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Agricultural land purchases for alternative uses – evidence from two farming areas in the Western Cape province, South Africa

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Abstract

Purchases of agricultural land for diverse reasons, such as recreation or aesthetic appeal (collectively referred to as lifestyle purposes), has implications for agricultural land valuations, commercial agriculture and the acquisition of land for redistribution purposes. This paper reports on the extent of purchases of agricultural land for diverse reasons within an intensive and extensive agricultural farming area in the Western Cape, gathered through a survey of land buyers between January 2005 and October 2007. Descriptive statistics provide demographical information of buyers, their reasons for purchasing farms and the importance of specific characteristics of agricultural properties considered in such purchases. Analyses of variance convey more information regarding the different characteristics of agricultural properties considered by agricultural and lifestyle buyers. Survey results indicated that farm purchases for alternative purposes were substantial: more than half of all transactions in both the intensive and extensive area were for lifestyle reasons. Lifestyle buyers mostly rely on income from outside the agricultural sector for their livelihoods and financing of purchased properties, therefore they could focus on characteristics of farms unrelated to commercial agricultural production in their decision to buy agricultural properties. Characteristics such as the recreational opportunities provided by the property and its aesthetic beauty, including natural scenery, beautiful views and locations within a valley and set against a mountain, appealed to these buyers.

Keywords: Multifunctionality; aesthetic appeal; lifestyle motivations

1. Introduction

The heterogeneous character of agricultural land lends itself to a variety of uses. Traditionally such land was valued for its productive capacity, implying that its value as a production factor generating income was the main determinant of its market value: agricultural production value was synonymous with market value. Worldwide the rural market is undergoing complex demand and supply changes: technological innovation in agriculture

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drives the decreasing terms of trade and the decreasing returns on investment in primary agricultural production. On the demand side there is a transition in the use of agricultural land as primarily a factor of production, towards a multi-functional environment where alternative uses are evident. Some high net worth buyers of agricultural land from outside the agricultural sector seem to be attracted to the intrinsic value of the land, where non-financial considerations of owning the land are important.

Alternative use buyers focus more on non-agricultural characteristics of agricultural land, where the satisfaction of owning the land for aesthetic appreciation, recreation, conservation and other purposes are prominent. For many such buyers the direct consumption attributes of the land (utility derived from enjoyment of aesthetic beauty, game viewing and other outdoor activities) seem to be more important than the production attributes of the land for income purposes. In this multi-functional agricultural landscape, the value of land does not only represent its agricultural potential, but other values as well. These buyers seem to be less dependent on the income generated from farming activities on the property in the financing of such transactions and for this reason the income generating capacity from farming might be secondary or even absent. In some instances the income potential from alternative uses of land not related to farming, such as tourism or accommodation facilities, might be present. These buyers have diverse preferences and are often willing and able to pay a premium for properties that satisfy their unique demand and lifestyle.

The emergence of lifestyle buyers in the agricultural land market has substantial implications for the agricultural land market and broader commercial and subsistence agricultural sector in South Africa. Agricultural land valuations are becoming more uncertain and demanding due to the increased number of characteristics and use options, together with the interaction between them. The productive characteristics of farms are measurable and related to the property's income-generating capacity, while characteristics valued by lifestyle buyers are more intangible and subjective, which complicates such valuations. This impact on the accuracy of such valuations: most valuations continue to focus on productive characteristics of farms at the expense of alternative considerations. Interest in rural land for mixed use purposes suggests a different valuation inventory with different value attributes.

At the same time purchases for alternative uses impacts on the availability and price of land for the government's land redistribution programme. Alternative use transactions influence the market price of agricultural land and

government has to compete with high net worth individuals for such land. The use of agricultural land for lifestyle reasons in many instances removes land from agricultural production, which raises food security issues. Lifestyle buyers impact on the commercial agricultural sector as well, with existing and prospective farmers competing with such buyers when purchasing farms. In especially extensive areas, the size of farms used for commercial agriculture has tended to increase in order to remain economically viable, but high land prices inhibit such expansion.

The objectives of this study were to identify the characteristics of land important to lifestyle inspired farm buyers and to gather demographic information of these buyers within an intensive and extensive farming area in the Western Cape. Better information regarding alternative use buyers' considerations and preferences for purchasing agricultural land would lead to more informed decision-making for valuers, the commercial agricultural sector and government. Given that very little information is currently available on such buyers and their influence in the land market, this article sheds more light on the preferences and motivations of these buyers by providing information on the extent of actual land transactions occurring on the ground. This would assist land valuers (more accurate land valuations), the commercial agricultural sector and government (both subsistence and commercial farming aspects).

2. Literature overview

Worldwide there has been a transition from utilising agricultural land primarily for agricultural production and income opportunities, towards a multi-functional environment where alternative uses are apparent (Adams & Mundy, 1991:48, 52; Roberson, 1997:114; Mundy & Kinnard, 1998:207; Brandt & Vejre, 2004:11; Green *et al.*, 2005:1; Maybery *et al.*, 2005:59; Holmes, 2006:142). Multi-functionality refers to the characteristics of agricultural land that simultaneously provide environmental, economic, social and amenity functions (Parris, 2004:211).

Agricultural landscapes provide many types of values, which can be economic, where a direct monetary benefit can be derived from income, and non-economic, where a property provides a non-monetary benefit (Palang *et al.*, 2004:221). Non-economic values are often intrinsic and relate to natural, historic, cultural, aesthetic and symbolic values (Antrop, 2004:166, 169). These values are formed within the minds of people, are unrelated to the income derived from the property and cannot be measured directly (Healy & Short, 1978:198). The emergence of a range of alternative uses which could be mixed

to a greater or lesser extent implies that the value of agricultural land has changed from being purely based on its productive capacity, towards a multi-functional landscape where many other uses are evident (Pope & Goodwin, 1984:750-751; Tait, 1984:84; Adams & Mundy, 1991:48-49; Agra Europe, 1991:1-2; Roberson, 1997:114; Wittenberg *et al.*, 2005:1-2).

There are many driving forces of the transformation of rural land from both the supply and demand side, as well as from interaction between these sides. Technological innovation in agriculture drives the decreasing terms of trade and the decreasing returns on investment in primary agricultural production, and with that, the growing redundancy of land as production factor (Oltmans, 1995:57, 66; Hanson & Schwab, 1999:14; Wittenberg *et al.*, 2005:12; Holmes, 2006:143-144). As a result more agricultural land becomes available for alternative uses. Equally, economic growth leads to increased disposable income for households to spend on other activities (Healy & Short, 1978:185; Parris, 2004:197; Maybery *et al.*, 2005:59; Holmes, 2006:142-144). Increased incomes around the world have led to a change in tastes and societal values, where people have become more environmentally conscious and desire to conserve and preserve natural habitats (Irwin *et al.*, 2003:22; Maybery *et al.*, 2005:62-65; Holmes, 2006:144).

Improved technology makes working from home through telecommuting possible, while improved transportation allows for longer distances between home and work (Inman *et al.*, 2002:72; Parris, 2004:197). As populations increase and more agricultural land is converted to urban or other uses, the demand for the remaining farmland as a scarce commodity increases (Irwin *et al.*, 2003:22). Rural areas with open space, close to natural amenities with aesthetic or recreational appeal has become an attractive alternative for people who want to escape from overpopulated cities with congested traffic, or as a place to cash in on other peoples' need for retreat through the provision of tourism or accommodation facilities (Pope & Goodwin, 1984:750, 755; Prag, 1995a:1; 1995b:1; Holmes, 2006:147).

In this study alternative uses not primarily related to agricultural production are collectively referred to as lifestyle considerations. Although the productive potential of the farm (economic reasons) might have an influence on the decision of such buyers, they are in most instances not dependent on the agricultural income generated on the farm and are willing to pay more than its agricultural production value.

The rural transition towards a multi-functional landscape is not a new occurrence, but manifests differently in different countries (Healy & Short,

1978:185-187; Pope, 1985:81-85; Agra Europe, 1990:1; 1991:1-2; Hendy, 1998:145; Maybery *et al.*, 2005:59-60; Holmes, 2006:142). However, the consequence is the same everywhere: rising agricultural land prices that are not always related to the production potential of the land (Hendy, 1998:144-145). Buyers are willing to pay a premium for agricultural land and primary production is not the decisive factor in their purchase decisions (Roberson, 1997:114; Mundy & Kinnard, 1998:210; Hardie *et al.*, 2001:120; Holmes, 2006:142). Non-agricultural factors play a role in buyers' motivations for purchasing rural land (Bastian *et al.*, 2002:337; Maybery *et al.*, 2005:59).

Although land has a heterogeneous character, its individual characteristics cannot be traded directly in the market. Statistical techniques such as Hedonic Pricing Models (HPM) have been developed to isolate the characteristics that contribute most to the market value of properties (Isakson, 2001:424; Platinga *et al.*, 2002:562; Vasquez *et al.*, 2002:70). The HPM operates on the principle that the value of a diverse good, such as land, can be modelled as a function of its characteristics, and by decomposing land into its respective components, it becomes easier to understand which characteristics contribute most to the value (Rosen, 1974:34-55).

Most HPM studies on rural properties have focused on the contribution of agriculturally productive characteristics towards the price of the property (Feng *et al.*, 1993:356; Xu *et al.*, 1993:356; Lopez *et al.*, 1994:53; Kennedy *et al.*, 1997:6; Maddison, 2000:519; Huang *et al.*, 2006:458). Some studies indicated, however, that farm prices could not solely be explained by earnings in agriculture and that other factors, such as population density, distance to urban centres and presence of natural amenities (such as vegetation cover, recreation opportunities, wildlife habitat) were highly significant in explaining land prices (Chicoine, 1981:353-362; Platinga *et al.*, 2002:561-579; Drozd & Johnson, 2004:294). The HPM technique, however, requires large datasets, which limits its application for agricultural land prices. At the same time the diverse nature of farmland is difficult to capture within a limited regression model (Isakson, 2001:424), while land prices tend to be area specific (Shi *et al.*, 1997:90; Hardie *et al.*, 2001:120; Platinga *et al.*, 2002:562).

3. Method

A survey of buyers of agricultural properties was undertaken in an intensive and extensive area of the Western Cape Province. These areas were identified from the Western Cape provincial Department of Agriculture's Area Development Plans, which identified homogeneous farming areas for the Province (Departement van Landbou Wes-Kaap, 1999; Wiid & Le Roux, 1999).

The objective of the survey was to determine the extent of lifestyle purchases in these areas and to identify the characteristics of farms that appealed to them.

The intensive area is situated within the Cape Winelands District municipality (formerly known as the Boland) and consists of the Stellenbosch and Paarl Registration Divisions (RDs) which overlaps with the Stellenbosch and Drakenstein local municipalities. Major towns within this area include Stellenbosch, Paarl, Franschhoek and Wellington. The area is characterised by a good infrastructural network, and is in close proximity to the City of Cape Town with its International Airport, as well as the picturesque Franschhoek valley and world renowned Stellenbosch wine region. This also makes it attractive from a lifestyle perspective. Both dryland and irrigated agricultural enterprises are pursued, with the main enterprises being wine grapes, wheat and pastures on dryland, and wine and table grapes, fruit (apples, pears, peaches) and vegetables on irrigated lands. Many wine cellars and wine routes are found, as well as some livestock farms and broiler chicken farms (Elsenburg Landbou-ontwikkelingsinstituut vir Winterreëngebied, 1990:10).

Mountains make up 51% of the area and the average rainfall ranges from 600 to 1000 mm per year. Most rivers originate in these mountains and the water is predominantly used for irrigation purposes. The mountains attract buyers for their aesthetic beauty and views, coupled with the prestige of owning a wine farm (Elsenburg Landbou-ontwikkelingsinstituut vir Winterreëngebied, 1990:35-36).

The extensive area falls within the boundary of the Central Karoo District Municipality and includes the local municipalities of Beaufort West, Laingsburg and Witzenberg and the major towns of Beaufort West, Laingsburg, Touwsrivier and Ceres. These areas, also called the Great Karoo and Ceres Karoo, are classified as semi-arid or arid, with a low and highly variable rainfall coupled with sporadic droughts. In the Ceres Karoo the rainfall varies between 50 to 400 mm per annum, and in the Great Karoo it fluctuates between 95 to 225 mm per year. Minimal crops can be planted and both areas are mostly suitable for extensive agricultural practices related to natural grazing (Wiid & Le Roux, 1999:5). The carrying capacity ranges from 45 to 140 hectares per large stock unit (LSU). The main agricultural enterprises are small stock farming for both wool and meat ("karoo lamb") purposes. However, ostrich and especially game farming are alternative land uses that have increased substantially over the past ten years and tourism (guest houses/farms, farm stalls, hiking and 4x4 trails) are becoming popular. The

area is known for its wide open spaces, unique vegetation and particular building style of houses (many farms do not have electricity).

The questionnaire included questions regarding farm characteristics, followed by a section on the motivation for purchasing the property, as well as demographical information of buyers. Characteristics related to agricultural and alternative (lifestyle) uses of properties were included. The agricultural characteristics were determined using HPM literature and interviews with farmers, agricultural land valuers, while the alternative use attributes were determined during semi-structured interviews with sixteen lifestyle buyers (this was part a qualitative exercise and is not reported on further in this paper).

The first section of the questionnaire consisted of 50 questions that asked respondents to rank the importance of specific characteristics in their decision to purchase an agricultural property on a scale of one to ten (the questionnaire is not provided in this article, but all the characteristics are listed in Table 2). Respondents were required to label themselves as either lifestyle or production oriented. All analyses depended on this classification and for improved measurement purposes two questions were asked about their motivation for buying the farm. The first question asked respondents to classify themselves as either lifestyle or production oriented, while the second question asked them to rank themselves on a scale of one (representing production considerations) to ten (representing lifestyle considerations).

Buyers were identified from the national Deeds Office data base of agriculturally zoned properties transferred between January 2005 and October 2007 (administered by the Department of Land Affairs). The Deeds Office data are arranged according to Registration Divisions (RDs). For the intensive area data on properties in the RDs of Paarl and Stellenbosch were requested, while data on properties in the RDs of Beaufort West, Laingsburg and Ceres were requested for the extensive area.

Only arms' length (market) transactions of properties greater than 5 ha in the intensive area and 100 ha in the extensive area were targeted, as farm size had to be conducive to a range of uses. This led to a substantial reduction in the number of respondents. In the case of Stellenbosch, for example, approximately 2700 transactions were recorded in the Deeds Office data base, but when the data was "cleaned" only 58 usable transactions were left.

Most properties were registered in the name of a company, trust or closed corporation (CC), which in many instances complicated the tracing of an

individual responsible for the decision to purchase the farm. Each land buyer (or person responsible for purchase decision) was contacted personally to explain the purpose of the study and to determine the most suitable survey administration method (e.g. e-mail, mail or fax). This personal contact was expected to increase the response rate. Questionnaires were sent out, followed by two telephonic reminders three weeks apart and a final electronic reminder. All in all five contacts were made with respondents over a period of approximately four months.

A total of number of 290 questionnaires was sent out (181 in the intensive area and 109 in the extensive area), while 123 were returned (64 within the intensive and 59 in the extensive area). The response rate was 35 and 54% in the intensive and extensive areas, respectively. After consultation with an expert statistician it was decided that attempts to increase the response rate by using transactions further back in time would be counter-productive, as a substantial number of additional responses would only be marginally beneficial for statistical analyses, which did not justify the time and effort. As with most rural land markets, the markets in the study areas are small and diverse, which makes it nearly impossible to secure big samples (Isakson, 2001:424; Holstein, 2003:40). The data was captured in Excel spreadsheets and analysed with STATISTICA software. The two areas were analysed separately, as they differed widely with regard to prevalent characteristics.

4. Results

The results indicated that the extent of lifestyle buyers within the intensive and extensive agricultural areas in the Western Cape was substantial. In both areas more than half of the transactions that occurred between January 2005 and October 2007 were for lifestyle purposes (65% of all respondents in the intensive area and 52% of buyers in the extensive area).

4.1 Demographic profile of buyers

Statistically significant differences between demographics of lifestyle and production oriented buyers in both areas manifested with regards to their main source of income and occupation only. The majority of lifestyle motivated buyers in both areas (92%) secured their primary income from non-agricultural sources. Most pursued jobs in the business and professional (e.g. doctors, lawyers and accountants) sectors. Due to these being independent of farming, lifestyle buyers could focus on non-productive characteristics of properties. Buyers' level of income and education *per se* did not reveal much. Most buyers of farms, irrespective of their motivation for buying these

properties, however, were high net worth individuals (more than half of respondents in both areas earned more then R600 000 per annum, the only exception being production oriented buyers in the extensive area, where 36% earned more than this amount). Thus it is an expensive exercise to acquire farmland. The demographic information for both areas is provided in Table 1.

Table 1: Demographic information of buyers in the extensive and intensive areas

		Intensive area			Extensive area		
Variable		**Lifestyle buyers (n=39)**	**Production-oriented buyers (n=20)**	**p-value***	**Lifestyle buyers (n=30)**	**Production-oriented buyers (n=28)**	**p-value***
Reside on property purchased (%)		54.05	30	0.08	6.67	25	**0.05**
Grew up on a farm (%)		28.94	52.38	0.08	41.3	62.9	0.1
Afrikaans as language of preference (%)		46.15	61.9	0.24	87.7	71.43	0.11
Marital status: married (%)		84.61	90	0.56	93.33	85.71	0.34
Citizens of South Africa (%)		86.84	76.19	0.3	93.33	100	0.1
Gender: male (%)		76.97	90	0.2	96	89	0.15
Mean age (years)		47	47	1	50	54	0.18
Variable	**Detail**						
Highest qualification (%)	Matric certificate	27.59	24.14	0.58	23.33	42.3	0.08
	Diploma	20.69	13.79		16.67	19.23	
	B-degree	17.24	18.97		13.33	23.07	
	Postgraduate degree	34.48	43.1		46.67	15.38	
Gross annual income** (%)	< R200 000	9.09	11.11	0.81	12	28	0.41
	R200 000 - R400 000	12.12	9.26		20	20	
	R400 001 - R600 000	12.12	14.81		12	16	
	> R600 000	66.67	64.81		56	36	
Occupation (%)	Business	70.58	28.57	**0.00**	53.33	29.62	**0.01**
	Professional	17.65	14.29		30	14.81	
	Agricultural	5.88	52.38		6.67	44.44	
	Government	0	0		3.33	3.7	
	Retired	5.88	4.76		6.67	7.41	
Main source of income (%)	Non-agricultural	91.89	15	**0.00**	93	46.43	**0.00**
	The farm purchased	5.41	40		0	17.86	
	Another farm	2.7	45		6.67	35.71	
Work position (%)	Work full time	76.32	85.71	0.1	63.33	74.07	0.16
	Work part time	10.53	14.29		30	11.11	
	Retired	13.16	0		6.67	14.81	

* Marked effects are significant at $p < 0.05$ (according to analysis of variance) and indicated in bold.
** In terms of salary paid if income is earned from farming.

The demographics of production and lifestyle motivated buyers in the intensive area corresponded in most respects, possibly because of the area's location - its proximity to Cape Town and other major towns, extensive road networks and the attraction of the exclusivity of this wine producing region for farmers and lifestyle buyers alike. About 43% of production oriented buyers had occupations outside of agriculture (14% indicated professional occupations and 29% were employed in the business sector), which implies that many production oriented buyers have business interests outside of agriculture.

South Africans made up 87% of lifestyle buyers and 76% of production oriented buyers in the intensive area, while this increased to 93% of lifestyle buyers and 100% of production oriented buyers in the extensive area. Foreign buyers originated from the United Kingdom, the USA, Germany and the Netherlands. This contradicts speculation that foreigners were responsible for most of South Africa's agricultural land transactions and the drivers of land prices.

4.2 Characteristics considered important to all buyers in their purchase decisions

The median scores presented in Table 2 indicate the importance of characteristics of farms to all buyers collectively (in the intensive and extensive area), as well as separately according to the reason for purchase (lifestyle or production). Several characteristics were important to lifestyle and production motivated buyers in both the intensive and extensive areas. These include: location of the property in terms of travelling time, setting and being private; property size, water availability, soil quality, meso-climate, condition of non-residential infrastructure and aesthetic characteristics such as the presence of natural scenery, beautiful views and rural surroundings. The secluded location of the property was alluring for lifestyle buyers because of the peace and quiet offered, while additional security was guaranteed because of limited thoroughfare. Production oriented buyers preferred privacy for the same reasons. Evidence from the literature validates the statistical significance of properties' accessibility in terms of distance to cities and towns as prime considerations of buyers (Bastian *et al.*, 2002:337; Livanis *et al.*, 2005:39; Henderson & Moore, 2006:597; Huang *et al.*, 2006:458).

In the intensive area, both types of buyers indicated the importance of the location of properties in terms of proximity to the nearest city and towns (easy access to markets or businesses), the availability of water for irrigation

purposes and the condition and capacity of irrigation infrastructure. Selected agricultural production potential characteristics related to the *terroir* of the area (property's locality, climate, topography and soil quality) were important to both types of buyers for the production of wine. The supply of electricity and capacity of non-residential infrastructure were important for the same reason. The importance of the existence of permanent living rights for labourers for both production and lifestyle oriented buyers is difficult to explain. Buyers with commercial farming expectations possibly do not want to buy a farm where permanent living rights could give rise to social problems, or they want to buy a property with labourers on it to assist with production. Lifestyle buyers on the other side possibly do not want the burden of acquiring farms with permanent living rights for labourers, as they do not need a substantial amount of labour for production purposes.

Aesthetic characteristics such as mountains, views, natural scenery, dams and rural surroundings were important to both buyer types in the intensive area. The 'address' of a property was important for production oriented buyers, because of the premium it places on their produce (e.g. wine label), while lifestyle buyers enjoyed the status associated with a specific address.

The characteristics that appealed to production and lifestyle motivated buyers in the intensive area were in general not far removed from each other, possibly because most buyers in this area have a strong lifestyle orientation. The area's standing as an exclusive and internationally acclaimed wine producing region, with spectacular views, scenery and position close to Cape Town attracts these buyers.

In the extensive area, water availability was a major concern for both production oriented and lifestyle motivated buyers (to be expected in arid and semi-arid areas), while privacy was another important consideration for both in terms of security from small stock theft and burglaries.

Soil quality, size of the farm, presence of indigenous vegetation and grazing capacity were important considerations for agricultural production in the extensive area, mainly for livestock farming. These variables were also important to lifestyle buyers, even though they scored them slightly lower than production oriented respondents, with the exception of grazing capacity of indigenous vegetation, which was especially important to lifestyle buyers who wanted to keep game on their farms. The size of the property was significant as a viable economic unit for farmers (large tracks needed). Lifestyle buyers, on the other hand, wanted farms that were not too big to manage.

Table 2: Median scores indicating importance of variables according to lifestyle and production-oriented buyers in intensive and extensive area**

	INTENSIVE AREA			EXTENSIVE AREA		
Variable	**Lifestyle buyers (n=39)**	**Production-oriented buyers (n=20)**	**All groups**	**Lifestyle buyers (n=30)**	**Production-oriented buyers (n=29)**	**All groups**
Location: proximity to nearest city	**8.00**	**8.00**	**8.00**	**7.50**	4.50	5.00
Location: proximity to nearest town	**9.00***	**7.00***	**8.50**	6.00	6.00	6.00
Location: proximity to nearest airport	**7.00***	3.00*	**7.00**	1.00	1.00	1.00
Location: proximity to nearest major road/ freeway	**8.00**	6.00	**8.00**	5.00	5.00	5.00
Location: travelling time	**8.00**	**8.00**	**8.00**	**8.00**	**8.00**	**8.00**
Access: for tourists	**7.00**	3.00	6.00	5.00	3.00	4.00
Location: setting (in valley, against mountain)	**8.00***	6.00*	**8.00**	**7.00**	6.50	**7.00**
Position: private	**8.00**	**8.00**	**8.00**	**10.00**	**9.00**	**9.00**
Production potential: general	6.00*	**9.00***	**7.00**	6.00*	**10.00***	**8.00**
Production potential: soil quality	**7.00***	**9.00***	**8.00**	**7.00***	**9.00***	**8.00**
Production potential: meso-climate	**8.00**	**8.00**	**8.00**	**7.50**	**8.00**	**8.00**
Production potential: size of property	**8.00**	**8.00**	**8.00**	**8.00**	**9.00**	**8.50**
Production potential: condition of existing cultivated areas	5.00	5.00	5.00	3.00*	6.50*	5.00
Production potential: expansion possibilities of existing cultivated areas	6.00	**8.00**	6.00	5.50	**7.00**	6.00
Production potential: grazing capacity	2.00	1.00	1.50	**8.00**	**9.00**	**8.00**
Production potential: game production	1.00	1.00	1.00	**8.50***	5.00*	**7.00**
Topography: varied	5.00	2.00	4.00	**9.00***	**7.50***	**8.00**
Topography: aspect	6.00	5.00	6.00	4.50*	**7.00***	6.00
Water availability: human and animal consumption	**10.00**	**10.00**	**10.00**	**10.00**	**10.00**	**10.00**
Water availability: irrigation	**10.00**	**10.00**	**10.00**	5.00*	**9.50***	**7.00**
Residential infrastructure: style of main residence	**8.00**	5.00	**7.00**	6.00	5.50	6.00
Residential infrastructure: size of main residence	**7.00**	6.00	**7.00**	6.00*	3.50*	5.00
Residential infrastructure: condition of main residence	5.00	5.00	5.00	**7.50**	6.00	**7.00**
Residential infrastructure: historic character of main residence	4.00	5.00	4.50	5.50	2.00	3.00
Residential infrastructure: condition of other residential units	6.00	5.00	5.50	**7.00**	5.50	6.00
Residential infra: accommodation	**7.00***	4.50*	5.00	5.00	5.00	5.00

capacity of other residential units						
Residential infrastructure: condition of labour housing	5.00	6.00	5.50	6.50	**7.50**	**7.00**
Residential infra: accommodation capacity of labour housing	4.00	5.00	4.50	6.00	**7.00**	6.00
Residential infrastructure: income potential from other residential units	5.00	4.00	4.50	1.50	1.00	1.00
Permanent living rights for labourers	**7.00**	**8.00**	**7.50**	5.00	**8.50**	5.00
Non-residential infrastructure: condition	**7.00**	**7.00**	**7.00**	**7.00**	**7.50**	**7.00**
Non-residential infrastructure: capacity	**7.00**	**7.00**	**7.00**	6.00	**7.00**	6.50
Non-residential infrastructure: historical character	4.00	2.00	3.00	3.00	1.00	1.50
Non-residential infrastructure: electricity supply	**10.00**	**9.50**	**10.00**	4.50*	**9.00***	6.00
Non-residential infrastructure: condition of irrigation infrastructure	**9.00**	**9.00**	**9.00**	5.00*	**9.00***	**8.00**
Non-residential infrastructure: capacity of irrigation infrastructure	**9.00**	**9.00**	**9.00**	4.50*	**9.00***	6.50
Non-residential infrastructure: game fencing	1.00	1.00	1.00	**7.50***	3.00*	5.00
Aesthetics: presence of natural scenery	**9.00***	**8.00***	**9.00**	**9.00***	**7.00***	**9.00**
Aesthetics: presence of river, stream, river frontage	**7.00**	6.00	**7.00**	**9.00***	6.50*	**7.00**
Aesthetics: presence of mountain	**8.00**	**8.00**	**8.00**	**9.00***	6.00*	**8.00**
Aesthetics: presence of beautiful view	**10.00***	**8.00***	**9.00**	**9.00***	**7.50***	**8.00**
Aesthetics: presence of indigenous vegetation	**7.00**	4.50	6.00	**9.00***	**9.00***	**9.00**
Aesthetics: presence of trees	**9.00***	**8.00***	**8.00**	**8.00**	**8.00**	**8.00**
Aesthetics: presence of dam or dams	**7.00**	**7.00**	**7.00**	**8.00**	**7.00**	**7.50**
Aesthetics: presence of rural surroundings	**8.00**	**7.00**	**8.00**	**8.00**	**7.00**	**8.00**
Possibility for outdoor recreation activities	**7.00***	4.00*	6.00	**9.00***	6.00*	**8.50**
Possibility of water recreation activities	5.00*	2.00*	4.00	5.00	2.00	3.00
Possibility of water: income generation from activities other than irrigation	3.00	2.00	2.50	3.50	2.00	3.00
Status	**8.00**	**7.00**	**8.00**	6.50	5.00	5.00

* Variables for which analyses of variance produced statistically significant differences between agricultural and non-agricultural buyers (the p-statistic of these variables were below the specified 5% confidence level: $p<0.05$).

** Measured on a scale of 1 to 10, where 1 represents not important at all and 10 represents very important.

Note: Median scores of 7 and above are indicated in bold.

The meso-climate was important from an agricultural point of view, but also played a role in the decisions of lifestyle buyers, as it affected the outdoor recreation potential of properties (extreme heat during summer). The accessibility of the property in terms of travelling time had a substantial impact on decisions by both types of buyers in the extensive area. Lifestyle buyers travelling from Cape Town or neighbouring towns do not want to spend more than three hours on the road, while travelling time also impacts on farmers' transport costs and thus profits. The condition of non-residential infrastructure was also an important consideration for both buyers in this area.

Interestingly, buyers with production motives in the extensive area expressed a preference for aesthetic attributes such as natural scenery, indigenous vegetation (although this is suspected to be related to grazing capacity), trees, dams, views and rural surroundings. These were matched by lifestyle buyers, who also wanted properties suitable for outdoor recreation activities such as hiking and game viewing.

4.3 Analysis of variance (ANOVA)

It was expected that characteristics unrelated to agricultural production would be attractive for lifestyle purposes. For this reason analyses of variance were carried out in order to differentiate between the characteristics valued by lifestyle and production oriented buyers. Tests for the homogeneity of variance and normality of the residuals were done. If residuals were not normally distributed then a Mann-Whitney U test was done as for non-parametric data. Variables (characteristics of farms) for which the p-statistic (p-value) were smaller than 0.05 indicated that there were statistically significant differences in the importance of these variables as perceived by different types of buyers (see Table 2 where variables for which the ANOVA results were statistically significant are indicated with an asterisk (*)).

Although some characteristics of farms were important to both types of buyers in the intensive area (according to high median values), ANOVA results indicated statistically significant differences between their importance for each type of buyer. As expected, characteristics related to agricultural production, such as the general production capacity and soil quality were more important to buyers with commercial production in mind. Lifestyle buyers focused on attributes not directly related to agriculture, such as the proximity to towns and airports, as well as the setting of the farm and accommodation capacity of other residential infrastructure. Lifestyle buyers living on farms usually need to be within reasonable distance to towns and cities, as well as have easy access to an airport for work/business purposes. On a different level,

properties with easy access are attractive to tourists, as well as family and friends of buyers, or buyers themselves. This could account for the high priority given to the accommodation capacity of other residential units by lifestyle buyers, while not being important to production oriented buyers.

Characteristics associated with aesthetics, such as the presence of natural scenery, views and trees appealed to lifestyle buyers. The possibility of outdoor and water related recreation activities were also more important to these buyers, as their main reasons for purchasing agricultural properties are for recreation and relaxation purposes.

In the extensive area ANOVA results revealed more characteristics of farms where there were significant differences between production and lifestyle oriented buyers. Once again, value attributes related to the production potential of farms were not as important to buyers with lifestyle purposes in mind. The fact that production oriented buyers emphasised characteristics such as the general production potential, soil quality, aspect of the farm (i.e. north or south facing), condition of existing cultivated areas, availability of water for irrigation purposes, capacity and condition of existing irrigation infrastructure and also the electricity to use this infrastructure were therefore expected.

On the flipside, the accommodation capacity of the main residence was important to lifestyle buyers, who use these properties for holidays and entertaining friends and family. Although both types of buyers found a varied topography appealing, lifestyle buyers indicated a stronger preference for it. There was a statistically significant difference between the importance of the potential to keep game and the existence of game proof fencing to production and lifestyle oriented buyers, these being more important to lifestyle oriented buyers. It was expected that these variables would be more important to production oriented buyers as a result of the increase in commercial hunting activities in this area, but it was more important to lifestyle oriented buyers. This is possibly due to their interest in nature and wildlife for outdoor recreation purposes.

As anticipated, the presence of natural scenery, rivers or streams, mountains, beautiful views and indigenous vegetation for aesthetic reasons were important to lifestyle buyers in the extensive region, who are attracted by the peace and quiet offered by the extensive area, as well as the varied topography typical of the Karoo landscape.

5. Conclusions

The main contribution of this study is the provision of more information regarding alternative use purchases of agricultural land within two areas in the Western Cape. Agricultural land transactions for such purposes were substantial: more than half of the farms included in the survey were purchased for lifestyle reasons. Lifestyle buyers are not dependent on farming income and thus are less concerned about the productive characteristics of agricultural properties. Their motivations, interpretations and priorities for purchasing agricultural properties are diverse and differ from production oriented buyers.

Demographic statistics of lifestyle buyers revealed that they were likely to be high net worth individuals and statistically significant demographic differences between lifestyle and production oriented buyers in both areas were recorded only in respect of their main source of income and occupation.

The characteristics considered important by lifestyle buyers in their decision to purchase agricultural properties were identified, as well as how these differed from conventional farming oriented buyers. While a number of characteristics were universally important to all buyers in both agricultural areas, there were also some fundamental differences. In the intensive area, lifestyle buyers focused on variables associated with aesthetic beauty and recreation opportunities, while production motivated buyers emphasised characteristics traditionally sought for agricultural production purposes.

The attributes specified in this study can be used as a guideline for valuers by providing a check list of lifestyle considerations to be used in the valuation of agricultural properties. At the same time it sheds more light on the impact of alternative use activities in the South African agricultural land market, which have implications for commercial agriculture and redistribution programmes of agricultural land by the government, due to increased competition in the market for agricultural land.

Even though this study was conducted with a small number of respondents (limited number of available observations), it provides essential important information regarding the impact of non-agricultural purchases of agricultural land.

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