it is evident that rotational grazing in the Leliefontein Area is not practiced widely and furthermore is not currently coordinated.

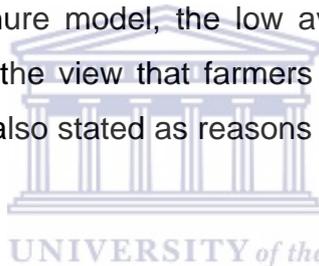
In the Leliefontein Rural Area rotational grazing varies from the traditional seasonal movement between winter and summer grazing areas, to daily grazing in different directions near settlements. There is at the moment, however, no systematic scientifically based rotational programme of grazing evident in this area. As far back as 1997, the SPP Namaqualand District Planning indicated that the Local Authorities of the Rural Areas in Namaqualand does not have registers recording the number of stock permitted to in specific areas ((Pienaar & May, 2003: 2). Lebert (2004: 6) also indicated that neither the grazing regulations nor the management plan were applied on the communal land of Leliefontein, even up to 2004.

Individual farmers apply rotational grazing primarily for their own financial benefit and not necessary for the broader and long-term sustainable use of the natural resources. Rotational grazing is also restricted by the availability of water, inaccessibility (absence and condition of roads) of parts of Leliefontein and the financial position of farmers. On the commonage farms, farmers are allocated camps according to their stock numbers. Rotational grazing can thus only happen within the confinements of the allocated camps with possible a detrimental impact negatively on the plant life.

7.3.3 INVESTMENT IN THE LAND

The majority of the respondents (69 %) indicated that the farmers of this area generally do not invest in the land and that they personally have not invested in the land either. In cases where farmers do invest in the land the investments is limited to activities that are directly beneficial to them like the reparation of fences, water infrastructure and the erection of fences.

The communal ownership of the land was identified as the main reason why farmers do not invest in the land. The implication is that other farmers have as much access to land in which an individual land user has invested resources. The type of tenure is thus of central importance to understand the non investment in the land. Apart from an inappropriate tenure model, the low average annual income from farming, as well as the view that farmers do not have the necessary funds to invest was also stated as reasons why farmers do not invest in the land.



Rohde, Benjaminsen & Hoffman (2000: 257) indicated that the overwhelming majority (87 %) of communal stock owners in Leliefontein own between 66 and 84 small stock and have average monthly household incomes of around R 1 400-00. This, however may not be an exclusive on farm income, but could also include welfare grants, temporary employment and family support.

The farmers that lease the commonage land also do not invest in the land or undertake improvements mainly because the twelve-month period is too short to recover the cost of the investment. Investment (fences, erosion control structures) in land used for grazing can only be recovered over a long period. They are also not sure that they will receive the same land the following year with the implication that somebody else may benefit from their investment. Once again here the model of land tenure and more specific particular conditions

attached to it is singled out as the main reason for non investment in the land.

7.3.4 SANCTIONS

Currently the commonage land of Leliefontein is managed through a leasehold system while the rest of the land is managed communally. The management institution responsible for the management and administration of the Leliefontein Rural Area under the current tenure systems operational in the area is not in a position to take actions (legal action, impoundment) against transgressions (overstocking, overgrazing). This is due to a lack of capacity, notably financial and human resources. Although the Commonage Committee does have the legal authority after the signing of the Service Delivery Agreement, the lack of financial and human resources makes the implementation and enforcement of the Management Plan and Grazing Regulations ineffective (Lebert, 2004: 34).

Prior knowledge of the researcher and discussions with an official of the Kamiesberg Municipality confirmed that sanctions are currently restricted to the issuing of warnings. The cost of sanctions such as impoundment of stock and legal actions is too high for the Local Authority to undertake. If transport costs for inspections and impounded animals, cost of the fodder to feed impounded animals and other costs are considered impoundment is not cost effective. This also applies to possible high legal costs that can not always be recovered even if the Court rules in favour of the management institution.

To ensure successful impoundment or legal action an effective administrative infrastructure is needed. The records of stock farmers stock numbers and payment of grazing fees, issuing of circulars and warnings, field reports of inspections etc. should be reliable and accurate. This is currently not the case. (Lebert, 2004: 34).

8

Alternative & Appropriate Tenure Systems

It is clear from the results emanating from this survey, as well as conclusions from other research studies indicated in chapter two that the communal tenure system currently operational in the Leliefontein Rural Area does not encourage adherence to certain crucial practices necessary for the sustainable use of the natural resources in the area. This would include rotational grazing, stock reduction, investment in the land by users etc. It militates against sound farming practice – systems and the sustainable use of the natural resources. It is therefore important to investigate alternative forms of land tenure to what is practiced at the moment i.e. communal land tenure. In the following paragraphs two different options, i.e. private ownership and leasehold will be considered.

8.1 PRIVATE OWNERSHIP

Of the respondents interviewed slightly less than half (46 %) indicated that they prefer private ownership as a form of tenure in the Leliefontein Rural Area. The reasons why the specific tenure system is preferred includes the following:

- individual farmers will take responsibility for the use of the natural resources on their land without interference from other parties,
- farmers will have the necessary incentives to invest in the land and undertake improvements because they will be the main beneficiary from their inputs, and
- Private ownership will also encourage and ensure better management and long-term planning.

Since the creation of the Namaqualand reserves in the 1800's including Leliefontein, there have been ongoing attempts to transform the communal nature of tenure and land use (Lebert, 2004: 3). These attempts were motivated in terms of a perceived 'tragedy of the commons' (Lebert, 2004: 4). The "commons" or communal farming was seen as having severe social and economic consequences for the people that lived on and from it. Communal farmers were seen as irresponsible 'free riders' whose striving to maximize individual gain had given rise to severe overstocking and subsequent overgrazing.

It is the opinion of the researcher that if communal tenure is converted to individual land holdings, farming would be limited to bona fide farmers who would be motivated to apply responsible farming practices in order to establish economically viable enterprise: stock numbers would be reduced and the individual users will be more responsible for the management and control of individual holdings. There is also in some circles, often referred to as "neo-liberal", a belief that individual tenure is more progressive, modern, and efficient and better for economic growth than indigenous communal tenure (United Nations Economic Commission for Africa, 2003: 7).

It is further indicated by the United Nations Economic Commission for Africa (2003: 7) that customary tenure systems including communal tenure, are perceived as anti-developmental, inflexible in responding to market signals, affecting choice of technology and crops and, because land cannot be sold better farmers have difficulty gaining access to land. The insufficient security provided by these tenure systems also contributed to low levels of investment.

Those propagating private land ownership argue that this form of tenure facilitates conditions necessary for the sustainable use of the natural resources. It is, for example in the interest of the individual land owner to keep within the carrying capacity of his/her land; practice

rotational grazing, invests in the land and uses the natural resources in a sustainable manner.

It is important to note that secure tenure does not necessarily imply private ownership. The right to sell the land, rent it to others and to use it as collateral for a mortgage is regularly mentioned as one of the main advantages of private ownership. These generalizations about economic empowerment by individual ownership will usually hold true in well-developed market economies, they are less reliable in transitional economies, where market forces generally are not well developed and markets are sometimes imperfect (Bruce, 2004:128). The fact that private land owners can lose their land if they are unable to repay loans is often underplayed especially in the context of a model to change communal tenure to private ownership.

The division of communal land into private land holding units has implications in terms of the legitimate rights of the current land and resource users. According to the United Nations Economic Commission for Africa (2003: 8) the demarcation of communal land into ranches that were given to individuals and groups for commercial use from 1975 in Botswana had serious implications. It led to an estimated 20 000 people including smallholders and individuals without stock and hunter-gatherers to lose their rights to utilize or occupy the land.

Cousins (2002: 2) also support this view. He indicated that the extensive land titling programme in Kenya that started from the 1950's and continued after independence have not achieved the anticipated consequences. Intended outcomes such as free market in land, credit to small farmers have not materialized. Community-based patterns of allocation and inheritance have persisted even where all land is nominally under individual freehold. The conversion of communal land into private entities, however, resulted in unintended negative outcomes such as land concentration, inequalities in agricultural income, landlessness and rural-urban migration.

In the report of the Department for International Development: Southern Africa (2003: 10) it is indicated that privatizing the former Bantustans in an titling exercise has appeal to a range of actors, including many rural rights holders. The danger is, however; that a rapid shift towards titling and privatization will undermine the rights of the marginalized and serve to consolidate vested interests. Furthermore communal land represents a key national resource with which to redress inequalities and provide some of the country's poorest with access to social protection, entitlement and agricultural assets.

The above-mentioned examples suggest that the conversion of the communal land of Leliefontein to private ownership will not necessarily be the best alternative and in the best interest of the more vulnerable, especially in the light of the expanded legitimate rights of all the current users, the unsympathetic geo-physical environment and the size of the available land. The communal and commonage land of the Leliefontein Rural Area is not large enough to accommodate all the current stock owners and users of the natural resources if it is divided into economic freehold units. Only the better resourced and the more commercially orientated farmers will be able to purchase land holdings and maintain the infrastructure on the land.

If private ownership is to be introduced in the Leliefontein Rural Area by way of dividing the communal and commonage land in economic freehold units the majority of the current users and specifically the poor may eventually lose their access to the land. Failure or defaulting to repay loans, rates and taxes may also pose a constant threat under private ownership. As mentioned earlier privatization will undermine the rights of the marginalized and serve to consolidate vested interests.

The role that communal tenure plays in providing the poor with a crucial livelihood asset that cannot be alienated through sale or failure to repay mortgage should be kept in mind. Communal tenure also provides a base for the accumulation of social capital, which creates

conditions for social stability during times of change and economic instability (Department for International Development: Southern Africa (2003: 16).

8.2 LEASEHOLD

Leasehold tenure was the third option of the respondents surveyed in this study. Twenty four percent indicated that they prefer leasehold which is significantly less than the percentage respondents that opted for private ownership and communal tenure. Those respondents in favour of leasehold argues that under this system of tenure there will be the necessary incentive to use the natural resources in a sustainable way, and maintain the infrastructure due mainly to the fact that individuals will have to pay for the use of the land. They also suggested under a leasehold system land will be more accessible than under private ownership thus making it more accessible to the poor.

It should however be noted that the payment of grazing fees by the users may pose a challenge in the implementation of a leasehold system. It is well known that users with low stock numbers frequently are not financially in a position to pay grazing fees. In order to implement sustainable tenure system users should pay for the administration and maintenance of the infrastructure.

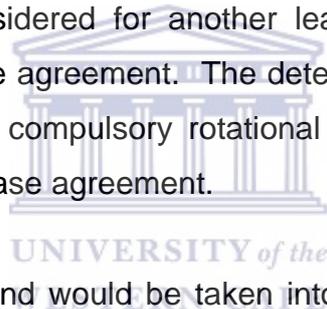
Reliance on external assistance over the long-term would undermine the sustainable implementation of a leasehold system and could cause the system to collapse. To assist the subsistent farmers a dual fee structure whereby the subsistent farmers pay less for grazing than the more commercially orientated farmers should be considered.

Currently the commonage farms of Leliefontein are operated on a leasehold basis. The implementation, management and administration of the leasehold system by the Commonage Committee are not very effective. This is patently clear from evidence collected in this survey

as well as other studies (Lebert, 2004). As indicated in chapter 8 the lack of financial and human resources hampers the effectiveness of the management institution. The infrastructure on the commonage land is also not maintained.

It is the opinion of the researcher that the conditions and processes necessary for the sustainable use of the natural resources of the commonage and communal land of the Leliefontein Rural Area can be addressed by the signing and enforcement of a lease agreement. Ideally, this lease period should be a minimum of 5 years.

The lease should, however, be reviewed on a yearly basis. This will allow the management institution to cancel a lease contract at any time if the lessee does not adhere to the lease agreement. The lessees would only be considered for another lease period if the individual adhered to the lease agreement. The determination and monitoring of stock numbers and compulsory rotational grazing will be an integral component of the lease agreement.



Investment in the land would be taken into consideration when users apply for the renewal of their leases. Individuals who have invested in the land would be allowed to lease the same land for another term. Transgressions may result in the cancellation of lease agreements and the allocation of the land to other applicants.

Leasehold can be operational under both communal and private tenure systems. It is therefore not necessary to change the communal system in order to extend the leasehold system to the communal land.

The key to the sustainable use of the natural resources of the Leliefontein Rural Area may be found in reconciling and balancing the disparate interest of the various users. On the one hand an accommodation of the interests and rights of the current land users must be established, while on the other hand incentive should be

provided for the more commercially orientated farmers to invest in the land. This should, however, go hand in hand with the implementation and enforcement of a socially just and economically viable land use plan for all the land of the Leliefontein Rural Area.





Proposed Tenure System

As mentioned in the previous chapter an appropriate tenure system for the Leliefontein Rural Area should accommodate the rights of the current users, the implementation and enforcement of an appropriate and sustainable land use plan for the area, as well as the provision of incentives especially for the more commercially orientated farmers to invest in the land.

9.1 APPROPRIATE TENURE SYSTEM

This research has critically analyzed the different options for the implementation of a new land tenure system for the focus area of this research, i.e. the Leliefontein Rural Area. In this process the views and sentiments of current actors as well as insight emanating from secondary research data were consulted to arrive at a valid and representative picture of the feasibility of the different alternative models of tenure and the relative support amongst the current users of the land in this rural area.

From the available research results and evidence it can be stated that any tenure system for the Leliefontein Rural Area must contain two vastly different qualities, i.e.:

- firstly it must create an environment that accommodate the unique circumstances and demands of subsistence farming, and

- secondly it must create an enabling environment for the more commercially orientated farmers to be able to farm in an economically viable and also in an environmentally sustainable manner.

This two-pronged approach is, however, possible and necessary in the context of the Leliefontein Rural Area. The current rights of the users should be considered while provision is made in terms of incentives for the more commercially orientated farmers.

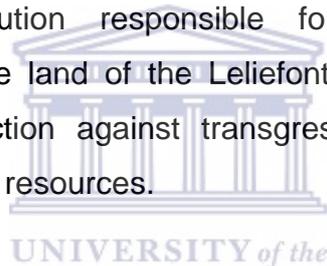
This researcher argues that the most appropriate tenure system to ensure the sustainable use of the natural resources of the Leliefontein Rural Area would be a combination of communal tenure and leasehold. Broadly, the land will still be owned communally but provision for the possibility of a system for leasehold will be made. The right of the subsistence users to use the land will be accommodated and incentives will be provided for the more entrepreneurial farmers. Mathuba (2004: 90) indicates that leasehold is preferable because it preserves an element of community control and enables landholders to use the land as security for loans.

It is important to note that communal tenure provides the poor with a crucial livelihood asset that cannot be alienated through sale or failure to repay mortgage. It provides a base for the accumulation of social capital, which creates conditions for social stability during times of change and economic instability (Department for International Development: Southern Africa, 2003: 16). It must be seen as a crucial part of an extensive social security net that is indispensable for the livelihood security of the chronically poor and marginalized as well as an important element of a comprehensive poverty reduction strategy (Hulme & Shepherd, 2003: 403-423).

Lebert (2003: 43) agrees with this. He states that the Leliefontein reserve remains a critical place of refuge for those between jobs, thus enabling residents to weather the vagaries of the regional labour

market. Access to land for impoverished rural people is undoubtedly an important and sensitive issue, not only for obvious political historical reasons, but often also for strategic socio-economic considerations. For many families in the Leliefontein Rural Area possessing livestock acts as a buffer or an insurance against unemployment or failure to receive sufficient income by other means. Sheep and goats provide capital storage for emergencies.

It is, however, clear from mounting evidence that the communal system cannot operate indefinitely in the Leliefontein Rural Area in its current format. The communal system practiced in the area led to overstocking and overgrazing. This, together with the absence of proper agricultural practices and institutional arrangements resulted in the general degradation and depletion of the natural resources. The management institution responsible for the management and administration of the land of the Leliefontein Rural Area is not in a position to take action against transgressions due to the lack of financial and human resources.



The once-off transfer of the communal land to private legal entities or individuals may also not necessarily be a workable solution. New sets of insecurities may be created due to the workings of the market and the lack of administrative infrastructure to monitor and support these new entities (Department for International Development: Southern Africa, 2003: 11). No support system exists from the side of the Government to render financial, institutional or administrative assistance to legal entities holding private land. The privatization of communal land may therefore not necessarily be a feasible option.

The proposed tenure system that is deemed workable and viewed as appropriate and feasible for the Leliefontein Rural Area is a system that should be arranged along the guidelines of the so-called of community-based natural resource management (CBNRM) as outlined by

Whiteside (1998: 104): These guidelines can be summarized as follows:

- It is necessary for a relative discrete community to exist with a defined relation to particular natural resources.
- The community's diverse interests (rich, poor etc.) must be sufficiently compatible.
- The benefits of collective action must outweigh the costs.
- The community must have the capacity to manage the scheme.
- The community must have the capacity to enforce rules among itself and on outsiders.
- The community's interest in the environment must be sufficiently compatible with national interests.

The Leliefontein Commonage Committee that was converted into a municipal entity in terms of section 82(2) (a) of the Municipal Systems Act of 2000 may be ideally placed to manage the communal and commonage land along the guidelines of community-based natural resources management as stated above. As discussed earlier, in terms of a Service Delivery Agreement between the Leliefontein Commonage Committee and the Kamiesberg Municipality, the Commonage Committee will formally manage the communal and the commonage land on behalf of the municipality, in terms of the Management Plan and Grazing Regulations.

The vested interest of the members of the Commonage Committee undermines the effectiveness of the mentioned committee. Lebert (2004: 36) is of the opinion that the Commonage Committee chose the issues they want to act upon. He alluded to the fact that the committee will enforce the exclusive rights of access to the camps on the new farms while the enforcement of stock numbers would not necessarily be high on their priority list.

A *co-management approach* (Local Authority and Commonage Committee) may be a more appropriate model or strategy for the effective natural resource management in the Leliefontein Rural Area. Co-management in community based natural resource management involves the building of partnerships between communities and other stakeholders in which decision-making power, responsibility and authority for natural resource management is shared (Mohamed, 2002: 39). This approach may help to overcome the pervasive problems as identified in this and other studies done in the Richtersveld and Malawi (Mohamed; 2002: 41-47) that are associated with natural resource management.

The idea of a co-management approach evolved essentially because of a limited state capacity to effectively implement natural resources management policies and the incapacity of community-based institutions to enforce relevant rules and regulations pertaining to natural resource usage as well as to distribute benefits equitably and manage natural resources in a sustainable manner.

With the conversion of the Commonage Committee to a municipal entity the responsibility and accountability of the Municipality regarding the administration and management of the communal and commonage land of Leliefontein shifted to this institution. This has implications for the effective administration and management of the land of the Leliefontein area.

At the moment it is expected of the Commonage Committee to fulfill the same function in terms of the management of the land as the Municipality without the necessary financial and human resources. Without these resources the Commonage Committee cannot enforce payment and adherence to regulations pertaining to the sustainable use of the natural resources.

A co-management structure for the management and administration of the Leliefontein land creates the ability to move beyond the limitations inherent to either a state (in this case the Municipality) or a local community management model. A co-management structure makes provision for the combination of the range of skills, capacities and resources of the Municipality on the one hand, as well as the indigenous knowledge and understanding of local conditions and challenges of the grassroots, traditional and local institutions. This combination of capacities, skills and indigenous knowledge has the potential to translate in effective implementation.

The land of the Leliefontein Rural Area could be communally owned but managed on the basis of leasehold. In acknowledging the traditional rights of land users, all inhabitants of the Leliefontein Rural Area who would prefer to have livestock, would be allowed to keep stock. This will ensure that everybody will have a vested interest in the sustainable use of the natural resources. There would, however, be a limitation on the number of stock that an individual can keep. This is to ensure that the stock numbers stay within the carrying capacity of the area. Each of the individual users, however, will still have to enter into a separate lease agreement to keep livestock.

Entrepreneurial bona fide farmers would qualify for leasehold on a more commercial basis. They would be allowed to keep more livestock. The commonage farms would be used for this purpose, but additional communal land would also need to be reserved to make provision for rotational grazing. The result would be that limitations would be placed on the stock numbers of individual subsistence farmers. This could, however, only happen if the rest of the users can see that they will benefit more from making this concession.

Entrepreneurial farmers that are allowed to keep more livestock on the commonage land should pay more for this privilege. The funds collected from this could be used either to subsidize the communal

users or for the upgrade of the communal land. Entrepreneurial bona fide farmers would also be allowed in terms of their traditional rights to keep the same number of livestock as the rest of the land users at the same rate. This would be over and above the “commercial” livestock for which they will pay more.

9.2 IMPLEMENTATION AND INSTITUTIONAL ARRANGEMENTS

The successful implementation of tenure arrangements to ensure the sustainable use of the natural resources of the Leliefontein Rural Area is dependent on the buy-in and acceptance of the new tenure arrangements by the majority of the users. The involvement of the community should move beyond consultation to the level of active participation in the development and implementation of the new tenure system. A participatory consultative process is very important in order to ensure that future stakeholders will feel they have played a significant role in the design of this new land tenure system. This will lead to a greater acceptance of the proposed tenure arrangements that acknowledge the traditional rights of the users while at the same time provide economic incentives for the users at different levels to use the natural resources sustainably.

In December 2003 a referendum was held where the residents of the Leliefontein Rural Area had to decide on the preferred legal entity to hold the land that is currently held in Trust by the Minister of Agriculture and Land Affairs in the future. The referendum formed a crucial phase of the Transformation Process. The majority of the residents of the Leliefontein Rural Area voted in favour of the Kamiesberg Municipality to hold the land on behalf of the community.

This decision must still be approved by the Minister of Agriculture and Land Affairs as the Trustee of the Rural Areas. If the Minister concurs with the decision of the local people the land will be transferred to the

Municipality subject to certain conditions that may include the upgrade of the infrastructure on the communal land to minimum standards.

All the land users of the Leliefontein Rural Area should be identified, registered and classified as users in different usage categories. Entry and exit criteria as land users in the Leliefontein Rural Area should be agreed upon. The classification of land users in different usage or user categories is important in order to address the diverse needs, interests and aspirations of all different types of users. This will allow the co-management institution to align the different category users to the allocated leasehold portions. The needs, interests, aspirations and capabilities of the users will be considered before land is allocated.

Currently users have specific rights to dry land plots based on historical allocation. Right holders would be encouraged to lease the dry land plots to other farmers for cultivation if they are not interested or able because re-allocation of the land would be considered after a certain period if no signs of cultivation are evident. The dependence on rainfall for cultivation should, however, be taken into consideration. The dry land plots will play a crucial role in rotational grazing, provision of fodder and in relieving the pressure on the natural vegetation.

The function of the Commonage Committee as a Municipal entity should be taken over by a new co-management institution consisting of the Commonage Committee and the Municipality. As was already discussed, this co-management institution would be better placed for the effective management and administration of the commonage and communal land.

The level of legitimacy and credibility of the co-management institution in the Leliefontein Rural Area should be improved by ensuring that all the different interest groups are democratically represented on the committee. Protection against domination by powerful groups should be provided for vulnerable groups by the co-management institution.

This was one of the weaknesses of the Commonage Committee identified by Lebert (2004: 36). The current Commonage Committee is dominated mostly by the better resourced farmers and the issues they choose to act upon are mostly in the interest of the better resourced farmers. As mentioned earlier Lebert (2004: 36) alluded to the fact that the committee will enforce the exclusive rights of access to the camps on the new farms but at the same time the regulation of stock numbers would not be necessarily be high on their priority list.

A participatory consultation process consisting of inter alia workshops, broader community and specific area meetings should be followed to reach consensus on crucial issues. All the users should have the opportunity to give inputs on stock numbers, grazing fees, appropriate rotational grazing methods, as well as regarding sanctions for transgressions before it is incorporated in the Management Plan and Grazing Regulations.

However, apart from the importance of internal consensus it is crucial for the future sustainable use of the natural resources that the entire community accepts an external scientific-based or founded set of guidelines on the sustainable use of the natural resources and practices required to be followed, including rotational grazing and keeping within the carrying capacity etc.

The Management Plan and Grazing Regulations to be implemented in the Leliefontein Rural Area should be a bargained trade-off between the interests of the different groups. The needs, interests and aspirations of all the land users should be considered in the development of the Management Plan and Grazing Regulations. This will increase the possibility of compliance because all the users had the opportunity to participate in the decision making process.

All the available land of the Leliefontein Rural Area should ideally also be brought into production. This can only happen, however, if all or

most part of this area are accessible (e.g. by roads) and if water points are provided in these currently unused areas.

The Municipality should, especially in the beginning when the tenure system is implemented make provision for adequate financial resources for the effective implementation of the tenure system. In order to create a culture of compliance to different obligations and commitments (i.e. stock numbers and payment of grazing fees) immediate effective action against transgressions are very important. All participating land users must be given an unequivocal message, that the non-payment of fees will not be tolerated. It is plausible that in the early phase of the implementation of the new tenure arrangement, that the expenditure incurred by the Municipality in terms of the establishment of the requisite management and administration systems (of the commonage and communal land of Leliefontein) may be higher than the income derived from the payment of grazing fees in the beginning. However, this must be seen as temporary. Once the system is operational and effective, the income, through inter alia levies and fees should be adequate to cover costs.

9.3 PRIVATE OWNERSHIP

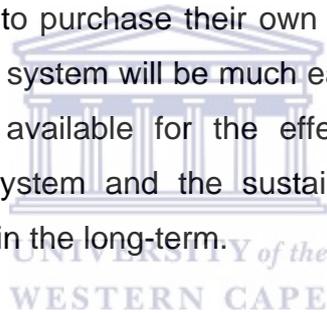
Commercially orientated farmers should be encouraged to purchase their own private land outside the communal land with grants from the Department of Land Affairs. This would relieve the existing pressure experienced on the communal land in terms of stock numbers and allow for the successful implementation of a rotational grazing system on the communal land.

Rohde, Benjaminsen & Hoffman (2000: 263) also supports this approach of accommodating commercial within the context of the Rural Areas in Namaqualand. They are of the opinion that giving incentives to the largest farmers to vacate the commons or the communal land and become commercial farmers themselves is often seen as the most

appropriate means of reducing communal livestock numbers and at the same time providing better grazing opportunities for the animals of the poorer communal farmers.

Incentives should be provided to commercial individual farmers for a specific period if they undertake to purchase their own land in order to relieve the existing pressure on the commonage land. This may include reduced grazing fees for the specific period. Individuals who agreed to purchase their own land and benefited by using the incentives (reduced grazing fees) and failed to do so will only be allowed to keep the minimum number of livestock as the subsistent farmers in terms of their traditional rights.

If some commercially orientated farmers of the Leliefontein Rural Area can be encouraged to purchase their own land, the implementation of the proposed tenure system will be much easier. Through this process more land will be available for the effective implementation of a rotational grazing system and the sustainability of the new tenure system will improve in the long-term.



10

Conclusion and Recommendations

The purpose of this research was to explore and decide upon a new and more appropriate tenure system for the Leliefontein Rural Area, one that establishes and upholds a more sustainable natural resource management system than is presently the case on the communal and commonage land of this rural area. It is clear from the information gathered by this research by way of interviews with the users of the Leliefontein Rural Area as well as from secondary data that the current tenure arrangement has a negative impact on the natural resource use.

Currently all the land of the Leliefontein Rural Area is communally owned by the inhabitants of the mentioned area. Leasehold is practiced on the commonage farms bought for the farmers of the Leliefontein Rural Area and currently administered by the Kamiesberg Municipality. The research results have shown that individual farmers are responsible for stock reduction and rotational grazing, but that it does occur neither in a coordinated manner nor on a significant scale. The survey has also shown that the reduction of stock and rotational grazing are also applied by individual farmers more for their own immediate financial benefits and not necessary to enhance the sustainable use of the natural resources of the Leliefontein Rural Area.

10.1 SOME FINDINGS:

The research produced a number of significant and interesting findings:

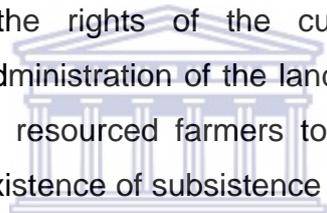
- Stock farming and sowing are the most important land uses in the Leliefontein Rural Area.
- Land conservation is practiced to some extent in the Leliefontein Rural Area but the implementation thereof is not enforced by any institution and also not coordinated between individual farmers. Access to transport, financial constraints and the availability of water are major determinants on whether rotational grazing will be practiced by individual farmers.
- Individual farmers are the most important institution responsible for land conservation.
- Rotational grazing is not applied on the commonage farms although it is prescribed by the Land Use Management Plans.
- Stock reduction is only implemented and enforced on the commonage farms because lessees pay grazing fees for every livestock unit on the farms. Respondents are of the opinion that the regulation of stock numbers are left entirely to the individual farmers.
- The majority of the respondents indicated that farmers do not invest in the land and that they personally have not invested in the land. The specific implications and ramifications of the communal ownership of the land were identified as the main reason why farmers do not invest in the land.
- The management institution currently responsible for the administration and management of the communal and commonage land of the Leliefontein Rural Area is not in a position to take action against transgressions due to the lack of financial and human resources.

- A significant finding was that nearly half of the respondents interviewed (46 %) indicated that they prefer private ownership, while another 30 % indicated that they prefer communal ownership. Twenty four percent opted for a leasehold land tenure system.
- The majority of the respondents (73 %) were of the opinion that no farmer will lose any of their current user rights under their preferred system. This, however, does not correlate with the tenure system preferred by the majority of the respondents, namely private ownership. Under private ownership some farmers will definitely lose existing user rights on the land.
- The investigation of private ownership as an alternative to address the identified problems raised concerns amongst respondents. One such problem centered around the issue of traditional rights of the land users; the fact that some current users will in all probability lose their rights under a tenure system of private ownership, while the possibility that private land can be sold by the bondholder to recover cost if individuals default on payment was a second issue that was raised. This is a very important consideration in the light of the high level of security of tenure that characterizes the present communal land tenure system.
- The research reiterated the crucial role of communal tenure in the maintenance and security of the livelihoods of the poor. Hall, Jacobs and Lahiff (2003: 22) summarized this as follows: "Communal tenure provides the benefits of free, or relatively cheap, access to land and provides a social safety net for some of the poorest South Africans". This perception was also evident amongst respondents interviewed in this research.
- The present implementation of the leasehold system on the commonage farms of Leliefontein is not effective. The reason for this

are that the Management Plan, lease agreements and grazing regulations are not implemented due to the lack of financial and human resources presently experienced by the responsible authority.

- The perception of the respondents was that land under a system of leasehold would be more affordable than private land ownership. The respondents that preferred leasehold indicated that investment in the land could be taken into consideration when users apply for the renewal of leases. Individuals who invested in the land should be allowed to lease the same land for another term. They thought that this will definitely serve as an incentive for individuals to invest in the land.

As mentioned earlier the key to the sustainable use of the natural resources of the Leliefontein Rural Area may be to find a delicate balance between the rights of the current users, improve the management and administration of the land and provide incentives for especially the more resourced farmers to invest in the land without compromising the existence of subsistence farmers.



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10.2 RECOMMENDATIONS

This study set out to establish the most appropriate tenure system to ensure sustainable natural resource management on the communal and commonage land of the Leliefontein Rural Area. Based on the findings from the research study as well as the review of relevant literature the following recommendations are made:

- Although there was strong support for private ownership, 46 percent of the respondents supported this tenure option, it is the contention of this researcher that the communal and commonage land should be communally owned by the users of the Leliefontein Rural Area but managed on the basis of a leasehold system of tenure. This option

can be motivated as follows: communal ownership will provide a safety net for the poor and the leasehold system incentives for the more commercially orientated farmers to invest in the land. Another important motivation is the possibility that communal land that is privatized can be permanently alienated if owners default in terms of payment to bondholders and other creditors. It is also easier to take action against transgressions of regulations measures aimed at protecting the natural resources under leasehold. Provision should be made for leasehold on a communal and a more commercial basis. All users will enter into lease management agreements.

- Commercial or entrepreneurial bona fide farmers would qualify for leasehold on a more commercial basis. The commonage farms would be used by these farmers, but additional communal land would be reserved to make provision for rotational grazing. Entrepreneurial farmers will be allowed to keep more livestock.

A differential fee structure should be introduced for subsistent farmers and the more commercially orientated farmers whereby subsistent farmers would pay less for grazing. Funds collected could either be used to subsidize the communal users or for the upgrade of the communal land.

- The lease period should be 5 years but the lease should be reviewed on a yearly basis. This will allow the management institution to cancel a lease contract if the lessee does not adhere to the lease agreement. The proposed lease period will also be long enough for the lessees to recover the cost of their investment in the land and will therefore serve as an incentive to invest in the land.

Commercially orientated farmers should be provided with incentives and encouraged to purchase their own private land outside the communal land with subsidies from the Department of Land Affairs.

This would relieve the existing pressure experienced on the communal land in terms of stock numbers and allow for the successful implementation of a rotational grazing system on the communal land. Individual farmers who agreed to purchase their own land would qualify for grazing fees at a lower rate for a specific period. These farmers must also be mentored and assisted by the appropriate Government Departments for a specific period once they have purchased and settled on these farms. Post settlement support should not only be in farming related practices, but must, in addition include important issues related to financial planning and management as well as developing reliable markets to sell their products.

- The extension of existing appropriate rural finance and-credit facilities should be accelerated to make strategically important financial credit and saving products for consumption and production purposes available. These rural and micro financial services must be accessible, as well as serve the interest and needs of both subsistence and commercial farmers of the Leliefontein Rural Area.
- The Commonage Committee as Municipal Entity should be replaced by a co-management institution consisting of members of the Commonage Committee and the Kamiesberg Municipality. This would allow the Municipality to make provision in their annual budget for expenses associated with the administration and management of the land. This is especially important in the initial stages of the implementation of the proposed tenure system. The strengths, capacity and local knowledge of both institutions can be combined for effective implementation.
- The proposed new tenure system should be promoted through a participatory and consultative process. As mentioned earlier the successful implementation of tenure arrangements to ensure the sustainable use of the natural resources is dependent on a high degree

or level of buy-in into and acceptance of the new tenure model by the majority of the land users and rights holders. Community involvement should move beyond mere symbolic consultation to a new level that will translate into the active and meaningful participation of the target population, i.e. the present land users of the area. The Local Authority and the Department of Land Affairs would be responsible for the consultative process.

- All the land users and rights holders of the Leliefontein Rural Area should be identified, registered and classified according to functional and disparate usage categories. The classification of the users in different categories is important in order to address the diverse needs, interests and aspirations of all land users. It will further enable the co-management institution to develop a long-term Management Plan.
- Current land users and rights holders must, through a thorough consultative process be encourage to agree upon a set of so called *entry- and exit criteria* that will be used to decide who will qualify as land users in the Leliefontein Rural Area, as well as who will have their land rights withdrawn. Only if control is exercised over the number of land users, type and extent of land usage, the sustainable use of the natural resources can be established and ensured.
- Current right holders to dry land plots should be encouraged to lease it to other farmers for cultivation if they are not in a position to cultivate it. If they do not cultivate it and also do not lease it out to farmers who do cultivate it, they will run the risk that their plots may be taken from them and be reallocated. Dry land plots can play a crucial role, for example in establishing rotational grazing and the provision of fodder.
- All the available communal land of Leliefontein should be brought into production through the construction of access roads and the erection of water points. The Land Care programme of the National Department

of Agriculture and the Commonage Upgrade Grant from the Department of Land Affairs makes provision for the allocation of funds to upgrade land. The possibility of accessing funds from the Expanded Public Works Programme for this purpose should also be explored.

The objective with this research study was to establish the most appropriate tenure system to ensure sustainable natural resource management on the communal and commonage land of the Leliefontein Rural Area. In order to achieve this, firstly, the current tenure system operational in the Leliefontein area was evaluated in terms of its impact on the use of the natural resources. One of the important issues investigated was whether the users of the natural resources invest in the land they farm on, and if so, to what extent this is done and with what measures of success.

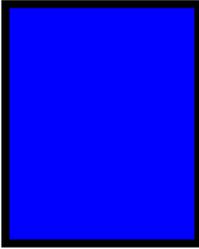
Secondly, a range of possible alternative land tenure systems for the Leliefontein Rural Area to replace the existing one was investigated and evaluated. A crucial consideration in deciding on the most appropriate tenure system was to what extent it was possible to develop and implement a set of incentives within the new tenure system that would encourage users to invest in the land.

An alternative tenure system for the Leliefontein Rural Area was proposed, one that this researcher considered the most appropriate model for this specific area, given the unique set of circumstances present in this area. It should be reiterated that any proposal for a new tenure system should not only be viewed in terms of its economic value or implementation criteria but also viewed against a set of social realities operating in the Leliefontein Rural Area. Relatively free access to land for the ordinary people from this area has been taken for granted for decades. Apart from farming the land, this pivotal resource has over the years performed different social functions to many of the livelihoods. In this regard it is particular important to highlight the current role that the Leliefontein Rural Area play in

providing a base for the accumulation of social capital, which creates conditions for social stability during times of change and economic instability.

Finally the researcher is of the opinion that the key to the sustainable use of the natural resources of the Leliefontein Rural Area is to find a balance between the rights of the current users, improve the management and administration of the communal and commonage land that will ensure the sustainable use of the land and its delicate resources, and finally provide attractive incentives for (especially) the better resourced farmers to invest in the land.





Bibliography

- Adams, M., Cousins, B & Manona, S. 2000. Land Tenure and Economic Development in Rural South Africa: Constraints and opportunities. In: Cousins, B (Ed). At the Crossroads. Land and Agrarian Reform in South Africa into the 21 St century. Cape Town: Logo Print, PP 11-128.
- Adams, M. 2000. Land Reform in Namibia
- Babbie, E. 1992: The Practice of Social Research. California: Wadsworth Publishing Company.
- Babbie, E. & Mouton, J. 2002. The practice of Social Research. Cape Town: Oxford University Press.
- Beetz, A. E. 2004. Rotational Grazing: Livestock System Guide. National Center for Appropriate Technology: University of Arkansas.
- Bruce, J. 1993. A Review of Tenure Terminology. Land Tenure Centre: University of Wisconsin-Madison.
- Bruce, J. 2004. Comparing Communal and Individual Ownership. In Roth, M. Nxasana, V. Sibanda, S. & Yates, T. (Ed). National Land Tenure Conference: Finding Solutions, Securing Rights. Durban: LexisNexis Butterworths, PP 127-137.
- Constitution of the Republic of South Africa, 1996. Formeset Printers Cape (Pty) LTD.
- Cousins, B. 2002. Reforming Communal Land Tenure in South Africa – Why Land Titling is not the Answer. Critical comments on the Communal Land Rights Bill, 2002. PLAAS.
- Cowling, R. & Pierce, S. 1999. Namaqualand a Succulent Desert. Vlaeberg: Fernwood Press.

- Critchby, W. & Turner, S. 1996. Introduction. Successful Natural Resource Management in Southern Africa. Windhoek: Gamsberg Macmillan Publishers, PP 1-17.
- Davenport, T. R. H. 1978. South Africa: A Modern History. Hong Kong: MacMillan (PTY) LTD.
- Department for International Development: Southern Africa, 2003. Land Issues Scoping Study: Communal Land Tenure Areas.
- Department of Land Affairs, 1998. White Paper on South African Land Policy. Pretoria.
- Department of Land Affairs, 2001. Namaqualand Commonage Investigation. *Monitoring & Evaluation*. 3(2001): 1-12.
- Department of Land Affairs, 1998. Project Business Plan – Purchase of Commonage land for Leliefontein.
- Department of Land Affairs, 2001. Guidelines for the integration of Environmental Planning into Land Reform and Land Development.
- Goodale, M. & Sky, P. 2000. Comparative Study of Land tenure, Property Boundaries and Dispute Resolution: Examples from Bolivia and Norway. Land Tenure Center: University of Wisconsin-Madison.
- Government Communication and Information System, 2001. South African Yearbook 2001/2. Durban: Universal Printers.
- Kepe, T. & Cousins, B. 2002. Radical Land Reform is Key to Sustainable Rural Development in South Africa. PLAAS.
- Hall, R. J., Jacobs, P. & Lahiff, E. 2003. Evaluating Land and Agrarian Reform in South Africa. PLAAS.
- Hulme, D. & Shepherd, A. 2003. Conceptualizing Chronic Poverty. *World Development*. Volume 31, Number 3 (March 2003): 403-423.
- Lahiff, E. 2001. Land Reform in South Africa: Is it meeting the challenge. *Policy Brief*. 1 (September 2001): 1-6.
- Lebert, T. 2004. A case study of Land Redistribution through the Municipal Commonage Programme: The new farms of Leliefontein, a communal reserve in Namaqualand.
- Leedy, P D. 1993. Practical Research. Planning and Design. New York: McMillan Publishing Company.

- Marais, J. S. 1955. The Cape Coloured People 1652 – 1937. London: Longmans.
- Mathuba, B. 2004. Reflecting on Customary Tenure Issues in Botswana. In Roth, M. Nxasana, V. Sibanda, S. & Yates, T. (Ed). National Land Tenure Conference: Finding Solutions, Securing Rights. Durban: LexisNexis Butterworths, PP 84-97.
- Maxwell, D. & Wiebe, K. 1998. Land Tenure and Food Security: A Review of Concepts, Evidence, and Methods. Land Tenure Center: University of Wisconsin-Madison.
- Melville, S. & Goddard, W. 1996. Research Methodology. An introduction for Science and Engineering students. Kenwyn: Juta & Co Ltd.
- Mohamed, N. 2002. Co-management as co- governance: Prospects for community-based natural resource management in Southern Africa. In: Benjaminsen, T. Cousins, B. & Thompson, L (Ed). Contested Resources. Challenges to the Governance of Natural Resources in Southern Africa. Cape Town: Logo Print, PP 127-140.
- National Botanical Institute, 2001. Desertification Research, Natural Resource Management and Rural Livelihoods in Paulshoek.
- Paxton, L. 2000. 50/50 Fact Sheet: Succulent Karoo
- Pearmain, S. Williams, J. 2004. Lessons from the drought- North Coast report. New South Wales Department of Primary Industries.
- Pienaar, K. & May, H. 2003. Presentation at the HSRC Kimberley Commonage Workshop.
- Redlinghuis, A. C 1981. Die Ontwikkelings potensiaal van vyf Landelike Gebiede in Namakwaland (PHD Dissertation UWC).
- RDP: A Policy Framework, ANC, 1994
- Rihoy, L. 1998. Natural Resource Tenure in Southern Africa: An overview of Key Issues and Policy Options for Communal Areas in Southern Africa.
- Rohde, R. F, Benjaminsen, T. A. & Hofmann, M. T. 2002. Land Reform in Namaqualand: Poverty alleviation, stepping stones and 'economic units'. In: Benjaminsen, T. Cousins, B. & Thompson, L (Ed).

Contested Resources. Challenges to the Governance of Natural Resources in Southern Africa. Cape Town: Logo Print, PP 127-140.

- Russel, M. & Mugenyi, M. 1997. Armchair empiricism: A reassessment of data collection in survey research in Africa. *African Sociological Review* 1, no. 1 (1997): 16-29.
- Shell, R. C. H, 1994. Children of Bondage: A social history of the slave society at the Cape of Good Hope, 1652-1838. Johannesburg: Witwatersrand University Press.
- Surplus People Project, 1997. Namaqualand District Planning and Management Project: Report on current situation of stock farming in Reserves, Municipal Areas (with commonages) and areas with communal grazing in Namaqualand. Cape Town.
- Surplus People Project, 2003. Report to the Minister of Agriculture and Land Affairs: Recommendations in terms of Article 5 of the Act on Transformation of Certain Rural Areas Act, Act 94 of 1998. Leliefontein Rural Area. Cape Town.
- Smit, D. 2002. The Impact of Tenure on the Implementation of Land Use Management Plans on the commonage farms of the Leliefontein Rural Area (Mini Dissertation submitted for the Masters of Environmental Management, UOFS).
- Smit, N. 2002. Game ranching as a reality in African Conservation. Bloemfontein: UOFS. (Study-guide MOB 743).
- Surplus People Project, 1996. Namaqualand District Planning and Management Project: Final Report on Phase One (Pre-planning phase).
- Surplus People Project, 1999. Namaqualand District Planning and Management Project: Final Report. Cape Town.
- Turner, S. 2001. Sustainable Development: What's land got to do with it? *Policy Brief*. 2(November 2001): 1-4.
- Topographical Maps 1:50 000: 3017 BD (1978) Karkams & 3018 AB (1986 Rooifontein).
- Twyman, C., Sporton, D. Thomas, D. & Dougill, A. 2002. Community fencing in open rangelands: A case study of community self-

empowerment in Eastern Namibia. In: Benjaminsen, T. Cousins, B. & Thompson, L (Ed). Contested Resources. Challenges to the Governance of Natural Resources in Southern Africa. Cape Town: Logo Print, PP 127-140.

- Tyler Miller, G. 2000. Living in the Environment. Principles, Connections and Solutions. Boston: Brooks/Cole Publishing Company.
- United Nations Economic Commission for Africa: South African Office, 2003. Land Tenure Systems and Sustainable Development in Southern Africa.
- Whande, W. 2002. Sustainable development through secure tenure. Afra News: 52 (February 2002): 14-15.
- Whiteside, M 1998. Living Farms. Encouraging Sustainable Smallholdings in Southern Africa. London: Earthscan Publications Ltd.
- Yield, J. 1997. Caring for the Earth-South Africa: A Guide to Sustainable Living. Cape Town: Associated Printing.



ANNEXURE 1: LOCATION MAP



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FORMER COLOURED RURAL AREAS | VOORMALIGE KLEURLING GEBIEDE

NORTHERN CAPE PROVINCE | NOORD KAAP PROVINSIE

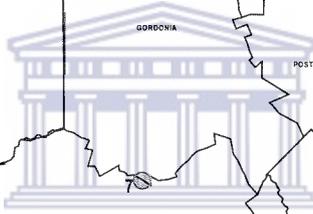
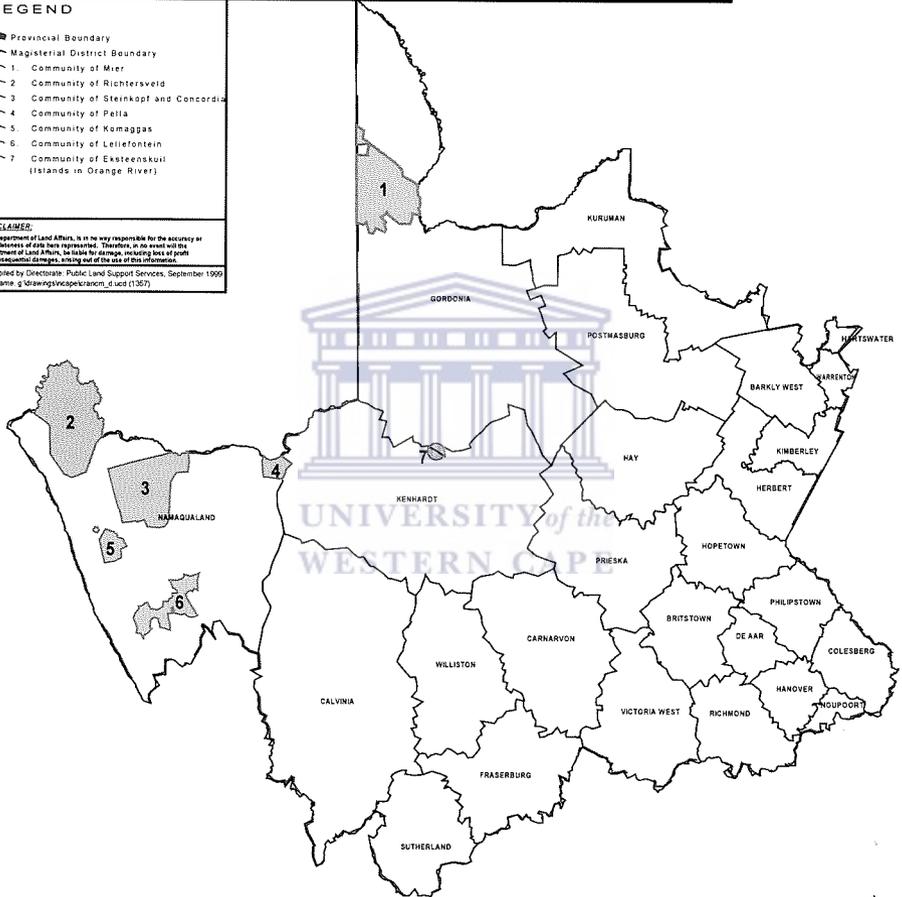
LEGEND

- Provincial Boundary
- Magisterial District Boundary
- 1 Community of Meer
- 2 Community of Richtersveld
- 3 Community of Steinkopf and Concordia
- 4 Community of Pella
- 5 Community of Komaggas
- 6 Community of Leliefontein
- 7 Community of Eksteenskuis (Islands in Orange River)

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WESTERN CAPE



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DATA NOT VERIFIED

The logo of the University of the Western Cape, featuring a classical building facade with a pediment and columns.

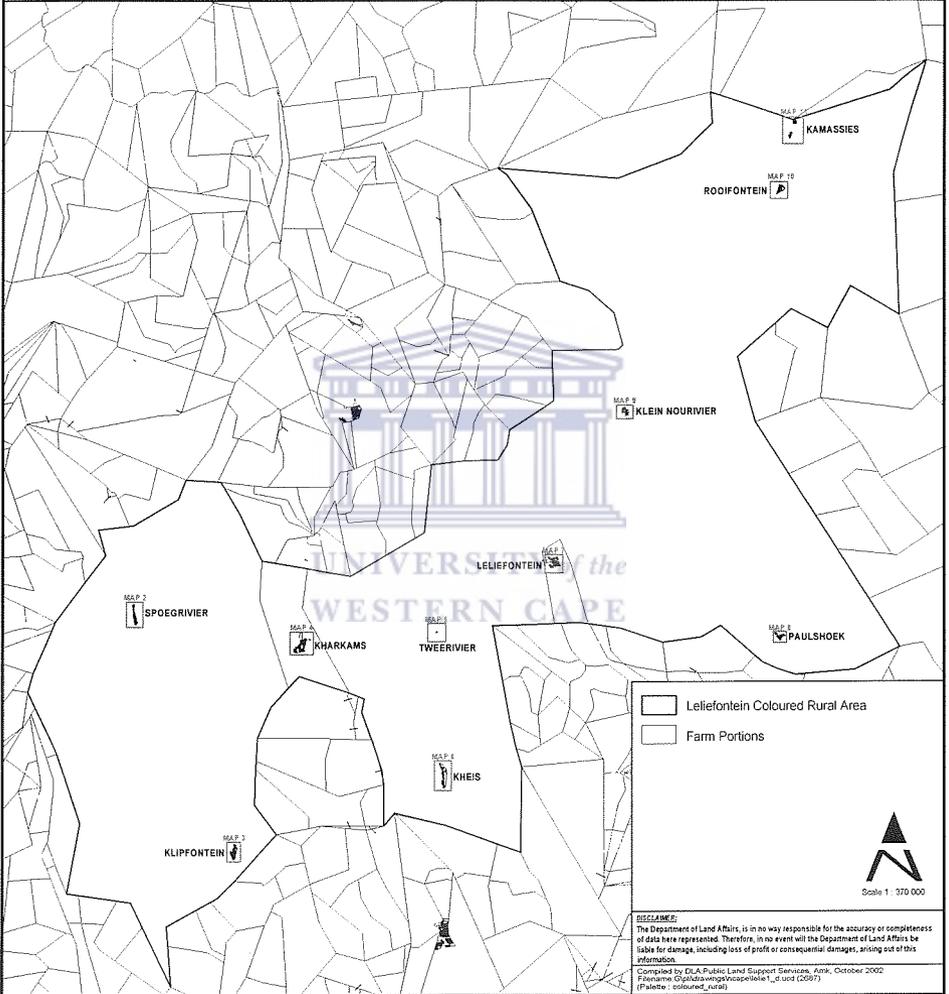
**ANNEXURE 2: LOCATION OF
SETTLEMENTS**

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WESTERN CAPE



LOCALITY OF URBAN AREAS IN THE LELIEFONTEIN COLOURED RURAL AREA NAMAQUALAND MAGISTERIAL DISTRICT - NORTHERN CAPE PROVINCE

MAP 1



The logo of the University of the Western Cape, featuring a classical building facade with six columns and a triangular pediment.

**ANNEXURE 3: COPY OF A
NOTARIAL DEED OF SERVITUDE**

UNIVERSITY *of the*
WESTERN CAPE

ELREG ITY R	
DOI E R	95.00

GEREGISTREER REGISTERED

REGISTRATEUR/REGISTRAR
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1-2
OS



~~1090 / 2000~~

Protocol Number 141

NOTARIAL DEED OF COMMONAGE SERVITUDE

BE IT HEREBY MADE KNOWN:

REKENAAR: DATAVASLEGING/COMPUTER DATA CAPTURE		
	DATUM/DATE	OPERATEUR/OPERATOR
OPGEMEEKENTERE?	<i>[Signature]</i>	<i>[Signature]</i>
REGISTRAR/REGISTRAR		

THAT on this 15th day of AUGUST 2000, before me, ELRETHA HUISAMEN, Notary Public, by lawful authority duly admitted and practising at SPRINGBOK, the Province of the Northern Cape, and in the presence of the subscribing witnesses, personally came and appeared **TALITA HAYES**, in her capacity as duly authorised agent of

[Handwritten signatures]
 EL H JCK
 OS

1. LELIEFONTEIN LOCAL TRANSITIONAL COUNCIL

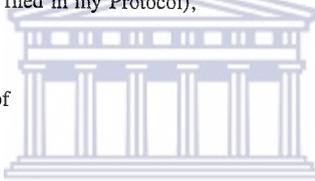
herein represented by GERT MAARMAN
in his capacity as Chairperson and as such duly authorised thereto by virtue of a
Resolution passed
at GARAGAMS on 29 MAY 2000

(hereinafter referred to as "the Owner")

the said Appearer acting by virtue of a Special Power of Attorney signed
at SPRINGBOK on 27 JULY 2000

(which said Special Power of Attorney and Resolution have this day been exhibited
to me and now remain filed in my Protocol),

and as duly authorised agent of



2. EMSLEY MANNE DIPICO

in his capacity as the PREMIER OF THE PROVINCE OF THE NORTHERN CAPE

(hereinafter referred to as "the Premier")

the said Appearer acting by virtue of a Special Power of Attorney signed
at KIMBERLEY on the 10th day of AUGUST 2000

(which said Special Power of Attorney has this day been exhibited to me and now
remains filed in my Protocol);

AND THE SAID APPEARER DECLARED THAT:

Handwritten signature and initials in black ink, including a large stylized signature and the initials 'AJK' and 'JB'.

WHEREAS the owner is the registered owner of

REMAINDER of the Farm BOESMAN PLAAT Nr 365, Division of Namaqualand,
the Province of the Northern Cape;

IN EXTENT: 6955,9896 (SIX THOUSAND NINE HUNDRED AND
FIFTY FIVE comma NINE EIGHT NINE SIX)
Hectares;

HELD by Deed of Transfer No T 000091376 / 2000

(hereinafter referred to as " the PROPERTY")

AND WHEREAS the Owner acquired the property through funds obtained from the National Department of Land Affairs but subject to the express condition that the property shall be used as a commonage and held in terms of the relevant provisions of the TRANSFORMATION OF CERTAIN RURAL AREAS ACT, 1998 (ACT NO. 94 OF 1998) previously known as the RURAL AREAS ACT, 1987 (ACT 9 OF 1987).

AND WHEREAS the Owner accepted the funds subject to the aforesaid restrictive condition and subject to the further condition that the property shall vest in the Province in which the property is situated, in the event of non compliance by the Owner of the condition requiring the use of the property as a commonage by the residents within the jurisdiction of the owner with special emphasis on the poor and less privileged and the conditions ancillary thereto as set out hereinafter;

JEK
JAB

NOW THEREFORE THESE PRESENTS WITNESS:

1. The Owner must ensure the use of the property as a commonage for the benefit of the residents within the jurisdiction of the Owner with special emphasis on the poor and less privileged (hereinafter referred to as "the Beneficiary Group). The land must be held by the Owner subject to the provisions of Act 9 of 1987 as amended and as it may be amended in future, and subject to any such conditions which the Minister of Land Affairs and the aforementioned Premier may deem expedient, or any other legal provisions which the Minister of Land Affairs may make applicable.

2. The Owner must establish a representative management body comprising at least 1 (one) member but not more than 2 (two) members of the Owner, 2 (two) members of the Beneficiary Group and not more than 2 (two) other persons (e.g. experts or members of relevant bodies or authorities such as the Department of Agriculture) agreed to by the Owner and the Beneficiary Group members. The Management body must formulate a Land Use Management Plan (hereinafter referred to as "the PLAN") which will set out conditions of use and how these shall be monitored and enforced.

3. The land may not be encumbered, alienated or transferred without the written permission of the Premier.

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WESTERN CAPE

JRK
AH
JB

- 4.1 The Owner acknowledges that failure on its part to ensure the use of the property as a commonage in terms of the plan and to administer it as such, will entitle the Premier to demand that the property be transferred to the Province in order to enable the Province to enforce the conditions in favour of the beneficiary.
 - 4.2 The Premier must only exercise the prerogative to demand that the property vests in the Province by way of transfer from the Owner to the Province on the basis of satisfactory evidence that the Owner failed in its duty to ensure the use of and to administer the property as a commonage for the Beneficiary Group in terms of the plan and/or this Deed.
 - 4.3 Should the Owner dispute that it failed in its duty to ensure the use of and to administer the property as a commonage as contemplated herein the parties to the dispute must in the first instance endeavour to resolve the dispute by negotiation. This entails that any party invites the other(s) in writing to meet and to attempt to resolve the dispute within 7 (seven) days from the date of receipt of the written invitation. If the dispute has not been resolved by such negotiation, the parties must submit the dispute to mediation to be conducted on such terms as may be mutually agreed on by the parties and failing such agreement, to be administered by the Arbitration Foundation of South Africa (AFSA), upon the terms set by the AFSA National Mediation Panel Secretariat, or its successors in title.
- UNIVERSITY of the
5. Failing such a resolution, the dispute, if arbitrable by law, must be finally resolved in accordance with the Rules of AFSA by an arbitrator(s) appointed by AFSA and approved by the parties. The determination of the arbitrator(s) shall be final and binding on the parties and may be made in order of any court of competent jurisdiction.
 6. No compensation is payable for the granting of this servitude.
 7. The costs of and incidental to the preparation and registration of this Notarial Deed must be paid by the Owner.

Handwritten signature and initials in black ink, located in the bottom right corner of the page. The signature appears to be 'S. J. A.' with a flourish underneath, and there are additional initials 'J. A.' and 'J. A.' to the right.

THUS DONE AND EXECUTED at
on the day, month and year first aforewritten in the presence of the undersigned witnesses.

AS WITNESSES:

1. JRKotze /

Hayes /

2. ABurger

AS WITNESSES:

1. JRKotze /

Hayes /

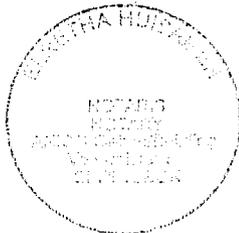
2. ABurger



QUOD ATTESTOR

Edu /

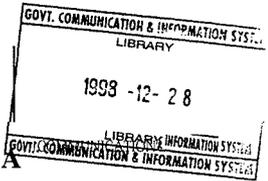
NOTARY PUBLIC



ANNEXURE 4: COPY OF ACT NO.

94 OF 1998

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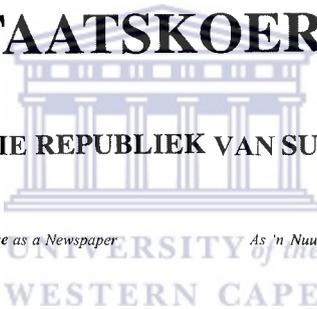


REPUBLIC OF SOUTH AFRICA

GOVERNMENT GAZETTE

STAATSKOERANT

VAN DIE REPUBLIEK VAN SUID-AFRIKA



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Vol. 401

CAPE TOWN, 2 NOVEMBER 1998

No. 19417

KAAPSTAD, 2 NOVEMBER 1998

OFFICE OF THE PRESIDENT

KANTOOR VAN DIE PRESIDENT

No. 1397. 2 November 1998

No. 1397. 2 November 1998

It is hereby notified that the President has assented to the following Act which is hereby published for general information:—

Hierby word bekend gemaak dat die President sy goedkeuring geheg het aan die onderstaande Wet wat hierby ter algemene inligting gepubliseer word:—

No. 94 of 1998: Transformation of Certain Rural Areas Act, 1998.

No. 94 van 1998: Wet op die Transformasie van Sekere Landelike Gebiede, 1998.

(English text signed by the President.)
(Assented to 20 October 1998.)

ACT

To provide for the transfer of certain land to municipalities and certain other legal entities; the removal of restrictions on the alienation of land; matters with regard to minerals; the repeal of the Rural Areas Act, 1987, and related laws; and to provide for matters connected therewith.

BE IT ENACTED by the Parliament of the Republic of South Africa, as follows:—

Definitions

1. In this Act, unless the context otherwise indicates—

- (i) "board area" means an area, or part of an area, consisting of one or more 5 pieces of land, whether they are contiguous or not, to which the provisions of the Rural Areas Act, 1987, applied immediately before the commencement of this Act; (vii)
- (ii) "elected committee" means a committee, elected by the residents of a board area who have reached the age of 18 years or older, which has satisfied the 10 Minister that it represents the majority of such residents; (x)
- (iii) "entity" means—
 - (a) a municipality;
 - (b) a communal property association registered in terms of section 8 of the 15 Communal Property Associations Act, 1996 (Act No. 28 of 1996); or 15
 - (c) another body or person approved by the Minister in general or in a particular case; (ii)
- (iv) "Minister" means the Minister for Agriculture and Land Affairs; (iv)
- (v) "municipality" means a municipality referred to in section 10B of the Local 20 Government Transition Act, 1993 (Act No. 209 of 1993); (v)
- (vi) "remainder" means land situated in a board area other than township land, including land which has been planned, classified and subdivided as an agricultural area or outer commonage in terms of section 20(2) of the Rural 25 Areas Act, 1987; (viii)
- (vii) "resident" means a person who, at the date of commencement of this Act—
 - (a) ordinarily resides in a board area; or
 - (b) under law is liable for the payment of assessment rates, rent, service 30 charges or levies to the municipality concerned in respect of land situated in a board area; (iii)
- (viii) "Rural Areas Act, 1987" means the Rural Areas Act (House of Representa- 35 tives), 1987 (Act No. 9 of 1987); (xi)
- (ix) "township" means any township situated in a board area established, approved, proclaimed or otherwise recognised as such under any law; (i)
- (x) "transitional period" means a period referred to in section 9; (vi) and
- (xi) "trust land" means land situated in a board area that vests in the Minister in 35 terms of section 7 of the Rural Areas Act, 1987. (ix)

Transfer of trust land in a township

2. At the commencement of this Act, all trust land situated in a township must vest in the municipality of the area where such land is situated, subject to the continued existence of any registered or registrable rights of a person in or over a piece of land in the township.

5

Transfer of land in the remainder

3. (1) (a) Trust land in the remainder or land in the "remainder which vests in a municipality in terms of a law listed in the Schedule, may be transferred to an entity at any time prior to the expiry of the transitional period.

(b) Different pieces of land referred to in paragraph (a) may be transferred to 10 different entities.

(c) Land referred to in paragraph (a) may be transferred from the registered owner thereof directly to the relevant entity, irrespective of the vesting or ownership of that land immediately prior to such transfer, and the provisions of section 14 of the Deeds Registries Act, 1937 (Act No. 47 of 1937), do not apply to such transfer.

15

(2) No transfer of land referred to in subsection (1) must take place unless the Minister is satisfied that, in the event of a transfer to—

(a) a municipality, the legislation applicable to such a municipality; or

(b) a communal property association or other body approved by the Minister, the rules of such association or body,

20

make suitable provision for a balance of security of tenure rights and protection of rights of use of—

(i) the residents mutually;

(ii) individual members of such a communal property association or other body;

(iii) present and future users or occupiers of land,

25

and the public interest of access to land on the remainder and the continued existence or termination of any existing right or interest of a person in such land.

(3) If in the opinion of the Minister the legislation or rules referred to in subsection (2) do not fully achieve the objects of subsection (2), he or she may determine terms and conditions for the transfer of such land, in order to achieve such objects.

30

(4) (a) The municipality of a board area may within three months after the commencement of this Act and must within three months after the date referred to in section 9(1)(a) submit a notice to the Minister setting out how and when it intends determining to which entity the land referred to in subsection (1) should be transferred.

(b) If the municipality fails to submit a notice referred to in paragraph (a) within 35 three months after the date referred to in section 9(1)(a), an elected committee may submit such a notice to the Minister.

(c) The notice referred to in paragraph (a) may include—

(i) a date of a special meeting to be convened for that purpose; or

(ii) a written survey reflecting the name, identity number or date of birth, address 40 and signature of the residents; or

(iii) any other matter relating to the manner in which it intends making the determination referred to in paragraph (a).

(d) Upon receipt of the notice referred to in paragraph (a), the Minister must cause it to be published in the *Gazette* and in a newspaper circulating in the district in which 45 the land is situated, unless the Minister determines such other procedures as he or she may deem fit.

(5) After compliance with the notice referred to in subsection (4)(c), the municipality or elected committee must submit a written report to the Minister recommending to which entity or entities the land referred to in subsection (1) must be transferred.

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(6) If, upon receipt of the report referred to in subsection (5), the Minister is satisfied with the recommendation, he or she must inform the municipality or elected committee of his or her decision and must take steps to transfer such land to the entity concerned.

(7) If, upon receipt of the report referred to in subsection (5), the Minister is not satisfied with the recommendation, he or she must inform the municipality or elected committee of the reasons for his or her rejection and specify how a new recommendation should be made to him or her.

(8) The Minister may designate any person to—

(a) assist the municipality or elected committee in making the recommendation referred to in subsection (7); or

(b) investigate the matter and submit a written report to the Minister recommending to which entity the land referred to in subsection (1) must be transferred.

(9) Any person designated under subsection (8) may, for the purposes of his or her 10 investigation—

(a) gather such information as he or she may deem necessary;

(b) hear or receive representations from any person;

(c) question any person who in his or her opinion may have relevant information available;

(d) by agreement between interested parties, settle any difference as to the land which forms the subject of the investigation, or the boundaries of such land;

(e) if requested by interested parties, determine the boundaries of such land or, if they cannot be determined, establish such boundaries after consultation with interested parties; and

(f) at any reasonable time, enter upon such land or any contiguous land.

(10) Any person designated under subsection (8) may, in the performance of his or her functions, be accompanied by such persons as he or she may deem necessary.

(11) The Minister must issue a certificate of designation to a person designated under subsection (8) and such person must, at the request of any person affected by the 25 performance of his or her functions under this section, produce such a certificate of designation.

(12) If, upon receipt of the recommendation or report referred to in subsection (7) or (8), the Minister is—

(a) satisfied with the recommendation, he or she must inform the municipality or 30 elected committee of his or her decision and must take steps to transfer such land to the entity concerned;

(b) not satisfied with the recommendation, or if the residents fail to make a recommendation within the transitional period, the Minister may decide to which entity the land referred to in subsection (1) must be transferred and 35 must take steps to transfer the land to such entity.

(13) Any trust land which is not transferred at the expiry of the transitional period vests in the Minister, who may continue to hold such land in trust and may at any time thereafter dispose of that land in accordance with the principles of this Act.

(14) If the land referred to subsection (1), or any portion thereof, has not been 40 surveyed, the Minister must cause such land to be surveyed.

(15) No transfer duty, stamp duty or other registration fees are payable in respect of any transfer in terms of this Act.

(16) The Minister may direct that any costs, including survey costs, necessary for the implementation of the provisions of this section be defrayed in full or in part from 45 monies appropriated by Parliament for that purpose.

Principles to be adhered to by a municipality

4. (1) When dealing with the land transferred to a municipality in terms of sections 3(6) and 12(a) or (b), such municipality—

(a) must afford residents a fair opportunity to participate in the decision making 50 processes regarding the administration of the land;

(b) must not discriminate against any resident;

(c) must give residents reasonable preference in decisions about access to the land;

(d) must not sell or encumber the land, or any substantial part of it, without the 55 consent of a majority of residents at a public meeting called for that purpose;

(e) is accountable to the residents;

(f) must manage and record effectively all financial transactions regarding the land; and

(g) has fiduciary responsibilities in relation to the residents.

(2) Despite the provisions of any law regarding the disposal of municipal land in a 5 township, the residents must be given reasonable preference to acquire land referred to in section 3(1).

Removal of restrictions

5. (1) Subject to section 4, at the commencement of this Act, any provision, irrespective of whether it is contained in any law listed in the Schedule or registered 10 against the title of land situated in a board area which—

(a) placed any restriction on the period for which the land right concerned was granted;

(b) placed any restriction, other than by virtue of an agreement to which the holder of such land tenure right was a party, on the capacity of the holder to 15 alienate, bequeath, let, hypothecate or otherwise deal with such land right; or

(c) placed any restriction on the transfer of such land right to, or on the possession, use or occupation of such erf or piece of land by, any person of a particular population or ethnic group or who is not of a particular population 20 or ethnic group,

is abolished.

(2) No transfer duty, stamp duty or other fees are payable in respect of any such abolition.

Mineral rights

6. (1) Despite the repeal of the Rural Areas Act, 1987, and despite section 3 of this 25 Act, at the commencement of this Act all mineral rights in land referred to in section 51(1) and (2) of the Rural Areas Act, 1987, vest in the State.

(2) (a) Despite anything to the contrary contained in any other law, prospecting for or mining of minerals on land situated in a board area must only be undertaken with the written consent of the Minister of Minerals and Energy in terms of sections 6(3) and 9(2) 30 of the Minerals Act, 1991 (Act No. 50 of 1991).

(b) The said Minister may only give his or her consent after consultation and with the approval of the entity concerned, which approval may not be unreasonably withheld.

(3) Despite anything to the contrary contained in any other law, the Minister of Minerals and Energy in granting the consent referred to subsection (2) must impose such 35 fees, restrictions and conditions as he or she may deem fit, in particular with respect to—

(a) a preference to exploitation by the residents, and in suitable instances in collaboration with external institutions, taking the optimal utilisation, exploration and exploitation of the minerals and the rehabilitation of the surface into account; 40

(b) surface rentals;

(c) the establishment of an equity sharing arrangement to the mutual benefit of all parties concerned; and

(d) work opportunities to the extent reasonably possible for residents.

(4) Despite section 6(2)(b) and (3), any application submitted to the Department of 45 Minerals and Energy before the commencement of this Act for the consent of the Minister of Minerals and Energy in terms of section 51(3) of the Rural Areas Act, 1987, must be dealt with in accordance with the provisions of the said section 51(3) and must not be subject to section 6(2)(b) and (3) of this Act.

Regulations

7. The Minister may make regulations regarding—
 (a) any matter required or permitted to be prescribed in terms of this Act; and
 (b) generally, all matters which in his or her opinion are necessary or expedient to be prescribed in order to achieve the objects of this Act.

5

Delegation of powers

8. (1) (a) The Minister may, either in general or in a particular case or in cases of a particular nature, in writing delegate any power conferred upon him or her by or under this Act, except the power referred to in section 7, to—

- (i) a Premier of a province; or
 (ii) any officer in the service of the national government.

10

(b) Any person to whom any power has been delegated under paragraph (a) must exercise that power subject to the directions of the Minister.

(c) The Minister may, at any time, revoke in writing such delegation, and the delegation of any power must not prevent the Minister, during the period of revocation, from exercising that power himself or herself.

(2) (a) The Premier of a province to whom any power has been delegated under subsection (1)(a)(i) may, subject to any directions referred to in subsection (1)(b) and such other conditions and periods of time as he or she may consider necessary, in writing delegate any such power to—

20

- (i) any member of the Executive Council of that province; or
 (ii) any officer in the service of the provincial government.

(b) Any person to whom any power has been delegated under paragraph (a) must exercise that power subject to the directions of the Premier.

(c) The Premier may, at any time, revoke in writing such delegation, and the delegation of any power may not prevent the Premier, during the period of revocation, from exercising that power himself or herself.

25

Transitional period

9. (1) (a) A transitional period is a period of 18 months which commences on a date determined by the Minister by notice in the *Gazette*.

30

(b) The Minister may determine different dates for different board areas or parts of board areas.

(c) When determining the date referred to in paragraph (a), the Minister must take into account the demarcation of the municipal boundaries of a board area in terms of the Local Government: Municipal Demarcation Act, 1998 (Act No. 27 of 1998).

35

(2) The Minister may, by notice in the *Gazette*, extend such period for another period of six months.

Repeal of Act 9 of 1987 and related laws

10. (1) The laws listed in the Schedule are repealed to the extent indicated in the third column thereof.

40

(2) (a) The repeal of the laws listed in the Schedule comes into operation on a date determined by the President by proclamation in the *Gazette*.

(b) Different dates may be determined in respect of—

- (i) different board areas or parts of board areas; and
 (ii) different laws or parts of laws.

45

(c) The President must determine the date referred to in paragraph (a) on the recommendation of the Minister.

(d) The Minister must inform the Minister for Provincial Affairs and Constitutional Development timeously of his or her intention to make a recommendation referred to in paragraph (c) to the President.

50

(3) If, prior to the date referred to subsection (2), in the application of this Act in a board area—

- (a) any conflict is found to exist between a provision of this Act and a provision of a law listed in the Schedule; or

(b) any provision of this Act and any provision of any law listed in the Schedule are found to give rise to administrative difficulty, the President may, by proclamation in the *Gazette*, determine to which extent either a provision of this Act or a provision of a law listed in the Schedule must apply to that area, in any manner he or she may deem necessary to remove the conflict or difficulty. 5

Short title

11. This Act is called the Transformation of Certain Rural Areas Act, 1998.



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SCHEDULE

Laws repealed by section 10

No. and year of law	Short title	Extent of repeal
Act No. 9 of 1987	Rural Areas Act (House of Representatives), 1987	The whole
Act No. 90 of 1990	Mier Rural Area Act (House of Representatives), 1990	The whole
Act No. 121 of 1990	Rural Areas Amendment Act (House of Representatives), 1990	The whole
Act No. 71 of 1991	Businesses Act, 1991	Section 7(1)(b), in so far as it repealed or amended the Rural Areas Act, 1987
Act No. 108 of 1991	Abolition of Racially Based Land Measures Act, 1991	Sections 57 to 71
Act No. 112 of 1991	Upgrading of Land Tenure Rights Act, 1991	Section 6(5) and paragraph 3 of Schedule 2
Act No. 112 of 1993	Rural Areas Amendment Act (House of Representatives), 1993	The whole
Proclamation No. R. 154 of 31 October 1994		The whole



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**ANNEXURE 5: COPY OF A
QUESTIONNAIRE**



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UNIVERSITEIT VAN WES-KAAPLAND
INSTITUUT VIR SOSIALE ONTWIKKELING

Geagte respondent

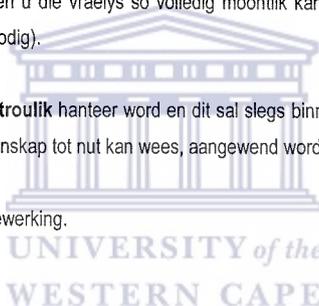
Die doel van die vraelys is om inligting oor Grondhervorming (grondgebruik en eienaarskap) binne die Leliefontein Landelike Gebied in te samel.

Die vraelys vorm 'n belangrike deel van 'n navorsingsprojek waaraan David Smit werk.

Dit sal waardeer oord indien u die vraelys so volledig moontlik kan beantwoord (met behulp van die veldwerker indien nodig).

Alle inligting sal **streng vertroulik** hanteer word en dit sal slegs binne 'n akademiese verband en in soverre dit die Gemeenskap tot nut kan wees, aangewend word.

Byvoorbaat dank vir u samewerking.



David Smit
Privaatsak X 5007
KIMBERLEY
8300

Tel: 053 831 4090
082 822 5102
Faks: 053 831 4095

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A. Demografiese inligting

1) Geslag: Merk met 'n X in die toepaslike blokkie

manlik	1
vroulik	2

2) Dui u ouderdom in die blok aan.

3) Hoe lank is u woonagtig in die Leliefontein Landelike Gebied (LLG)?

0 - 5 jaar	1
6 - 10 jaar	2
11 - 15 jaar	3
16 - 20 jaar	4
21 jaar +	5

4.1) Wat is u hoogste akademiese kwalifikasie?.

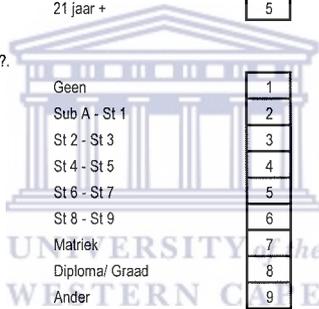
Geen	1
Sub A - St 1	2
St 2 - St 3	3
St 4 - St 5	4
St 6 - St 7	5
St 8 - St 9	6
Matriek	7
Diploma/ Graad	8
Ander	9

4.2) Indien ander. Spesifiseer asseblief.

5.1) Wat is u beroep?

Algemene werker	1
Boer	2
Bouwerker	3
Tegniese werker	4
Professionele werker	5
Klerk	6
Politici	7
Dienswerker	8
Ander	9

Slegs vir amptelike gebruik



5.2) Indien ander. Spesifiseer asseblief.

.....
.....
.....

--	--

B. Grondgebruik

6.1) Wat sou u in die Leliefontein Landelike Gebied beskou as die belangrikste natuurlike hulpbron?

Grond	1
Water	2
Plantegroei	3
Minerale	4
Ander	5

6.2) Indien ander. Spesifiseer asseblief.

.....
.....
.....

6.3) Motiveer asseblief u antwoord.

.....
.....
.....

7.1) Wat sal u beskou as die belangrikste grondgebruik in die Leliefontein Landelike Gebied?

Veeboerdery	1
Tuinbou	2
Mynbou	3
Saailoerdery	4
Veeboerdery & tuinbou	5
Vee- & saailoerdery	6
Ander	7

7.2) Indien ander. Spesifiseer asseblief.

.....
.....
.....

--	--

8.1) Watter impak dink u het veeboerdery op die veld in die Leliefontein Landelike Gebied?

.....
.....
.....

--	--

8.2) Watter impak dink u het veeboerdery op die water voorraad in die Leliefontein Landelike Gebied?

.....
.....
.....

--	--

8.3) Watter impak dink u het tuinbou op die veld in die Leliefontein Landelike Gebied?

.....
.....
.....

--	--

8.4) Watter impak dink u het tuinbou op die water voorraad in die Leliefontein Landelike Gebied?

.....
.....
.....

--	--

9.1) Watter impak dink u het mynbou op die grond in die Leliefontein Landelike Gebied?

.....
.....
.....

--	--

9.2) Watter impak dink u het mynbou op die plantegroei in die Leliefontein Landelike Gebied?

.....
.....
.....

--	--

9.3) Watter impak dink u het mynbou op die water voorraad in die Leliefontein Landelike Gebied?

.....
.....
.....

--	--

9.4) Watter impak dink u het saaiboerdery op die veld in die Leliefontein Landelike Gebied?

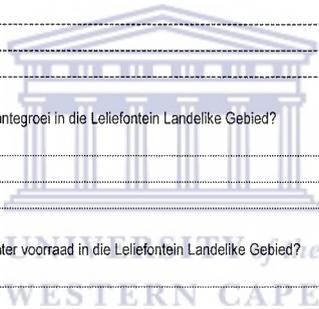
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10) Identifiseer die probleme wat u ervaar rakende die gebruik van die natuurlike hulpbronne.

.....
.....
.....

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C. Grondbewaring

11.1) Wat verstaan u onder die term grondbewaring?

.....
.....
.....

--	--

11.2) Word grondbewaring in die Leliefontein Landelike Gebied toegepas?

Ja
Nee

1
2

--

11.3) Indien ja watter individue/instansie(s) is verantwoordelik daarvoor?

.....
.....
.....

--	--

11.4) Verduidelik asseblief hoe grondbewaring in die Leliefontein Landelike Gebied toegepas word.

.....
.....
.....
.....

--	--

11.5) Volgens u, hoe suksesvol is die stelsel van grondbewaring in die Leliefontein Landelike Gebied?

Baie suksesvol
Suksesvol
Onsuksesvol
Totale mislukking
Onseker
Ander

1
2
3
4
5
6

--

11.6) Indien ander, verduidelik asseblief.

.....
.....
.....

--

11.7) Pas u grondbewaring toe?

Ja
Nee

1
2

--

11.8) Indien ja, hoe pas u dit toe?

.....
.....

--



11.9) Indien nee, wat is die rede(s) waarom u dit nie toegepas nie?

D. Wisselweiding

12.1) Wat verstaan u onder die term wisselweiding?

12.2) Word wisselweiding in die Leliefontein Landelike Gebied toegepas?

Ja

1
2

Nee

12.3) Indien ja watter individue/instansie(s) is verantwoordelik daarvoor? Indien nee, gaan na vraag 12.6.

12.4) Hoe ingelig is die meeste veeboere in u area oor die wisselweiding metodels?

Goed ingelig

1
2

redelik ingelig

3
4

Swak ingelig

5

Bykans geen kennis

Onseker

12.5) Indien ja vertuידelik asseblief hoe wisselweiding in die Leliefontein Landelike gebied toegepas word?

12.6) Volgens u, hoe suksesvol is die toepassing van wisselweiding in die Leliefontein Landelike Gebied?

Baie suksesvol

1

Suksesvol
 Onsuksesvol
 Totale mislukking
 Onseker
 Ander

2
3
4
5
6

12.7) Indien ander, verduidelik asseblief.

.....

.....

.....

12.8) Indien nie, motiveer waarom u dink wisselweiding nie in die Leliefontein Landelike Gebied toepas word nie?

.....

.....

13.1) Vind veevermindering plaas binne die Leliefontein Landelike Gebied?

Ja
 Nee

1
2

13.2) Indien ja, watter instansie(s) is verantwoordelik vir die regulering van vee getalle.

.....

.....



13.3) indien nee wat is die rede(s) waarom dit nie plaasvind nie?

.....

.....

14.1) Is daar area(s) binne die LLG wat a.g.v. oorbeweidning nie meer vir weiding gebruik word nie?

Ja
 Nee

1
2

14.2) Indien ja, watter area(s)?

.....

.....

.....

14.3) Indien ja, wat is die rede vir die oorbeweiding?

14.4) Indien ja, is daar aksies geloods om die area/s te onttrek van weiding?

Ja

1

Nee

2

14.5) Indien ja, verduidelik asseblief volledig hoe die proses van om die area/s te onttrek van weiding geïnisieër was.

14.6) Indien ja, was daar enige aksies geloods om die oorbeweide area/s te rehabiliteer?

Ja

1

Nee

2

14.7) Indien ja, verduidelik hoe die proses om die area/s te rehabiliteer ingestel is.

15.1) Vind daar investering in die weidings/saai grond deur die boere in die LLG plaas?

Ja

1

Nee

2

15.2) Indien ja, wat behels die investering?

Aanbring van heinings

1

Herstel van heinings

2

Bekamping van erosie

3

Aanplant van plantegroei

4

Aanbring van keerwalle

5

Opvul van dongas

6

Ander

7

15.3) Indien ander. Spesifiseer asseblief.

15.4) Indien nee, wat is die rede(s) waarom dit nie plaasvind nie?

15.5) Het u al in die grond geinvesteer?

Ja
Nee

1
2

15.6) Indien ja, wat het investering behels?

15.7) Verskaf 'n beraamde koste van u investering.

15.8) Indien nee, wat is die rede(s) waarom u nie in die grond investeer het nie.



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E. Grondbesit

16.1) Dui u boerdery aktiwiteit aan:

Veeboerdery
Saaiboerdery
Tuinbou
Veeboerdery & tuinbou
Veeboerdery & saaiboerdery
Tuinbou & saaiboerdery

1
2
3
4
5
6

16.2) Het die huidige grondbesit stelsel 'n impak op die gebruik van die natuurlike hulpbronne binne die Leliefontein Landelike Gebied?

Ja
Nee

1
2

16.3) Indien ja, beskryf asseblief die impak.

16.4) Watter probleme ondervind u met die gebruik van die natuurlike hulpbronne onder die huidige grondbesit stelsel?

17.1) Watter grondbesit stelsel dink u sal die gebruik van die natuurlike hulpbronne oor die langtermyn verseker?

Privaat grondbesit

1

Gemeenskaplike grondbesit

2

Huur van grond

3

Ander

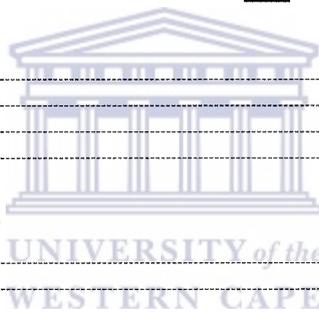
4

17.2) Indien ander. Spesifiseer asseblief.

17.3) Waarom verkies u die spesifieke stelsel?

17.4) Verduidelik breedvoerig hoe die stelsel wat u verkies gaan werk.

18.1) Hoe sal die stelsel wat u verkies veevermindering aanspreek?



18.2) Hoe sal die stelsel wat u verkies oorbeweiing aanspreek?

--	--

18.3) Hoe sal die stelsel wat u verkies die lang termyn gebruik van die natuurlike hulpbronne aanspreek?

--	--

19.) Watter aansporings is daar onder u verkose stelsel wat gebruikers sal aanmoedig om te investeer in die grond?

--	--

20.) Watter stappe sal teen boere geneem word onder u verkose stelsel wat die vasgestelde reëls en regulasies (grondgebruik) oortree?

--	--

21.1) Gaan van die boere wat huidiglik gebruiksreg op die grond het, hulle "regte" verloor onder u verkose stelsel?

Ja
Nee

1
2

--

21.2) Indien ja, verduidelik asseblief.

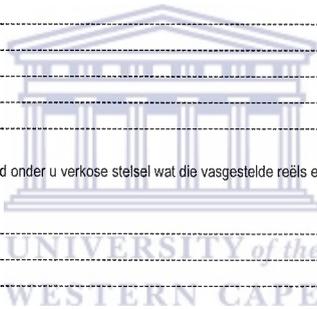
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22.1) Is u bewus van 'n voorbeeld waar die stelsel wat u verkies, reeds toegepas word?

Ja

1

--



Nee

2

22.2) Indien ja, identifiseer asseblief die gebied/e.

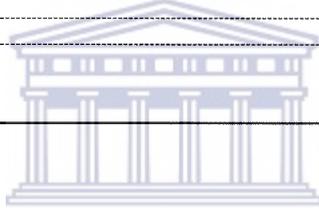
22.3) Hoe sal u verkose stelsel die ekonomiese aktiwiteite in die Leliefontein Landelike beïnvloed?

Geen impak
Middelmatige
Sterk impak
Onseker

1
2
3
4

22.4) Motiveer asseblief u antwoord.

BAIE DANKIE VIR U SAMEWERKING



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