

# **The nature, extent and impact of multiple land uses on the agricultural landscape in Stellenbosch as manifestation of a post-productivist mode of agricultural change**

by  
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## **DECLARATION**

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## ABSTRACT

The aim of this study was to investigate the nature, extent and impact of multiple land uses on the agricultural landscape in Stellenbosch as manifestation of a post-productivist mode of agricultural change. The research objectives included the provision of a thorough literature review of post-productivism; mapping the spatial distribution of farm-based activities on wine farms within the Stellenbosch area; the compilation of a land-use map of the area that will investigate the extent of multiple land-use diversification; an analysis of the locational relationship between farm-based activities and a range of land-use changes in GIS; mapping the municipal properties and land use on each; the provision of a typology of post-productivist, non-agricultural land consumption practices; and conducting a representatively sampled survey among farm owners/managers who have not followed the trend of multiple land-use practices. Data were collected from questionnaires completed by the owners of wine farms within the Stellenbosch area; by differentiating each land cover type by the changes that took place over the period 1993 to 2010; and from long-term lease agreements of Stellenbosch municipal properties and the land use of each property. An overall increase in the presentation of alternative features/facilities can be observed in the Stellenbosch area. According to the information obtained from the questionnaires, conferences and weddings seems to be the most popular alternatives to primary farming. The research findings indicate that tourism-related functions/facilities on farms lead to a much needed alternative source of income for farmers. The changes in land cover observed over time can be linked to the process of post-productivism, which is aimed primarily at minimising the harmful effects of intensive farming techniques on the environment. In cases where land cover has decreased drastically, especially plantations, these areas have been transformed into natural vegetation. The Stellenbosch Municipality is strict on compliance with policies, as failure to do so can have harmful effects on the environment. These policies include the Land Use Planning Ordinance 15 of 1985 (Western Cape, 1985); the Municipal Asset Transfer Regulations of 2008 (Western Cape, 2008); the Western Cape Provincial Spatial Development Framework of 2009 (Western Cape, 2009); the Provincial Urban Edge Guidelines of 2005; and the policy on the management of Stellenbosch Municipality's immovable property of 2012. The municipality also is strict on the fact that the property may only be used for the purpose for which it was zoned. Failure to comply with these rules can lead to the termination of the contract between the municipality and the farmer, without any compensation from the municipality. Recommendations for future research include some development opportunities and marketing

strategies for farm-based tourism; suggestions regarding the municipal responsibilities towards the commonages; as well as suggestions regarding the management of changes in rural land use change.

**Keywords and phrases:** post-productivism; agriculture; conventional farming; multifunctional farms; diversification; urban edge; broadened income; tourism; rural land use; municipal commonage; land cover; land use; lease properties

## OPSOMMING

Die doel van hierdie studie was om ondersoek in te stel na die aard, omvang en impak van veelvoudige grondgebruike op die landbou-landskap van Stellenbosch as 'n manifestasie van die postproduktivistiese modus van landbouverandering. Die navorsingsdoelwitte het die volgende ingesluit: die voorsiening van 'n deeglike literatuuroorsig oor postproduktivisme; kartering van die ruimtelike verspreiding van plaas-gebaseerde aktiwiteite op wynplase in die Stellenbosch-omgewing; samestelling van 'n grondgebruikskarta van die gebied wat die omvang van die diversifisering van veelvuldige grondgebruike ondersoek; analise van die liggingsverhouding tussen plaas-gebaseerde aktiwiteite en 'n verskeidenheid van grondgebruikveranderinge in GIS; kartering van die munisipale eiendomme en grondgebruik op elke eiendom; verskaffing van 'n tipologie van die postproduktivistiese, nie-landbou verbruikspraktyke; en die uitvoering van 'n verteenwoordigende opname onder plaaseienaars/bestuurders wat nie die tendens van meervoudige grondgebruike volg nie. Data is ingesamel deur middel van vraelyste wat deur eienaars van wynplase in die Stellenbosch-omgewing voltooi is; deur onderskeid te tref tussen verskillende soorte grondbedekking deur te fokus op die veranderinge wat van 1993 tot 2010 plaasgevind het; asook 'n ondersoek van langtermyn huurkontrakte van munisipale eiendomme op Stellenbosch en die grondgebruik van elke eiendom. In die Stellenbosch-omgewing was daar 'n algehele toename in die aanbieding van alternatiewe funksies/fasiliteite. Volgens die vraelyste blyk konferensies en troues die gewildste alternatief tot primêre boerdery te wees. Die navorsingsbevindinge dui daarop dat toerisme en verwante funksies/fasiliteite op plase 'n noodsaaklike alternatiewe bron van inkomste vir die boere verskaf. Die veranderinge in die grondbedekking wat oor tyd waargeneem is, kan gekoppel word aan die proses van postproduktivisme, aangesien die proses daarop fokus om die skadelike uitwerking van intensiewe boerderytegnieke op die omgewing te verminder. In gevalle waar grondbedekking drasties afgeneem het, veral van plantasies, is hierdie gebiede gewoonlik in natuurlike plantegroei omskep. Die Munisipaliteit van Stellenbosch is streng oor die nakoming van beleide, aangesien versuim 'n skadelike uitwerking op die omgewing kan hê. Hierdie beleide sluit in die Grondgebruikbeplanning Ordonnansie 15 van 1985; Munisipale Bate Oordrag Regulasies van 2008; die Wes-Kaapse Provinsiale Ruimtelike Ontwikkelings Raamwerk van 2009; die Provinsiale 'Stedelike Randgebied' Riglyne van 2005; asook die beleid op die bestuur van die Stellenbosch Munisipaliteit se vaste eiendom van 2012. Die munisipaliteit is ook streng oor die feit dat eiendomme slegs gebruik mag word vir die doel waarvoor dit gesoneer is. Versuim om

hieraan te voldoen kan lei tot die beëindiging van die kontrak tussen die Munisipaliteit en die boer, sonder enige vergoeding vanaf die munisipaliteit. Voorstelle vir toekomstige navorsing sluit in 'n paar ontwikkelingsgeleenthede en bemarkingstrategieë vir plaas-gebaseerde toerisme, voorstelle ten opsigte van die munisipale verantwoordelikhede teenoor meentgronde, asook voorstelle gerig op die bestuur van verandering in landelike grondgebruik.

**Slutelwoorde en frases:** postproduktivisme; landbou; konvensionele boerdery; multifunksionele landbou; diversifisering; stedelike rand; verbreding van inkomste; toerisme; landelike grondgebruik; munisipale meentgrond; grondbedekking; grondgebruik; eiendomme te huur

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## ABBREVIATIONS AND ACRONYMS

ANC	African National Congress.....	63
ATCOR2	Atmospheric/topographic correction for satellite imagery.....	10
BGIS	Business and Geographic Information Services.....	10
CWD	Cape Winelands District.....	106
CGA	Centre for Geographical Analysis.....	9
KWV	Cooperative Winegrowers Association of South Africa.....	73
DLA	Department of Land Affairs.....	60
GIS	Geografiese Inligtingstelsels.....	iv
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MATR	Municipal Asset Transfer Regulations.....	66
NGO	Non-governmental organisation.....	19
RMSE	Root mean square error.....	10
SANBI	South African National Biodiversity Institute.....	10
UK	United Kingdom.....	22

## **CHAPTER 1 MULTIPLE LAND USES ON WINE FARMS IN THE STELLENBOSCH MUNICIPAL AREA**

This study investigated the nature, extent and impact of multiple land uses on the agricultural landscape in Stellenbosch as a manifestation of a post-productivist mode of agricultural change. This introductory chapter starts off with a historical overview of Stellenbosch as a wine region, tourist attraction and investment opportunity, followed by a section on the research methodology, and finally a discussion of the structure of the thesis.

### **1.1 INTRODUCTION**

Since farmers worldwide realised the harmful effects of productivist modes of farming on the environment, there has been a growing change in the use of agricultural land as a means of production to a multifunctional environment in which alternative uses clearly emerge. Potential buyers of agricultural land from the agricultural sector are drawn by the intrinsic value of the land, while “alternative buyers” of the land instead focus more on the aesthetic value, the conservation of the land or even on the use thereof for recreational purposes. These buyers seem to be more or less independent of the income from agricultural activities on a wine farm. They do not mind paying prices exceeding the productive value of the farm, as the status and rural lifestyle associated with owning a wine farm are extremely important to them (Kleynhans & Opperman, 2005).

Small wine farms are known to have a greater degree of involvement in/dependence on wine tourism, while medium and large businesses are to a lesser extent dependent on this sector for their survival. Farms with alternative capital sources also seem to perform better than those depending only on agriculture as a means of income (Reed & Kleynhans, 2009; Viljoen & Tlabela, 2007). Such wine farms offer a diverse range of services, such as weddings, conferences, restaurants and accommodation, as a means of broadening their income.

Stellenbosch, established in 1679, is located in the Western Cape province of South Africa. The town and its surroundings are one of the most visited and well-known areas in South Africa, largely due to the breath-taking natural landscape. This town, which is the second oldest European settlement in the Cape, is also part of the Cape Floristic Region (Fairbanks, Hughes & Turpie, 2004). The wine routes allow tourists to explore this unique region, with its Mediterranean climate and winter rainfall (Bruwer, 2003; Demhardt, 2003).



According to Reed and Kleynhans (2009), the Stellenbosch wine routes are characterised by a good infrastructure and are within reach of the Western Cape's capital city, Cape Town, and the Cape Town International Airport. Stellenbosch University has approximately 28 000 students, who contribute to the economy of the town and the district (Stellenbosch Tourism, 2012). Another benefit is the average annual rainfall, which ranges between 600 mm and 1 000 mm per year. This water is not only used for the irrigation of vineyards, but also for crops, such as maize, corn and strawberries (Bruwer, 2003).

The Stellenbosch wine route is the largest wine route in South Africa and is divided into five sub-regions, namely Greater Simonsberg, Stellenbosch Berg, Helderberg, Stellenbosch Hills and Bottelary Hills (Scott, 2008). Stellenbosch's tourism sector is well established and has substantial growth potential. A large portion of visitors coming to Stellenbosch visit the wine route. Tourists are especially interested in this area because of its scenery, peace and quiet, wine, animals, as well as value for money (Stellenbosch Tourism, 2012). Meyer (2004) states that the enormous growth in tourism in the Stellenbosch area led to a move away from standardised mass tourism towards more individualistic patterns, in which greater suppleness and a more expressive experience gained importance. The wine route concept is based on the idea of an officially established wine region. These wine routes are characterised by natural attractions such as the scenery, physical attractions, vineyards as well as roads, and clearly recognisable road signs show the way to each wine farm along the route.

Until the 1960s, the development of Stellenbosch was well contained in terms of the Land Use Planning Ordinance 15 of 1985, evading the fertile and flood-prone valley bottoms and the abrupt and scenic slopes of the surrounding mountains. A close relationship existed between the urban settlements and their environment. In the early 1970s, this started to change as new suburbs were developed. This also led to a severe decline in the quality of the water in the surrounding rivers and dams.

The Stellenbosch area is covered by 17 117 hectares of vineyard (Stellenbosch Tourism, 2012). According to Stellenbosch Tourism (2012), the wine farms in this area are host to roughly 6 272 permanent workers, equal to 22 workers per farm. The decision was taken to do this research on the Stellenbosch wine region as this region shows various signs of change in its agricultural sector that can be associated directly with the overarching process of post-productivism.

## 1.2 RATIONALE FOR THE RESEARCH

Stellenbosch reflects numerous characteristics of post-productivism, which will be discussed accordingly. First, the use of rural areas for their aesthetic and recreational value, the re-establishment of lost or damaged habitats, better on-farm monitoring of land degradation, and the conservation of wildlife habitats. Second, a lessening of the intensity of farming, as well as a shift in food production from quantity to quality. Third, a return to environmentally sound (green) and sustainable farming techniques, as well as the gradual removal of state support for agriculture. Fourth, the creation of a consumptionist countryside, as well as the inclusion of emerging farmers, organic farmers and hobby farmers in the broader farming process. These are all characteristics of a shift towards a more post-productivist countryside, and are all processes that are also taking place in the Stellenbosch area (Albrecht, 2007; Ward *et al*, 2008; Wilson & Rigg, 2003).

Stellenbosch is well known for its wine farms. It is argued that wine farms can no longer make a living from producing wine only, because of the unstable market and the fluctuating prices of grapes (Sharpley & Vass, 2006). This has led to wine farms increasingly diversifying their land uses over the past two decades. For example, tourism activities on farms that generate income outside of conventional farming, focusing more on the ‘consumption’ of the land, are becoming more popular. Tourism-based activities include, among others, farm-based restaurants, accommodation, wedding facilities, conference facilities, hosting of formal picnics, hiking routes and 4×4 routes. Such tourism activities lead to a reduction in the intensity of farming through the use of land for its aesthetic value (Cloke, 1993; Cloke & Perkins, 2002). Over the past few decades, the number of farms in the Stellenbosch area offering tourist-related activities has increased dramatically – leading to what one can label a change towards post-productivism.

### 1.2.1 Research aim and objectives

The primary aim of this study was to investigate the nature, extent and impact of multiple land uses on the agricultural landscape of Stellenbosch, as manifestation of a post-productivist mode of agricultural change.

Seven research objectives were identified to find answers to the research aim.

- To provide a literature review of post-productivism.
- To analyse the locational relationship between farm-based activities and a range of land-use changes in GIS.

- To compile a land-use map of the area to determine the extent of multiple land-use diversification.
- To provide a typology of post-productivist, non-agricultural land consumption practices.
- To map the municipal properties and establish the land use on each of these properties.
- To conduct a representatively sampled survey among farm owners/managers who have not followed the trend of multiple land-use practices/diversification of economic activities.
- To conduct a representatively sampled survey among farm owners/managers who have followed the trend of multiple land-use practices.
- To map the spatial distribution of farm-based activities on wine farms within the Stellenbosch area.

### **1.3 DATA COLLECTION**

Data for this study were obtained using multiple methods. First, a literature study was carried out to provide a theoretical background to the study. Second, data were obtained to differentiate between 1993 and 2010 land cover of the study area. Third, data were obtained on the municipal commonages, as well as on the policies for the management thereof. Last, a questionnaire survey was conducted of wine farms offering alternative land uses, as well as wine farms offering only wine tastings. A distinction was made between farms producing wine from their own grapes and farms buying grapes from elsewhere.

#### **1.3.1 Research methods**

The methods followed to reach the objectives of this study will be discussed separately for each chapter.

##### **1.3.1.1 Literature review**

A literature study was carried out, focusing mainly on the process of post-productivism and its observable effects. A few topics were identified that are related closely to the overarching process of post-productivism, namely productivism as predecessor; changing farmers' identities; the urban edge; tourism; rural land-use planning; and municipal commonage.

##### **1.3.1.2 A changing rural landscape: changes in land cover from 1993 to 2010**

Data, in Excel sheet format, was obtained from the Centre for Geographical Analysis (CGA) to differentiate between land cover in 1993 and 2010, and this data was then used to

determine where stark changes have taken place over the past 17 years. Four specific end products were needed for the presentation of the data, namely: imagery 2010, imagery 1993, land cover/land use (LC/LU) classification, and building count. Each of these will be discussed under separate headings.

### *Imagery 2010*

Since satellite imagery is best for automated classification, SPOT5 was chosen as it has very high spatial resolution (2.5 m) and good spatial coverage (60 × 60 km).

Two raw images were acquired for the summer of 2009/2010. The raw imagery was pre-processed: orthorectified to existing SPOT5 imagery (< 5 m root mean square error ((RMSE)), radiometrically and atmospherically corrected (ATCOR2), and pan-sharpened to a resolution of 2.5 m.

### *Imagery 1993*

There was no satellite imagery available that was sufficient for high-resolution land-cover mapping prior to 1998. There were several aerial photographs available that covered the years 1938, 1953, 1966, 1977, 1989, 1993, and 2000. Job 972–1993, at a scale of 1:150 000, was chosen. Eleven aerial photographs were thus scanned in, orthorectified and mosaicked.

### *LC/LU classification*

Eight different types of land cover were defined, namely:

- Natural bare: areas of exposed soil/rock not falling within urban areas;
- Vegetation: all vegetation not falling under fields, plantation or recreation;
- Water;
- Built up: as defined by the Chief Surveyor-General, May 2011 erven data;
- Fields: as defined by Department of Agriculture, 2007 WC fields index;
- Conservation: formally protected areas defined by SANBI (BGIS);
- Plantation: cultivated trees (mostly pine and eucalyptus plantations); and
- Recreation: vegetation intended for sport (golf courses).

The object-orientated eCognition 8 software package, as well as the multi-resolution segmentation of the four-band, pan-sharpened SPOT5 image, was used to merge the objects, resulting in a spectral difference of less than seven and a size of less than four pixels. The supervised classification required ‘training’ the classification algorithm regarding what spectral properties defined each class. Training areas were delineated for water, vegetation and natural bare. ‘Similar date’ aerials and GoogleEarth™ images were used as reference. The classification algorithm decided on was the nearest neighbour.

Built-up was accordingly defined as follows: May 2011 ‘erven’ obtained from the Chief Surveyor-General, after which all ‘erven’ intersected by the 2007 WC Fields Index were removed. This resulted in the removal of ‘non-agriculture erven’ from the classification.

Fields were defined by the June 2007 Fields Index obtained from the Department of Agriculture.

Conservation data was defined by the SANBI (BGIS) ‘formal protected areas’ – Assegaaibosch, Hottentots-Holland, Hawequas, Helderberg, Jonkershoek, Simonsberg, Mont Rochelle, Theewatersand, and Jan Marais.

To reduce the size of the dataset, objects smaller than 6.25 m<sup>2</sup> were removed from the final classification, changing the more than 759 000 objects in the original to more than 614 000 in the final. This resulted in a highly accurate summer 2009/2010 land cover/land-use classification, which was duplicated and overlaid onto the 1993 black-and-white aerial photographs and then reclassified manually. Having identical objects for two different times prevented edge mismatches during change detection. Two problems occurred, namely the poor image quality for 1993 due to the small scale, as well as a still unwieldy number of objects (> 600 000). These problems were mitigated by the precautionary approach to the 1993 classification, through which only one operator was used in the manual classification with the aim of minimising human bias.

#### *Building count*

The initial database used for this purpose was the ESKOM building count (2008). This was overlaid with orthorectified aerial photographs from 2010 and manually updated and corrected, after which it was duplicated and overlaid onto the 1993 images and again corrected manually. This method led to the problem of individual houses being difficult to see on the 1993 aerial photographs, and a second operator was used to double check these images.

The final products used for the Stellenbosch area were:

- an eight-class 2.5 m land cover/land-use classification for summer 2009/2010 and 1993;
- a point-based building count for 2010 and 1993 respectively.

#### 1.3.1.3 Municipal owned non-urban land: municipal regulations on lease properties and the different uses thereof

This study focused on multiple land uses on private as well as public land. For this purpose, the 2012 long-term lease agreements of Stellenbosch Municipality's immovable property were obtained from the local municipality in PDF format. This led to a problem, as data in PDF format cannot be edited. This problem was mitigated by using software converting the data into Excel format.

A review of the management of the Stellenbosch municipal commonage was done by reviewing the draft policy on the management of Stellenbosch Municipality's immovable property, with the aim of establishing the municipal rules and regulations regarding commonage usage.

Municipal-owned properties, as well as which of these properties were leased and for what purpose, were indicated on a map using GIS. The land uses were categorised into nine main categories, namely business, community facilities and activities, tourism-related uses, transport, vacant land, nature areas, open spaces, smallholdings, and a category labelled 'other'. The label 'other' covers all land uses not covered by the other eight categories.

Information obtained from the land audit was also used to differentiate between the different land usages in the study area.

#### 1.3.1.4 Multiple land use and diversification on Stellenbosch farms

Information regarding the facilities offered by each grape-producing farm was drawn from the Platter Wine Guide 2012 (Platter, 2012), the Stellenbosch Tourism Bureau, as well as a booklet provided by the Stellenbosch Tourism Bureau, *Stellenbosch and its wine routes* (Stellenbosch Tourism, 2012).

Differentiation was done between multifunctional farms and farms offering no alternative functions/facilities. A complete list of 119 multifunctional farms was thus compiled (Appendix A), 54 of which participated in the study. A detailed list of the 54 participating wine farms and the alternative functions/facilities offered by each was drawn up (Appendix

B). A complete list of 41 farms offering only wine tastings was compiled, 31 of which participated in the study.

Google Earth™ was then used to capture the coordinates of each farm for mapping in GIS. A map was drawn up for multifunctional farms as well as farms not offering any alternative functions/facilities.

A survey of the functionality of wine farms, as well as questions focusing on the opinions of wine farmers regarding the Winelands landscape, was incorporated into this research for both the multifunctional farms (Appendix B) and farms offering only wine tastings (Appendix C). The reason for this was to get an idea of the farmers' attitudes towards and opinions of diversification (pros and cons), to find out why some farmers apply diversification of their farms while others do not.

Google was used to obtain the contact details of each farm in the study area. Each farm was then contacted telephonically, at which time the aim of the study was explained briefly and the farmer was asked to participate in the study. Of the 41 farms that do not offer extra facilities, only 31 agreed to answer the questionnaire. Each farm was given a choice of receiving the questionnaire either by e-mail or fax. It was decided to give the farmers two weeks to complete the questionnaires and then either e-mail or fax them back. Two weeks gave each farmer enough time to go through the questionnaire thoroughly and answer it entirely. After the two weeks only 11 farms had returned the completed questionnaire. The remaining farms were once again contacted telephonically and reminded of the questionnaire. After three more weeks, 23 farms had completed the questionnaire. It was then decided to drive to each of the remaining farms to complete the questionnaire on the farm with the farmer/manager present. This took two more weeks.

Of the 119 farms that do offer extra facilities (Appendix C), only 54 agreed to answer the questionnaire. It was decided to drive to each of these farms and complete the questionnaire on the farm with the farmer/manager present. This process took three weeks.

## 1.4 THE RESEARCH DESIGN

Figure 1.1 shows the research design for this study.

This study consists of three main components, namely an investigation of how rural land has changed in Stellenbosch; an investigation of how public rural land is utilised and managed (through various policies); and lastly, an investigation of how private farm land is utilised.

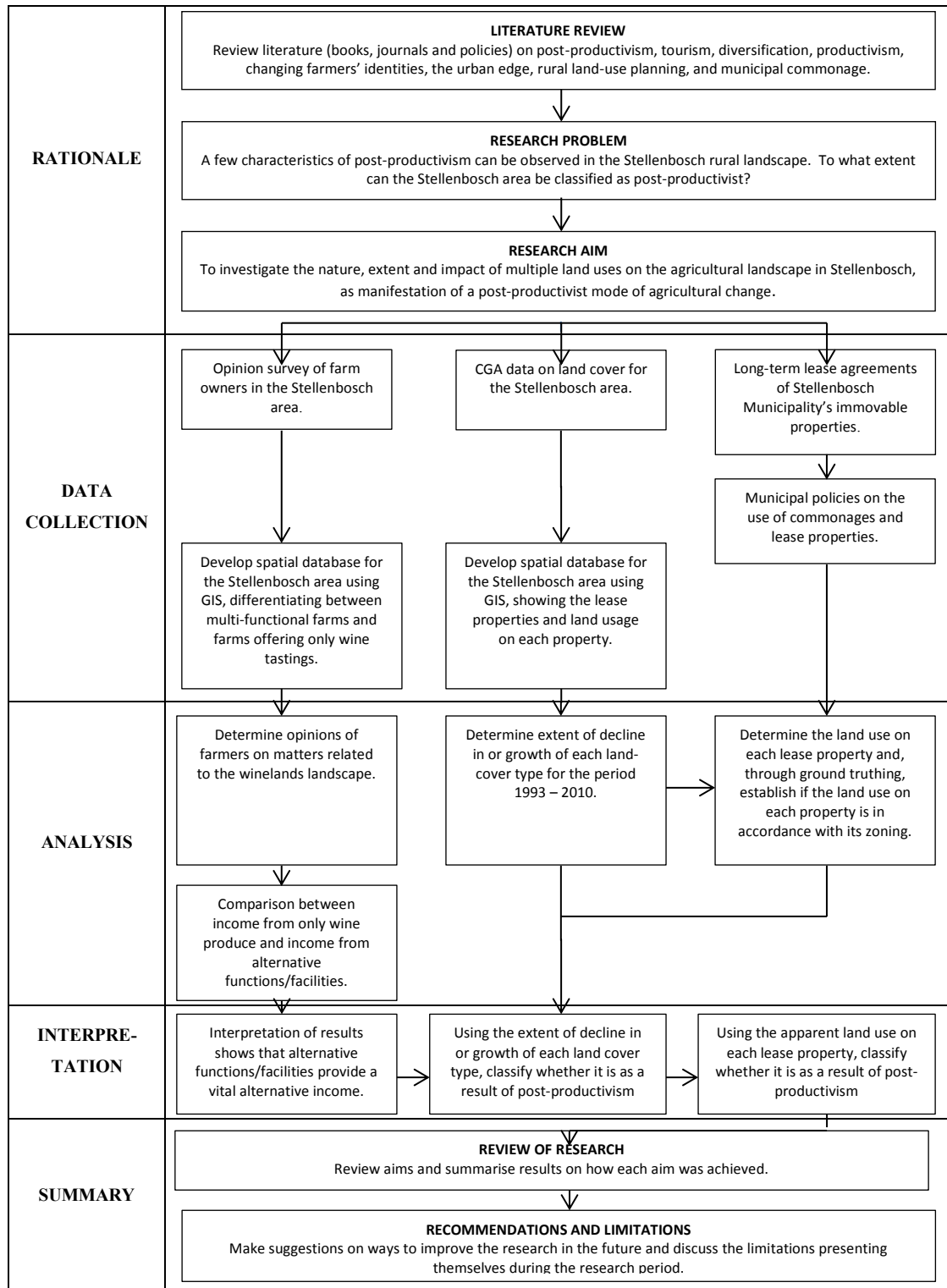


Figure 1.1 The research design



## 1.5 STRUCTURE OF THE THESIS

The introductory chapter has provided the rationale for, as well as the research aim, objectives and methodology of the study. It also provides a background to the process of post-productivism and how this process has led to multiple land uses on farms, and especially farms in the study area. In Chapter 2 the literature on post-productivism is discussed. The aim of Chapter 2 is to give context to the research done on post-productivism and its effects on multiple land use. This chapter also focuses on the positive outcomes introduced through diversity, such as including extra and desirable facilities, leading to a vital alternative income. Literature on the underlying processes characteristic of post-productivism was also studied thoroughly. These characteristics include productivism as predecessor, tourism, diversification, changing farmers' identities, the urban edge, and rural land-use planning. Chapter 3 provides an overview of the changes in land cover for both state- and privately owned land for the period 1993 to 2010, and how these changes can be linked to the process of post-productivism. Chapter 4 focuses on state-owned land and gives an overview of the regulations pertaining to the management of municipal properties, as well as an overview of commonage usage in the Stellenbosch area. The focus in Chapter 5 is on privately owned land and on providing a critical review of the revenue earned from alternative facilities/activities as opposed to profit made from only the agricultural sector. Farmers' opinions on the Winelands landscape, as well as the reasons they give for not offering tourism-related functions/facilities, are also captured in this chapter, while Chapter 6 concludes the thesis by providing a summary of the aim and objectives of the study and the methodology followed to achieve each aim. Recommendations are also made to the local municipality on the effective management and maintenance of rural land. In addition, recommendations are made to local farmers to broaden their farm-based activities as a means of earning an alternative income.

## **CHAPTER 2 THE PROCESS OF POST-PRODUCTIVISM: THE CREATION OF MULTIPLE LAND USES**

### **2.1 INTRODUCTION**

This chapter aims to describe the overarching process of post-productivism by means of a literature study. To understand this process completely it is important to look at the underlying processes that are characteristic of post-productivism. These characteristics include productivism as predecessor, tourism, diversification, changing farmers' identities, as well as the urban edge.

### **2.2 PRODUCTIVISM AS PREDECESSOR**

In the mid-1980s, a social and economic catastrophe took off in the countryside when a range of pressures in places around the world, including economic globalisation and neo-liberalism, gave rise to associated changes in rural policy. In the midst of this crisis, the de-regulation of agriculture, the reorganisation of local government as well as the privatisation of many rural services dominated in many places. These changes led to rising unemployment and debt and a period of rural discomfort for both primary producers and the rural community. Many groups adapted to this change by either capitalising on an increase in non-agricultural/consumption-based activities the countryside had to offer, or by expanding their land uses (Ray, 1998).

Productivism refers to a mode of agricultural policy and practice that is “both input intensive and [in which] the maximization of the production of commodities [is] emphasized” (Haberl & Wackernagel, 2004:196). Productivism is characterised by a strong correlation between agricultural actors, a Fordist food regime, industrialised capital-intensive technologies, specialised and intensified agricultural production, and an agricultural policy marked by strong government support for production. Typically, “governments support maximum production through subsidisation, price guarantees and protectionist policies” (Frenkel, 2004:361).

According to Wilson (2001), the productivist era started at the time of the Second World War and lasted to the mid-1980s. Productivism was based on an intensive and industrially driven agriculture, with state backing mainly concerned with output and increased productivity. Agricultural intensification is defined as “higher levels of inputs and improved output (in quantity or value) of cultivated or reared products per unit area and time – permitted the doubling of the world's food production from 1961 to 1996 with only a 10% increase in

arable land globally” (Lambin *et al.*, 2001: 262). In the productivist era the governments of many advanced capitalist countries proclaimed new regulatory and policy regimes. These regimes aimed to safeguard local agriculture from change in the global economy, improve regional food security and self-sufficiency, and take full advantage of local primary production (Marsden *et al.*, 1993). Other steps taken included government subsidies for farm inputs, such as fertiliser, pesticides and farm equipment; minimum price guarantees for farm outputs, such as meat, wool and grain; state backing for rural research and development; and the establishment of tariffs to shield local primary production from global opposition (Albrecht, 2007; Bjorkhaug & Richards, 2008; Haberl & Wackernagel, 2004; Ilbery & Bowler, 1998).

However, productivism had an environmentally destructive nature, as it focused mainly on capitalising on food production by using more intensive farming techniques and chemical inputs, causing severe environmental deprivation in some intensively farmed areas. These state-led policy regimes fortified a long period of productivist agriculture, one which situated farming conclusively at the heart of rural life. The vital goal was to secure national self-sufficiency for agricultural commodities, as well as government support for maximum production, resulting in increasing surplus production and environmentally harmful intensification (Lowe *et al.*, 1993).

Productivist ideologies entailed a firm conviction that farmers were the pre-eminent guardians of the countryside, and the main threats were perceived to be urban and industrial development, not agriculture itself. Ilbery (1991) believes that the food regimes during this era were characterised by mass consumption of agricultural products and the adoption of Fordist regimes of agricultural production.

A variety of social, economic and political powers began to challenge productivist agriculture during the 1970s and 1980s. These forces encompassed an emergent “public awareness of the environmental damage intensive farming was causing, and a related shift in consumer preference towards green commodities and organic food; social and political concern for the on-going cost of supporting over-production in the rural sector; and more general pressures arising from the rapidly globalising and neo-liberal economy” (Albrecht, 2007:3). These concerns (Albrecht, 2007) underpinned a major revolution in the post-war political economy of agriculture, namely ‘rural restructuring’.

The main aim of rural restructuring was to break down the productivist regimes that had supported intensive primary production since the 1950s. These regimes, built on the principles of social democracy and state intervention, were substituted with a range of new-liberal policies that opened up primary industries to the unremitting market forces of advanced global capitalism and consequently caused a crisis in the countryside. In the rural areas of a large number of advanced capitalist countries, the crisis was initially marked by falling farm incomes, growing farm debt and job losses in the primary sector (Clope & Perkins, 1998, 2002; Dowsett, 2008; Gardner, 1993; Hall, 2006; Woods, 2006, 2009). Post-productivism as heir to productivism will be discussed in the following section.

## **2.3 POST-PRODUCTIVISM AS GENERATOR OF MULTIPLE LAND USES**

In New Zealand and other countries overseas, the uneven spatial implications of rural restructuring resulted in the emergence of the term post-productivism in the literature on rural change – as an approach to describe the new state of affairs in the countryside (Lowe *et al.*, 1993; Shucksmith, 1993; Ward, 1993). The ‘death’ of the productivist regime therefore gave rise to post-productivism. Throughout the late 1990s and early 2000s, the changes taking place in the countryside grew into this very popular, though highly disputed, theoretical framework (Argent, 2002; Bjorkhaug & Richards, 2004; Burton & Wilson, 2006; Evans *et al.*, 2002; Halfacree, 1997; Holloway, 2000; Holmes, 2002, 2006; Ilbery & Bowler, 1998; Jay, 2004; Lowe *et al.*, 1993; Mather, Hill & Nijnik, 2006; McCarthy, 2005; Morris & Evans, 1999; Shucksmith, 1993; Smailes, 2002; Walford, 1999, 2003; Ward, 1993; Ward *et al.*, 2008; Wilson, 2001; Wilson & Rigg, 2003; Wilson & Wilson, 1997).

Post-productivism’s precise characteristics were clearly identified and outlined by Ilbery and Bowler (1998). During the productivist era, higher farm output was motivated through the continuous modernisation and industrialisation of agriculture. Post-productivism is the complete opposite; Ilbery and Bowler (1998:74) describe it as “the integration of agriculture within broader rural economic and environmental objectives, often marked by the development of a low-input/low-output farming ethos in which the emphasis is on the quality of the commodities produced”. The way governments facilitated both economic policies and reforms greatly influenced both these periods. In both periods, three major structural shifts were identified, namely “productivist agriculture involved intensification, concentration and specialisation, while post-productivism focused on a move towards extensification, diversification and dispersion” (Ilbery & Bowler, 1998:68).

Today there is a trend from a productivist towards a post-productivist era. Post-productivist agriculture takes place when there is a reduction in the intensity of farming, of which diversification is an example, as well as production focused on the consumption-led activities of the countryside (Wilson & Rigg, 2003). The scarcity of agricultural land and the issue of sustainability are the two main reasons for growing diversification. Post-productivism is also characterised by a move away from agricultural production towards the consumption of the countryside. In the past, leisure and tourism were separated from other activities, with the main aim of avoiding negative impacts on traditional agricultural land uses. Nowadays, consumers have become more demanding, requesting unique experiences and places filled with character and authenticity. Leisure and tourism are now incorporated into development plans. The countryside is challenged to strengthen its adaptive capacities to anticipate the transition it is undergoing towards consuming the countryside (Wilson & Rigg, 2003).

Six main indicators of post-productivism, namely policy change, organic farming, counter-urbanisation, the inclusion of environmental NGOs at the core of policy making, the consumption of the countryside, and on-farm diversification (Wilson & Rigg, 2003), will be discussed next.

Firstly, productivist policies are characterised by their expansive emphasis on the production of food and the intensification of commodity production. Post-productivist policies, on the other hand, are associated with an alteration in discourse towards ‘environment’, ‘extensification’, and the ‘multifunctionality’ of the countryside (Wilson, 2004). Changing the environmental attitudes of the broader public, as well as farmers’ attitudes and identities, to be more post-productivist in nature, is of the utmost importance. Farmers’ concerns should also be raised about the environmental condition of their farms, as well as the need to protect the farm (Wilson, 2001; Wilson & Rigg, 2003).

Secondly, another key factor is organic farming, a vital ingredient of the post-productivist countryside, especially for its strong focus on high-grade, pollution-free produce and its efforts to reduce the effects of degradation (Hall, McVittie & Moran, 2004; Mather *et al.*, 2006; Mowle, 1988; Wilson, 2001).

Thirdly, according to Wilson and Rigg (2003), counter-urbanisation also counts as a fundamental part of the transition towards post-productivism in advanced economies, leading to a weakened rural-urban divide as people move out of urban areas into the surrounding rural areas for lifestyle reasons generated by the intrinsic appeal of the countryside. The growth of

smallholding space and farmers' markets are also examples of post-productivism (Holloway, 2000). This has led to farming practices being adjusted, as well as the questioning of traditional and often environmentally destructive countryside management behaviour. Several new rural land uses and new patterns of rural settlement have arisen as a result of post-productivism.

Fourthly, governance has changed to empower local stakeholders and ultimately to remove the power of the government as the shaper of decisions affecting rural communities. Formerly

marginal actors, such as environmental non-governmental organisations, have increasingly been included in the core of the policy-making process. This process has led to the inclusion of more post-productivist agri-environmental policies that aim at encouraging farmers to farm in more environmentally friendly ways. As traditional corporate relationships between agriculture ministries and powerful farmers' unions are gradually broken down, former politically marginal actors such as environmental groups or local grassroots organisations are now allowed into the decision-making process (Wilson & Rigg, 2003:692).

Fifth, the consumption of the countryside implies the ability of society to consume more than the farmers' produce alone. Farms are now being used for their aesthetic and recreational properties. Examples are golf courses, walking routes and farm tourism. According to Spocter (2009), the part of society having an urge to pay regular visits to the countryside for benefits such as privacy, aesthetic enjoyment and relaxation is usually relatively wealthy and mobile.

Lastly, on-farm diversification has grown to become an everyday phenomenon (Wilson & Rigg, 2003). Farms have grown to be multifunctional, offering alternative facilities/activities to the public as a means of broadening their income. Fast-growing urbanisation in many areas of the Western Cape raises concerns about the sustainability of this growth and the effects thereof on the environment (Western Cape, 2005).

According to the National Agricultural Marketing Council (2002), South Africa's agricultural sector policy has changed its aims towards achieving three main goals over the past 20 years. These goals are pursued, firstly, by righting the imbalances and wrongs of the former apartheid regime by means of the restitution programme of the land reform initiative. Secondly, by ensuring a more just and fair distribution of income in the industry through the introduction of policy regarding labour market protocols, the redistribution and tenure

security programmes under the land reform initiative, the Water Act of 1998, as well as the reorganisation of the Land Bank and Agricultural Research Council. Lastly, by improving the competitiveness of the industry through guidelines on the deregulation of the agricultural marketing system, the removal of input and product subsidies, as well as trade policy.

Post-productivism is characterised by policy shifts from strictly the production of food to a diversified rural landscape. Productivist policies were characterised mainly by their emphasis on food production and the intensification of commodity production. Post-productivist policies, on the other hand, are associated with a shift towards sustainability and the multifunctionality of the countryside (Wilson, 2004). These policies are also characterised by a shift in focus from quantity to quality of food production, since the consumer now attaches more value to the quality of a product than in the past. This has led to the creation of non-food-producing farm jobs and activities, as there are now more jobs available outside the agricultural sector. Also, farmers' attitudes have changed towards more sustainable and environmentally friendly farming techniques. This growing environmental awareness has come as farmers are realising the damaging effects of traditional farming techniques on the environment. The systematic reduction of government support in the decision-making process indicates a move away from state-sustained manufacture models, giving rise to a loss of confidence in the capability of the state to influence agricultural rejuvenation (Evans *et al.*, 2002; Wilson, 2001).

During the late 1980s and early 1990s, geographers and sociologists adopted a neo-Marxist political economic approach (Cloke, 1989). For them, the restructuring of rural areas was connected to the far-reaching macro-scale practices in the international economy. During this period, the spatial variations and inconsistency in rural change grabbed the attention of many geographers. These researchers' main concern was agricultural policy change; nonetheless, they also recognised the importance of growing consumptionist uses of rural areas and the associated upsurge in non-traditional rural businesses, such as suburban development and rural tourism, and the development of commercial recreation. According to these researchers, rural restructuring led to a differentiated countryside (Lowe *et al.*, 1993; Marsden, 1995, 1998; Marsden & Murdoch, 1998; Marsden *et al.*, 1993).

Researchers outside of Britain have to a great extent examined the appropriateness of the productivist/post-productivist model for non-European spaces, for example Australia (Argent, 2002; Holmes, 2002, 2006; Smailes, 2002), New Zealand (Jay, 2004), and the developing world (Wilson & Rigg, 2003). These researchers have established that productivist 'ways of



thinking and doing' are still predominant among farmers and, consequently, that the term post-productivism falls short of depicting the precise details of modern-day rural change. Some critics in the UK state that post-productivism is only a myth. Other, less critical, people have noted that signs of post-productivism are evident, even though hints of productivist agriculture remain in many rural areas.

A further characteristic of post-productivist policies is the creation of the consumptionist countryside, as well as the widening of the farming community to include not only emerging farmers, but also hobby farmers and organic farmers (Heimlich, 1989; Spocter, 2009; Wilson, 2001). Agricultural activity is still the dominating land use in rural areas, but its dominant position in the economic, social and political sphere has been reduced drastically. The idyllic settings beyond the metropolitan borders have become the main attraction for people wishing to escape from the city.

Today, farming embraces a multitude of functions, with an emphasis on environmental conservation and a move away from state-sponsored subsidies that encouraged the intensification of agriculture (Evans *et al.*, 2002; Wilson, 2001, 2004). Bjorkhaug and Richards (2008) note that the state has reduced funding for production, but offers monetary support for substitutes that help sustain the environment or lessen the effects of degradation. Post-productivism can be seen as a shift towards multifunctionality in rural areas, producing not only food but also supporting rural landscapes, protecting biodiversity, generating employment and contributing to the viability of rural areas (Wilson, 2009). Many researchers suggest that the term must be replaced with an emphasis on multifunctional rural space, since the research on post-productivism has concentrated mainly on the diversification of rural economies. Multifunctional rural space may perhaps better capture the idea that rural space is presently being used in hybrid ways – including continuing productivist agriculture and new economic activities, including those directly related to the provision of amenities (Bjorkhaug & Richards, 2004; Burton & Wilson, 2006; Holmes, 2002, 2006; McCarthy, 2005; Smailes, 2002; Wilson & Rigg, 2003; Woods, 2009).

Holmes (2002, 2006) has been predominantly active in the formulation of theory in relation to the idea of multifunctional rural space. According to Holmes, a differentiated and more complex countryside has arisen as a result of these new interests. The multifunctional transition includes the radical re-ordering of the three elementary drives for the underlying human use of rural space, namely production, consumption and protection. This shift is



characterised by an move from the previously dominant production goals in the direction of a more complex, contested, variable mix of production, consumption and protection.

Other academics have noted that the multifunctional character of contemporary rural space is the result of neo-liberal reforms (McCarthy, 2008), and that it is possibly more positive than post-productivist discourses as it concentrates on new outputs – not on the loss of old production systems.

According to McCarthy (2005), demands on rural areas extend beyond production and now include demands for the delivery of ecosystem services, amenities and aesthetics, as well as the preservation of cultural landscapes. Production is no longer the main function; rather, it is “the provision of ecosystem services, amenities and aesthetics, as well as the preservation of cultural landscapes [that] now prevails as the main function of rural land” (Paquette & Domon, 2003: 432). The greater public now demands greater environmental services, amenities, food safety and other public goods from rural areas.

These days, according to McCarthy (2008), more people invest in rural areas for their aesthetic, recreational and other consumption-orientated values. Rural areas within close proximity to protected natural areas and with access to outdoor recreation are very important factors for potential buyers. A home in a rural area, surrounded by green and open space, allowing direct communication with nature but with easy access to the benefits of the city when desired, is regarded as important. ‘Urbanisation of the rural’ takes place as new owners change land-use patterns, land cover and water use. All these attributes lead to an increase in land prices.

The post-productivist era is characterised by a greater variety of economic activities and a change in attitudes relative to land. Multi-dimensionality is a feature of a large number of the characteristics of post-productivism. In this era a shift has taken place from support for food and farm production to an attempt to deliver other environmental and consumer-based benefits. Nowadays, ‘lifestyle’ owners form a significant percentage of farmland ownership. Mather *et al.* (2006) and Kline and Wichelns (1996) concluded that there were three aspects that led to the post-productivist transition, namely overproduction, alternative land usage, and a significant change in societal values.

Post-productivism has attributes such as a reduction in food output, since farmers have realised the importance of quality over quantity and consumers have become more specialised in their needs. It can be said that post-productivism can be described as a simple reversal of

three previous productivist modules of change, namely extensification instead of intensification, dispersion instead of concentration, and diversification rather than specialisation (Ilbery, 1991). The withdrawal of state subsidies as agricultural policy has broken the link between farm incomes and the volume of food produced, by moving away from the support of high prices for food towards direct income for farmers. There also have been increasing environmental regulations and the creation of a more sustainable agricultural system. Lastly, the intensification, concentration and specialisation of production to prevent overproduction are all characteristics of this process (Evans & Ilbery, 1989; Ilbery *et al.*, 1997). Farmers search for new sources of income from a range of alternatives, whether off-the-farm activities or farm diversification on the farm. Alternative sources of income are needed to broaden their income, since farmers have realised the devastating effects of agricultural intensification. According to Chaplin, Davidova and Gorton (2004), the natural environments of farms present opportunities for tourism and recreational activities, especially because of the aesthetic surroundings and the willingness of people to travel far distances to escape from everyday city life.

A key characteristic of an area undergoing post-productivism is a growing migration of new residents into the area, attracted by rural amenities, as well as increased visitation by non-residents seeking recreational and leisure opportunities supported by rural land amenities (Bergstrom, 2002).

Rural places are being transformed, linked and commodified as a product of current global forces (such as amenity migration, international tourism) (McCarthy, 2008; Murdoch, 2003). Woods (2006, 2009) argues that, as rural places are shaped by these global forces, the locals' capacity to act is being increasingly challenged. He suggests that it is better to think of the global countryside as a sequence of modernised and hybrid spaces comprising interactions between local, regional, national and global actors – a place of negotiation, contest and conflict.

Amenity migration and rural property development have been at the core of social, economic and landscape alterations and at the core of local politics (especially land-use planning debates). These can largely be linked to an area's high and universally acknowledged natural amenity value and a matching demand for rural living in this setting. This increased interest and investment has led to these areas now being inextricably linked to a grid of global actors, including international tourists and non-local investors (McCarthy, 2008). The process of

diversification is a major building block and closely linked to post-productivism, and will be elaborated on in the following section.

## **2.4 DIVERSIFICATION**

Sharpley and Vass (2006: 1042) have defined farm diversification as “[t]he reallocation and recombination of farm resources (i.e., land, labor or capital) into new unconventional crops/animals or into non-agricultural enterprises developed on the farm”.

Diversification is those actions that take place on farms that do not focus solely on the production of one product, such as grapes for making wine. Diversification implies changes to activities that generate income outside the conventional wine farm, which means that income is derived from other sources than only the farm (Gatti & Incerti, 1997; Ilbery, 1991). Examples are the increasing growth of farm-based accommodation and recreational activities. Research on both post-productivism and multifunctional rural space is closely interweaved with work on the commodification of the countryside. This research has shown that the approach to the countryside was altered from focusing mainly on primary production to one open to a growing range of non-traditional rural commodities, services, lifestyle products and practices. This area of investigation is closely linked with the wider cultural turn (Cloke, 1997) in social science research, as it usually draws attention to the non-agricultural elements of countryside modification, such as the increasing commodification of rural culture, places and landscapes for tourist, leisure and recreational purposes. According to Ilbery (1991) and Reed and Kleynhans (2009), farms on the urban fringe provide plenty of opportunities for diversification, as farmers should be able to maximise their income from the close proximity of a large market of potential customers, especially in the form of farm-based recreation and value addition to conventional businesses.

Diversification usually entails a reduction in agricultural production – a move towards a multi-functional countryside (Bjorkhaug & Richards, 2008; Gimona & Van der Horst, 2007; Vreeker, 2006). According to Reed and Kleynhans (2009), the development of different enterprises has been encouraged by the state with the aim of diversifying farm incomes in an effort to keep farmers in business, attract new entrants to agriculture as well as promote regional development. The generation of alternative (non-agricultural) income, the continuation of farming and the improvement of quality of life are among the most important goals of farm diversification (Kline & Wichelns, 1996; Parks, 1995).

Ilbery (1991) and Nakana and Mkhabela (2011) noted that the broadening of income is very important, because there are so many risks in agriculture. There are several types of risks in agriculture, namely production risks, where weather, diseases and genetics play a part; price risks, where prices go down or input prices go up; legal risks, in the form of liabilities and taxes; and human resources risks, where the quality of work or the dependability of workers directly influences agriculture, either positively or negatively.

Farms offering wine tastings, restaurants and accommodation perform better, as these unique facilities lead to a greater income. The greater the variety of activities and/or services the farm offers, the more successful the tourism attraction, which means that the farm generates an increase in its revenue. Landowners make use of several strategies to increase and diversify their revenue, such as workshops and conferences, leisure, tourism and hospitality initiatives. These farms offer the direct buying of agricultural produce onsite (on-farm markets), recreational self-harvesting of products (fruit, flowers), recreational activities and events (tours, festivals and weddings), on-farm restaurants and stays in several kinds of farm accommodation (bed and breakfasts, cottages, hotels), and the use of vineyards for weddings as well as for recreation (Ray, 1998, 2006; Shucksmith, 2000).

According to Ilbery *et al.* (1997), a distinction can be made between agricultural and structural diversification. Agricultural diversification is when the farmer makes use of other agricultural methods to improve income, for example planting other crop types, while structural diversification suggests alternative methods of income generation, for example the construction of accommodation, wine-tasting and recreational facilities on the farm. Structural diversification is directed towards the public, which means that effective marketing is essential. In agriculture, this structural diversification is also known as vertical expansion.

The terms attraction and experience are closely linked to the products and production processes discussed by Ray (1998), which include the sale of new and boutique foodstuffs and beverages, often at the point of manufacturing; diversification in the form of counter-urbanisation; and the establishment of a significant selection of commercial rural recreation and tourism facilities. These processes are based on transforming the rural to attract those with money to spend on consumer goods and 'in' experiences. The process of rural commodification involves regarding land and lifestyles as commodity forms. Land, and the lifestyle of the people who live on it or who visit it, are subject to a range of material and symbolic forces as land is marketed, exchanged, divided up, regulated, landscaped, cultivated, built on and fought for (Ray, 1998).

In the late 1990s, the process of commodification led to the development of a rural sociological literature, focusing on the various ways local rural residents have endeavoured to create new ways of generating income. These processes are known as neo-endogenous or local rural development (Ray, 2006; Shucksmith, 2000).

Ray (1998, 1999) developed a variant of this theme, known as rural culture economies, which stresses rural redevelopment grounded in the valorisation, commodification and sale of local cultural assets. These can be physical, symbolic or human. Since the escalation of place promotion, tourism and commercial recreation makes use of local assets, these are good examples of the rural culture economy in action.

Central to Ray's (1998, 1999) notion of cultural economy is the idea that a new type of rural economy has come to light; one based more on regional/territorial character and the valorisation, manipulation and sale of a rural community's endogenous resources, rather than on the sale of only primary commodities. Examples of rural development centred on the valorisation of endogenous resources include: traditional cooking methods (Haukeland & Steen, 2001), local music (Gibson & Connell, 2003), local languages (Ray, 1998), regional heritage (Moon, 2002), history and architecture (Panelli, Otilie & Bedford, 2003); adventure and wilderness (Cloke & Perkins, 1998); and rural landscapes (Mackay, 2004). Tourism products are exclusive, for they are usually offered and sold to tourists as geographical experiences of a local culture, people and places.

Ray (1998, 1999) argued that, in present-day times, it is of the greatest importance that small towns develop a definite place identity around which prospective economic activity can be built. These identities are created as local rural actors choose 'aspects/things' from geographically defined cultural resources. These things/aspects then become place products, and therefore marketable signs of locality.

Rural households broaden their activities either to cope with livelihood risks or to make use of the new opportunities created by market liberalisation (Démurger, Fournier & Yang, 2010). The diversification of income occurs for various reasons. Some farmers diversify to maintain food security, while others make use of it to earn cash income to finance farm investments. Uneven distribution of resources, seasonality of agriculture, climatic hazards, poor access to credit, and education and skills constraints all serve as factors pushing rural households to diversify in order to secure their livelihood (Reardon, 1997).

“Value-added activities (by processing and direct marketing), farm tourism (accommodation and recreation) and passive diversification (leasing of land and/or buildings for non-agricultural use) [form] the main categories of diversification” (Ilbery, 1991: 211). The decision to diversify is influenced greatly by proximity to a major urban market. There are three types of farming that adopt alternative enterprises: first, hobby, part-time and semi-retired farmers, who get very little farm income and have no outstanding arrears on the farm. Very little profit is made from farming and the owners enjoy earning small sums of money from diversification. Second, survivors through diversification, who have embraced diversification as a possible way of paying their debts. Third, accumulators of capital, where large amounts of capital are invested in either non-agricultural or agriculture-related ventures. In this case, the earnings from diversification are the main income of the farm.

Vink *et al.* (2009) emphasise that climate change is a reality and its impact on South Africa is increasingly evident. Climate studies on the regional scale of the South-western Cape, the traditional grape-growing region in the country, serve as evidence that climate change has already affected the wine industry negatively. In a study of 12 weather stations in the South-western Cape during the period 1967 to 2000, remarkable trends in rainfall and air temperature were found. Notable heating trends for minimum temperatures (about 1°C from December to March) and maximum temperatures for almost every month of the year were observed. Very hot days are becoming warmer and have occurred more frequently during the last decade, especially during January, April and August. Despite the trends observed at the regional scale and the projected change in climate for the South African wine region, the best strategy to deal with this is the application of diversity (Vink *et al.*, 2009).

As livelihoods diversify, the reliance on natural resources will shift and become less on solely agricultural activities, which will then lead to the altering of land use. Land has always been the primary mechanism generating income and sustaining the household. Although the reliance on land in many livelihoods has declined over the past few decades, the contribution of land-based activities still remains vital. Amenity migration will be discussed in the next section, as it contributes largely to a revival in the rural areas.

## **2.5 AMENITY MIGRATION**

Recent thinking on the growing global countryside led to the notion of rural amenity and its ability to attract new immigrants, domestic and international tourists and also private capital. In Australia and New Zealand, contemporary rural growth may rely solely on the extent to

which a region can be promoted on the grounds of its amenity qualities, as this is the fundamental element of the post-productivist and multi-functional conversion in rural places in these countries (Argent, Smailes & Griffin, 2007; Holmes, 2006; Woods, 2006, 2009). This focus on amenity, however, brings about uneven change, as only areas meeting the prerequisite aesthetic, legal, linguistic and other preconditions qualify, leaving other rural places not likely to receive amenity-related investment. Both natural and cultural resources are then used by these places in an effort to remake themselves, and thus to invite foreign investment.

The association between amenity and rural development and change is a relatively new theme in rural studies. In the Australian-based research, a variety of locally situated environmental attributes are mentioned, including coastal vistas and access to good surfing and swimming beaches (Argent *et al.*, 2007). From a North American perspective, McGranahan (1999) lists a similar set of amenities, highlighting the importance of climate and access to water resources such as lakes and rivers. Buckley *et al.* (2006) included wine regions, national parks and mountainous regions as amenity resources, as these have the ability to draw new residents and tourists to rural areas.

Moss (2006, 8-9) provides the following definitions for both environmental and cultural amenities:

Environmental amenities are the valued natural physical attributes of a place, including terrestrial and aquatic landscapes, distinguishing topographical features, climate, air, water and biodiversity quality and quantity. Cultural amenities are tangible and intangible manifestations of human groups considered culturally valuable by either their originators or others. Tangible manifestations are artefacts, including the built or significantly altered natural environment. At the more visually perceivable end of an intangibility continuum are the performing arts, spectacles and rites, and toward the other end are audible language, gestures and other shared constructs, such as aesthetic and organisational paradigms.

McCarthy (2008) describes amenity migration as “the purchasing of primary or secondary residences in rural areas valued for their aesthetic, recreational, and other consumption-orientated use values...”. An intensification of people moving to the countryside is currently taking place as an outcome of the increasing mobility of elites, fast growth in the incomes of



some urban professionals, the loosening of restrictions on foreign ownership of land and property, as well as advances in transportation and communication.

McCarthy (2008) has highlighted recent areas of work on the effects of amenity migration and the globalisation of the countryside. However, he identified that little work has been done on the ecological effects of amenity migration. These devastating effects includes “changing patterns of land use, land cover and water use, and changing mixes of species through planting, or stopping and starting hunting or fishing (McCarthy, 2008:133)”. According to McCarthy (2008) we are entering a new era of rural stewardship, as many new amenity migrants seem to have strong environmental values, lessening the destructive effect of older farming techniques and practices on the environment.

According to Moss (2006), since most amenity migrants come from the city they can alter local values, customs and behaviour, thereby creating a new and multifaceted social milieu comprising conflict or collaboration, convergences or alliances. Amenity migrants are often more well-off than local residents, which gives them more purchasing power than the locals. Local displacement can also occur, as the prices of goods and services increase with the presence of migrants, especially the prices of real estate, which can increase phenomenally. The amenity migrants may also assume greater control over resources than locals, since they are drawing on their more extensive social networks and political-economic connections with the outside world. The effects are not all negative, however, as amenity migration can also lead to the creation of wealth and jobs, as well as improved infrastructure and services. Changes in farmers’ identities will be set out in the next section, as identity changes will occur as more people move to the countryside and start farming

## **2.6 CHANGING FARMERS’ IDENTITIES**

When farms diversify, farmers often struggle with their identity of being a ‘real farmer’. Brandth and Haugen (2011) state that the change to new, non-farming activities is not responsible for farmers moving away from traditional farm culture and way of life. Farmers often resist change that requires them to give up their socio-cultural status acquired through their traditional/productivist farming roles (Chaplin *et al.*, 2004).

Farmers find it difficult to construct identities as both a farmer and a tourist host. Different types of work lead to the establishment of diverse identities. “Farmers who have diversified into tourism may practice it in different ways, emphasizing various aspects of farm resources



and undertaking it in different constellations and forms of labour” (Brandth & Haugen, 2011: 37).

When running a tourism business, the hosts are judged by the visitors on the basis of how friendly and service minded they are, the quality of the food, and how interesting the stories told and the activities offered (Brandth & Haugen, 2011). The demand on farmers to live up to many functions may result in more diverse identities, as diversified farmers see themselves as both entrepreneurs and farmers. The host forms part of the tourist product, as tourists are interested in the ways farmers used to live, giving the guests a personal, memorable and meaningful experience. The landowner’s level of general education has a positive and significant effect on his or her likelihood to diversify.

According to Nickerson, Black and McCool (2001), financial pressures on farms have put pressure on these businesses to look beyond agriculture as a means of supporting their operations. A decline in profits and farm incomes in the 1980s led to farmers cutting costs and enhancing income. The expansion of income generally was accomplished by working off the farm or diversification. As discussed by Nickerson *et al.* (2001), there are ten motivations for farmers choosing to diversify. These motivations are discussed next.

First, the volatility of agricultural income. Diversification tactics help level income by reducing market fluctuations. Seasonal variations can also be reduced by combining businesses and activities that makes money at different times of the year. Secondly, diversification serves as employment for family members. Through farm recreation, family labour can be used, which is much cheaper, and more loyal and committed. Thirdly, the ability to provide additional income helps the many farmers who need the extra income for survival. Fourthly, the loss of government agriculture programmes means that help from government is being reduced or phased out. Fifth, by meeting a need in the recreation market farmers try to capitalise on the demand for vacation and leisure experiences. Sixth, there are tax incentives for farmers operating additional businesses. Seventh, companionship with guests/tourists is an important social reason and motive, as meeting a variety of people often outweighs the economic benefits, specifically for farmwives. Eighth, diversification contributes towards the better use of resources. Land and operations necessary to attract visitors are available and farmers make use fully of what they have to offer. Ninth, diversification is motivated by a hobby, which grows into a business. Lastly, the value of educating the consumer is also growing in importance.

The cultural value of traditional architecture and the necessity of its preservation are very important in farm tourism. In addition, there are several advantages to using redundant buildings on the farm (Fuentes *et al.*, 2010). These are: savings in energy and materials, creation of jobs and new economic activities, promotion of cultural tourism, preservation of a valuable documental source about countryside culture, the recovery of native construction techniques, community encouragement, and a more pleasant appearance of the villages and rural landscapes (Fleischer & Felsenstein, 2000).

According to Delbecq and Florax (2010), farms undergoing diversification can be classified into three categories: traditional, recreational and adapting farms. The first group consists of the original farms, which are unchanged in terms of production, management and consumption practices. Recreational farmers work off farm or are retired and use farming as a hobby. Adapting farms have adjusted their produce from traditional to specialised crops and/or to agritourism.

Alternative uses for land, such as residential and commercial, are being implemented on a big scale. Nowadays, large portions of prime agricultural land are being used for residential housing, office buildings and recreational facilities, such as for hunting and hiking trails. The public also benefits from open space services, such as the aesthetic and heritage value, wildlife habitat and biological diversity. Open space services of the farmland can be enjoyed by society, as these are the external benefits that farmland has for society, which farmers are not compensated for (Cornelius, Jensen & Seavert, 1995; Ozdemir, 2001).

“Farm businesses can raise capital in two ways; either an economic centrality change where the amount of off-farm income entering the household is expanded, or a farm diversification change where ‘unconventional’ use is made of on-farm resources” (Evans & Ilbery, 1992: 93). Rural non-farm income plays a very important role in household economies, especially for food security, since it allows greater access to food and an increase in the area of land under cultivation. Swift or extreme urbanisation, as well as the degradation of natural resources through overexploitation, can be diminished by means of this form of income. It also influences the performance of agriculture positively by providing farmers with an extra cash source to invest in productivity-improvement inputs (Reardon, n.d.).

The incentives offered, such as profitability, the risk of farming and rural non-farm activities, as well as the capacity of the household (education, income and assets and access to credit) to participate in such activities are the three main factors shaping rural households’ involvement

in these activities. Income diversification equals risk minimisation (Mishra *et al.*, 2007). Reardon (n.d.) states that, when deciding on these activities, households are motivated by either pull or push factors. The main pull factors are the better earnings in the non-farm sector comparative to the farm sector. The main push factors comprise an insufficient farm income, and the risks associated with farming, which encourage households to manage income uncertainties by diversifying activities with returns better than those of farming. Rural non-farm activities are usually home based and involve the small-scale production of non-tradable goods, which include trade in fertiliser, tractor services, crop processing, commerce and the production or maintenance of market facilities.

When diversification is costly and primarily risky, better-off households are in a more favourable position to diversify into rural non-farm income activities, as they are able to use their affluence for the purpose of self-financing and as a buffer against risks associated with farming. The wealthier households undertake the more labour- and/or physical capital-intensive activities with the highest labour returns. These activities include cottage manufacturing, transport necessitating the use of a vehicle, shop commerce and salaried jobs. The poor, with limited assets or skills, tend to undertake activities that are intensive in unskilled labour. These activities include farm wage labour, market porter jobs, the gathering of wood and unskilled factory jobs. Employment off farm can reduce the pressure on land in fragile areas, as it reduces the incidence of poverty and direct dependence on farm-based resources (Mishra *et al.*, 2007; Reardon, n.d.).

The poorest households, facing the greatest need for rural non-farm employment, unfortunately are most inhibited in their lack of key assets such as education, skills and capital. In contrast, wealthier households have a much smaller need, but enjoy a much greater ability to participate in this sector. The inequality in access to employment in this sector draws attention to the entry barriers poor households are faced with. Both on-farm and off-farm labour have the potential to attract tourists to the area. The diverse nature of tourism and its manifestations are examined in the next section.

## **2.7 TOURISM**

### **2.7.1 International context**

Tourism provides economic success, economic development and poverty relief for emerging nations in the developing world (Binns & Nel, 2002; Meyer, 2004). Tourism has become one of the most critical role players in the world's economy through the generation of foreign

currency, the creation of employment, and the diversification of markets (Goudie, Khan & Kilian, 1999).

Nature-based tourism/ecotourism refers to the process of “visiting natural areas for the purpose of enjoying the scenery, including plant and animal wildlife” (Brown, n.d. 242). Nature-based tourism can be either passive, in which guests tend strictly to be observers of nature, or active, where guests take part in outdoor recreation or adventure travel activities.

The fast-growing tourism sector is part of a worldwide trend towards alternative tourism. Farm tourism is also used to attract people to agricultural holdings. Tourism represents a possible route for external capital to enter agriculture and reduce the dependence on mainly agricultural produce (Hjalager 1996). Tourism, drawing outside capital into the local community, leads to positive economic benefits that may be essential for the survival of a rural community.

Sharpley and Vass (2006) noted that, through tourism, rural areas are renovated and renewed. There are four main challenges facing the fruitful diversification of farms into tourism. Firstly, location plays an important role, since not all rural areas attract tourists to a similar degree. The provision of accommodation and leisure facilities does not guarantee demand; the total package offered must be adequate to attract and retain tourists. The second challenge is investment, as diversification may require significant investment, greater than that justified by the potential returns. Marketing is third, as farm businesses normally do not hold the resources for effective marketing, a requirement for success. Quality is another factor, as the quality of the products offered must meet the expectations of the tourists.

According to Evans and Ilbery (1992), since the 1990s there has been a change from an emphasis on manufacturing and related facilities on farms, to the experiential and aesthetic values, which are now rated the highest. The leisure, cuisine, scenery and outdoor activities offered by wine farms serve as a major pull factor for tourists. Since the late 1990s, tourists have been expecting farms to offer high standards of accommodation and restaurants, and a high quality of stay in terms of experience. Consumers want to combine a core wine product, essential destination features and associated cultural experiences with a wine-related travel experience (Busby & Rendle, 2000; Fleischer & Tchetchik, 2005; Getz & Brown, 2006).

In farm tourism, the farm environment and its essence are incorporated into the product offered. Tourists are offered the opportunity to participate in farm work, catch a tractor ride or pick their own produce (Schmitt, 2010). Visitors are willing to pay for the personal touch

offered by on-farm accommodation. Tourists attach high values to comfortable, high-quality accommodation and an abundance of tourist activities. Agritourism provides economic as well as non-economic benefits to farmers, visitors and the surrounding communities. Agritourism has also led to an increase in land values (Brandth & Haugen, 2011; Greene & Stager, 2001; Isgin & Forster, 2006).

Tew and Barbieri (2012) note that the main aim of agritourism is to attract more farm customers, provide training to the visitors in agriculture and enhance the value of life of the family. Over the past three decades there has been more of a focus on the development of different enterprises making use of the existing farm resources. Agritourism does not require major investments in the existing farm infrastructure, labour or equipment, thus making it a good investment.

Many activities are classified under agritourism, such as daily farm visits, recreational self-harvesting, hunting and fishing for a fee, nature and wildlife observation, and other outdoor activities. Some farms offer hospitality services, such as accommodation, restaurants and special events like conferences and weddings (Chaplin *et al.*, 2004).

According to Chaplin *et al.* (2004: 63), a non-hierarchical typology of agritourism has developed:

First, non-working farm agri tourism, such as a bed and breakfast on a former farm; second, working farm, passive contact agri tourism, such as a bed and breakfast on a current farm; third, working farm, indirect contact agri tourism, such as serving farm products in meals on the farm; fourth, working farm, direct contact, staged agri tourism such as viewing farming demonstrations; and fifth, working farm, direct contact, authentic agri tourism such as helping with farm chores.

Non-economic benefits have also been recognised, such as maintaining rural lifestyles and increasing awareness and preservation of everyday customs, especially related to food production. The economic value of agritourism has also been recognised, as farmers' overall revenues and incomes have increased and dependence on agriculture production has decreased (Benjamin, 1994; Nickerson *et al.*, 2001).

Rural tourism serves as an important source of income for rural economies, since it leads to economic growth, diversification and stabilisation through job creation in new as well as existing businesses, trades and crafts, opportunities for revenue growth through pluriactivity, the creation of new markets for agricultural products, as well as increasing a region's

economic base. Rural tourism also leads to sociocultural development, including the repopulation of rural areas and the maintenance and improvement of public services. The revitalisation of local crafts, customs and cultural identities, increased opportunities for social contact and exchange, as well as the protection and improvement of both the natural and built environment and infrastructure, can also be attributed to local tourism (Sharpley, 2002). For some farming families, agritourism has become a vital livelihood strategy, while it remains only an additional income for others. Agritourism is a sustainable ingredient of regional development and also serves as a source of women's growing self-confidence. Diversification involves engagement with non-agrarian activities like agritourism, which strengthens the resource base, expands autonomy and reduces dependency on the land as livelihood (Schmitt, 2010).

According to Nickerson *et al.* (2001), farm-based tourism is one way of attracting people to the farm. Farm-based tourism is a wide-ranging term encompassing farm accommodation (where guests stay) and farm-based recreation (what guests do during their stay). There are two tourism development paths to be followed. In some cases, farms are used as holiday retreats for guests and tourists and, in others, farmers supply 'novelty' food products for niche markets and market a farm-gate experience. The second strategy involves entertaining the guests for a shorter period of time by offering tastings and/or a shopping experience on the farm (Schmitt, 2010).

### **2.7.2 The South African experience**

South Africa only recently realised the importance of tourism as a "passport of economic development" (Rogerson & Visser, 2006). This section will focus on tourism and its various facets, namely: pro-poor tourism, agritourism and farm tourism, as well as each one's contribution to the economy.

Pro-poor tourism is a growing phenomenon in South Africa, as it stresses the importance of a policy environment for assisting small tourism enterprises as a prospective basis for reducing poverty (Rogerson, 2005; Rogerson & Visser, 2005). Nowadays, tourism in South Africa is widely recognised as a key growth alternative, as it offers a rich natural and cultural heritage. Community participation in tourism is widely promoted through the advertising of crafts, township stopovers and cultural tourism (Goudie *et al.*, 1999). The hosting of festivals, the creation of heritage sites and capitalising on locally available natural resources are part of a growing phenomenon. Towns in the Western Cape are progressively using their natural scenery as a tourism asset.

Agritourism refers to “the act of visiting a working farm or any agricultural, horticultural or agribusiness operation for the purpose of enjoyment, education, or active involvement in the activities of the farm or operation” (Nowers, De Villiers & Myburgh, 2002).

The main purpose of agritourism

is the combination of three goals, namely tourism, produce sales and product brand promotion. In the Western Cape, both the local tourism and agricultural sectors are developed by trying to improve the quality of life for all by means of a strong and healthy, sustainable agritourism sector. Various reasons are identified for visiting wineries, namely sampling and purchasing, festivals and events, socialising with family and friends, country setting/vineyard destination, learning about wine and winemaking, restaurant facilities at wineries, winery tours, entertainment, meeting the winemaker, and other attractions and activities (Nowers *et al.*, 2002:201).

Visits to vineyards are not a new phenomenon, and have been associated with travel at least since the time of the ancient Greeks and Romans. Wine trails have been part of the German tourism industry since the 1920s (Nowers *et al.*, 2002).

Guest houses, self-catering accommodation, weddings and conferences are the most popular activities used as a means of earning extra income on farms (Rogers & Toerien, 2009). Demhardt (2003) concurs with this statement by emphasising the importance of a wine farm to be an “innovative, multi-functional mixture of more or less, wine-related activities in order to obtain as many niche markets as possible in the high class tourism market”. According to Bruwer (2003: 423), wine tourism can be defined as “...visitation to vineyards, wineries, wine festivals and wine shows for which grape wine tasting and/or experiencing the attributes of the grape wine region are the prime motivating factors for visitors”.

Even though South Africa is regarded as a “medium income country”, it is characterised by great levels of social inequality and extraordinary levels of poverty. Tourism has the potential to create much needed employment, as jobs in the tourism industry do not require advanced training. Local residents with relatively few skills can work as waiters, retail clerks and hospitality workers. These days, local authorities are set on making their areas more attractive for the purposes of consumption, entertainment and recreation (Binns & Nel, 2002; Rogerson & Visser, 2005). This includes the use of townships as black/African cultural tourism destinations, the hosting of cultural and art festivals, urban redevelopment programmes, heritage tourism and the advancement of tourist routes, and the development of scenic,



cultural and historical trails, all yielding benefits for the host community (Binns & Nel, 2002; Brown, n.d.). Impressive business-tourism facilities in the shape of national convention centres are also growing in importance.

The South African wine industry plays an essential role in regional development, employment generation, corporate investment, business growth and tourism. According to Viljoen and Tlabela (2007), the tourism sector is one of the key forces of economic expansion and the development of opportunities for employment in South Africa. In 1999, according to Demhardt (2003), approximately 96 000 people were directly involved in the wine industry, with another 216 000 people throughout the economy supported by this sector, of which two thirds can be found in the Western Cape. Income from wine tourism can be divided into two broad categories, namely income from wine sales through the cellar door, and income from other wine tourism-related activities (Bruwer, 2003). An estimated 11% of the Western Cape population, or 23 000 people, are directly employed in wine-related tourism.

“Tourism is a means by which the economic and social transformation of the province can be achieved” (Cornelissen, 2005: 486). The path for tourism to follow is one that focuses on social equality, economic empowerment, an integrated approach as well as economic, environmental and social sustainability. Social equality can thus be obtained through the encouragement of responsible tourism management practices and the development of tourism products that give equal representation to all people in the province.

During the first half of the 1990s, apartheid and other related sanctions were responsible for the decline in wine exports and in the inflow of foreign tourists. In 1994, at the end of apartheid, the local government of the Western Cape embarked on using wine tourism as a tool for fast development and socio-economic transformation (Tassiopoulos, Nuntsu & Haydam, 2004). Tourism is also addressing the apartheid legacy of discrimination and inequality (Rogerson & Visser, 2006).

Farm tourism makes use of family labour and forms part of a special interest group. McEwan and Bek (2009) argue that the Western Cape is one of South Africa’s leading tourist regions. The increase in international demand for tourism has contributed to the development of niche tourism types, with a positive impact on rural destinations in terms of community-based tourism.

Kleynhans and Opperman (2005) note that there are several important motivations for either buying or visiting a wine farm in the Western Cape: terroir is the dominant site factor, as well



as the most important motivation, followed by location relative to Cape Town, the aesthetic beauty of the farm, accessibility, potential for more/new vineyards, meso-climate and the status associated with the “address”. Kleynhans and Opperman (2005) add that *terroir* is the ecology or physical geography of the vineyard site, including its local climate, topography, soil, subsoil and biotic associations. The income-generating potential of the property is also a very important motivation, whether from wine grapes and/or winemaking or from supplying tourism services like bed and breakfast facilities, restaurants or wine tastings.

The wine routes of the Western Cape are by far the most frequently visited non-urban tourist attraction South Africa has to offer. South Africa is the eighth largest wine producer in the world, with approximately 90% of the wine production taking place within the Cape Floristic Region (Petersen, 2007; Scott, 2004). Demhardt (2003) states that there are several pull factors that make the Stellenbosch area a prestigious tourist attraction, of which the most important is the wine industry. Secondary attractions include cultural history and mountain climbing in reserves. Visits to wine farms, attending wine and food festivals and wine shows, entertainment and visits to family are generally accepted as the main reasons to visit wine regions. The Stellenbosch Wine Region is responsible for the provision of 10 800 jobs, in which a significant number of people are involved in providing services to tourists and the tourism sector. It is clear that this small business sector is responsible for a large proportion of the population’s income. After the establishment of the Stellenbosch wine route, guesthouses, coffee shops, pubs and restaurants have developed within close proximity of the town. Many members of the wine route adapted to tourism needs by offering on-site restaurants, picnic baskets, conference facilities, guesthouse facilities, and even shows (Nowers *et al.*, 2002).

## 2.8 CONCLUSION

In this chapter, the overarching process of post-productivism was defined by looking at national as well as international literature. From the literature it became clear that this process can be characterised by various underlying processes, namely productivism as predecessor, tourism (international and local), on-farm diversification, amenity migration, as well as the changing of farmers’ identities. The findings show that post-productivism has a vital role to play in the broadening of the income of farms, as wine farming alone no longer provides sufficient income for a good standard of living (Sharpley & Vass, 2006).

The following key observations pertain to productivism as predecessor of post-productivism. The productivist era lasted from the Second World War until the mid-1980s and refers to a

mode of both agricultural policy and practice that was focused on intensifying input as well as the production of commodities. These land-use practices had an environmentally destructive nature, as their main focus was on maximising food production by means of more intensive farming techniques and chemical inputs.

Worldwide, tourism serves as an important source of alternative income. Farmers realised the potential to earn extra money by offering tourism-related functions/activities on their farms. These activities include accommodation, restaurants, wedding and conference facilities, walking trails as well as 4×4 routes. On-farm diversification is directly related to tourism, as farmers diversify their activities to attract tourists, thus introducing their wine to the public and broadening their income. Through the process of on-farm diversification, farmers are often confronted by more than one identity. Different jobs lead to the formation of different identities, and farmers often find it difficult to construct identities as both farmer and tourist host.

Since most amenity migrants come from the city, the possibility exists that they can change local values, norms and behaviour, thereby creating a new and complex social milieu comprising conflict or collaboration, convergences or alliances. Amenity migrants are often more wealthy than local residents, which gives them more purchasing power than the locals. Local displacement can also occur, as the prices of goods and services will upsurge as a result of the presence of migrants, especially the prices of real estate, which can increase phenomenally. The amenity migrants may also assume more control over resources than locals, since they will be able to draw on their more extensive social networks and political-economic connections with the outside world. The effects are not all negative, as amenity migration can also lead to the creation of wealth and jobs, as well as improved infrastructure and services.

## **CHAPTER 3 A CHANGING RURAL LANDSCAPE: CHANGES IN LAND COVER FROM 1993 TO 2010**

### **3.1 INTRODUCTION**

This chapter discusses the land-cover changes of both state- and privately owned properties that took place between 1993 and 2010. Post-productivism is characterised by a shift in the usage of land, from mainly agricultural to a diversified rural landscape. Post-productivist policies are associated with a worldwide shift towards sustainability and the multifunctionality of the countryside (Wilson, 2004). They are also characterised by a shift in focus from quantity to quality of food production, since the consumer now attaches more value to the quality of a product than in the past (Bjorkhaug & Richards, 2008; Evans *et al.*, 2002; Wilson, 2001, 2004).

This chapter aims to outline the differences between land cover and land use and shed light on some guidelines aimed at managing rural change. The chapter focusses on the changes in land cover in the Stellenbosch municipal area that have taken place over a 17-year period (1993 to 2010), as a manifestation of the process of post-productivism. Attention is given to each land cover type for which data was available, namely built surfaces, vegetation, bare land, water, fields and plantations. There are significant differences between the terms land cover and land use, which will be explained next.

### **3.2 LAND COVER AND LAND USE – UNDERSTANDING THE DIFFERENCE**

The terms land cover and land use are at times used interchangeably, although they are distinctly different. Land cover can be defined as “the observed physical and biological cover of the Earth’s land as vegetation or man-made features” (Watson *et al.*, 2000: 268). Land use, in turn, can be defined as “the total of arrangements, activities, and inputs undertaken in a certain land cover type (a set of human actions). The social and economic purposes for which land is managed (e.g. grazing, timber extraction, conservation)” (Watson *et al.*, 2000: 267).

According to Watson *et al.* (2000), it is evident all over South Africa that any specific area can have a mixture of land uses. Worldwide, and in South Africa, human interference by means of production has led to the increasing degradation of ecosystems, eventually leading to a decline in the value of the ecosystem. This problem has been met by the recognition that measures need to be taken to reverse the severe effects that degradation has had on ecosystems. Some categories of change are observable, for example increasing urbanisation,

deforestation and agricultural intensification in some areas, while in other areas agricultural intensification is prohibited. Agricultural intensification is still widely used on farms, although there has been a tremendous reduction in the over-exploitation of agricultural land (Ward *et al.*, 2008). The use of rural land has to be controlled and managed on various levels, and this will be elaborated on in the next section.

### **3.3 DATA**

Data on the changes in land cover for the years 1993 and 2010 were obtained for the study area (Stellenbosch Municipal area) from the Centre of Geographical Analysis (CGA). The entire area was subdivided into parcels, each with its own identifying number. The study area consisted of 3 363 parcels, covering the whole of Stellenbosch Municipality, including the urban area. The CGA undertook a complete audit to determine the land cover and the size of each land parcel outside the built-up area.

The parcel number, and the land cover and size of each parcel, were keyed into an Excel database. The changes in land cover were determined by comparing the land cover and the size of each parcel with each other. The size of the changes, as well as the changes in land cover, was then added in a different Excel sheet, and visually shown on a map.

### **3.4 CHANGES IN LAND COVER**

The data obtained on the size of each parcel and the changes in land cover was used to compile graphs to display the changes that had taken place in the land cover from 1993 to 2010. Maps were also drawn for each land cover type to display the changes that took place over this 17-year period. The maps cover the whole of the Stellenbosch municipal area (Stellenbosch, Franschhoek and Pniel).

In the discussion of the accompanying graphs, it is important to bear in mind that, in cases where a growth in the minus category is indicated, a decrease occurred, suggesting that the particular land cover was altered in the period 1993 to 2010.

Graphs were prepared for built-up, vegetation, bare land, water, fields and plantations respectively.

#### **3.4.1 Built-up**

Built-up areas (urban areas) cover less than 2% of the earth's surface. Since urban lifestyles lead to an increase in consumption, and because roughly 60% of the world's population will

reside in cities by 2025, the ecological footprint of cities is critical to land change (Lambin *et al.*, 2001).

When comparing the 1993 and 2010 built-up maps (Figure 3.1), it becomes clear that the total built-up area increased drastically from 1993. Most of the development took place near the urban edge of Stellenbosch, as well as on farms just outside the urban edge of the town. This development took place mainly in areas that previously were covered by natural vegetation and cultivated crops, leading to a decrease in fields and vegetation. These changes took place as “[p]roduction is not the core function anymore; the provision of ecosystem services, amenities and aesthetics, as well as the preservation of cultural landscapes now prevails as the main function of rural land” (Paquette & Domon, 2003: 432). Farmers are less focused on farming as a primary source of income. A reduction in the intensity of farming can be observed, as farmers are increasingly becoming aware of the devastating effects thereof on the environment. Sustainable farming techniques are applied by many farmers and are used to take care of the environment and the farm as an ecosystem. The scenery of farms is increasingly being used to attract tourists. Ruined buildings on farms are being restored and equipped to serve as accommodation or cultural attractions. Today, farmers are more prone to use agricultural land for the construction of accommodation and/or restaurants, as these features can lessen the degradation of land while simultaneously broaden the income of the farm.

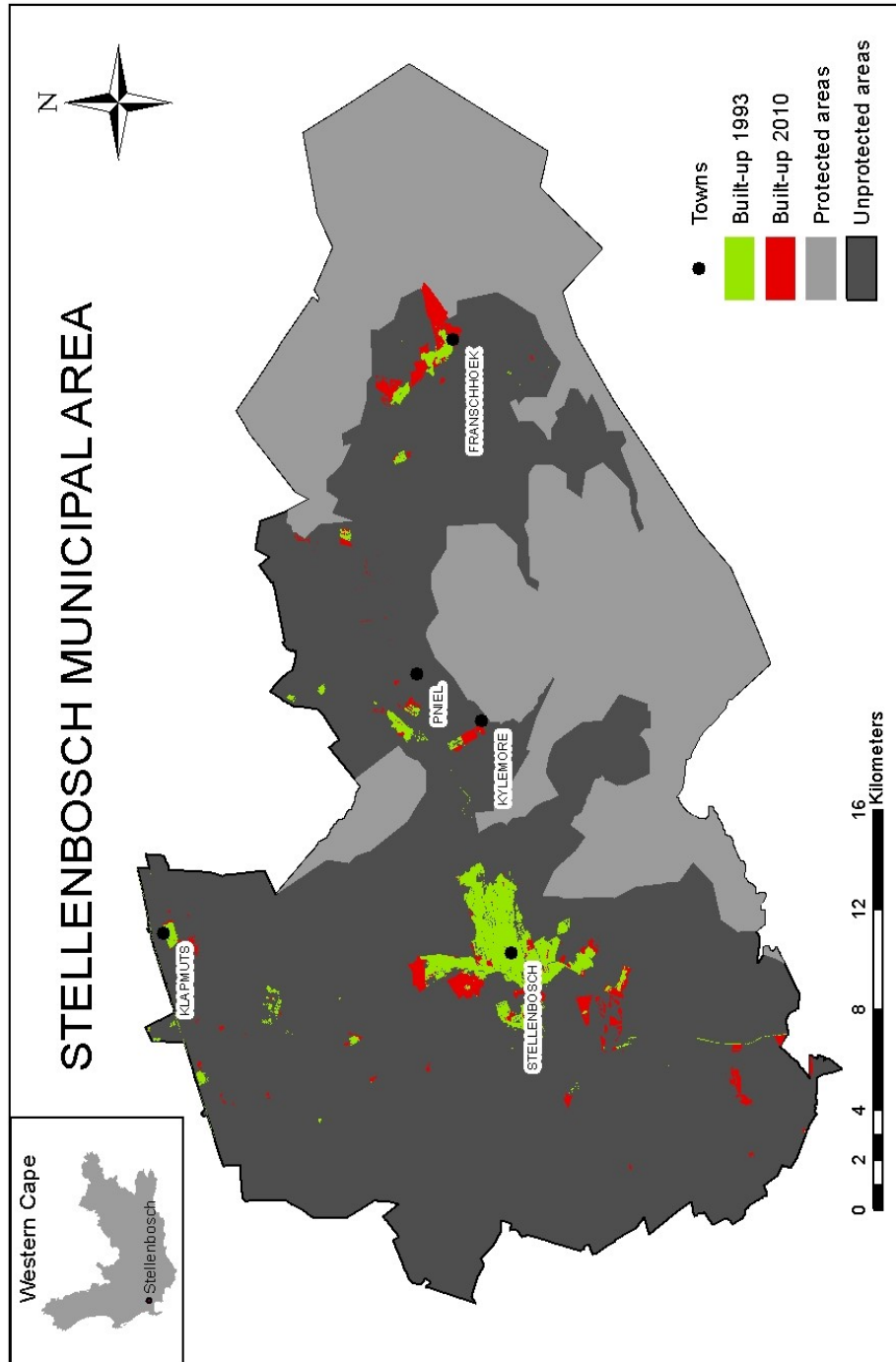
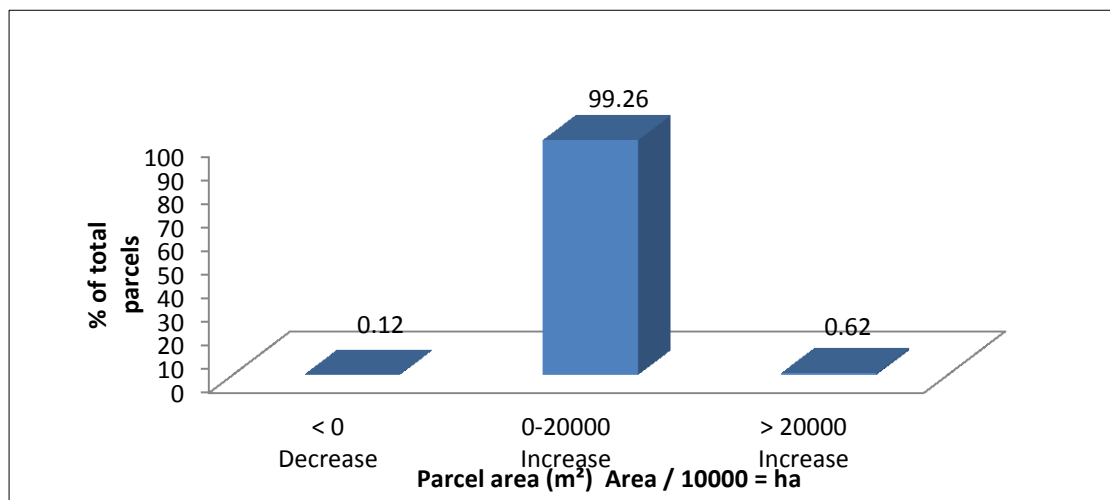


Figure 3.1 Change in built-up area: 1993-2010

A total of 119 farms in the Stellenbosch region are offering tourist- and lifestyle-related functions and activities. As more tourists visit farms there will be an increase in the number of buildings on the farm that provide accommodation and restaurants. The result is that agricultural land is used for the construction of tourism and hospitality superstructures, leading to an increase in built-up areas on the farms.

For the compilation of Figure 3.2, the data were divided into three categories: smaller than 0 m<sup>2</sup>, ranging between 0 m<sup>2</sup> and 20 000 m<sup>2</sup>, and greater than 20 000 m<sup>2</sup>. These three categories best represented the widespread data.



**Figure 3.2 Change in built-up parcel area: 1993–2010**

Note: smaller than 0 m<sup>2</sup> indicates a decline in the category concerned.

Figure 3.1 and Figure 3.2 show that the majority of land parcels (3 338), or more than 99%, fall into the 0 to 20 000 m<sup>2</sup> (0 to 2 ha) category, indicating the highest changes in the 0 to 2 ha range. The construction of buildings does not take up large portions of land, thus the majority of changes did not exceed two hectares in size. Only 0.62% of the parcels (21) were larger than 20 000 m<sup>2</sup> (more than 2 ha), indicating a very small change of more than 2 ha.

When a farmer decides to introduce alternative functions/facilities on the farm, redundant buildings on the farm can be restored to accommodate the facilities. In many cases the absence of such buildings necessitates the construction of new buildings specifically for these purposes.

These changes consist mainly of the construction of bigger buildings, like cellars, outbuildings and storage rooms. In the 65 000 m<sup>2</sup> (6.5 ha) to 110 000 m<sup>2</sup> (11 ha) range there was no case of any built-up area recorded, with only one case in the 11 ha to 11.5 ha range. In

this case, according to the policy on the management of Stellenbosch immovable property, the municipality had purchased a portion of a farm that was converted into low-income housing for Kayamandi. In the range smaller than 0 ha (0.12%), indicating a decline in built-up areas, four cases were recorded, ranging between -2 ha and 0 ha.

This indicates that, during the 17-year period, only four cases were recorded where buildings were demolished for reasons unknown. The CGA (Stellenbosch) states that, in the case of the demolition of buildings, the buildings never exceeded 0.5 ha in size.

### **3.4.2 Vegetation**

Vegetation is all vegetation not falling under fields, plantation or recreation (Stellenbosch, 2010). When comparing the 1993 and 2010 vegetation maps (Figure 3.3) it is clear that an increase in the overall vegetation has taken place since 1993. The growing vegetation cannot be limited to a specific area, as in some regions the vegetation has decreased whilst in others there has been an increase. Farms outside the urban edge were affected the most by these changes, as big portions of farmland covered by fields changed into vegetation. On many of the farms only the land needed for agricultural purposes is used for farming, whilst the other pieces of land are left uncultivated so that natural vegetation can establish itself. The increase in vegetation is due to a decrease in agricultural activities (fields), thus less land is cultivated than before. The total area planted under wine grapes in Stellenbosch was 17 358 ha in 2006 and 16 526 ha in 2012, thus reflecting a decrease of 4.8% (South African Wine Industry Information and System, 2012).

More than 1 100 plant species are known to occur in the Stellenbosch region, of which the fynbos community is the most predominant (Stellenbosch Tourism, 2012). Oak trees are also well known in this area. The growth in vegetation can also be linked to tourism, as vegetation contributes to the aesthetic beauty of the environment to a large extent, and this is regarded as an important factor to attract tourists (Cloke & Perkins, 2002).

As 69% of the changes lie in the 0 to 10 ha range, the data was divided into three categories to best represent it. The three categories are: smaller than 0 m<sup>2</sup>, ranging between 0 m<sup>2</sup> and 100 000 m<sup>2</sup>, and greater than 100 000 m<sup>2</sup>. Figure 3.4 shows that the majority of the changes lay in the 0 to 100 000 m<sup>2</sup> range, indicating the highest growth in the 0 to 10 ha category, accounting for 2 342 cases. The reason for the high occurrence in this range is that farmers often convert pieces of land to vegetation. This vegetation is mainly used for alternative farming purposes, such as for wildlife and amenity purposes.



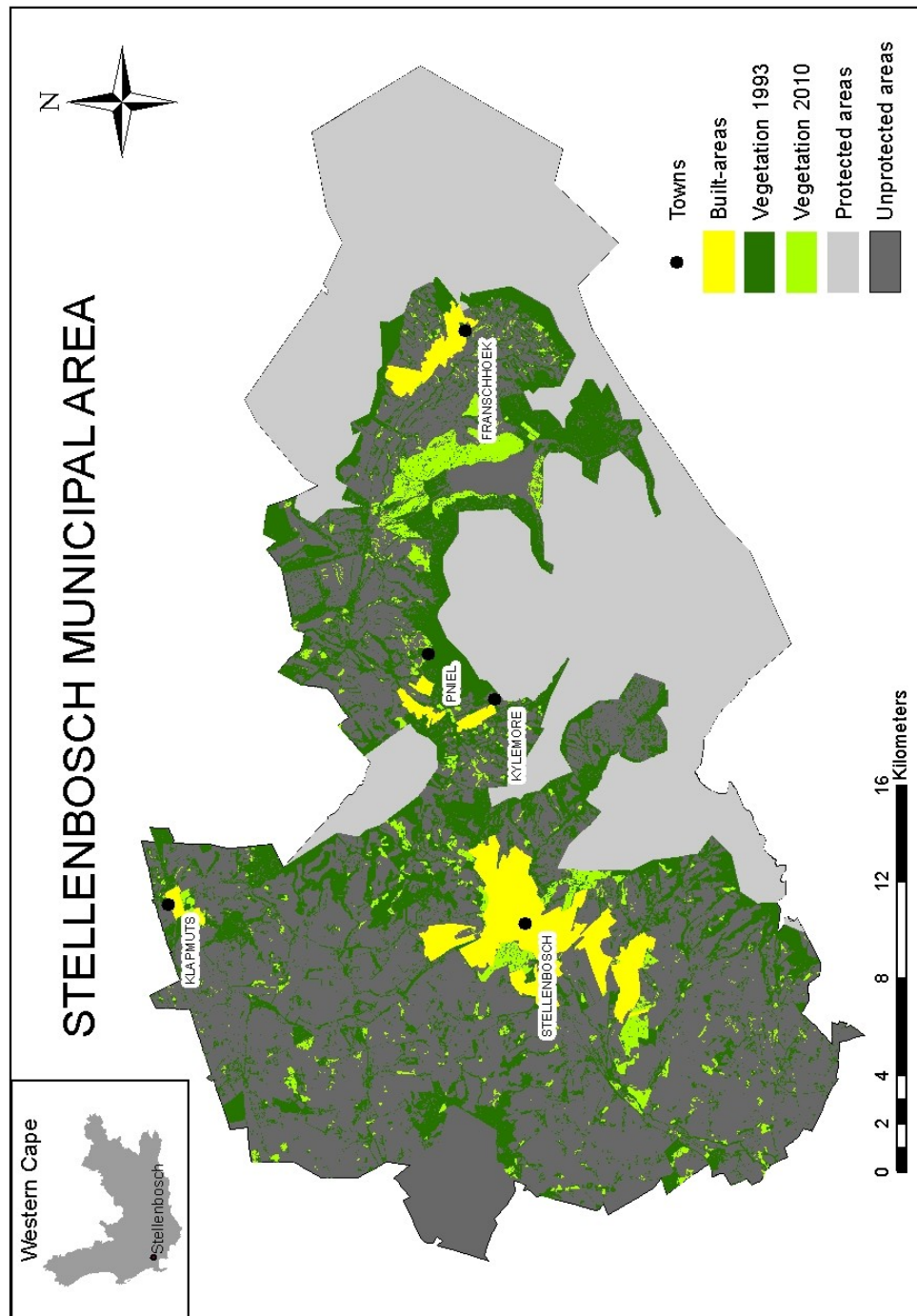
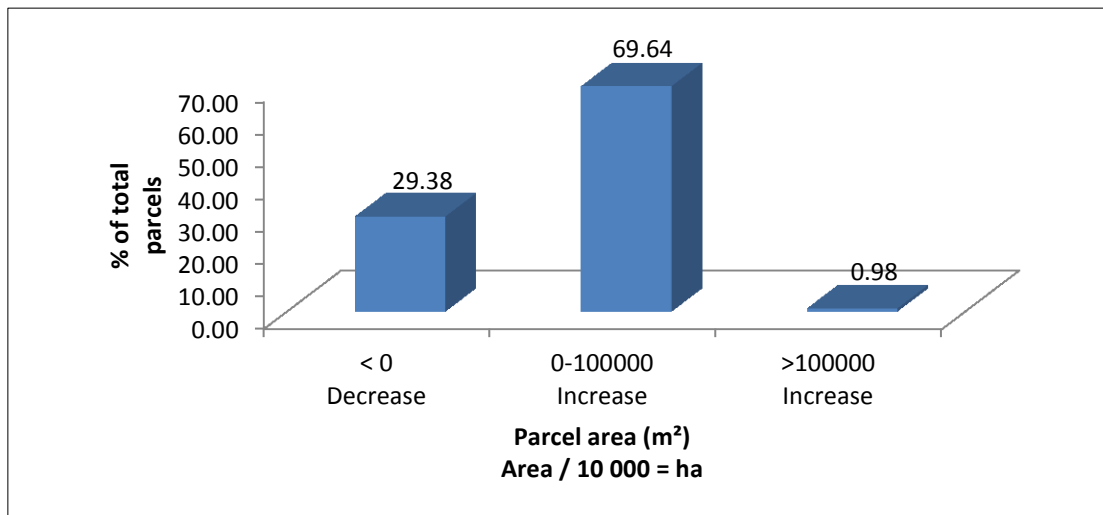


Figure 3.3 Change in vegetation: 1993–2010



**Figure 3.4 Change in vegetation parcel area: 1993–2010**

Note: smaller than 0 m<sup>2</sup> indicates a decline in the category concerned.

There are several reasons for the growth in vegetation on wine farms. A few wine farmers (16) have livestock on the farm, used as a means of alternative income. Eleven farms in the Stellenbosch region introduced sheep farming. Another reason for this growth is the increasing tendency to introduce wildlife to the farm (4), as wildlife watching is growing in popularity among tourists. Big portions of farmland are fenced off and vegetation is established to serve as natural habitat for the animals.

The protection of natural vegetation is very important to farmers, especially those focused on tourism. Walking trails, 4×4 routes and picnics on the farms are also growing in popularity among tourists, as the natural beauty of the farm is one of the main factors attracting tourists. These tourists have a need to get away from the busy city life and escape to the untouched natural environment offered by a farm. Natural plantations of trees are also commonly found on wine farms. These trees serve as picnic spots for tourists as well as fuel for the farm workers. Rows of trees are also planted parallel to the vineyards to serve as shields against wind and storms.

Lucerne, wheat, pomegranates, strawberries, olives and apples are commonly found on wine farms (Stellenbosch Tourism, 2012). These crops are harvested for their own use or to sell to other farmers or the public. The lucerne and wheat are mainly used as feed for livestock.

Land lying bare and land used as fields were mostly converted to vegetation uses, but rarely exceeded 10 hectares in size. The reason for these changes being so small is that wine farms are not primarily focused on livestock farming. When these changes do occur they are only used as an alternative to wine farming. Only 0.98% of the parcels (29 cases) were recorded as

larger than 100 000 m<sup>2</sup> (> 10 ha), ranging between 10 ha and 80 ha, thus indicating a relatively small growth in the greater than 10 ha series. We see that bare land and land covered by fields were converted on a larger scale because of the farmers' need for extra vegetation for livestock. Four cases were recorded between 100 ha and 300 ha, indicating very little change greater than 100 ha. In these four cases, the land cover was severely altered as a result of the development of large lucerne and wheat fields. In the range smaller than 0 ha (29.38%), 988 cases were recorded, ranging between -3 ha and 0 ha.

This indicates that, during this 17-year period, 988 cases were recorded where vegetation was changed into other types of land use, such as building a dam or the construction of buildings like cellars and storage rooms. It is noteworthy that these changes never exceeded 30 ha in size.

### **3.4.3 Natural bare land**

Since 1993, distinct changes in land lying bare can be observed (Figure 3.5). These changes cannot be limited to a specific area and mainly took place on farmlands further from the urban edge. These changes in land cover mainly took place on areas previously covered by fields or vegetation, leading to an enormous decrease in both fields and vegetation.

Data were divided into three categories: smaller than 0 m<sup>2</sup>, ranging between 0 m<sup>2</sup> and 100 000 m<sup>2</sup>, and greater than 100 000 m<sup>2</sup>. These three categories were used to best differentiate between and interpret the data. Figure 3.6 shows that the majority, at more than 94%, lay in the 0 to 100 000 m<sup>2</sup> (0 to 10 ha) series, indicating the greatest increase in the 0 to 10 ha range, which accounted for 3 185 cases. Areas covered by either fields or vegetation changed to bare land. A possible reason for vegetation changing to bare land could be multi-dimensionality, a shift that has taken place during the past few years. This process focuses on discouraging food and farm production and rather attempting to deliver other environmental and consumer-based benefits. At present, 'lifestyle' owners represent a significant portion of farmland ownership (Kleynhans & Opperman, 2005). These owners are less focused on maximum production and more focused on the intrinsic value of the land.

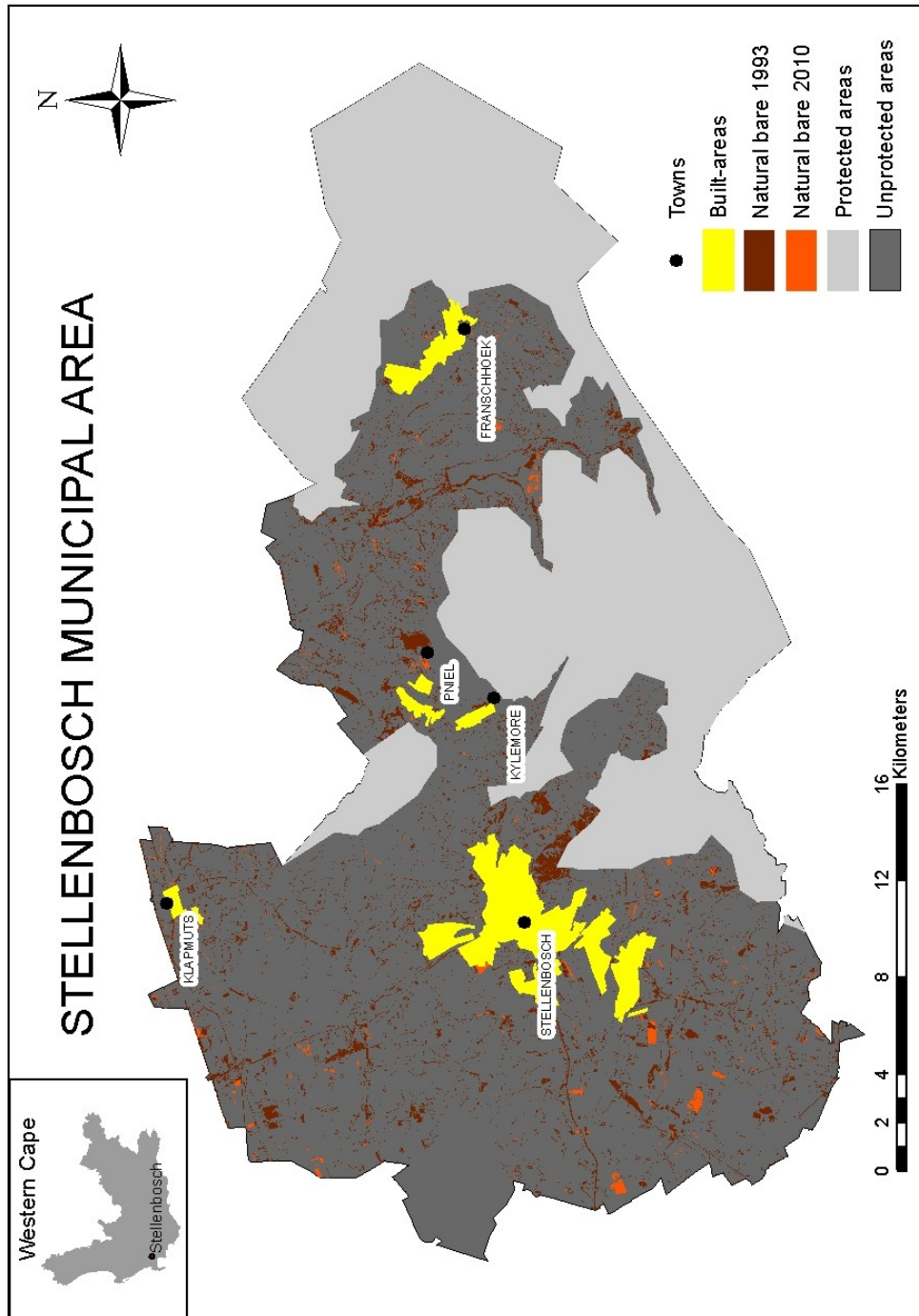
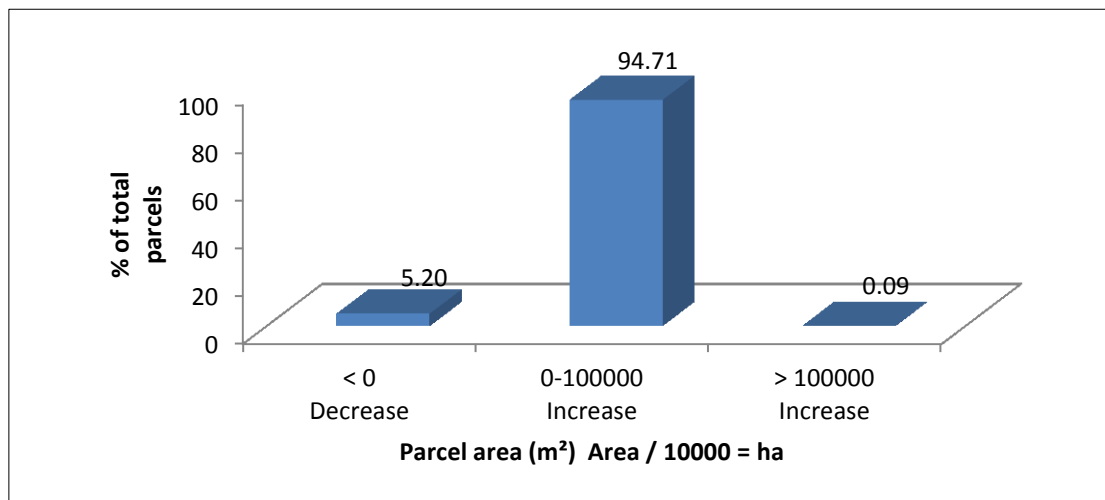


Figure 3.5 Change in natural bare land: 1993–2010

Only 0.09% (three cases) were recorded as being greater than 100 000 m<sup>2</sup> (> 10 ha), ranging between 10 ha and 40 ha, thus indicating a very small change in the range greater than 10 ha. This means that very little field- and vegetation-covered land was changed on a large scale. These three cases were recorded at between 100 ha and 350 ha, indicating very little change greater than 100 ha. In the range smaller than 0 ha (5.20%), 175 cases were recorded, ranging between -38 ha and 0 ha. This indicates that, during this 17-year period, 175 cases were recorded where bare land was changed into other types of land use, although these changes never exceeded 38 ha in size.



**Figure 3.6 Change in natural bare parcel area: 1993–2010**

Note: smaller than 0 m<sup>2</sup> indicates a decline in the category concerned.

#### 3.4.4 Water

Distinct changes can be observed in water around the Stellenbosch Municipal area from 1993 to 2010 (Figure 3.7). It is clear that an increase in water has taken place since 1993, specifically in areas previously covered by fields.

The data were divided into three categories for ease of graphic representation: smaller than 0 m<sup>2</sup>, ranging between 0 m<sup>2</sup> and 20 000 m<sup>2</sup>, and greater than 20 000 m<sup>2</sup>. Figure 3.8 shows that the greatest area, more than 98%, lies in the 0 to 20 000 m<sup>2</sup> (0 to 2 ha) series, indicating the highest growth in the 0 to 2 ha range, accounting for 3 327 cases.

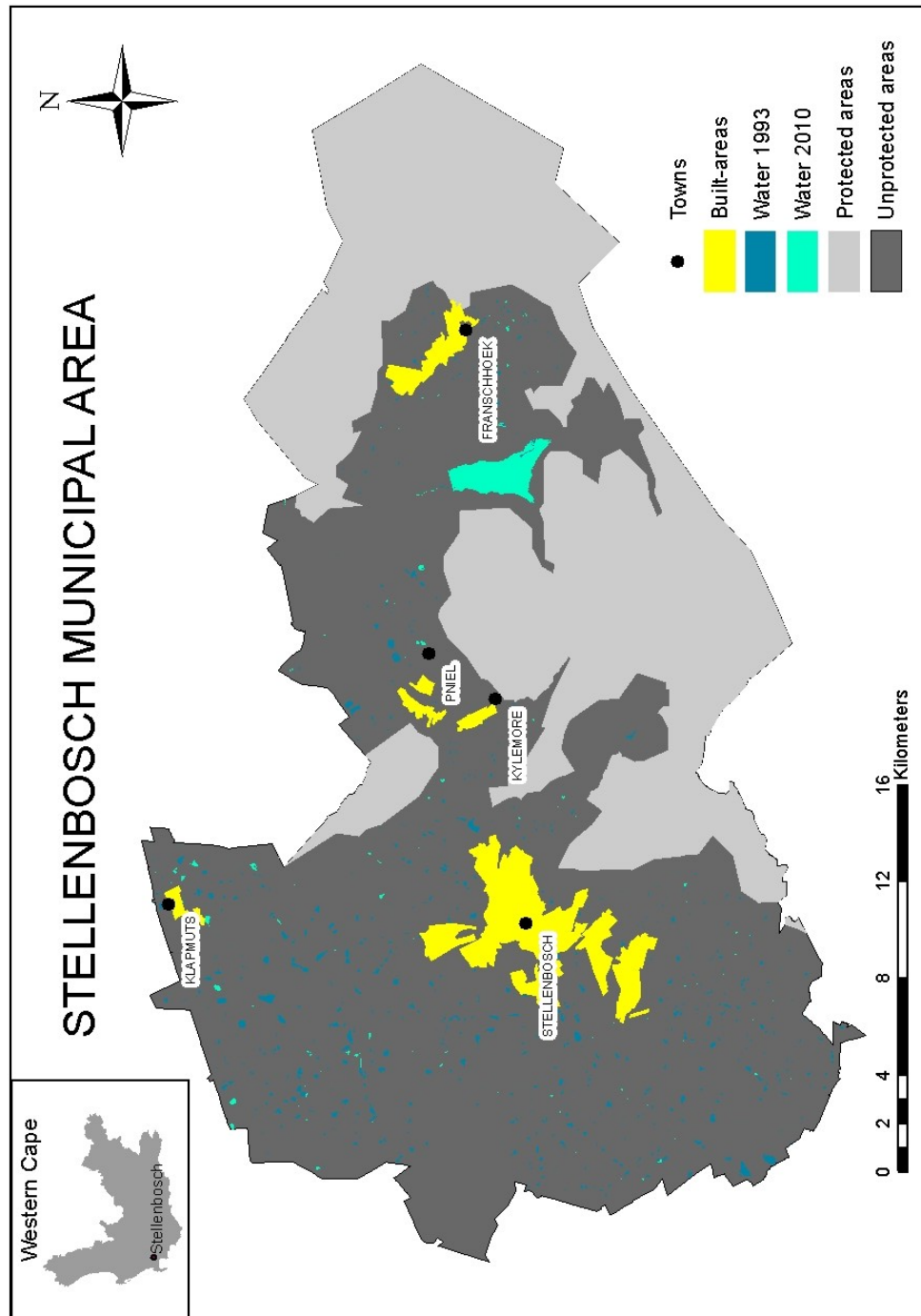
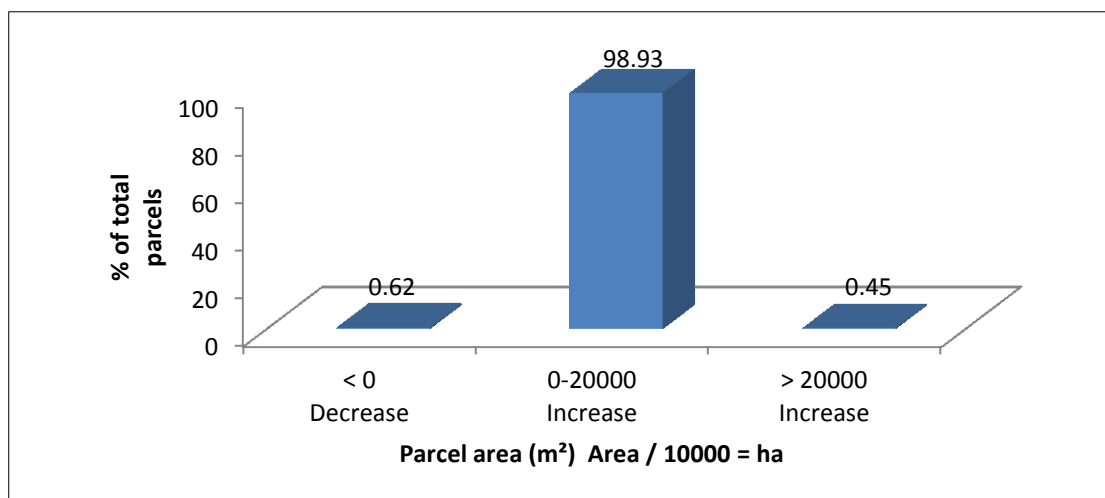


Figure 3.7 Change in water: 1993-2010

A lot of land previously covered by fields has been changed by the building of dams over this 17-year period. These dams serve as drinking holes for livestock, are used for irrigation purposes and, in some cases, serve as tourist attractions. Tourist and housing facilities have led to an increase in water usage, thus the need to build more dams in the region to supply water for gardens and household usage. In some cases, the presence of surface water attracted tourists for recreation purposes. None of these dams exceeds two hectares in size, indicating that these dams are mainly used by one farmer for limited irrigation. Only 0.45% of the cases (15) were recorded as greater than 20 000 m<sup>2</sup> (> 2 ha), ranging between 2 ha and 8 ha, thus indicating a very small growth in the series greater than 2 ha. When looking at the land parcels in this category, it is noteworthy that more than one dam is found on one parcel of land. These dams are built close together, which suggests intensive irrigation. Most of these dams are found in close proximity to mountainous areas, where water flowing downstream is gathered. The 15 cases recorded between 2 ha and 8 ha indicate very little change greater than 2 ha. Only one case of 504 ha was recorded, which is significantly greater than 8 ha. This one case comprises the construction of the 68 m high Berg River Dam, which was designed to capture and store winter rainfall for the dry summer months. Although the Berg River basin generates only about 3% of the country's water, the basin and the neighbouring Cape Town metropolitan area are very important to the Western Cape, as the region is home to roughly 8% of the country's population (Stellenbosch Tourism, 2012).

In the range smaller than 0 ha (0.62%), 21 cases were recorded, ranging between -2 ha and 0 ha. This indicates that, during this 17-year period, 21 cases were recorded where land covered by water was changed into other types of land use, mainly fields and vegetation.



**Figure 3.8 Change in water parcel area: 1993–2010**

Note: smaller than 0 m<sup>2</sup> indicates a decrease in the category concerned.



### 3.4.5 Fields

A drastic decrease in fields (cultivated land, wheat and lucerne pasture) can be observed since 1993 (Figure 3.9), although this decrease cannot be linked to any specific area. Areas previously covered by fields have now mainly changed to being covered with vegetation.

For the compilation of this graph, the data were divided into three categories: smaller than 0 m<sup>2</sup>, ranging between 0 m<sup>2</sup> and 100 000 m<sup>2</sup>, and greater than 100 000 m<sup>2</sup>. These three categories were chosen as they best represent the data. Figure 3.10 shows that the majority of this area, at more than 79%, was found in the 0 to 100 000 m<sup>2</sup> (0 to 10 ha) series, indicating that the highest growth was in the 0 to 10 ha category, accounting for 2 661 cases. Only 0.48% cases (16) were recorded as being greater than 100 000 m<sup>2</sup> (> 10 ha), ranging between 10 ha and 60 ha, thus indicating a relatively small growth in the series greater than 10 ha. In the range smaller than 0 ha, 685 cases (20.40%) were recorded, ranging between -135 ha and 0 ha. Only one case of -135 ha was recorded, which is significantly greater than -60 ha. This indicates that, during this 17-year period, 686 cases were recorded where fields were changed into other types of land use. These changes never exceeded 60 ha in size, except for one case, where a change of 135 ha took place.

In most cases the decrease in fields can be related directly to the increase in vegetation. Stellenbosch is a very sought-after area for residential development and agricultural land has in many cases been converted into built-up areas. Sheep farming and dairies have been introduced on wine farms as a means of alternative income. The increasing tendency to introduce wildlife to the farm, as wildlife watching grows in popularity among tourists, is yet another reason for the increase in vegetation on wine farms. Farmland is being fenced off and turned into fields of natural vegetation to serve as natural habitat for animals. Large portions of farmland are now being converted to accommodate the planting of crops. Crop farming is growing in popularity among wine farmers as an alternative means of income. These crops are sold to the public as a means of broadening the farmers' income. The most popular crop types in the Stellenbosch area are lucerne, wheat, pomegranates and olives (Stellenbosch Tourism, 2012).



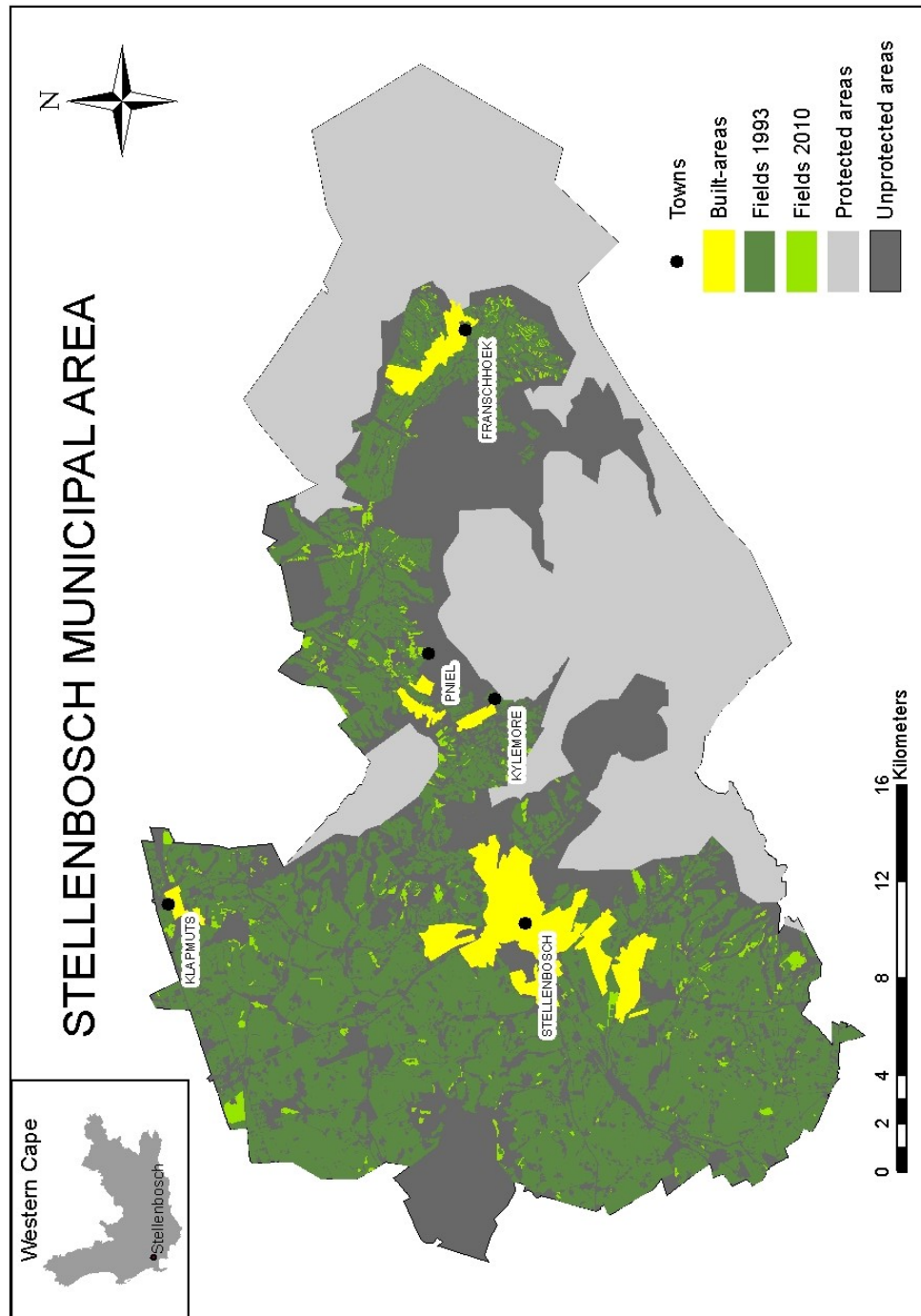
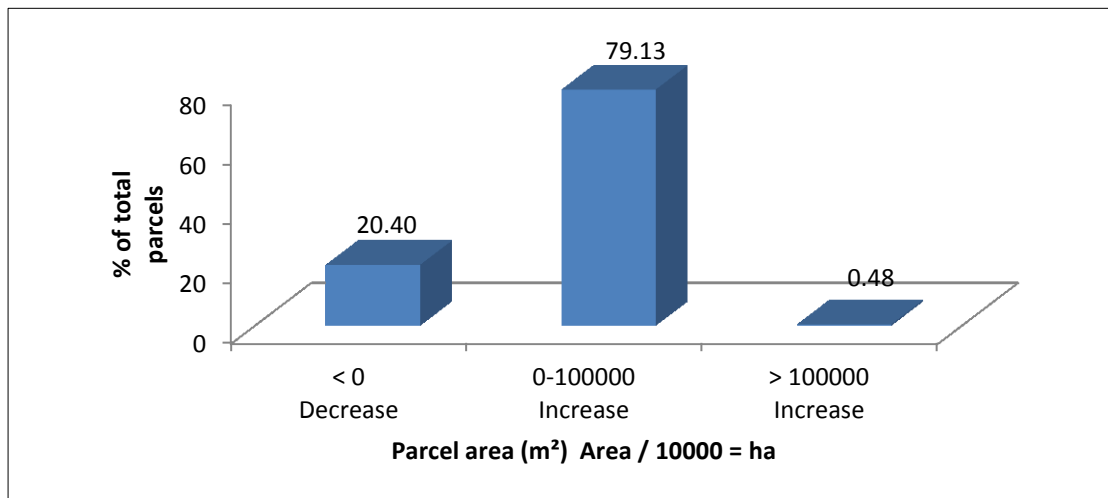


Figure 3.9 Change in fields: 1993–2010



**Figure 3.10 Change in field parcel area: 1993–2010**

Note: smaller than 0 m<sup>2</sup> indicates a decrease in the category concerned.

### 3.4.6 Plantations

Since 1993 a slight decrease in plantations/forests can be observed (Figure 3.11). It is noteworthy to mention that most of these differences were on farmlands near to the edge of the town. Areas previously covered by trees have changed to being covered by vegetation or fields. The variety of fauna and flora will increase if non-plantation areas are changed to plantations.

For the compilation of this graph, the data were divided into three categories for easier interpretation and graphic representation: smaller than 0 m<sup>2</sup>, ranging between 0 m<sup>2</sup> and 100 000 m<sup>2</sup>, and greater than 100 000 m<sup>2</sup>. Figure 3.12 shows that the majority (more than 98%) lies in the 0 to 100 000 m<sup>2</sup> (0 to 10 ha) series, indicating that the highest increase was in the 0 to 10 ha range, accounting for 3 305 cases. These areas were previously covered by plantations, but recently had changed to vegetation and fields. Stellenbosch and other areas in the Western Cape have become marginal for forestry. These areas were cleared because of a need for more vegetation and agricultural land. The wood from these plantations was mainly sold to the residents of the town as firewood and/or building materials. Rural communities also use the wood as an energy source for cooking.

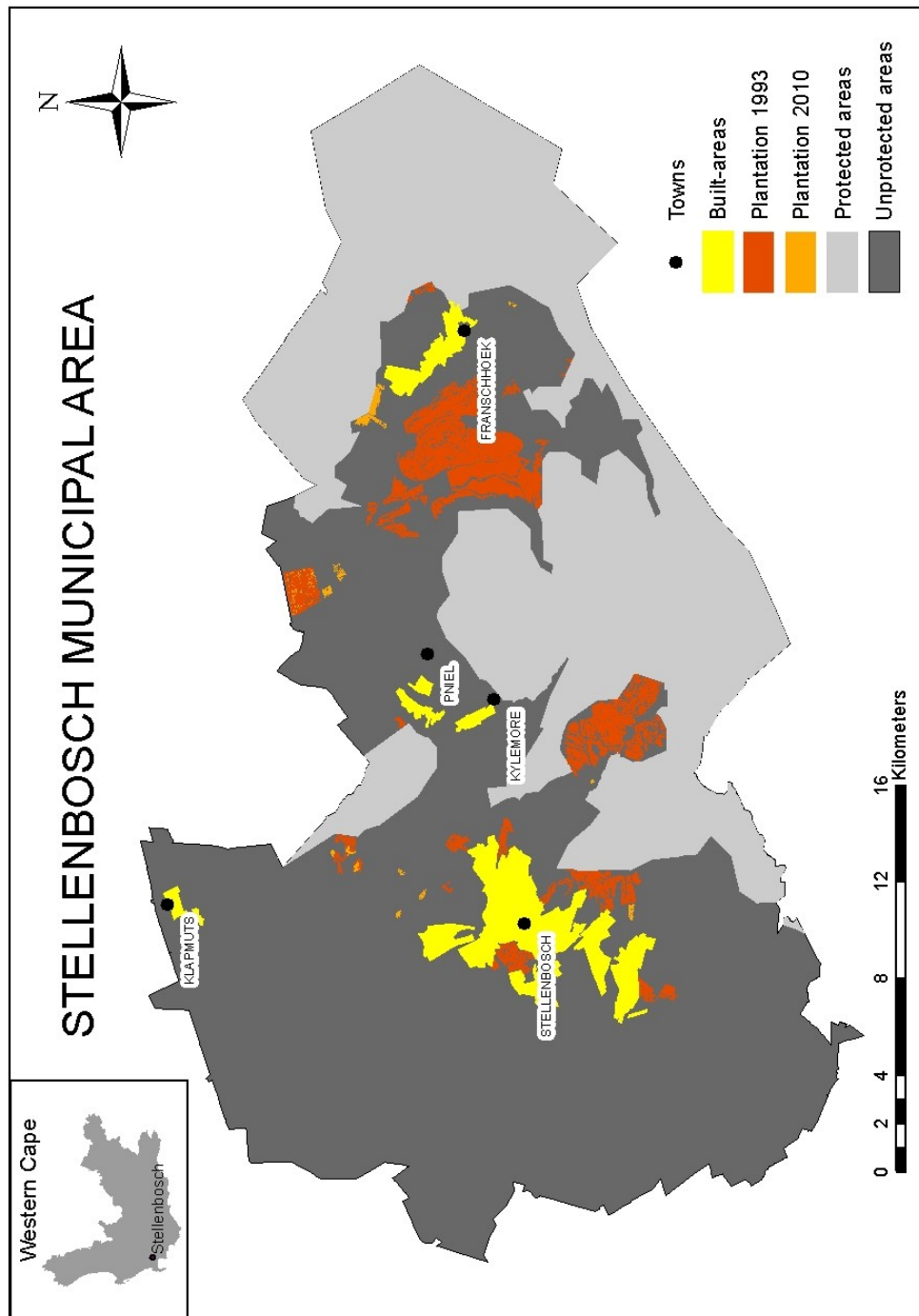
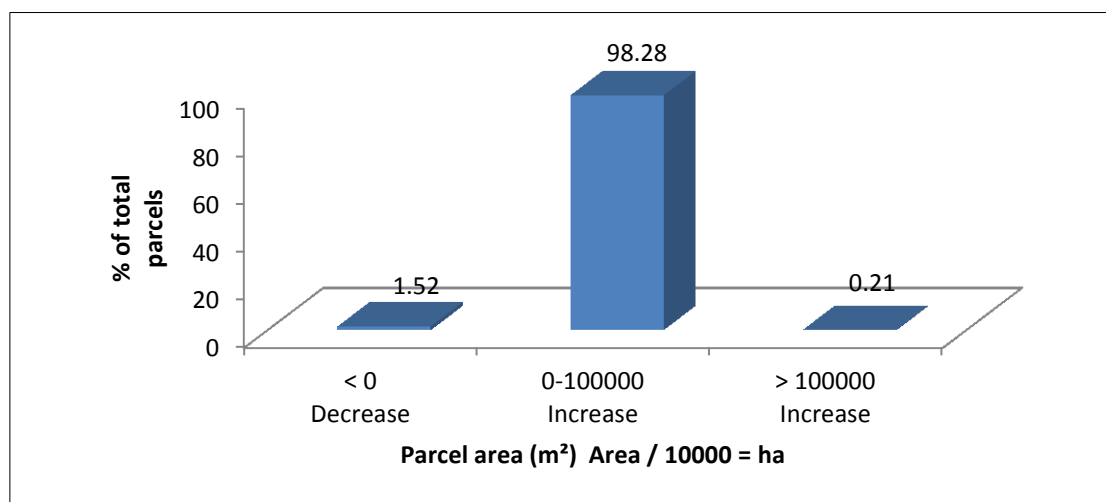


Figure 3.11 Change in plantations: 1993–2010

Only seven cases (0.21%) were recorded that were larger than 100 000 m<sup>2</sup> (> 10 ha), ranging between 10 ha and 40 ha and indicating a relatively small growth in the series greater than 10 ha. The largest decrease in this 17-year period can be attributed to the construction of the Berg River Dam. Large portions of plantations were demolished in the catchment area of the dam, and in the areas surrounding the dam and its catchment area. Large portions of land previously covered by plantations are now covered with water. The second largest decrease can be attributed to the clearing of plantations surrounding the Jamestown area for the establishment of vineyards. In the range smaller than 0 ha, 51 cases (1.52%) were recorded, ranging between -80 ha and 0 ha. This indicates that, during this 17-year period, 51 cases were recorded where plantations were changed into other types of land use, although these changes never exceeded 80 ha in size.



**Figure 3.12 Change in plantation parcel area: 1993-2010**

Note: smaller than 0 m<sup>2</sup> indicates a decrease in the category concerned.

### 3.5 CONCLUSION

Changes in land cover occurred in the study region between 1993 and 2010. When looking at the changes in land cover, a definite shift in the usage of land, from mainly agricultural to a diversified rural landscape, can be detected.

The data relating to changes in land cover display the changes that have taken place from 1993 to 2010. Attention was paid to each land cover type for which data was available, namely built surfaces, vegetation, bare land, water, fields and plantations.

A drastic increase in the built-up area can be observed. Most of the developments took place near the urban edge, as well as on farms just outside the urban edge of the town. Land covered by fields and vegetation was mainly converted into built-up areas. The main reasons for the

great increase in build-up area can be linked to the fast-growing population of Stellenbosch, as well as the growing importance of tourism in this area. Vegetation has largely increased, mainly on farmlands further away from the urban edge. Areas previously covered by fields were influenced the most. The largest factor pertaining to this increase is the growing tendency for wine farmers to introduce alternative farming methods on their farms. When looking at natural bare land we can conclude that an increase occurred in some areas, whilst in other areas a decrease occurred. These changes took place on farmlands further away from the urban edge. Land covered by fields or vegetation was influenced the most. The main reason for land changing to bare land is the process of multi-dimensionality. This process changes the focus from discouraging food and farm production to an attempt to deliver other environmental and consumer-based benefits. Water bodies have increased drastically on farmlands both near and far from the urban edge. Fields are the land cover type that changed the most. Dams, both large and small, were constructed to serve in the growing population's water needs. Fields increased in some areas and decreased in others, but it still can be concluded that fields are the land cover type that decreased the most over this 17-year period. These changes mainly took place on farmlands, both far from and nearer to the urban edge. This decrease in fields can be linked to several factors, such as the increase in the population, the increase in building, and the conversion of farmland to natural vegetation. Plantations have largely decreased over the past decade, especially nearer to the urban edge. Plantations have mainly changed into vegetation or fields.

Land-use and land-cover changes are

so pervasive that, when aggregated globally, they significantly affect key aspects of Earth system functioning. They directly impact biotic diversity worldwide; contribute to local and regional climate change as well as to global climate warming; are the primary source of soil degradation; and, by altering ecosystem services, affect the ability of biological systems to support human needs (Lambin *et al.*, 2001: 263).

## CHAPTER 4 STATE-OWNED RURAL LAND IN STELLENBOSCH

### 4.1 INTRODUCTION

Agriculture plays a major role in South Africa's economy and therefore it is of the utmost importance to maintain this sector. The Department of Agriculture has a few programmes aimed at improving the agricultural sector. These programmes are: administration, dealing with the internal administration; sustainable resource management, dealing with engineering services (water resources, animal housing, waste handling, mechanisation, rural infrastructure) and land care; farmer support, dealing with the training of farm workers and emerging farmers, land reform, food security and sustainable rural development; veterinary services, dealing with animal health and hygiene, as well as veterinary laboratory services; agricultural economics, dealing with the economics of farming systems and research on agricultural economics; and agricultural training, dealing with the training of farmers and farm workers (Cape Winelands District Municipality, 2007).

In this chapter, the Municipality's role as potential contributor to the creation of a post-productivist countryside is investigated. This chapter discusses the municipal regulations on state-owned lease properties, as well as the regulations pertaining to the use of these properties. It also looks at the role of land reform pertaining to municipal commonage. Attention is given to the uses of these properties as a result of post-productivism.

A distinction is made between two types of commonage (land made available by the municipality for long-term lease), namely historical commonage and new commonage. Historical commonage consists of commonage that has always been the property of the municipality, to manage to the benefit of its residents. New commonage was obtained after the Land and Assistance Act, Act No 126 of 1993 was put into place, in which the Department of Land Affairs (DLA) stipulated that this land was for the use of emerging farmers only (Buso, 2003; Stellenbosch Municipality, 2012a).

Prior to 1994 it was common for municipalities to rent out large portions of their agricultural land to local commercial farmers on a tender basis, always to the highest bidder at going market rates. The successful bidders generally agreed contractually to maintain the infrastructure and to return the land in an acceptable condition. Such an arrangement involves minimal transaction costs, no extension services, no facilitation costs, no infrastructure maintenance and an optimal income. After 1994, with the introduction of South Africa's new political dispensation, it became a policy recommendation that land should be handed over to

black aspirant farmers, which many municipalities failed to do. The role of the urban edge in protecting the rural area from urban sprawl will be discussed in the next section.

#### **4.2 RURAL LAND-USE PLANNING**

The Western Cape has specific guidelines on managing rural land-use change, which will be discussed shortly. The decisions on rural development applications should be based on the following sustainable land use principles, namely: social inclusion, effective protection and the enhancement of the environment, discreet use of natural resources and maintaining high and stable levels of economic growth. A good quality of, as well as carefully sited, development should be encouraged in existing settlements. Accessibility should be a key factor in all development decisions. The development of new buildings in the open countryside, away from active settlements, should be strictly controlled with regard to scale, height, colour, roof profile, etc. Priority should be given to the re-use of previously developed sites in preference to green fields sites. All development in rural areas should be well developed and inclusive, in keeping and scale with its location, and sensitive to the character of the rural landscape and local distinctiveness (Western Cape, 2009).

The legacy of apartheid is still evident in the pattern and structure of human settlements in the Western Cape. New urban and rural dynamics have emerged in the post-1994 era. These include, firstly, a rapid migration into the province by work seekers and their dependants, which has intensified housing backlogs and led to a proliferation of informal settlements. Secondly, they have resulted in less labour-intensive farming practices, as well as the movement of farm workers to neighbouring towns. Jobs and formal housing remain inaccessible for these people. Thirdly, they have led to the relocation of rural communities displaced in the apartheid era, the settlement of emerging farmers, which forms part of the land redistribution programme, as well as improved security of tenure for rural occupants. Fourthly, the leisure and tourism sectors have grown rapidly, driven mainly by the more profitable domestic market, as well as by foreigners. Fifthly, there has been foreign investment in the local property market, contributing to a rapid increase in urban and rural land prices. Sixth, these dynamics have resulted in an abundance of lower density resorts and residential lifestyle estates outside the city border, leading to the destruction of rural landscapes and the shift of sprawl into close-by rural areas. Lastly, they have given rise to the rapid growth of towns in the Western Cape as a desirable location for retirement (Western Cape, 2009).

The provincial authorities of the Western Cape are concerned about the current rural development patterns in the region (Western Cape, 2010). There are several reasons for this growing concern. The snowball effect of piecemeal development in different municipal authorities is shattering the Western Cape's rural landscapes and eating away its natural resource base. As the Western Cape's rural assets are of national importance from an ecological, cultural and economic perspective, it is of the utmost importance for the authorities to ensure that the asset base is developed in a sustainable manner, with special reference to alleviating poverty, promoting food security, facilitating land reform, and minimising the impacts of climate change. The Western Cape's urban edge policy, aimed at containing urban sprawl and promoting the restructuring of human settlements, led to property developers turning their attention to the rural areas. In the absence of a sound provincial policy on how these development pressures should be managed, there are growing incidences of rural residential sprawl in this area. Whilst the provincial government encourages investment in its rural areas, several forms of rural development are altering the Western Cape's settlement structure, undermining the legitimacy of rural landscapes as prime tourist attractions, gentrifying the countryside and marginalising the rural poor, and contributing to an overall decline in public access to rural areas. Given a limited rural return base and staff shortages, municipalities lack the ability to plan for and manage their rural areas, resulting in rural areas being neglected. There is a growing disjuncture between the zoning of rural land and how it is used, and diverse understandings of what land uses are appropriate in a rural context. Municipal efforts at managing their rural areas are complicated by the intersecting authority of diverse legislative authorities.

In many cases, market pressure has caused local authorities to endorse applications that are in direct conflict with national and provincial planning policy, with devastating effects on the environment.

The Western Cape Provincial Spatial Development Framework (Western Cape, 2009) states that application for rezoning consists of various stages. Firstly, a landowner may apply in writing to the town clerk or secretary concerned for a rezoning of the land. Secondly, the town clerk or secretary must ensure that the application is advertised. Thirdly, if any objections against the rezoning are received, they should be sent to the owner of the land for comment. Fourthly, the opinion of any person with an interest in the application should be obtained. Fifth, the application and all relevant documents should be submitted to the council, and the owner should be notified of the council's decision. Sixth, the administrator should obtain the



relevant comment from the council and provide the director with a copy thereof, and with any documents required by the director. Lastly, the director should then notify the applicant and the local authority concerned of the administrator's decision on whether the application was successful or not. Government and local municipalities give much attention to the role of land reform in relation to municipal commonage and its uses, which will be the main focus of the following section.

#### **4.3 LAND REFORM AND MUNICIPAL COMMONAGE**

Since 1993, the policy of the African National Congress (ANC) has been influenced largely by the World Bank, which emphasises the need “for a move away from inefficient, large-scale farming to a more labour-intensive, small-scale farming system” (Hamman & Ewert, 1999: 448). The Department of Land Affairs (DLA) is focused on the transfer of land to previously disadvantaged individuals and groups.

Municipal commonages can be used for various purposes, such as the collection of fuel wood and building materials, the running of livestock and vegetable production for additional income, as well as for purposes of recreation, ablution, housing, refuse disposal, eco-tourism, and sewage treatment works (Anderson & Pienaar, 2003).

Today, land reform rests on three pillars, namely restitution, redistribution and tenure reform. The restitution of land rights, lost under racially based land legislation, plays a minor role in the Western Cape's wine sector. The main aims of the redistribution programme are to provide the poor with access to land for both agricultural and residential use. According to the protection of private property rights, expropriation is impossible and land transfers will only take place on a willing buyer/willing seller basis. The government thus decided on assisting beneficiaries in purchasing land by making land acquisition grants available to them. This programme also aims to redistribute land to the rural poor, mainly woman and children (Hamman & Ewert, 1999).

Since 1994, land reform has become a key priority of government policy. Municipalities have been restructured to play a role in the development of communities by making land available to them so that they can practise farming in such a way that emerging farmers eventually become commercial farmers. These commonage users are usually classified as needy or lower income, although there are a few cases of commercial farmers utilising commonage (Buso, 2003; Davenport & Gambiza, 2009). One way of addressing the apartheid issue has been for

government to prioritise the reallocation and use of municipal commonage for poverty relief and food security in key national policy documents (Puttick, Hoffman & Gambiza, 2011).

Prior to 1949, white residents relied heavily on the commonage for basic needs such as wood and food, leading to over-utilisation of the resource. The period between 1942 and 1990 was characterised by woodland dominating grassland, and a recovery of vegetation. Town residents relied on commonage resources to a lesser extent, which led to a reduction in livestock numbers and the division of the commonage into camps that were leased out to commercial cattle farmers. This period was also characterised by an increasing awareness of degradation issues in South Africa and the introduction of new agricultural and conservation acts.

The loss of jobs in the agricultural sector since the 1990s led to a decline in rural populations, with a rapid increase in urban population growth in both small towns and larger urban centres (Davenport, Gambiza & Shackleton, 2011). This rapid population increase resulted in progressively heavier exploitation of commonages. The added pressure led to various problems, such as dominance by political and financial elites, the exclusion of women and children, and degradation of the land and infrastructure. Households making use of commonage are usually poorer and less educated than other urban residents. Township residents are also placing pressure on municipalities to promote pro-poor commonage projects, which has added to the need for land reform. Land reform are mainly concerned with giving local people access to land, the creation of livelihood opportunities and the development of the local economy. The benefactors of land redistribution include the poor and previously disadvantaged groups, women and children, labour tenants, new entrants to agriculture, and farm workers (Davenport *et al.*, 2011).

Prior to 1994, municipalities leased some commonage to commercial farmers, thus generating revenue, as these farmers were responsible for the maintenance of the infrastructure (Puttick *et al.*, 2011). Municipalities are moving towards making more commonage available to emerging farmers. From the 1950s onwards, municipalities leased out commonage to private commercial farmers, at market prices, thus changing the communal nature of the resource. This benefitted the municipalities, as it allowed them to get an income from the commonages. The reduced income received from commonages now leased out at market rates, as opposed to land leased to commercial farmers at a much higher rate, is a major concern for municipalities (Davenport *et al.*, 2011). Emerging farmers gain access to land through tendering, negotiations between the farmers and the municipality, as well as applications by

the farmers to the municipality. However, renting out commonage to emerging farmers, according to Buso (2003), gives rise to problems with maintenance, lack of repairs, vandalism and theft, although the users of commonage are responsible for infrastructure repairs.

The lack of binding contracts between municipalities and emerging farmers led to big problems, since the municipality had no hold on the farmer if he refused to pay, which in turn led to the municipality being unable to pay for the maintenance of the land and/or the infrastructure.

Davenport and Gambiza (2009) state that the efficient management of commonage could enhance land reform, food security, local economic development and the sustainable use of natural resources. The Department of Land Affairs has the responsibility of acquiring skilled personnel to supervise the commonages, since municipalities are responsible for the maintenance and administration of the commonages. Agricultural extension support during the formulation and implementation of management strategies are extremely important, since commonages are mainly used for agricultural purposes. In order to promote sustainable natural resource use on municipal commonage, more support for the provincial and local government departments is needed from national government for the implementation of the Municipal Commonage Programme.

The Department of Agriculture is involved in two ways. Firstly, they provide community project funds to communities to get projects off the ground and, secondly, the extension officers of the Department assist emerging farmers with agricultural skills such as the prevention of overgrazing, the ploughing of crops, and disease control (Lebert & Rhode, 2007).

A municipality may make by-laws to regulate and control the use of the commonages. The municipality holds the right to restrict the number of livestock per household, restrict or prohibit the use of certain parcels of land for pasturage, and prescribe appropriate charges for the use of lands. The approval of the Premier needs to be obtained when the municipality wishes to lease a portion of commonage to a tenant; as such, a lease allows the tenant to use the land to the exclusion of other members of the public. The income obtained from this lease must be used for the promotion of a special public purpose and may not be used to subsidise the ordinary expenditure of the municipality. It is the municipality's responsibility to establish a management committee that will represent the people using the commonage, and it must include a member of the relevant Department of Agriculture. This committee must formulate

a land-use management plan to set out conditions of use, rules and regulations, the monitoring of the commonage, and a prescribed plan on how this will be enforced (Anderson & Pienaar, 2003).

Municipalities need qualified agricultural personnel to supervise the commonage and to report back to the municipality. Commercial farmers play an important role in assisting emerging farmers by serving as mentors, since commercial farmers have experience in the field. The burden on government departments, in relation to monitoring use and identifying good markets, could be lessened to a great extent, as working relations between commercial farmers and emerging farmers are improving (Cape Winelands District Municipality, 2007).

A land audit of the municipal properties of Stellenbosch, done by Global Image GIS Consultants in August 2004, was used as the primary source for this chapter. The document contains the land parcel number, area name as well as the land use of each of these parcels. The Municipality also provided a document on long-term lease agreements of the agricultural units in the study area. The document contains the land parcel number, the size of each property, the contract period as well as the annual rent of each property.

#### **4.4 MUNICIPAL REGULATIONS ON LEASE PROPERTIES**

The Constitution of the Republic of South Africa, Act 108 of 1996, obligates municipalities to govern the local affairs of communities in agreement with the Constitution and other national and provincial legislation. The municipality thus should provide governance of an outstanding quality, ensure the provision of services to the community in a sustainable manner, endorse social and economic development, and promote a safe and healthy environment for all (Western Cape, 2005b).

When the municipality is involved in a project, it should be of maximum benefit to the municipality, its operational requirements, as well as the larger community. The Municipal Asset Transfer Regulations (MATR) govern the transfer and disposal of capital assets and entities, as well as the granting to municipalities and municipal entities the rights to lease, use, sell, control and manage assets (Stellenbosch Municipality, 2012b).

According to legislation, property is the only department within the municipality that may close a contract with a third party in respect of the disposal as well as the authorising of a property right. A property may only be disposed of in the case where no reasonable economic and/or social benefit can further be derived from the property.

The municipality should use its assets to encourage social integration, with the aim of rectifying existing spatial inequalities, promoting economic growth, building strong, integrated and dignified communities, as well as providing access to housing, services, amenities, transport and employment opportunities. The municipal properties should be managed as a sustainable resource; properties should further be used to give black people access to the social and economic advantage of property ownership, management, development and use (Stellenbosch Municipality, 2012a). Property and rights may be managed by council, within or outside its municipal area, by means of purchase, expropriation, exchange, donation, gift, and lease or otherwise, subject to compliance with the procedures stipulated by law. According to the Expropriation Act, Act No 63 of 1975, expropriation of property shall only be allowed for public purposes or in the case where it is in the public's interest. Regulation 45 of the Municipal Asset Transfer Regulations (MATR) stipulates the minimum terms and conditions that need to form part of all lease agreements. All costs relating to transactions, such as legal, survey, re-zoning, sub-division, consolidations, advertisement, relocation or the provision of services, shall be borne by the applicant. A deposit equal to two months' rental for commercial transactions, or a deposit equal to one month's rental for residential and social services transactions, shall apply to leases where the rental is based on market value.

Property may only be disposed of at market-related prices, except when the plight of the poor or other public interest factors, which impact on the economic and community value to be received by the municipality, plea otherwise. If the municipality, on account of the public interest, particularly in relation to the plight of the poor, intends to dispose of property for less than market value, the following factors must be taken into account. First, the interests of the state and the local community; second, the strategic and economic interests of the municipality, including the long-term effect of the decision on the municipality; third, the constitutional rights and legal interests of all parties affected; fourth, whether the interest of the parties to the transfer should carry more weight than the interest of the local community, and how the individual interest is weighed against the collective interest; and lastly, whether the local community would be better served if the capital asset was transferred at less than its fair market value, as opposed to a transfer of the asset at fair market value (Stellenbosch Municipality, 2012a). The Western Cape has set out specific guidelines and principles on managing rural land use, which will be the focus of the following section.

#### 4.5 EXTENT OF LEASEHOLD IN STELLENBOSCH

This section will focus on Stellenbosch's lease properties and the utilisation thereof.

It is important to note that vacant and underutilised commonage is all land that is not used efficiently and at its best potential in terms of its zoning or locality. Figures 4.1 and 4.2 represent this data graphically.

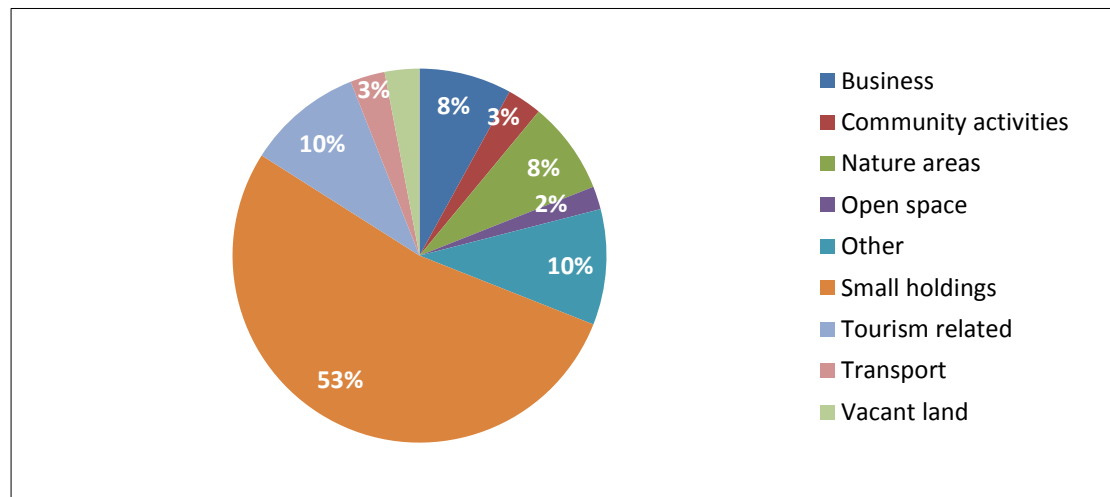


Figure 4.1 Percentage of leasehold properties in each land-use category

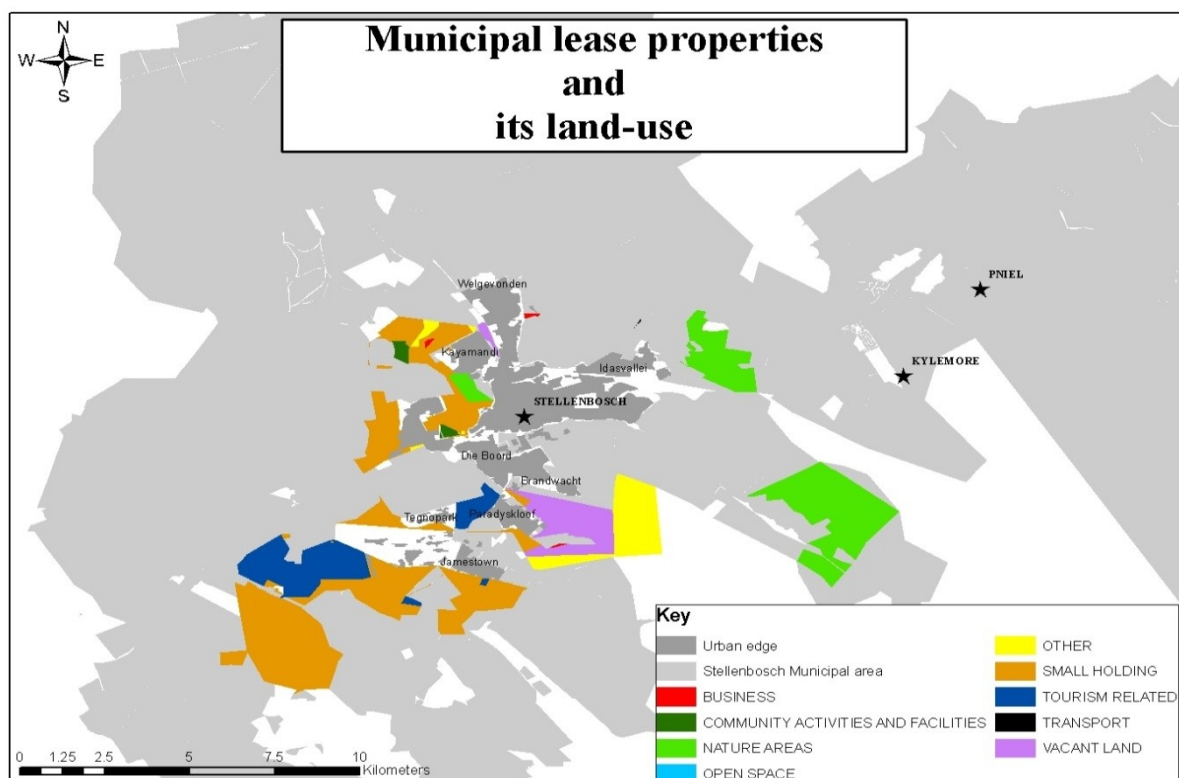
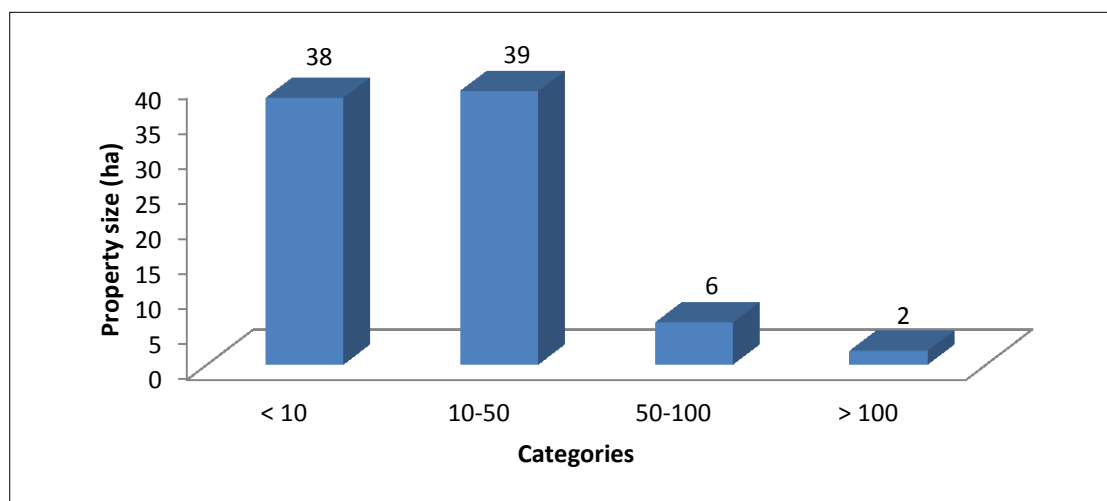


Figure 4.2 Lease properties and associated land-use

Most of the municipal lease properties are classified as smallholdings. Smallholdings are smaller than small farms, roughly about 20.5 hectares in size. Most of these properties are in close proximity to the suburbs of Stellenbosch for easy access by the residents of the surrounding areas, since these properties are mostly leased for cultivation purposes by these residents. Small farmers make use of these properties for a small livelihood. Smallholdings are primarily low-density residential land, where the owners generate a primary income by working elsewhere and supplementing the primary income by keeping livestock or planting crops on the smallholding.

When looking at Figure 4.3 it can be noted that the majority of the municipal properties are smaller than 50 hectares.



**Figure 4.3 Average size of properties in each category**

#### **4.6 EXPLORING STELLENBOSCH MUNICIPALITY'S LEASE PROPERTIES**

Ground-truthing was done to determine how serious the municipality is about using the commonage only for the purpose it was set up for by the council and for purposes legalised by town planning schemes. The Municipality succeeds in this by council officials inspecting the properties on a regular basis. The land is leased mainly to white farmers for agricultural purposes (Stellenbosch Municipality, 2012a).

The management of lease properties is extremely multifaceted and is filled with the potential for conflict. For any agricultural project to be successful, its owners should be competent, literate and mobile. When commonage is no longer leased to commercial farmers, but to aspirant beginner farmers instead, it increases the chances of this worthy resource being



damaged irreparably, and the municipality should be prepared to employ its own agricultural officers to monitor and manage the following: infrastructure (fences, boreholes, windmills, kraals and dams), access routes to and from camps and drinking holes; vaccination protocols and the treatment of infected livestock; control of timing, intensity and duration of grazing; optimal stocking; erosion management and water contamination (Stellenbosch Municipality, 2012a).

It is evident that, up until now, the Municipality of Stellenbosch has not been able to comply with South Africa's new political dispensation, which insists that the land should be transferred to black aspirant farmers (Stellenbosch Municipality, 2012a), since, currently, most of the land is still contract bound to local commercial farmers on a long-term tender basis.

Most contracts were signed with white farmers in the early 1990s for a 48- to 50-year period. These contracts assure minimal transaction costs, no extension services, no facilitation costs, no infrastructure maintenance and an optimal income, as these owners generally agreed to maintain the infrastructure and to return the land in an adequate condition.

A few land reform projects in the Winelands area have already been completed, and a number currently are under way. Roughly 600 ha of land is involved in this process, which amounts to roughly 5,6% of the agricultural land (10 693 ha) of the municipality that is to be redistributed according to national policy (Stellenbosch Municipality, 2012b).

According to the long-term lease agreements of Stellenbosch Municipality's immovable property, of the 85 property units available for long-term lease, accounting for 1 703.13 hectares, 16 units are vacant, while 69 units are leased to either a company or a private individual. The 16 vacant units account for 266.4 hectares and the leased properties account for 1 437.09 hectares. The average size of the properties being leased is 20.03 hectares, with an average lease term of 48 years. The average income for the Municipality per hectare per year amounts to R1 448. The total annual revenue for the leased properties amounts to R2 081 111, while the 266.4 hectares of vacant property can easily contribute to a further annual revenue of R385 225.92. When using the abovementioned averages, the Municipality can have revenue of R118 384 172.16 in a 48-year period (Stellenbosch Municipality, 2012b).

#### **4.7 CONCLUSION**

Municipalities are faced with a challenge to manage their commonage appropriately. Even municipalities that try a 50-50 compromise approach (lease half of their commonage to



commercial farmers and the other half to emerging farmers) will learn that the consultancy and management costs associated with the non-paying part will do away with the profits derived from the paying half.

When looking at Stellenbosch's municipal commonages, it becomes clear that the commonages are not only used for agricultural purposes, but also for multiple land uses. Multiple land uses are implemented on these properties as farmers are no longer concerned only with production, as in the past. A growing number of farmers are less focused on production as primary income, as in earlier years. Farmers are introducing alternative income-generating functions/facilities on their farms. The most well-known alternative functions on farms are weddings, conferences and accommodation, and the use of the land for its aesthetic beauty. Tourists are drawn to wine farms to experience farm living and to take part in the wine-making process. Some farmers introduce wildlife on their farms as a way of attracting tourists. In cases where wild animals are kept on the farm, this often leads to the altering of land cover, since these animals thrive in undisturbed, natural environments. For this purpose, cultivated land was left unhindered for natural vegetation to be able to establish itself again. Vredenheim is the most popular farm in the study area for its use of wild animals to attract tourists. Different practices on the properties lead to alternative income from outside the farm.

Data on Stellenbosch's commonages shows that not only is the annual revenue per hectare per year very little, but also that there are several pieces of agricultural land that are not occupied. Capable management of the commonage will result in a major economic boost for the town of Stellenbosch, and this money could be used for other community services.

## **CHAPTER 5 PRIVATELY OWNED FARMLANDS IN STELLENBOSCH: THE STATE OF DIVERSIFICATION**

### **5.1 INTRODUCTION**

This chapter aims to contrast the experience and viewpoints of farm owners who implement multiple land uses compared to those providing only one activity, namely wine tastings. The introduction of alternative land uses on farms serves as a good source of alternative income and reduces dependence on primary production. This chapter aims to explore the reasons why some farmers are not interested in altering their farms to multi-functional farms. The fact that tourism can be seen as the main factor causing farms to diversify, by offering alternative functions/facilities, is also explored.

### **5.2 THE SOUTH AFRICAN WINE INDUSTRY**

Despite considerable challenges, the wine sector has become one of South Africa's leading agricultural sectors. In the 1960s, 1980s and 1990s, the consumption of wine was positive, although a drastic decline occurred during the 1970s. Worldwide, the consumption of wine has declined, while there has been an increase in the consumption of all other types of alcoholic beverages. The wine industry therefore is struggling to maintain its share of the market for alcoholic beverages (Scott, 2008).

Since the end of apartheid, the South African wine industry has undergone major restructuring in order to meet the demands of international markets. The industry has the potential to compete in the global market, and producers and wholesalers are transforming business structures to meet the demands of the international markets. Prior to 1994, production was aimed mainly at the local market, with producers and their co-operatives selling the majority of grapes to the Co-operative Wine Growers of South Africa (KWV) and other wholesalers. The guaranteed prices offered by these businesses protected the producers from market variations, thus creating a market favouring the mass production of grapes of a lower quality (Bek, McEwan & Bek, 2007). International boycotts and sanctions further contributed to the producers only producing for local use. Very little was done to promote the uniqueness of the terroir of the region. With the lifting of sanctions in the early 1990s, the wine industry was ill prepared to exploit the newly available opportunities. This new era was characterised by the

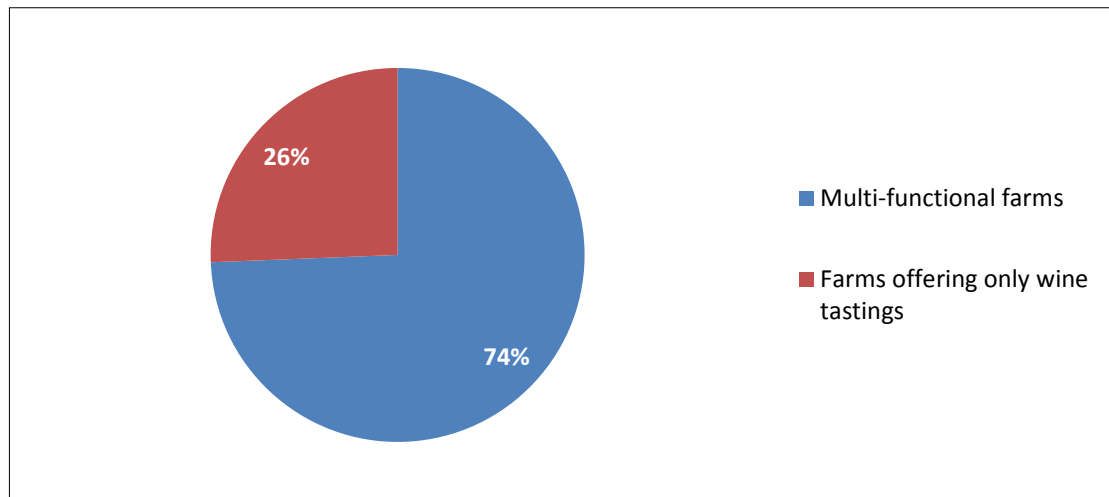
globalisation of the world agro-food economy, the improvement of labour legislation, and extensive deregulation, internationalisation and democratic transition (Scott, 2008).

Over the last few years, cellars have used different strategies to get the best possible price for their product in both local and international markets. Some cellars have converted their original cultivars into lower-priced wines, brandy and grape juice, while others have adopted a 'quality' strategy, involving a firm shift in planting programmes towards more noble cultivars, self-bottling of their product instead of selling in bulk, and trying to launch a distinguishable brand image in the eyes of the consumer. Nearly 60% of all exports are sold in the United Kingdom, where South African wines hold a 5.6% market share (Ewert & Hamman, 2002). Domestic wine sales increased by 4.3% for the period August 2011 to July 2012. Exports of wine in bulk increased by 26.0%, and exports of packaged wine decreased by 9.2% for the period September 2011 to August 2012 (VinPro, 2012). Most of these exports are taken on board and distributed by four UK sellers, including Raisin, Social and Tesco. These companies negotiate directly with South Africa, making recommendations and giving guidance. A noteworthy problem is that almost all export revenues go into planting new vineyards, upgrading cellars, as well as for private consumption. Another problem is that workers' wages and living conditions have not improved, despite the improvement in the industry's welfare, which is in direct contrast with the expected notion that the welfare of the industry should contribute to the welfare of the workers involved in it.

Stellenbosch is a well-known wine region in South Africa. The town, its wine routes and wine farms were used to explore diversification and multiple land use as a manifestation of post-productivism.

### **5.3 PARTICIPATING FARMS**

The Stellenbosch wine route consists of 160 wine farms (Appendix C) that are open to the public (Stellenbosch Tourism, 2012). Of the 160 farms, 119 offer alternative functions/facilities, while only 41 farms have wine tastings as an additional multifunctional use (see Figure 5.1). Of the 119 farms that have diversified their facilities, 54 farms participated in the study by completing the questionnaire.



**Figure 5.1 Nature of functionality of wine farms in the Stellenbosch area (n = 160)**

For a farm to be classified as multifunctional, it should, besides wine tastings, offer at least one of the following functions: conferences, weddings, accommodation and/or a restaurant (see Appendix A for a list of these farms). Much attention is paid to the external appearance of the farmhouse, outbuildings and cellar, and to the surrounding environment.

Of the 41 farms that only offer wine tasting, 31 farms participated in the study (see Appendix B for a list of these farms). GIS was used to compile two maps, showing the multifunctional farms in the Stellenbosch area (Figure 5.2), as well as the wine farms offering only wine tastings (Figure 5.3). According to the Stellenbosch Municipal Land Audit (Stellenbosch Municipality, 2004), these farms are often owned by foreigners who are not dependent on the income from the farm (Cloete, 2011). Less attention is given to the appearance of the farms, as these farms are not dependent on attracting tourists (Kleynhans & Opperman, 2005).

### **5.3.1 Distribution of multifunctional farms**

Figure 5.3 shows the distribution of wineries offering alternative facilities. These farms are found mainly along the main traffic routes leading into and out of the town. When looking at the distribution of wine farms in the Stellenbosch area, it is worth noting that the farms form five clusters along the traffic routes. The clusters are found along the R44 that leads to Klapmuts (cluster A); the R310 leading to Franschoek (cluster B); the R44 leading to Somerset West (cluster C); the M12 that leads to Kuils River (cluster D); and the R304 which leads to the N1 to Cape Town (cluster E). Most of the farms along the traffic routes are diversified, as they offer various activities to the public, such as accommodation, restaurants,



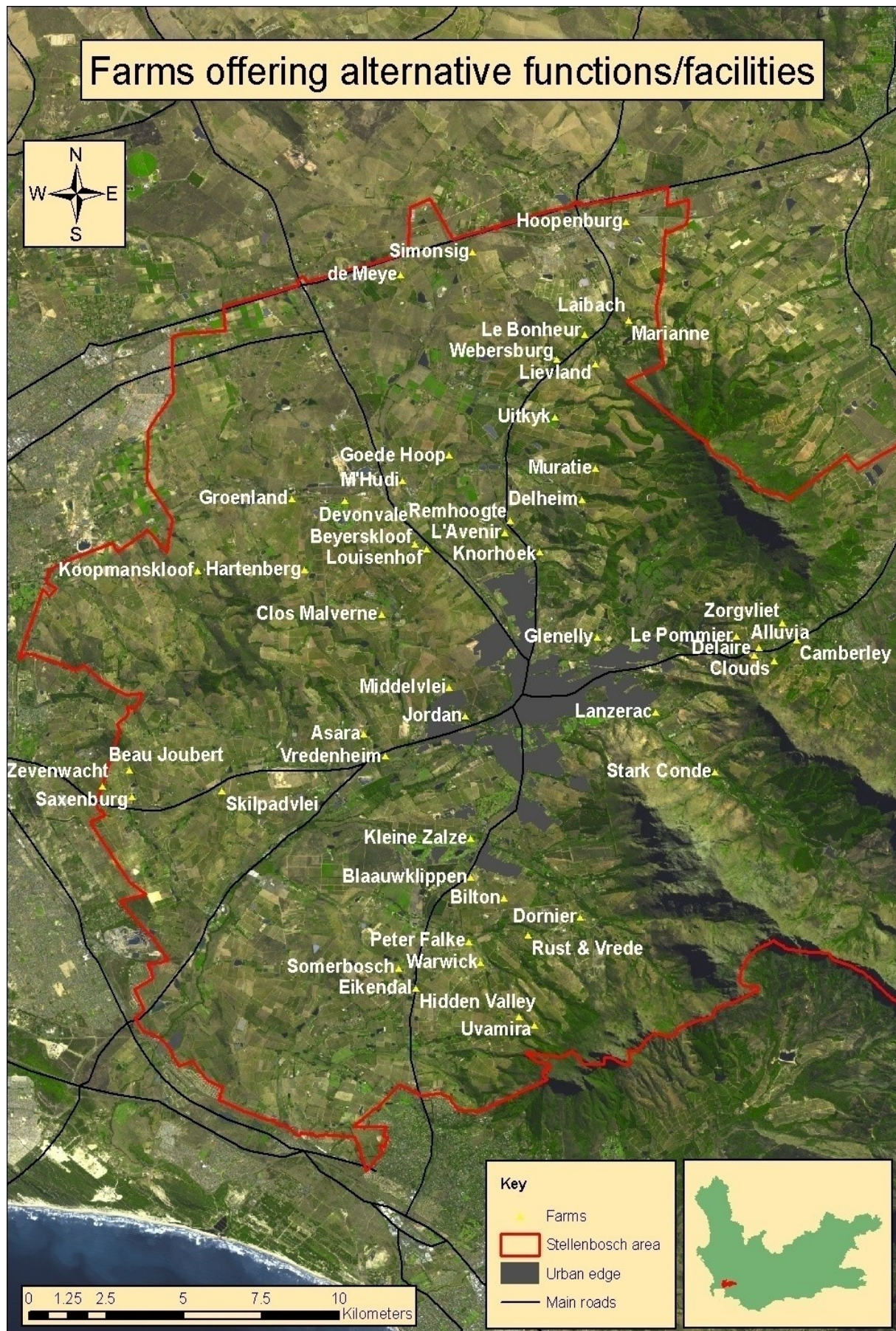
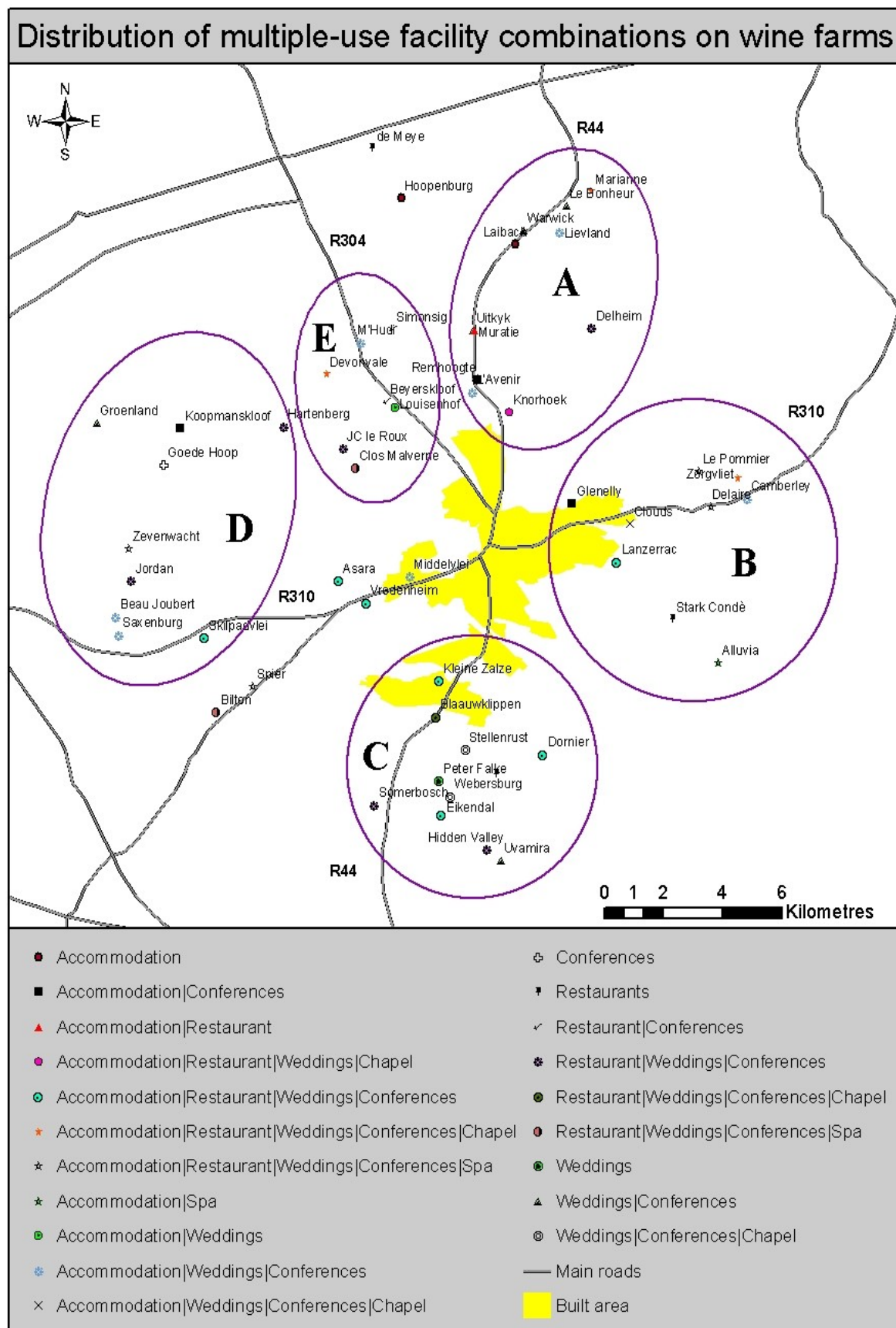


Figure 5.2 Farms offering alternative functions/facilities





**Figure 5.3** Distribution of multiple-use facility combinations on wine farms



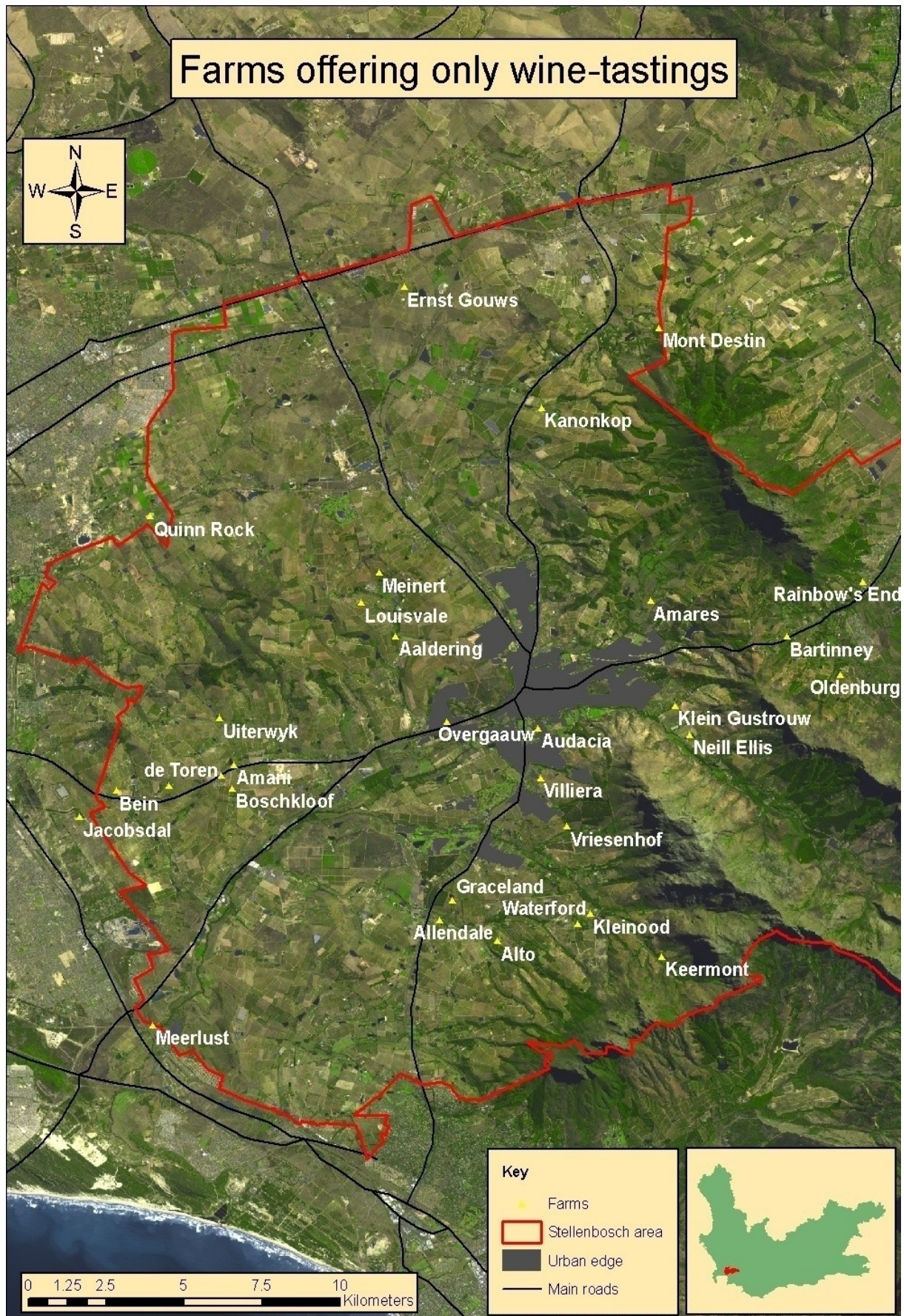


Figure 5.4 Farms offering only wine tastings



weddings, conferences, etc. When one wine farm in a specific region introduces an alternative function/facility, there is a tendency for the surrounding farms to follow in its footsteps, as this alternative will attract more visitors to the farm, broadening the income.

Cluster A consists of 11 farms. All the farms along this route are open to the public for wine tours and no appointment needs to be made in advance. Eight farms offer weddings and conferences, making these two the dominant activities offered by the farms in this cluster. Cluster B is made up of nine farms. Two of the farms are not open to the public for wine tours without prior appointment. Both these farms are less focused on tourism, with wine farming as the main activity. Accommodation (eight farms) is the predominant activity of the farms in this cluster, followed by conferences (seven farms). Cluster C covers 10 farms. Two of the farms are not open to the public for wine tours without prior arrangement. Nine farms offer weddings, followed by conferences (eight farms). Cluster D covers a large area and consists of eight farms. Four farms in this cluster are not open to the public for wine tours without prior arrangement. All four of these are smaller, privately owned farms (family businesses) that are less focused on tourism. Eight farms offer conferences, followed by weddings (six farms). Cluster E is made up of seven farms. All the farms in this cluster are open to the public for wine tours without appointment. Six farms offer conferences, followed by five offering weddings and five with restaurants.

Chapels are found on two farms in cluster A, two farms in cluster B and three farms in cluster C. Spas are found on three farms in cluster B, one in cluster D and one in cluster E. The scarcity of these two facilities probably indicates that more money is made from the other facilities offered by the farms.

Looking at the facilities offered by each cluster, a trend in the direction of similarities in the facilities offered in each cluster can be observed. When one offers a specific facility to the public, there is a tendency for neighbouring farms to follow the example and introduce the same facility. This is evident from the data regarding the number of farms offering specific facilities within each cluster.

Another remarkable aspect observed from the map is that the R310 is the only route in and out of town along which there is no clustering of wineries. The route is characterised by only two wineries, Spier and Bilton. There are three likely reasons for this lack of clustering, namely the size of Spier, the commercial nature of the land along this route, as well as the popularity of the road as a route to the Cape Town International airport. There are also many



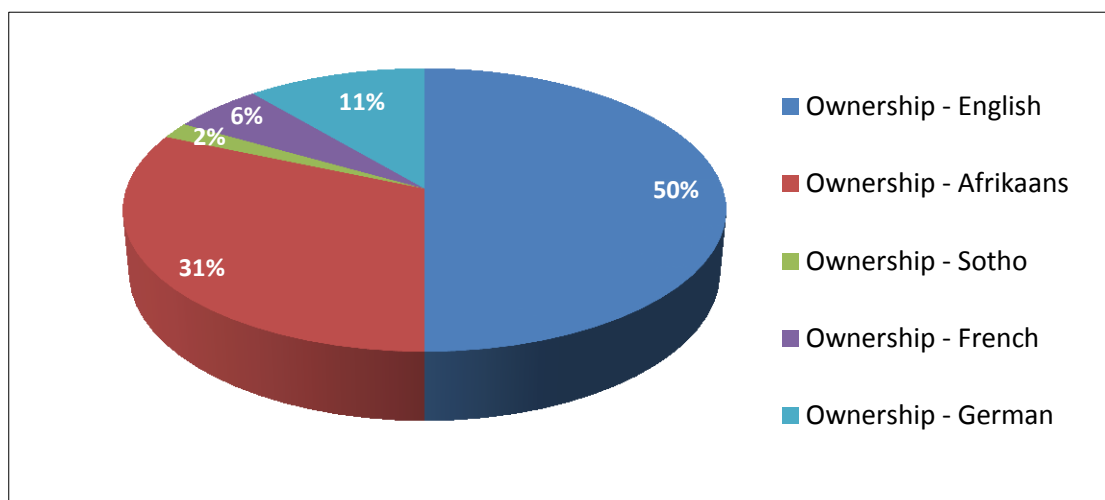
retailers and farm stalls found along this route, making it unsuitable for agriculture. Spier is the largest, most famous and most diversified farm in the Stellenbosch area. It offers high-quality wines, a five star hotel, a spa, several restaurants, an art gallery, conference facilities, craft market, picnics, and state-of-the-art sustainable farming methods – all of which makes Spier very tough to compete with.

### 5.3.2 Multifunctional farms

The purpose of this section is to provide answers to a number of prominent issues focused specifically on multifunctional farms. This section focuses specifically on aspects of the owner, the crops and facilities on the farm, the visitor profile, the reasons for diversifying, as well as the economics of the diversified products.

#### 5.3.2.1 Language of owners

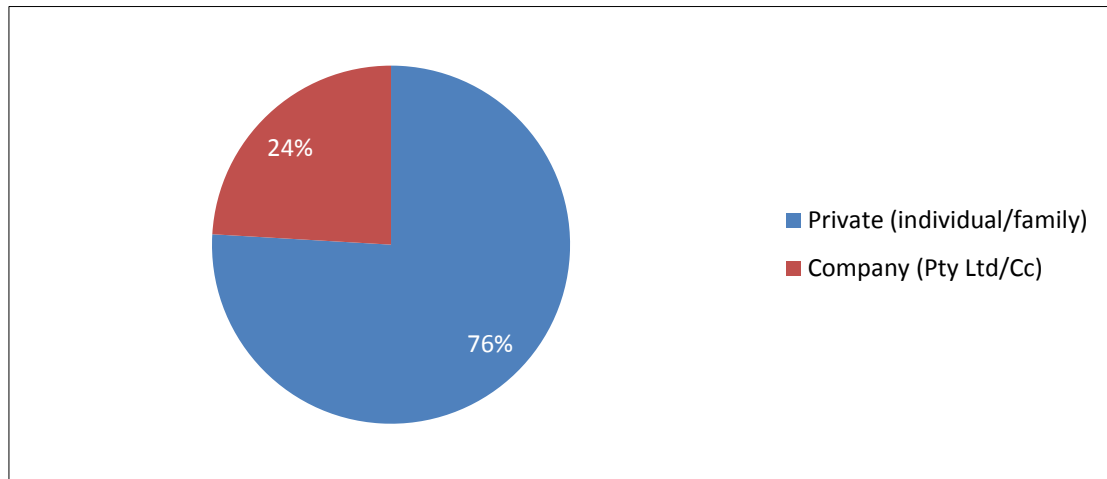
The majority of farms (81%) are owned by English- and Afrikaans-speaking South Africans, 2% belong to Sotho-speaking South Africans, 6% are owned by French people and the other 11% by Germans (Figure 5.5).



**Figure 5.5 Language of owners (n = 54)**

#### 5.3.2.2 Ownership

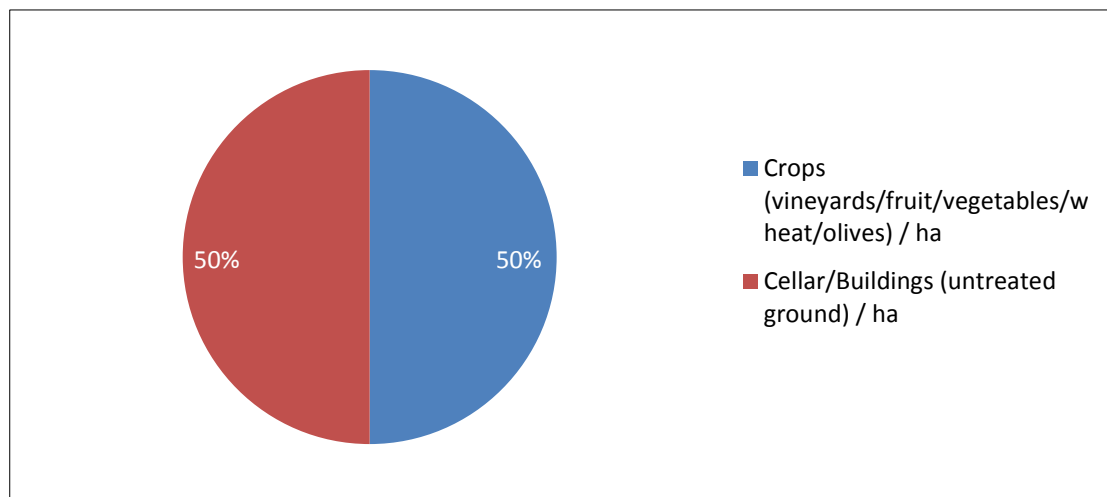
Wine farms in the Stellenbosch area have a tradition of being passed on from one generation to the next. The majority (76%) of farms are privately owned, either by an individual or a family trust. Twenty-four percent are owned by a company (Figure 5.6). The majority of farms in this study owned by companies belong to Lusan Holdings or Distell.



**Figure 5.6 Ownership of farms (n = 54)**

#### 5.3.2.3 Crops on wine farms

Although Stellenbosch is known mainly for its vineyards, there are also other agricultural products produced on the farms. Vineyards (46%) are the most significant crop type on the farms in the Stellenbosch region, with fruit (3%), vegetables (2%), wheat (2%) and olives (1%) being subdominant. The remaining 46% of the farm area is untreated/open ground. Agricultural diversification takes place to a large extent as a means of broadening the income of the farm. These products are sold either on the farm or locally. Figure 5.7 below shows the ratio of crops to other uses in hectares.



**Figure 5.7 Crops on wine farms (n = 54)**

#### 5.3.2.4 Facilities on wine farms

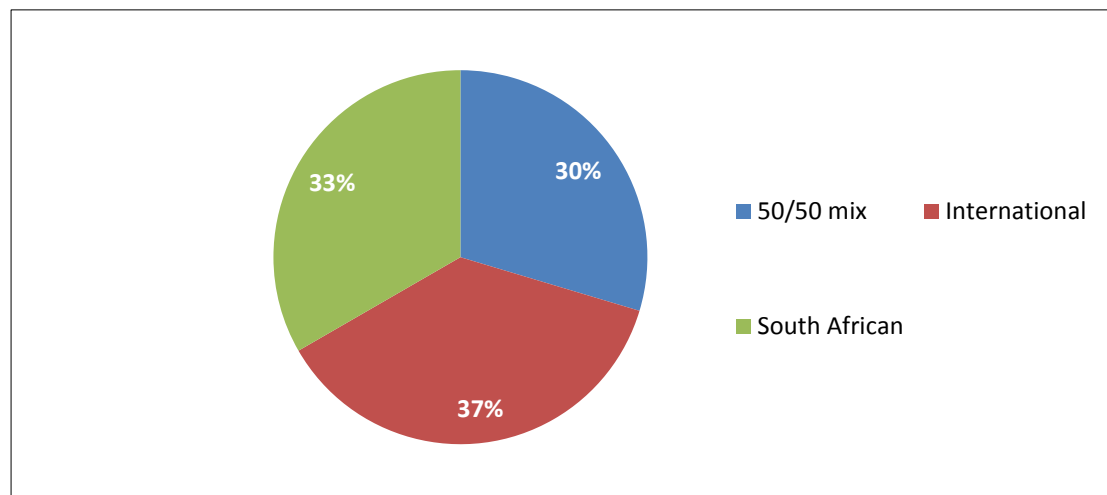
According to the literature, on-farm diversification is a key characteristic of post-productivism (Wilson & Rigg, 2003). Over the past few decades, the number of farms offering alternative functions/facilities has risen sharply. Table 5.1 shows the different facilities and the number of farms offering these facilities. Conferences and weddings are the most popular alternative functions in demand by the public, hence the high percentage of farms offering these facilities. These facilities also need much less time and labour than restaurants.

**Table 5.1 Facilities on wine farms (n = 54)**

<b>Function / Facility</b>	<b>N</b>	<b>%</b>
<b>Conferences</b>	44	81
<b>Weddings</b>	41	76
<b>Accommodation</b>	32	59
<b>Restaurant</b>	30	56
<b>Chapel</b>	8	15
<b>Spa</b>	7	13

#### 5.3.2.5 Visitor profile

The respondents were asked to give an estimation of which visitor types most frequently visit their farm. A distinction was made between three types of visitors, namely international, local (South African), and a 50/50 mix between the two (Figure 5.8). There thus is considerable scope for local marketing to attract more locals to the farms. It can also be deduced that the Stellenbosch wine route is well marketed among overseas visitors, as a large portion of visitors are foreigners.



**Figure 5.8 Visitor profile (n = 54)**

#### 5.3.2.6 Reasons for diversification

In the literature review, the reasons for, and impacts and outcomes of farm diversification were discussed. During the interviews, attention was paid to the reasons farmers give for diversification. Most of the respondents agreed that the main reason was to supplement their income.

With the influence of the recession on the economy, the general consumer does not spend as much money on wine, thus the facilities on the farm are also used to attract people to the farm, with the ultimate goal of selling and marketing their wines. This extra income is vital due to the growing competition in the industry and the low price paid for wine grapes by the cellars.

The average size of a wine farm in the study area is approximately 166 hectares, with an average surface of 76 hectares under vineyard. An average of 7.5 tons of grapes is harvested from one hectare of vineyard (Table 5.2).

**Table 5.2 Income and expenses for an average-sized farm (Cloete, 2011: 12)**

Income and production cost	Price (R)
Production cost per hectare	22 000.00
Average income per ton	3 100.00
Average income per hectare	23 250.00
Average expenses per 76 hectare farm	1 672 000.00
Average income per 76 hectare farm	1 767 000.00

The production costs per hectare, the average income per ton and the average tons per hectare were derived from VinPro's (2010) website. The average income per hectare was calculated by multiplying the average income per ton (R3 100) by the average tons per hectare (7.5 ton).

#### 5.3.2.7 Economics of diversified products

Wine farms in the Stellenbosch area offer a wide variety of alternative functions/activities, with the main aim of broadening their income. The alternative functions/activities offered by these farms include weddings, conferences, wine tastings, restaurants and farm-based accommodation. The following section will focus on each of these alternative functions/facilities separately.

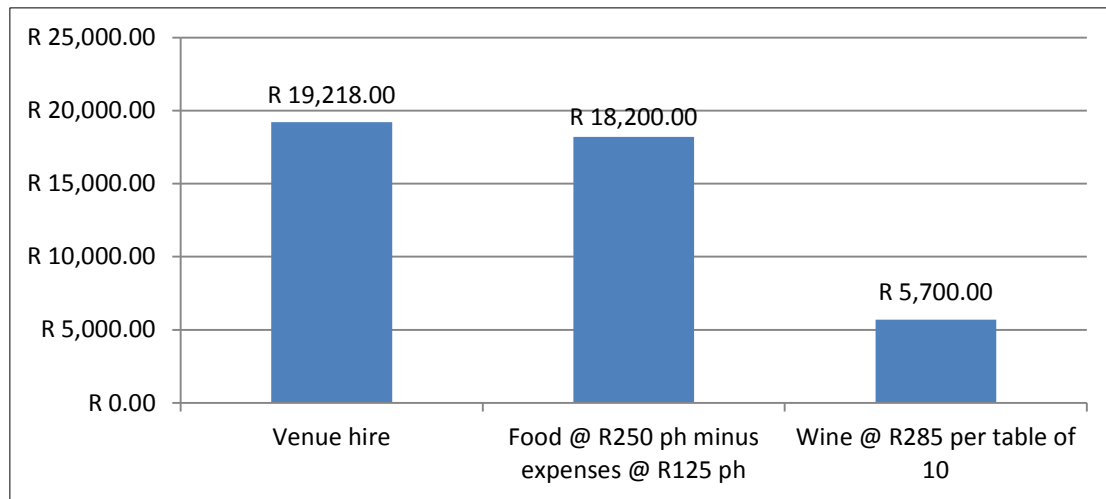
##### 5.3.2.7.1 Weddings

The majority of farms offer wedding facilities. The largest expense for a wedding (100 guests) is the average venue hire, which amounts to R19 217 (Table 5.3). Venue hire ranges from as low as R3 000 to a maximum of R95 000. The second largest expense is the food/catering, at R250 per head. An amount of R125 per head was deducted from the food/catering as expenses, resulting in an amount of R18 200. The provision of wine is the third largest expense; when calculated at R130 per bottle of red wine, R80 per bottle of white wine and R75 per bottle of sparkling wine, it amounts to R5 700 (Figure 5.9). The smallest expense is the chapel hire (R2 312).

However, it should be noted that the cost of venue hire for the wedding facilities ranges between R3 000 and R95 000. It should also be noted that the number of weddings per annum ranges from 15 to 50, with an average of 43 weddings. There were three farms where this number was much higher than 50.

**Table 5.3 Statistics on weddings**

	Mean	Mode	Median	Min	Max	Standard deviation
Venue hire	R19 217	R10 000	R10 000	R3 000	R95 000	6 977.86
Chapel hire	R3 231.43	R5 000	R750	R0	R5 000	2 519.57



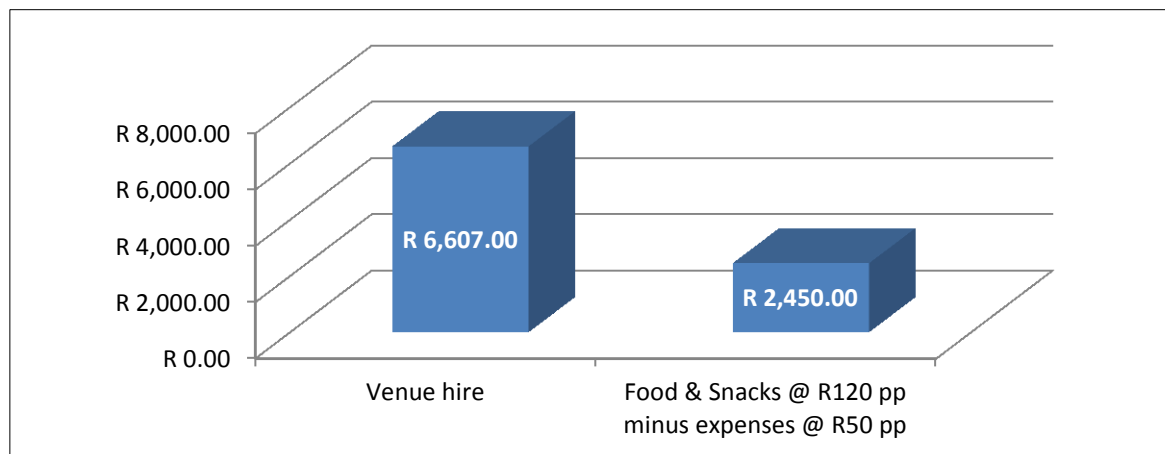
**Figure 5.9 Averages of weddings (n = 41)**

#### 5.3.2.7.2 Conferences

Forty-four farms offer conference facilities. On average, the conference facilities on the farms can accommodate up to 35 people. Figure 5.10 illustrates the expenses incurred per conference (accommodating 35 people). The average number of conferences was 47 per annum. Venue hire amounts to the largest expense, at R6 607 per conference. Food and snacks are the other expense, calculated at R120 per head. An average expense of R50 per head was deducted from the food/snacks as the farm's catering expenses, to get an amount of R2 450 (Figure 5.10).

**Table 5.4 Statistics on conferences**

	Mean	Mode	Median	Min	Max	Standard deviation
Venue hire	R6 607.14	R5 000	R5 000	R1 500	R32 000	6 167.91



**Figure 5.10 Revenue from conferences (n = 44)**

#### 5.3.2.7.3 Wine tastings

All 54 wine farms that participated in the survey offer wine tastings. The average price per wine tasting amounts to R19. It should be noted that the number of wine tastings ranged from 6 000 to 20 000 per annum, amounting to an average of 7 506 wine tastings per annum. There also were a few farms where between 21 000 and 50 000 wine tastings were held per annum (Table 5.5).

**Table 5.5 Statistics on wine tastings for a 12-month period**

	Mean	Mode	Median	Min	Max	Standard deviation
Price p.p.	R19	R20	R20	R0	R50	11.24
Amount p.y.	7 506.33	1 500	4 363	60	50 000	9 434.94

#### 5.3.2.7.4 Restaurants

Thirty of the 54 farms participating in the study had restaurants on the farm. Restaurants are the fourth most frequently used facility, at 9 375 guests per annum (Table 5.8). At an average of R200 per person per main course, the broader population cannot afford eating on these farms. This results in fewer farms offering restaurants, as their client base is limited to the wealthier part of the population and tourists.

**Table 5.6 Statistics on restaurants for a 12-month period**

	Mean	Mode	Median	Min	Max	Standard deviation
Guests p.y.	9 375	20 000	7 500	150	26 000	7 212.59

#### 5.3.2.7.5 Accommodation

Thirty-two farms offer farm-based accommodation. The average price per person per day for accommodation on a wine farm amounts to R899, with an overall number of 2 520 accommodation guests per annum (Table 5.9). Most of the accommodation guests on the farms are foreigners, who choose to stay on a wine farm to discover wine products and associated activities.

**Table 5.7 Statistics on accommodation for a 12-month period**

	Mean	Mode	Median	Min	Max	Standard deviation
Guests p.y.	2 520	100	360	30	20 000	4 165.55

#### 5.3.2.8 Comparison of revenue

After establishing the average number per annum for each alternative function/facility, the total revenue from these facilities will be explained next (Table 5.10).

Accommodation is the largest supplier of farm income, as it attracts roughly 2 520 guests per year, amounting to an annual income of R2 265 480. Restaurants are the second largest revenue supplier, at 9 375 customers per year, amounting to an annual income of R 1 875 000. Weddings, at 42 per annum, are the third largest supplier of farm revenue, amounting to R1 389 553, with conferences and wine tastings subdominant.



**Table 5.8 Income from additional functions/facilities**

<b>Function/Facility</b>	<b>Number per annum</b>	<b>Price per person (R)</b>	<b>Total income (R)</b>
<b>Weddings</b> (venue hire and expenses included)	42	250	1 389 553
<b>Conferences</b> (venue hire and expenses included)	47	125	425 685
<b>Wine tastings</b>	7506	19	143 454
<b>Restaurant guests</b>	9375	200	1 875 000
<b>Accommodation guests</b>	2520	899	2 265 641
<b>Total income</b>			<b>6 099 333</b>

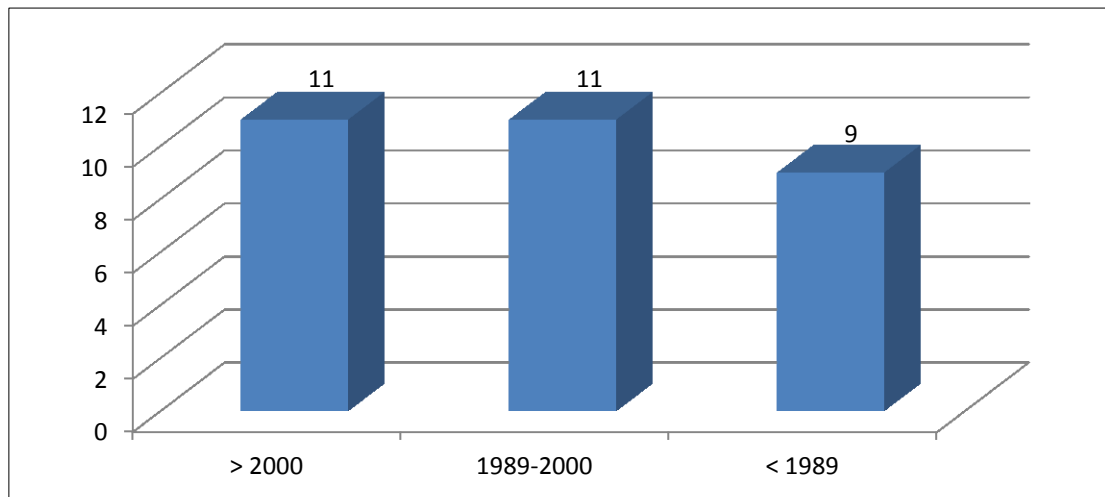
Income from grapes for an average farm (76 ha) that does not provide any extra services will be roughly R95 000.00 per year. This amount was obtained by subtracting the average expenses per 76 hectare farm, which amount to R1 672 000.00, from the average income per 76 hectare farm, which amounts to R1 767 000.00 (VinPro, 2012).

## **5.4 FARMS OFFERING ONLY WINE TASTINGS**

The average size of the 31 farms that offer only wine tastings and that participated in this survey is 82 hectares. The average size under vineyards is 40 hectares. Of the 31 farms, 27 (87%) have their own cellar on the farm, three (10%) sell their grapes to co-operative cellars, and only one farm (3%) sells its grapes to other cellars.

### **5.4.1 Ownership of farms**

When looking at Figure 5.11 it becomes clear that 29% of the farms participating in the study fall into the < 1989 category, which means that these farms have been in the family's possession for a long time. Of these farms, 35% have been in the owner's possession for less than twelve years, showing a different tendency of buying and selling for the purpose of making a profit. In some cases, the high purchase price of these farms in relation to the profit made from wine farming is financially unobtainable, hence the quick selling.

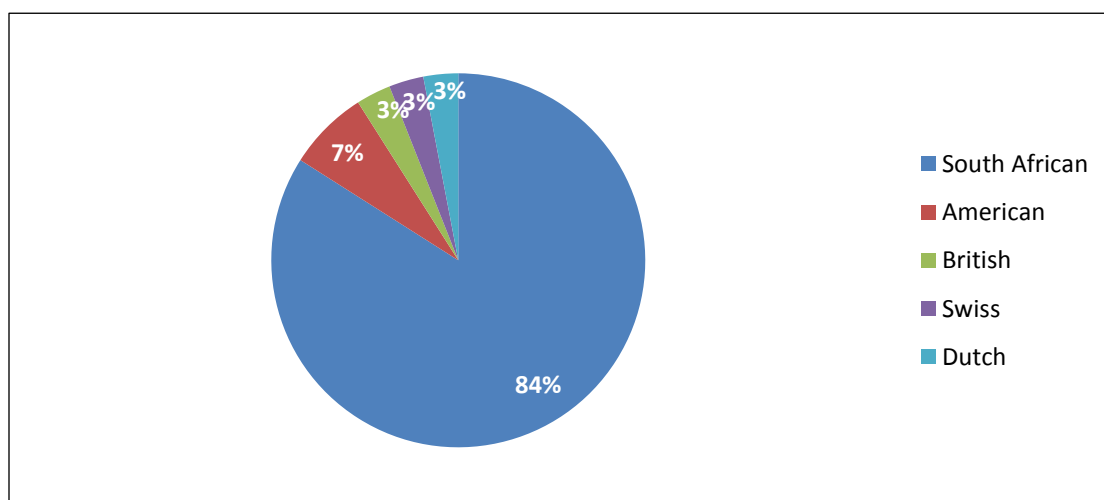


**Figure 5.11 Ownership of farms**

The remaining 35% have been subject to purchase and sale between the years 1989 and 2000. This data reflects the earlier statement that farms in this area are in many cases passed from generation to generation in the same family.

Of the 31 farms participating in the study, 26 belong to English- and Afrikaans-speaking South Africans and five to foreigners. Twenty-eight of the farms are privately owned, either by an individual or a family trust, while three are owned by Distell (Figure 5.12).

If the ownership of farms offering only wine tastings is compared with that of farms offering alternative functions/facilities, we can see that foreigners own more farms with only wine tastings. From the literature it became apparent that foreigners often buy wine farms as a hobby, and that they are not financially dependent on the farm's income (Kleynhans & Opperman, 2005). Many of these foreigners only come to South Africa once a year for holiday purposes.



**Figure 5.12 Ownership of farms (n = 31)**

### 5.4.2 Crops on wine farms

Crop diversification has been adopted widely by farmers to diversify their income in an effort to maintain their business, attract new entrants to agriculture and promote regional development. The following could be derived in relation to the different types of crops used as a means of income (Figure 5.13). Olives (13%) are the biggest crop type used as a means of alternative income, with prunes (7%), lavender (6%) and plums (3%) being subdominant. Seventy-one percent of the farms use only vineyards, and no alternative crops, as a means of income.

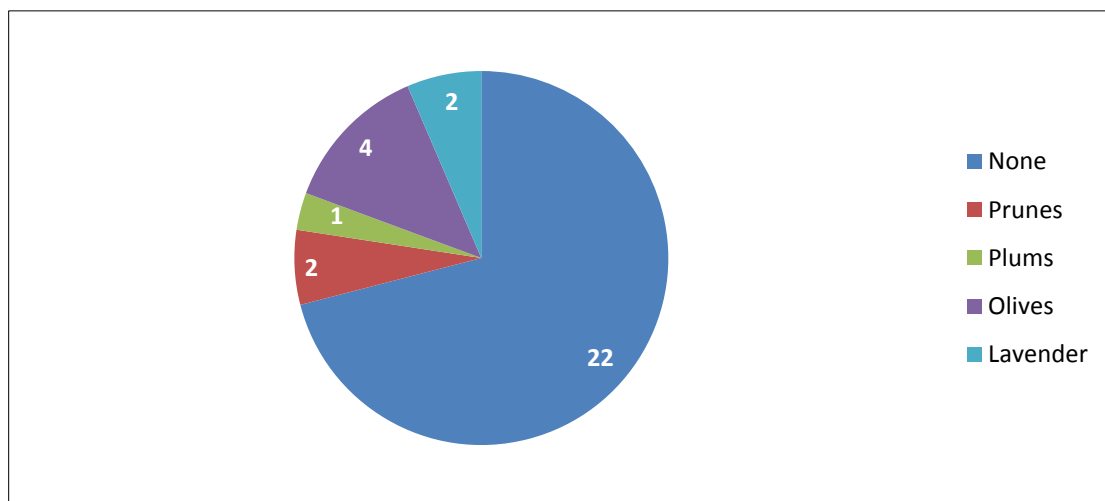
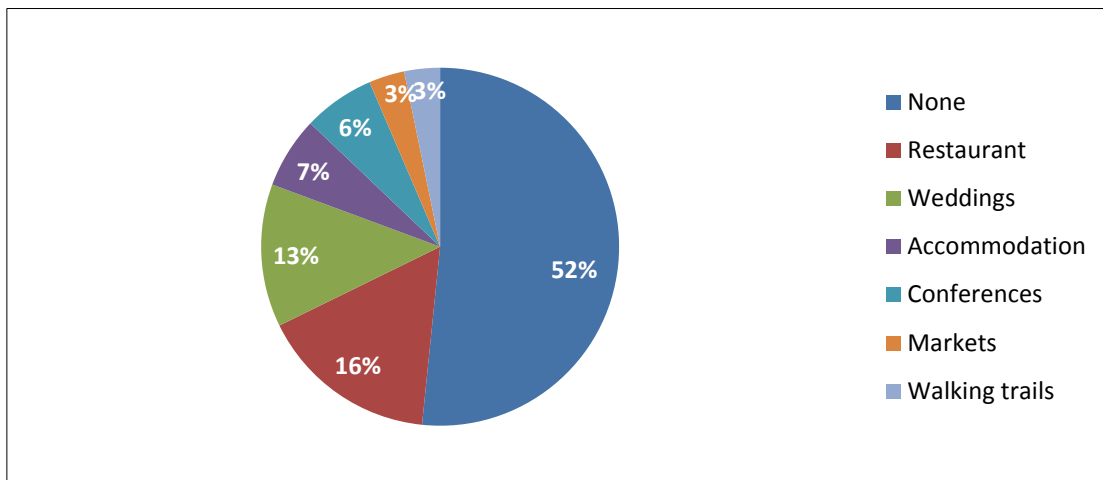


Figure 5.13 Crops on wine farms presented as numbers (n = 31)

### 5.4.3 Facilities considered in the future

Farms offering tastings, restaurants and accommodation perform better than farms offering only wine tastings, as these unique facilities lead to a greater income. Farmers make use of numerous strategies to increase and diversify their revenue, such as hosting workshops and conferences, and providing recreation, tourism and hospitality enterprises. These farms offer the direct purchase of agricultural products onsite (on-farm markets), recreational self-harvesting of these products (fruit, flowers), participation in recreational activities and events (tours, festivals and weddings), on-farm restaurants, stays in various types of farm accommodation (bed and breakfasts, cottages, hotels), and rental of vineyards for weddings and recreation. Figure 5.14 shows that 52% of the farms are not considering any alternative functions/facilities in the future. Sixteen percent are considering introducing restaurants in the

future, 13% are considering providing wedding venues, 7% accommodation, 6% conference venues, 3% farm-based markets, and 3% walking trails.



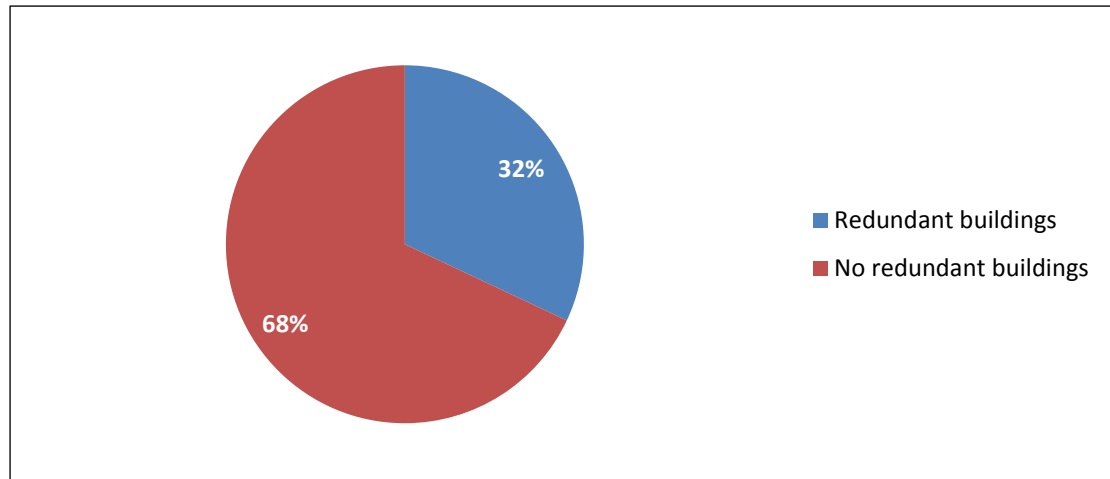
**Figure 5.14 Facilities considered presented as numbers (n = 31)**

#### **5.4.4 Reasons behind alternative functions/facilities**

Several reasons were cited for the introduction of alternative functions/facilities on the farm. Thirty-two percent (10) of the respondents argued that ‘the broadening of income’ was a motivating factor for the introduction of alternative functions/facilities, while 26% (8) cited ‘exposure of their wines’ as being the most important. According to these respondents, the increase in the number of wine farms is too great and there is an excess of wine on the market, therefore marketing their brand is very important. The remaining 42% (13) were not planning to introduce any alternative functions/facilities on their farms in the near future.

#### **5.4.5 Developing potential**

The cultural value of traditional architecture and the necessity of its preservation are very important in farm tourism (Fuentes *et al.*, 2010). Many (one-third) of the farms in the study area have redundant buildings that can be restored and used for accommodation and/or restaurants (Figure 5.15). Redundant buildings are found on almost all farms in the Stellenbosch area. The reason for this is the age of most of the farms. These buildings are often hundreds of years old, and today are in ruins. Traditional farm buildings play an important role in rural landscapes, as they represent not only a historic legacy and ways of life in past years, but also serve as essential contributors to the sense of place of the countryside (Fuentes *et al.*, 2010).



**Figure 5.15 Development potential of farms (n = 31)**

#### **5.4.6 Opinions of farmers offering only wine tastings on the winelands landscape**

Throughout the literature (Bek *et al.*, 2007; Bruwer, 2003; Fairbanks *et al.*, 2004; Getz & Brown, 2006; Nakana & Mkhabela, 2011; Nowers, De Villiers & Myburgh, 2000; Scott, 2008) it became apparent that opinions on the wine landscape differ to a great extent. This section focuses on the respondents' opinions on some aspects regarding the Stellenbosch Winelands (Table 5.11).

**Table 5.9 Farmers' perceptions of the Winelands landscape as percentages**

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The Stellenbosch Winelands are overdeveloped	13	39	3	10	35
Smaller wine farms are more dependent on wine tourism than bigger farms	32	29	10	13	16
The municipality has enough vacant farmlands for land reform	19	16	16	13	36
Opening up a guesthouse or restaurant on the farm is crucial for survival as a wine farmer	29	16	29	13	13

Intensifying production to maximise income is crucial for a good quality of living	16	23	6	16	39
Experiencing what the wine farms have to offer is the prime motivating factor for wine tourism	36	29	13	6	16
Farms on the urban fringe face the threat of increasing urban growth	26	29	19	10	16
There are too many lifestyle farms in Stellenbosch where owners run the farm as a hobby	16	29	19	23	13
The fact that foreigners buy farms in large numbers contributes to escalating farm prices	36	16	19	16	13

#### 5.4.6.1 The Stellenbosch Winelands are overdeveloped

Over the past few decades, development has taken place in all spheres of the Stellenbosch Winelands. Tourism has become more popular and in demand, which has led to the establishment of accommodation, restaurants, etc. This development took place on farms on a large scale, and this is believed to have led to the overdevelopment of the region. However, the respondents felt that there was enough scope for more development to take place in the Stellenbosch Winelands area. Fifty percent were in disagreement with the statement that the Stellenbosch Winelands are overdeveloped.

#### 5.4.6.2 Smaller wine farms are more dependent on wine tourism than bigger farms

The Stellenbosch wine region is well known for its growing wine tourism. Wine tourism leads to a greater income for farmers, improving the local economy. According to these farmers, all farms are equally dependent on wine tourism.

#### 5.4.6.3 The municipality has enough vacant farmlands for land reform

After 1994, land reform became a very important issue in South Africa. The farmers disagreeing with this statement felt that the government should make more farmlands available for land reform, as well as provide effective guidance to beginner farmers.

#### 5.4.6.4 Opening up a guesthouse or restaurant on the farm is crucial for survival as a wine farmer

The establishment of accommodation, restaurants and other tourism-related activities has taken place on a large scale over the past few decades. These activities/facilities lead to a much needed, vital alternative income. These farmers are of the opinion that, if done in the right way, farming provides sufficiently, not only for survival, but for a good quality of living.

#### 5.4.6.5 Intensifying production to maximise income is crucial for a good quality of living

From the literature it became clear that a change has taken place since the mid-1970s, from an era where the intensification of production was important to an era where there has been a definite move away from agricultural production towards the consumption of the countryside. These farmers realise the importance of protecting the environment by minimising the intensity of production.

#### 5.4.6.6 Experiencing what the wine farms have to offer is the prime motivating factor for wine tourism

The literature made it clear that one of the most important factors motivating tourists is the fact that they want to experience what the farm has to offer. Today, tourists stay on the farms and participate in the daily activities of the farm.

#### 5.4.6.7 Farms on the urban fringe face the threat of increasing urban growth

Increasing urbanisation is the order of the day. More people leave the rural areas daily to settle in cities. The cities' infrastructure cannot handle all the immigrants, therefore urban growth takes place to accommodate all the people. New suburbs arise, threatening the rural land close to the urban fringe. When looking at the data on Stellenbosch wine farmers, it is clear that urban growth is not seen as a threat to farms on or near the urban fringe of the town.

5.4.6.8 There are too many lifestyle farms in Stellenbosch where owners run the farm as a hobby

Together with the process of post-productivism came the tendency for buyers to use wine farms for lifestyle purposes. When looking at the commercial transactions between January 2005 and October 2009, it was found that more than half of these transactions were for lifestyle purposes rather than agricultural purposes (Scatigna, 2008). Reed and Kleynhans (2009) have noted that several features are more important for lifestyle buyers, such as the location of the property in terms of travel time, privacy, size of the property, water availability, soil quality, climate, infrastructure conditions, and aesthetic properties such as the presence of natural beauty, beautiful views and a rural environment. The capacity of the main house is also important for lifestyle buyers, as it is used during holidays or for the entertainment of friends and family. There was only a 9% difference between farmers who do not agree with the statement and farmers who do agree with the statement. The majority of the farmers do not agree. The data on Stellenbosch farmers is in direct contrast to the literature (Albrecht, 2007; Ward *et al.*, 2008; Wilson & Rigg, 2003), which shows that lifestyle farms, run as a hobby, are not that much of a problem in Stellenbosch.

5.4.6.9 The fact that foreigners buy farms in large numbers contributes to escalating farm prices

Today, wine farms in the Stellenbosch area have become unaffordable. Foreigners can pay these high prices, as their country's currency is mostly strong in relation to that of South Africa. According to the data on Stellenbosch wine farmers, the majority disagreed with this statement and felt that this was not the factor responsible for the high prices of land in the Stellenbosch area. The respondents agreeing with this statement felt that the reason for the rapid rise in the prices of wine farms was the growing trend of foreigners buying wine farms in the Stellenbosch area, leading to money leaving the country instead of strengthening the local economy.

## 5.5 CONCLUSION

The variety and number of non-productive activities on farms have increased significantly since the mid-1980s. The study has shown that the Stellenbosch wine region serves as an excellent example of the rapidly growing trend of diversification on wine farms. In the study area, 54 farms from a total of 119 complied with the requirements of the study, i.e. providing extra/alternative functions. Of the 41 farms that only offer wine tastings, 31 participated in the



study. Of all the extra features the wine farms have to offer, venues for weddings and conferences, as well as accommodation, are the most sought after. Stellenbosch is less than an hour's drive from Cape Town, thereby allowing companies and guests to visit the wine farms on a regular basis, enjoying the diversity these farms have to offer.

From the literature it can be concluded that the main reason for this diversification is the need for an extra income. When looking at the production cost of grapes, at R22 000.00 per hectare, in relation to the income from grapes at R23 250.00 per hectare, it is clear that very little profit can be made. The profit made here is not nearly sufficient to make a living from. The reasons for the profit being so little are the high costs of labour, the influence of the recession on the economy and the influence of climatic changes on agriculture.

The farm often does not make any profit from agriculture at all, hence depends on the revenue from these facilities. When a wine farm meets all of the above averages, an extra income of approximately R6 099 333.00 is earned. When looking at the extent of these facilities as an extra income, it is evident that these facilities are responsible for the provision of a very large part of these farms' income.

## CHAPTER 6 SUMMARY AND RECOMMENDATIONS

### 6.1 INTRODUCTION

Taking into account the proposed aims of the study, this chapter examines the success of the study by looking at the objectives and the extent to which these objectives have been met (or not). The limitations of the study are recorded, suggestions are made on how similar studies can avoid these, and some opportunities for future research on the topic are outlined.

### 6.2 REVIEW OF AIMS, OBJECTIVES AND RESULTS

The first section of this chapter provides an outline of the initial aims and objectives of the research, and the second section discusses how each objective has been met and provides a discussion of the main findings in relation to each objective.

#### 6.2.1 Outline of aims and objectives

When looking at the Stellenbosch area, several characteristics of a shift towards a more post-productivist countryside can be observed. These processes include, firstly, the use of rural areas for their aesthetic and recreational value; secondly, the re-establishment of lost or damaged habitats; thirdly, better on-farm monitoring of land degradation and the conservation of wildlife habitats; fourthly, a reduction in the intensity of farming; fifth, a shift in food production from quantity to quality; sixth, a return to environmentally sound (green) and sustainable farming techniques; seventh, the gradual removal of state support for agriculture; and eighth, the creation of a consumptionist countryside as well as the inclusion of emerging farmers, organic farmers and hobby farmers in the broader farming process (Albrecht, 2007; Ward *et al*, 2008; Wilson & Rigg, 2003).

It is argued that wine farms can no longer make a living from producing wine only, thus wine farms have increasingly started to diversify their land uses over the past two decades. For example, tourism activities on farms, generating an income beyond conventional farming by focusing more on the ‘consumption’ of land, are becoming more popular. Such tourism activities lead to a reduction in the intensity of farming because the land is used for its aesthetic value. Over the past few decades, the number of farms in the Stellenbosch area offering tourist-related activities has increased dramatically – leading to what one can label a change towards post-productivism.

#### 6.2.1.1 Aim of the study

The aim of this study was to investigate the nature, extent and impact of multiple land uses on the agricultural landscape of Stellenbosch, as a manifestation of a post-productivist mode of agricultural change.

To achieve this aim, the following objectives were completed:

- a literature review on post-productivism
- mapping the spatial distribution of farm-based activities on wine farms within the Stellenbosch area
- compiling a land-use map of the area that investigated the extent of multiple land-use diversification
- analysing the locational relationship between farm-based activities and a range of land-use changes in GIS
- mapping municipal properties and land use on each
- providing a typology of post-productivist, non-agricultural land consumption practices
- conducting a representative sample survey among farm owners/managers who have/have not followed the trend of multiple land-use practices.

#### 6.2.2 Revision of results

This section provides a summary and synthesis of the key issues discussed in Chapters 3 to 5.

##### 6.2.2.1 A changing rural landscape: changes in land cover from 1993 to 2010

When comparing the 1993 and 2010 built-up areas, it becomes clear that a drastic increase in built-up areas has taken place since 1993. A few decades ago, farmers began to diversify their income by introducing alternative functions/facilities (farm based) to the public. The alternative facilities include weddings, conferences, restaurants, accommodation and health resorts. When a farmer decides to introduce these facilities on the farm, redundant buildings on the farm can be restored to accommodate the facilities. In many cases the absence of such buildings necessitates the construction of new buildings specifically for these purposes.

Most of these new developments took place near the urban edge of Stellenbosch, as well as on farms in close proximity to the town, as tourists prefer a shorter travel distance from the town.

The majority of growth in the built-up areas in the study area does not exceed 2 ha in size, indicating the construction of small- to medium-sized buildings. Very little of the built-up area exceeded 2 ha, which indicates the construction of storage rooms and cellars.

Since 1993 there has been an increase in vegetation, of which most is on farmlands near the urban edge of the town of Stellenbosch. These are mainly areas previously covered by fields, or land lying bare. The majority of the growth in vegetation does not exceed 10 ha in size. These changes took place mainly because of the farmers' need for extra vegetation for livestock and/or for agricultural purposes. Growth in vegetation can also be linked to tourism, as vegetation contributes a great deal to the aesthetic beauty of the environment, which is regarded as an important factor for tourists.

Changes have taken place in natural bare land since 1993. Most of these changes took place on parcels of farmland further away from the urban edge of the town that were previously covered by fields and vegetation. The majority of these changes do not exceed 10 ha in size.

A possible reason for vegetation changing to bare land could be due to the process of 'multidimensionality', in terms of which farmers are concerned less with production and more with the delivery of other environmental and consumer-based benefits. In some cases, farmers are no longer dependent on the income from production, but rather on the income introduced through offering alternative facilities on the farm. Some farmers therefore no longer pay attention to any other land cover on the farm, as they are focused only on tourism-based activities. Nowadays, 'lifestyle' owners represent a significant portion of farmland ownership, contributing to the neglect of other land cover types.

When looking at water, significant increases are evident since 1993. Most of these changes occurred on parcels of farmland further from the urban edge of Stellenbosch. It is mainly land previously covered by fields that is now covered with water through the building of dams. The biggest share of these changes does not exceed 2 ha in size. These dams are used either as drinking holes for livestock, for irrigation, or in some cases serve as tourist attractions. The increase in tourism has led to an increase in water usage, either for drinking, household or recreational purposes. These dams are found near mountainous areas so that runoff water can be collected.

A drastic decrease in fields has taken place since 1993. In cases where increases did occur, these were limited to farmlands outside the urban edge of the town. These changes in land cover mainly do not exceed 10 ha in size. Land covered by fields has been changed to vegetation since 1993. As mentioned earlier, these changes took place mainly because of the farmers' need for extra vegetation for livestock and/or for agricultural purposes. Growth in vegetation can also be linked to tourism, as vegetation contributes to the aesthetic beauty of

the environment to a great extent, and this is regarded as an important factor to attract tourists to visit a specific farm. The aesthetic beauty of farms is also a major determining factor in foreigners' choice to buy the farms.

A slight decrease in plantations has occurred since 1993, mainly on farmlands near the urban edge of town. Areas covered with trees have been changed because of a need for more vegetation and agricultural land. The wood from these plantations was mainly sold to the town's residents as firewood and/or building materials. Where increases did occur, they did not exceed 10 ha in size.

#### 6.2.2.2 Municipal regulations on lease properties and the different uses thereof

Prior to 1994 it was common for municipalities to rent out large portions of their agricultural land to local commercial farmers on a tender basis to the highest bidder at going market rates. The majority of these contracts were fixed for a very long period. The successful bidders generally agreed contractually to maintain the infrastructure and to return the land in an acceptable condition. Such an arrangement involves minimal transaction costs, no extension services, no facilitation costs, no infrastructure maintenance and an optimal income. With South Africa's new political dispensation after 1994 it has become a policy recommendation that land should be handed to black aspirant farmers, which many municipalities have failed to do.

There are approximately 85 property units (1 703.13 ha) available for long-term lease from the Stellenbosch Municipality. Sixteen of these units (266.4 ha) are vacant, while the other 69 are leased to either a company or a private individual. When using the averages of the Stellenbosch Municipality's long-term lease agreements, the Municipality could obtain a revenue of roughly R118 384 172 in a 48-year period

Stellenbosch's commonage is used for various purposes. Fifty-four percent of these grounds are used for cultivation purposes by the town's residents (smallholdings). The other 46% can be categorised as being used for business, community service, nature areas, open space, tourism, transport and vacant land.

According to the Constitution of the Republic of South Africa, municipalities are obligated to use their assets, farmland included, to encourage social integration. The main aim of this is to rectify existing spatial inequalities, promote economic growth, build strong, integrated and dignified communities, as well as provide access to housing, services, amenities, transport and employment opportunities.

It is evident that, up until now, the municipality of Stellenbosch has failed to comply with South Africa's new political dispensation, which insisted that the land should be transferred to black aspirant farmers. Most land is currently still contract bound to local commercial farmers on a long-term basis.

#### 6.2.2.3 Multiple land use and diversification on Stellenbosch farms

There are 160 wine farms in the Stellenbosch area that are open to the public for a range of consumption practices. Of these 160 farms, 119 offer alternative functions/facilities (multifunctional) to the public as a means of broadening their income. Fifty-four of these 119 farms took part in the study by answering a survey questionnaire, helping to establish the scope of this growing trend in this industry, as well as to determine what has influenced this diversification. The questionnaire also focused on the positive outcomes introduced through this diversity, such as introducing extra and desirable facilities, leading to a vital alternative income.

Attention was paid to the language of the owners, ownership (private/company), crop types on the farms, facilities offered, visitor profiles (South African/international), reasons for diversifying, and the economics of diversified products (weddings, conferences, wine tastings and restaurants), and a comparison was made of the revenue from alternative functions/facilities.

Using data from the 54 multifunctional farms, it became evident that the following revenues can be made from additional facilities/functions. Weddings are responsible for an annual income of R1 389 553, conferences account for R426 685, wine tastings are responsible for R143 454, restaurants for R1 875 000, and accommodation accounts for R2 265 641.

Of the 160 wine farms open to the public, 41 do not offer any alternative functions/facilities besides wine tastings. Thirty-one of these 41 farms took part in the study by filling out a questionnaire.

Attention was paid to ownership (private/company), crop types on the farms, facilities considered in the future, and farmers' opinions of the Winelands landscape.

An average farm in the study area is roughly 76 ha in size. In the case where a farm does not provide any alternative/extra services as a means of income, income from grapes will amount to about R95 000 per year. The production cost of grapes is about R22 000 per hectare, and the income from grapes is R23 500 per hectare. When taking these figures into account it becomes clear that wine farming alone is not profitable.

There are tremendous differences in farmers' opinions regarding the Winelands landscape. Nine statements were made and the farmer had a choice to either strongly agree, agree, strongly disagree, disagree or be neutral in relation to the statement.

The majority of farmers (61%) agreed with the statement that smaller wine farms are more dependent on wine tourism than bigger farms. The next statement made was that 'the municipality has enough vacant land for land reform', about which 36% were neutral and 32% agreed. Twenty-nine percent of the farmers were neutral in opinion on the statement 'opening up a guesthouse or restaurant on the farm is crucial for survival as a wine farm', while only 16% agreed. The majority of farmers (39) were neutral in opinion towards the statement 'intensifying production to maximise income is crucial for a good quality of living', while 23% agreed. Sixty-five percent of the respondents agreed with the statement that 'experiencing what the wine farm has to offer is the prime motivating factor for wine tourism'. Fifty-five percent of the farmers agreed with the statement that 'farms on the urban fringe face the threat of increasing urban growth'. Forty-five percent agreed with the statement that 'there are too many lifestyle farms in Stellenbosch where owners run the farm as a hobby', while 23% disagreed. Fifty-five percent agreed with the statement that 'the fact that foreigners buy farms in large numbers contributes to escalating farm prices'.

When a wine farm offers all the extra facilities discussed, an extra income of approximately R6 099 333 is earned. When looking at the extent of these facilities as an extra income, it is evident that these facilities are responsible for the provision of a very large part of these farms' income.

## **6.3 RECOMMENDATIONS**

The following section aims to outline some disadvantages relating to multiple land uses and make some suggestions for how local authorities should manage this phenomenon. It also makes recommendations on the management of the commonages, as well as recommendations on the management of rural land-use change in the Stellenbosch area. The last section discusses possibilities for future research that can complement this study.

### **6.3.1 Drawbacks relating to multiple land use and the management thereof**

Farms are now being used for their aesthetic and recreational properties. Production is no longer the main function; it is rather "the provision of ecosystem services, amenities and aesthetics [that] now prevails as the main function of rural land" (Paquette & Domon, 2003: 432). From a social point of view it can be argued that a reduction in primary production is

needed to ensure sustainability. The greater public now demands more environmental services, amenities, food safety, and other public goods from rural areas.

McCarthy (2008) defines amenity migration as “the purchasing of primary or secondary residences in rural areas valued for their aesthetic, recreational, and other consumption-orientated use values...”. An increase in the number of people moving to the countryside is currently taking place, resulting from the loosening of restrictions on foreign ownership of land and property. The sense of place, as well as the sense of community, is suffering because of the influx of foreigners. Foreigners have different customs and beliefs that can have a negative impact on the local traditions of a region. The construction of modern buildings and infrastructure on farms can alter the sense of place, damage the rural landscapes as tourist attractions, and gentrify the countryside, marginalising the rural poor (Western Cape, 2005b). Workers who once depended on income from working on the farm are left jobless, and since many of them have no other skills they cannot establish themselves in any other sphere of work.

Local government must thus ensure that multifunctional farms do not predominate in the area. A balance must be maintained between multifunctional farms and farms where primary production predominates. Stellenbosch is known predominantly as a major wine-producing region with unspoiled scenery. The image of this region could easily be damaged irreparably if a balance is not maintained.

### **6.3.2 Municipal responsibilities regarding the commonages**

With South Africa's new political dispensation after 1994 it became a policy recommendation that land should be handed to black aspirant farmers. Municipalities play a vital role in perfecting this process, and therefore should provide governance of an outstanding quality. There must be cohesion between different municipal departments regarding the price of the commonages. Technical and financial assistance should be given to emerging farmers for them to succeed in their practices. Financial assistance could be offered in two ways, namely as loans or as advice on how to get access to funds. Skilled personnel should be appointed to supervise the commonages in terms of the maintenance of the infrastructure. Emerging farmers should be trained in agricultural skills, such as the ploughing of crops, disease control and other agriculture-related techniques. Emerging farmers should be assisted in becoming prosperous, commercial farmers.



Municipalities should ensure the provision of services to the community in a sustainable manner. Income from the commonages should be used to uplift the disadvantaged by providing adequate housing, electricity and sanitation. Endorsing social and economic development and promoting a safe and healthy environment for all should be the municipality's main concerns.

### **6.3.3 The management of rural land-use change**

The decisions on rural development applications should be based on the following ecologically sustainable land-use principles, namely social inclusion, the safekeeping and improvement of the environment, the discreet use of natural resources, and maintaining high and stable levels of economic growth (Western Cape, 2009).

A good quality of, as well as carefully sited, development should be encouraged in existing settlements. Accessibility should be a key factor in all development decisions. The development of new buildings in the open countryside, away from active settlements, should be strictly controlled with regard to scale, height, colour, roof profile, etc. Priority should be given to the re-use of previously developed sites in preference to greenfields sites. All development in rural areas should be well considered and inclusive, in keeping and scale with the location, and sensitive to the character of the rural landscape and its local distinctiveness (Western Cape, 2009).

The provincial authorities of the Western Cape are concerned with the current rural development patterns in the region. There are several reasons for this growing concern: the snowballing impact of piecemeal development in different municipal jurisdictions is fragmenting the Western Cape's rural landscapes and eroding the region's natural resource base. As the Western Cape's rural assets are of national importance from an ecological, cultural and economic perspective, it is of the utmost importance for the authorities to ensure that the asset base is developed in a sustainable manner, with special reference to alleviating poverty, promoting food security, facilitating land reform, and minimising the impacts of climate change. The Western Cape's urban edge policy, aimed at containing urban sprawl and promoting the restructuring of human settlements, has led to property developers turning their attention to the rural areas. In the absence of a sound provincial policy on how these development pressures should be managed, there are growing occurrences of rural residential sprawl. Whilst the provincial government encourages investment in its rural areas, some forms of rural development are altering the Western Cape's settlement structure, damaging

the genuineness of rural landscapes as prime tourist attractions, gentrifying the countryside and marginalising the rural poor, and contributing to an overall decline in public access to rural areas (Western Cape, 2005b).

Given the limited rural revenue base and staff shortages, municipalities lack the ability to plan for and manage their rural areas, resulting in rural areas being neglected. There is a growing disjuncture between the zoning of rural land and how it is used, and the diverse understandings of what land uses are appropriate in a rural context. Municipalities should ensure that commonages are used only for the purpose for which they were zoned. Fines should be levied when farmers do not comply with the predetermined rules and regulations.

#### **6.4 LIMITATIONS OF THE STUDY**

Limitations were encountered with the following: using questionnaires as research method, data sampling, unwillingness of the Municipality to provide data and policies, and the inaccuracy of land audit data.

There are several disadvantages to using questionnaires as a means of conducting research. Firstly, research by means of questionnaires generally yields a low response rate. To counteract the low response rate, the wine farmers were contacted telephonically and informed about the study, and permission was asked to send out the questionnaires, either via e-mail or fax. Despite this, very few farmers responded, after which they were again contacted telephonically several times, once again resulting in very little feedback. After four weeks the remaining farms were visited individually for the questionnaires to be completed. Secondly, despite phrasing the questions in the simplest manner possible, some of the questions were misinterpreted. The main reasons for this misinterpretation were that the respondents did not read and understand the questions correctly. When this was the case the farmers were contacted telephonically and the question was explained, after which the appropriate answer to the question was provided. Lastly, the returned questionnaires contained missing information where the respondents simply did not answer questions. This problem was reduced by contacting the farmers telephonically to get the correct answers to the questions.

The main problem occurring through the data sampling process was convincing farmers to participate in the study. This problem was overcome by either contacting the farmers telephonically, or by including a section at the start of the questionnaire explaining the aims of the study.

The main problem in obtaining the relevant data from the Municipality was the unwillingness of the Municipality to provide help. A lot of time was spent in the different municipal departments to explain the aims of the study. After the right person was found, it still took a long time to obtain the data needed for the study.

A further problem concerning the municipal data was that of inaccuracy and incompleteness. Once again a lot of time was spent at the Municipality to obtain the right data and to complete the missing data.

Data on commonages should not only represent the agricultural uses, but should represent all land-use types to gain a better understanding of the land uses in each region. Legislation related to land usage should be available from municipalities.

## **6.5 FUTURE RESEARCH**

Recommendations for future research include the following:

- Research on wine-related tourism can be conducted on a broader scope to include the Cape Winelands, which will result in a more reliable, representative study. Expanding the research to include all the wine farms in the Cape Winelands District (CWD) would allow researchers to see how prices in the different regions relate to each other. By using the whole Cape Winelands District in the study, the spatial distribution of the different facilities on farms would be better understood and better portrayed by means of maps. Furthermore, the broader scope would allow researchers to determine the value of wine-related farm-based tourism, not only for the people directly involved, but also how revenue from this tourism affects the economy of the broader area.
- A study on the management of land-use change in Stellenbosch can be performed to determine the local municipality's regulations regarding changes in land use. All relevant policies must be carefully studied to determine whether the Municipality comply with them or not.
- Since the wider public held many different views on multi-purpose farming, a study should be carried out to determine the views of visitors to Stellenbosch on this phenomenon.

(38660 words)

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## APPENDICES

## Appendix A: List of 54 farms and the facilities they offer

NAME	ACCOMMODATION	RESTAURANT	WEDDINGS	CONFERENCE	CHAPEL	SPA
Alluvia						
Asara						
Beau Joubert						
Beyerskloof						
Bilton						
Blaauwklippen						
Camberley						
Clos Malverne						
Clouds						
DeMeye						
Delaire						
Delheim						
Devonvale						
Dornier						
Eikendal						
Glenelly						
Goede Hoop						
Groenland						
Hoopenburg						
Hidden Valley						
Hartenberg						
JC le Roux						
Jordan						
Kleine Zalze						
Knorhoek						
Koopmanskloof						
L' Avenir						
Laibach						
Lanzerac						
Le Bonheur						
Le Pommier						
Lievland						
Louisenhof						
Marianne						
M'Hudi						
Middelvlei						
Muratie						
Peter Falke						
Remhoogte						
Rust en Vrede						
Saxenburg						
Simonsig Estate						
Skilpadvlei						

Somerbosch						
Spier						
Stark - Condé						
Stellenrust						
Uitkyk						
UvaMira						
Vredenheim						
Warwick						
Webersburg						
Zevenwacht						
Zorgvliet						
<b>TOTAL</b>	n = 32	n = 30	n = 41	n = 44	n = 8	n = 7

#### Appendix B: List of 31 farms offering only wine tastings

Aaldering	Bein	Kanonkop	Meinert	Quinn Rock
Annandale	Boschkloof	Keermont	Mont Destin	Rainbow's End
Alto	de Toren	Klein Gustrouw	Mulderbosch	Uiterwyk
Amani	Ernst Gouws	Kleinoord	Neill Ellis	Villiera
Amares	Graceland	Louisvale	Oldenburg	Vriesenhof
Audacia	Jacobsdal	Meerlust	Overgaauw	Waterford
Bartinney				

**Appendix C: List of 119 farms offering extra facilities/activities**

Aaldering	Cape Hutton	Ernst Gouws & Co	Koelenhof	Muratie	JC le Roux
Akkerdraai	Camberley	Fort Simon	Koopmanskloof	Natte Valleij	Thelema
Alluvia	Carisbrooke	Glenelly	Laibach	Neethlingshof	Tokara
Alto	Clos Malverne	Goede Hoop	Lanzerac	Neill Ellis	Topaz
Amani	Clouds	Graceland	L'Avenir	Oldenburg	Uitkyk
Amares	Clovelly	Groenland	Le Bonheur	Overgaaauw	UvaMira
Annandale	Delaire Graaff	Guardian Peak	Le Pommier	Peter Falke	Villiera
Asara	Delheim	Hartenberg	Le Riche	Quinn Rock	Vredenheim
Audacia	De Meye	Hazendal	Lievland	Rainbow's End	Vriesenhof
Bartinney	De Morgenzon	Hidden Valley	Louisenhof	Remhoogte	Warwick
Beau Joubert	De Toren	Hoopenberg	Louisvale	Rustenberg	Waterford
Bein	De Trafford	Jacobsdal	Lovane	Rust en Vrede	Webersburg
Bellevue	Devon Hill	Jordan	Marianne	Saxenburg	Zevenwacht
Beyerskloof	Devon Rocks	Kanonkop	Meerlust	Simonsig	Zorgvliet
Bilton	Devonvale	Kanu	Meinert	Skilpadvlei	
Blaauwklippen	De Waal	Keermont	M'Hudi	Somerbosch	
Blue Creek	Dombeya	Ken Forrester	Molenvliet	Spier	
Bonfoi	Dormershire	Klein Dasbosch	Mooiplaas	Stark Condè	
Boschkloof	Dornier	Kleine Zalze	Morgenhof	Stellenbosch Hills	
Bottelary	Eaglevlei	Klein Gustrouw	Mostertsdrift	Stellenrust	
Brampton	Ernie Els	Knorhoek	Mulderbosch	Stellenzicht	

**Appendix D: Questionnaire – Farms offering alternative functions/facilities**

A: PERSONAL DETAILS/ PERSOONLIKE BESONDERHEDE	
A1 Name of the owner? Naam van die eienaar? .....	
A2 Home language/ Huistaal:    English <input type="checkbox"/> Afrikaans <input type="checkbox"/> Other: .....	
A3 Nationality Burgerskap	South African <input type="checkbox"/> Other: .....(specify/ spesifiseer)
A4 Ownership of the farm    Private <input type="checkbox"/> Company <input type="checkbox"/> if company, where is it based Eienaarskap van die plaas    Privaat <input type="checkbox"/> Maatskappy <input type="checkbox"/> .....	
B. Question about the farm/ Vrae oor die plaas	
B1 What is the size of the farm? Wat is die grootte van die plaas? .....ha	
B2 What portion (size) of the farm is under vineyards? Watter deel (grootte) van die plaas is onder wingerde? .....ha	
B3 Are there any other crops on the farm used as a means of income? Is daar enige ander gewasse op die plaas, gebruik as middel tot inkomste? .....(ha)    .....(ha)    .....(ha)	
B4 Where are the grapes delivered to? Waar word die druive gelever?	
Cellar on the farm <input type="checkbox"/> Cooperative Cellar <input type="checkbox"/> Sold to other cellars Kelder op plaas <input type="checkbox"/> Kooperatiewe kelder <input type="checkbox"/> Verkoop aan ander kelders <input type="checkbox"/>	

A. QUESTIONS ABOUT THE FACILITIES/ VRAE OOR DIE FASILITEITE						
A1 What facilities/activities does the farm provide? Watter fasiliteite/aktiwiteite bied die plaas?						
Wine tastings Wynproe	Restaurant Restaurant	Accommodation Akkommodasie	Cheese making Kaasmakery	Farmers markets Boeremarkte	Fishing Visvang	Spa's Spa's
Wedding venue Troufasiliteit	Conference Konferensie	Chapel Kerkie (Kapel)	Horse riding Perdry	Mountain-biking routes Bergfietsroetes	Cooking courses Kookkursusse	Other Ander
Other/Ander, spesifiseer: .....						

A2 What is the annual use of the following facilities/activities? (Approximate)

Wat is die jaarlikse gebruik vir die volgende fasiliteite/aktiwiteite? (Gemiddeld)

	Getal mense
Wine tastings/Wynproe	
Restaurant	
Accommodation/Akkommodasie	
Wedding venue/Troufasiliteit (getal troues)	
Conference/Konferensie (getal konferensies)	

A3 During which months of the year are you most busy?

Watter maande van die jaar is die besigste?

January Januarie	February Februarie	March Maart	April April	May Mei	June Junie
July Julie	August Augustus	September September	October Oktober	November November	December Desember

A3.1 Which month is the busiest?

Watter maand is die besigste? .....

A3.2 Which month is least busy?

Watter maand is die minste besig? .....

A4 How long have the following facilities been in use?

Hoe lank is die volgende fasiliteite in gebruik?

Wine tastings Wynproe	jr	Restaurant Restaurant	jr	Accommodation Akkommodasie	Jr
Wedding venue Troufasiliteit	jr	Conference Konferensie	jr	Chapel Kerkie (Kapel)	Jr

A5 What is the capacity (number of people) of each of the above mentioned facilities?

Wat is die kapasiteit (hoeveelheid mense) van elk van die bogenoemde fasiliteite?

Wine tastings Wynproe		Restaurant Restaurant		Accommodation Akkommodasie	
Wedding venue Troufasiliteit		Conference Konferensie		Chapel Kerkie (Kapel)	

A6 Are the majority of your visitors local or international?

.....

Is die meerderheid besoekers plaaslik of internasionale toeriste?

.....

A7 Is there a big piece of grass for the erection of a 'marquee tent'?

☐ Y

☐ N

Is hier 'n groot grasperk vir die opslaan van 'n 'markiestent'?

A8 What are the reason/s for adding alternative functions on the farm? (next page)

Wat is volgens u die rede/s vir die addisionele funksies op die plaas? (volgende blad)

.....

.....

.....

.....

A9 Star ranking / sterre:

Accommodation/ akkommodasie .....

A9.1 If you have a restaurant, has it won any awards? If yes: what ..... when .....

Indien jul 'n restaurant het, het dit al enige toekennings gewen? wat ..... wanneer .....

A10 Outsourcing catering and drinks / Uitkontraktering van spyseniering en drinkgoed

Wedding

☐

Conference

☐

Both

☐

Troue

Konferensie

Albei

A11 Estimated prices (per person) of the following / Geskatte pryse (per persoon) vir die volgende:

Wynproe/ wine tasting

.....

Akkommodasie/ accommodation

.....

Trou/ wedding facilities

.....

Konferensie/ conference

.....

Kerkie/ chapel

.....

Restaurant (average price per main) / Restaurant (gem prys per hoofgereg)

Baie hoog

☐

Hoog

☐

Bo gemiddeld

☐

Gemiddeld

☐

# Appendix E: Questionnaire – Farms offering only wine tastings



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jou kennisvennoot • your knowledge partner

<p><b><i>To whom it may concern</i></b></p> <p>I am Gerjo Cloete, a Master's student in the Department of Geography at the University of Stellenbosch. The aim of my study is to investigate multiple land uses on wine farms in the Stellenbosch Municipal area. I am currently only looking at wine farms, not offering extra facilities / activities (weddings, conferences, restaurants etc.). I therefore kindly request you to please fill out the accompanying questionnaire and send it back to me. It should not take much longer than 5 minutes of your time.</p> <p>Thank you very much</p>	<p><b><i>Vir wie dit mag aangaan</i></b></p> <p>Ek is Gerjo Cloete, 'n Meestersgraadstudent in die Departement Geografie aan die Universiteit van Stellenbosch. Die doel van my studie is om die verskillende grondgebruike op wynplase in die Stellenbosch Munisipale area te ondersoek. Ek is tans slegs gefokus op wynplase wat nie ekstra fasiliteite / aktiwiteite bied nie (troues, konferensies, restaurante, ens.). Ek versoek u vriendelik om asseblief die meegaande vraelys in te vul en aan my terug te stuur. Dit behoort nie veel langer as 5 minute van u tyd in beslag te neem nie.</p> <p>By voorbaat dank</p>
--	---

## A: Personal details/ Persoonlike besonderhede

A1 Farm  
Plaas .....

A2 Since when are you the owner of this farm?  
Sedert wanneer is u die eienaar van die plaas? .....

A3 Nationality  
Burgerskap

South African ☐ Other: .....(specify/ spesifiseer)

A4 Ownership of the farm Private ☐ Company ☐ if company, where is it based  
Eienaarskap van die plaas Privaat ☐ Maatskappy ☐ .....  
Other form of ownership/ander formaat van eienaarskap (specify/spesifiseer).....

## B. Questions about the farm/ Vrae oor die plaas

B1 What is the size of the farm?  
Wat is die grootte van die plaas? .....ha

B2 Approximately what portion (size) of the farm is under vineyards?  
Ongeveer watter deel (grootte) van die plaas is onder wingerde? .....ha

B3 Are there any other crops on the farm used as a means of income?

Is daar enige ander gewasse op die plaas, gebruik as middel tot inkomste?

.....(ha) .....(ha) .....(ha)

B4 Where are the grapes delivered to? Waar word die duiwe gelever?

Cellar on the farm ☐ Cooperative Cellar ☐ Sold to other cellars ☐

Kelder op plaas ☐ Kooperatiewe kelder ☐ Verkoop aan ander kelders ☐

### C. Questions about the facilities/ Vrae oor die fasiliteite

A1 What facilities/activities does the farm provide? Watter fasiliteite/aktiwiteite bied die plaas?

Wine tastings Wynproe	Restaurant Restaurant	Accommodation Akkommodasie	Cheese making Kaasmakery	Farmers markets Boeremarkte	Fishing Visvang	Spa's Spa's
Wedding venue Troufasiliteit	Conference Konferensie	Chapel Kerkie (Kapel)	Horse riding Perdry	Mountain-biking routes Bergfietsroetes	Cooking courses Kookkursusse	Other Ander

Other/Ander, spesifiseer: .....

A2 Which of these facilities are you considering to introduce in the future?

Watter van hierdie fasiliteite oorweeg u vir die toekoms?

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

A3 Why have you decided on these facilities (refer to question A2)?

Waarom het u op hierdie fasiliteite besluit (verwys na vraag A2)?

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

A4 What is the potential for developing alternative functions / activities on your farm. E.g. old unused buildings that can be altered as guest accommodation etc.?

Wat is die potensiaal vir die ontwikkeling van alternatiewe funksies / aktiwiteite op u plaas, bv. ou geboue wat gerestoreer kan word vir akkommodasie ens.?

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

A5 What is your opinion on the application procedure for consent use or rezoning?

Wat is u opinie omtrent die aansoekprosedure vir vergunningsgebruik of hersonering?

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



A6 Do you have any farm workers staying on the farm?

Is daar enige plaaswerkers wonend op die plaas?

☐ Y

☐ N

A 6.1 If yes, how many?

Indien ja, hoeveel? .....

#### D. Opinions on the Winelands landscape/Opinie oor die Wynland landskap

D1 On a scale from 1 (strongly disagree to 5 strongly agree) what is your opinion on the following?

	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
The Stellenbosch Winelands is overdeveloped (i.t.o. buildings and facilities).					
Smaller farms are more dependent on wine tourism than bigger farms.					
The Municipality has enough vacant farmlands for land reform.					
Opening-up a guesthouse or a restaurant on a wine estate is crucial for survival as a wine farmer.					
Intensifying production to maximise income is crucial for a good quality of living.					
"Experiencing what the farms has to offer are the prime motivating factors for wine tourism."					
Farms on the urban fringe face the threat of an increasing urban growth.					
There are too many lifestyle farms in Stellenbosch where owners run the farm as a hobby.					
The fact that foreigners buy wine farms in large numbers, contribute to escalating farm prices.					

Thank you for your participation. Kindly return questionnaire by email ([14559382@sun.ac.za](mailto:14559382@sun.ac.za)) or fax 021-8083109

Dankie vir u deelname. Stuur asb die vraelys terug per epos of faks.

MASTERS (MS02295) - MEESTER...Chapter 1 - DUE 31-Dec-2013

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The nature, extent and impact of multiple land uses on the agricultural landscape in Stellenbosch as manifestation of a post-productivist mode of agricultural change

by  
Gert Johannes Abraham Cloete

Thesis presented in fulfillment of the requirements for the degree of  
Master in Geography and Environmental Studies in the Faculty of  
Stellenbosch University

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