

## Municipal commonage policy and livestock owners: Findings from the Eastern Cape, South Africa

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### Abstract

The new African National Congress government announced after 1994 that municipal commonage would be a pillar of their land reform programme. The Department of Land Affairs spearheaded this by acquiring new land to complement the existing 'old' commonages. The aim of old commonage was to supplement the income of poor urban residents through the subsistence user system whereas new commonage was intended as a 'stepping stone' for emergent farmers. We investigated the differences between old and new commonage farmers as well as how they perceived the Makana local municipality's capacity to manage the commonage. The results showed that local institutions were weak. Only 46% of the old commonage farmers were members of a local livestock association whereas 74% of the new commonage farmers were members. Most old commonage farmers (59%) were dissatisfied with local government's management of the commonage. In contrast, only 37% of the new commonage farmers were dissatisfied with the management of the commonage. There were no differences between old and new commonage farmers in terms of livestock owners' characteristics and mean annual net direct-use value of livestock. There were also no differences in the age of the two types of commonage farmers. Furthermore, there was no association between the type of commonage and level of education. The mean annual net direct-use value of livestock on old commonage was R6308 compared with R9707 on new commonage. Although the income from livestock for new commonage farmers varied slightly from that of old commonage farmers, the annual productive output per farmer on old commonage was R473 ha<sup>-1</sup>, three times higher than that of new commonage farmers which was R134 ha<sup>-1</sup>. We suggest that new land policy legislation is needed in which poverty as well as the legal arrangements between all stakeholders is clearly defined. Furthermore, national departments need to be more involved with local municipalities to increase local management capacity.

### Introduction

The 1997 White Paper on South African Land Policy outlined the role of municipal commonage within the greater land reform programme (DLA, 1997a). It stipulated that "In large parts of the country, in small rural towns and settlements, poor people need to gain access to grazing land and small arable/garden areas in order to supplement their income and to enhance household food security. The Department of Land Affairs (DLA) will encourage local authorities to develop the conditions that will enable poor residents to access existing commonage, currently used for other purposes. Further, the Department will provide funds to enable resource-poor municipalities to acquire additional land for this purpose."

The White Paper clearly identifies two focus areas. The first is that 'poor' people need access to land; the second is that landless people can access either existing commonage or the additional land which will be purchased by the DLA. The existing commonage also known as traditional or old commonage, refers to land found adjacent to small towns that was granted by the state (mainly in the 1800s during the formal establishment of towns) for the use and benefit of the residents ([Anderson and Pienaar, 2003], [Atkinson and Benseler, 2004] and [Atkinson and Buscher, 2006]). The aforementioned 'additional' land, now known as 'new' commonage refers to land purchased by the DLA (through the grant for the acquisition of land for municipal commonage; Act 126) from commercial farmers after 1994 as part of South Africa's land reform programme ([DLA, 1997b], [Anderson and Pienaar, 2003], [Benseler, 2003] and [Ingle, 2006]). Purchased land is transferred to

municipalities free of charge. It must then be allocated to emergent farmers from a disadvantaged background so that they can practise farming to improve their standard of living (Buso, 2003). Thus, old and new municipal commonage represents land which is made accessible to residents for subsistence or economic purposes in terms of the conditions of title stipulated by the DLA ([Anderson and Pienaar, 2003] and [Atkinson and Buscher, 2006]).

The municipal commonage programme aims to accommodate both a subsistence user system and an emergent farmer system (DLA, 2002). The subsistence user system (communal leasehold) should allow poor residents access to land for household production. It should typically have low amounts of commercial activity, this being due to the majority of farmers who have little education and limited financial and management skills (DLA, 2002). In contrast, the emergent farmer system (individual leasehold) is seen as a stepping stone for farmers who want to produce for the market and who would eventually own their own land for commercial farming (DLA, 2002). Thus, traditional commonage should be used by subsistence farmers and 'new' commonage should be used by emergent farmers.

Operating municipal commonage efficiently can enhance land reform, food security, local economic development and sustainable natural resource use (Atkinson, 2005). However, problems have arisen since the initiation of the government's municipal commonage programme. In most cases, the DLA has provided land to municipalities without extra funds for maintenance or training ([Benseler, 2003] and [Buso, 2003]). This means that funds have to be drawn from limited municipal coffers ([Wisborg, 2002] and [Benseler, 2003]). Atkinson and Buscher (2006) point out that the DLA's commonage policy provides for both 'poor' subsistence and 'poor' emerging farmers; however, the commonage policy does not define poverty. According to Atkinson and Buscher (2006) the legal arrangements are frequently unclear and in the majority of cases farmers use the land communally, without proper rental agreements being enforced.

Stakeholders have expressed concern about the incapacity of municipalities to manage commonages in a sustainable manner (Atkinson, 2005). Research has shown that administrative difficulties are occurring within municipalities: poor commonage management practices are taking place and there is irregular support from the Department of Agriculture (DoA) (Atkinson and Buscher, 2006). It has also been shown that the poor contractual systems of most commonages result in many dysfunctions, including poor maintenance of infrastructure (roads, fences, windmills, watering troughs and livestock handling facilities), overgrazing and poor payment of rentals ([Benseler, 2003], [Buso, 2003], [Atkinson, 2005], [Bradstock, 2005] and [Atkinson and Buscher, 2006]). For successful common property management, monitoring should take place, rules should be enforced, boundaries should be well defined and institutional procedures which promote marginal households to contact government officials should be in place ([Gibson et al., 2005] and [Atkinson and Buscher, 2006]).

We acknowledge that commonage may be used for small-scale cultivation and that it provides landless people with access to natural resources. Its primary use, however, is grazing (Anderson and Pienaar, 2003). We therefore compared old and new commonage farmers by focusing on livestock farmers and primarily on the direct-use value of their livestock. Several authors have analysed the economic role of livestock in other African agricultural contexts ([Campbell et al., 2000], [Shackleton et al., 2001] and [Dovie et al., 2006]). Shackleton et al. (2005) have shown that households owning livestock keep animals for the multiple benefits they provide. Livestock is a potential source of capital which equates to potential assets for the household (Barrett, 1992). Livestock provides multiple direct and indirect use values (Shackleton et al., 2001). Direct-use values include draught power, transport, milk, dung, meat, hides, cash sales and herd growth ([FAO,

2001], [Shackleton et al., 2001] and [Rietmuller, 2003]), while indirect-use values include savings and security which are important for many households ([Vink, 1986] and [Shackleton et al., 2001]).

We gathered information on farmers' perceptions of the municipality's commonage management capacity and also on the net benefits from livestock (used interchangeably with 'mean annual net direct-use value of livestock'). Our study attempted to answer the following three key questions: (1) What are the characteristics of old and new commonage farmers? (2) Do benefits from livestock differ between old and new commonage farmers, and if so what are the implications? (3) What is the Makana local municipality's capacity to manage commonage?

## Materials and methods

### Study location

The Makana municipality consists of privately owned land and land owned and managed by the Makana local municipality. Cattle, sheep and goat farming are the main livestock activities in the area (du Plessis, 2001). The average carrying capacity is 5.5 ha per large stock unit (LSU) and 1.2 ha per small stock unit (SSU) (du Plessis, 2001; ECARP<sup>1</sup>). The commonages consist of land surrounding the towns of Grahamstown and Riebeeck East. Grahamstown's commonage consists of three sections. The first is the southern commonage ( $\pm 1896$  ha) which is part of the Oldenburgia conservancy and was therefore omitted from the study. The second is the eastern old commonage ( $\pm 900$  ha) which is set aside for subsistence farming by previously disadvantaged people. The third is new commonage which surrounds the town in the form of scattered smallholdings intended for emergent farmers (Bates, K.G. <sup>2</sup>, pers. comm.).

Old commonage within the study area consisted of Grahamstown's eastern commonage and Riebeeck East's commonage ( $\pm 400$  ha), which is situated 40 km north west of Grahamstown. New commonage consisted of five farms that were purchased by the DLA namely Armistice (283 ha), Tempe (676 ha), Glen Craig (561 ha), Anniskilling (199 ha) and Upper Gletwyn A (357 ha) (Bates, K.G., pers. comm.; ECARP), as well as two other farms which were purchased after 1994, namely Slaaikraal ( $\pm 350$  ha) and Mayfield ( $\pm 500$  ha). Therefore the total size of the old commonage is 1300 ha and the new commonage is 2926 ha.

There are between 2000 and 2500 head of cattle ( $\pm 1850$  LSU) and roughly 1900 SSU (sheep and goats) on the commonage (old and new) (Bates, K.G., pers. comm.). The exact numbers of cattle and goats are not known due to the continuous movement in and out of the commonage. The different stakeholders include the Makana local municipality, DoA, DLA and the stockowners themselves. The stockowners have formed a local farmers' association with an executive that meets with the municipality. This association has been named the Makana Emerging Farmers Association (MEFA) and consists of members from Grahamstown and Riebeeck East.

### Interview surveys

A household survey was conducted in mid 2006 using a structured interview schedule. Twenty-two out of 90 old commonage farmers and 19 out of 60 new commonage farmers were interviewed. The snowball technique was used to identify potential interviewees after random farmers were chosen in a given area (Rubin and Babbie, 2005). A random farmer was chosen by driving through the respective township and interviewing the first household which had a 'kraal' (livestock enclosure) next to it. During the household interviews, details were gathered from the farmers on: (1) their socio-economic characteristics, (2) benefits they received from owning livestock and (3) their

perceptions of commonage governance. Kevin Bates who is the Assistant Director at the Makana Municipalities' Department of Parks and Recreation was interviewed as a key informant. Mr. Bates supplied information that was unattainable elsewhere such as insights into the relationship between commonage farmers and the municipality and total number of livestock on commonage.

The livestock owners' characteristics included information on gender, age, household size, education, occupation, livestock type and numbers, and for how long they had lived in town. Data on livestock numbers were obtained for the years 2001, 2005 and 2006. Current (2006) livestock numbers were needed as well as the previous year's (2005) numbers so that herd growth could be calculated. We collected data for 2001 so that we could assess trends in livestock numbers in the medium term.

Data on perceptions of commonage governance included enquiring whether the farmer: knew of a local livestock association; was satisfied with management; felt that they could communicate with management; knew where the commonage boundaries were; felt that the boundaries were well defined; felt that the rules were simple and; felt that the rules were enforced. Direct-use values of livestock goods and services were calculated per commonage farmer to determine the relative importance of livestock to the farmer's livelihood. This included gathering information such as the amount used, frequency of use, associated costs and local unit prices of livestock products (e.g. milk, meat, hides, dung). We followed procedures similar to those of [Shackleton et al. \(2005\)](#) and [Dovie et al. \(2006\)](#). There was an emphasis on daily, weekly and monthly use within the context of changing seasons. The monetary values of products were computed from the mean price quoted from each interviewee. Values were calculated for benefits received at different stages of production, consumption and sales, taking into account the costs of production. Monetary values were calculated in South African Rand which at the time of our study (mid October 2006) was at an exchange rate of US \$1 = R7.8.

The annual net value (benefits) for the goods and services rendered by goats and cattle for each type of commonage farmer was calculated using the following equation:

$$V_{an}=(C_{vgc}+B_a)-(L_{vgc}+C_a),$$

where  $V_{an}$  is the annual net value;  $(C_{vgc} + B_a)$  is the annual gross value of production which consists of the current value of goats and cattle ( $C_{vgc}$ ) and the annual benefits value ( $B_a$ );  $(L_{vgc} + C_a)$  is the annual cost of production input which consists of last year's mean value of goats and cattle ( $L_{vgc}$ ) and the annual value of costs and losses ( $C_a$ ). To calculate the value of herd growth, the previous year's value of livestock ( $L_{vgc}$ ) had to be subtracted from the present value of the livestock ( $C_{vgc}$ ).

By adding all values of each farmer's current goats and cattle ( $C_{vgc}$ ) and each farmer's annual benefits ( $B_a$ ), an annual gross value for each farmer was calculated, from which a mean annual gross benefit ( $C_{vgc} + B_a$ ) could be calculated. For cattle, bulls were valued at R5400, cows at R2800, oxen at R3450 and calves at R900. For goats, billies were valued at R800, does at R520, wethers at R700 and kids at R100. These figures were obtained by calculating the mean price farmers were getting for their animals. The annual benefits were calculated by adding each farmer's individual cash sales from livestock, skins, meat and milk, as well as adding all values of the benefits they received from their animals in terms of milk, meat and dung. Milk was valued at R4 per litre which was the mean selling price and dung was valued at R0.23/kg which was obtained from [Dovie et al. \(2006\)](#).

The mean cost of production ( $L_{vgc} + C_a$ ) was calculated in a similar fashion to the mean annual gross benefit ( $C_{vgc} + B_a$ ). For simplicity, inflation was ignored when calculating the value of the previous season's livestock ( $L_{vgc}$ ). The annual costs ( $C_a$ ) were calculated for each farmer by adding the money they spent on hired help, veterinary medicines, commonage fees, feed, camp erection and maintenance, treatment of skins as well as the value of stock that they lost through stock theft and deaths.

To calculate the production (total monetary output) per hectare on both types of commonage, the following simple formula was used:

$$(A \times B) \div C$$

where,  $A$  equals the number of farmers,  $B$  equals the mean annual net value, and  $C$  equals the size of the respective commonage.

### Data analyses

Chi-square tests were used to test for association between the type of commonage and the (1) level of education amongst farmers, and the (2) type of animals being farmed. A two-sample  $t$ -test was used to test for differences in age between the two types of commonage farmers. Household size, goat and cattle numbers and annual net direct-use values were not normally distributed. Mann–Whitney  $U$  tests were therefore used to test for significant differences between the two types of commonages in terms of these variables. The relationship between annual net direct-use values of livestock and type of commonage, age of farmer, years of education of the farmer and total household size were examined with stepwise multiple regression. The annual net direct-use values and household size were square root-transformed before analysis. Type of commonage was used as a dummy variable. All statistical analyses were done using STATISTICA (StatSoft Inc., 2007).

## Results

### Socio-economic characteristics of farmers

There were no significant differences between the mean ages of farmers from old and new commonage ( $t = -1.5$ , d.f. = 39,  $p > 0.05$ ). The mean age of old commonage farmers was 54 ( $\pm 18$ ) years and that of new commonage farmers 61 ( $\pm 14$ ) years. The mean household size of old commonage farmers ( $4.8 \pm 1.9$  people) did not differ significantly ( $U = 163$ ,  $p > 0.05$ ) from that of new commonage farmers ( $5.5 \pm 1.7$  people). Although a greater proportion of old commonage farmers had some form of education, none had a tertiary education whereas this was not true for new commonage farmers (Table 1). However, there was no association between the type of commonage and the level of farmers' education ( $\chi^2 = 7.4$ , d.f. = 3,  $p > 0.05$ ).

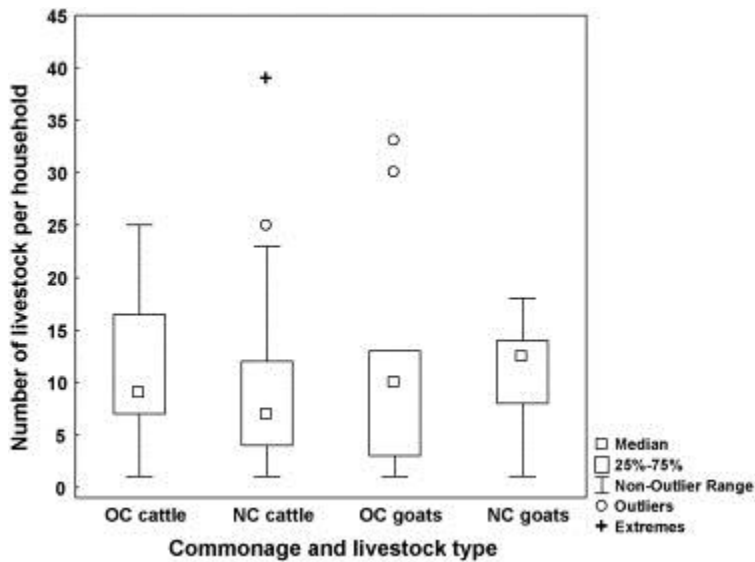
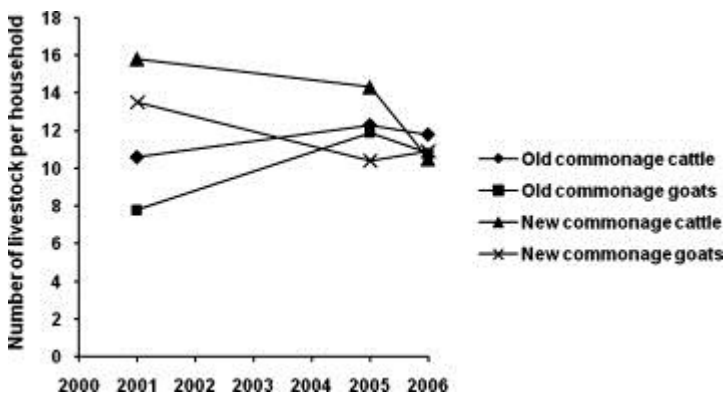


Fig. 1. Number of cattle and goat per household for old and new commonage farmers (OC = old commonage and NC = new commonage). Each box and whisker plot indicates the median, quartile and non-outlier range of livestock numbers.

Goat and cattle numbers per farmer have fluctuated on both commonage types over the last five years (Fig. 2). Mean ( $\pm$ standard deviation) cattle numbers on old commonage increased from  $10.6 \pm 11.0$  in 2001 to  $11.8 \pm 7.2$  cattle per owner in 2006. In contrast, cattle numbers on new commonage declined from  $15.8 \pm 16.2$  cattle per farmer in 2001 to  $10.5 \pm 10.1$  cattle per farmer in 2006. During the same period, the mean goat numbers on old commonage increased from  $7.8 \pm 5.5$  to  $10.8 \pm 10.2$  goats per farmer. In contrast, the number of goats on new commonage declined from  $13.5 \pm 17.1$  to  $10.9 \pm 5.7$  goats per farmer. None of the above changes in past and present livestock numbers per farmer were significant (goats: old commonage ( $U = 1.0, p > 0.05$ ); new commonage ( $U = 0, p > 0.05$ ) and cattle: old commonage ( $U = 2.5, p > 0.05$ ); new commonage ( $U = 0, p > 0.05$ )). There were also no significant differences between the present goat ( $U = 53.0, p > 0.05$ ) and cattle ( $U = 111.0, p > 0.05$ ) numbers between old and new commonage.



The annual net value of livestock per farmer on old commonage ranged from –R5850 to R67 786 and on new commonage from –R10 651 to R58 246 (Fig. 3). The mean annual net values for old and new commonage farmers were R6308 ± 15 358 and R9707 ± 18 471 per farmer, respectively (Table 2). It is important to reiterate that these figures include the savings value accrued to livestock. Inheritance or heavy losses can swing the net value accrued to a farmer dramatically; the high value of R67 786 on the old commonage is due to a farmer who inherited all of his livestock and the low value of –R10 651 on the new commonage was due to a farmer who suffered heavy stock losses. The high cost values in Table 2 are due to the fact that the value of each farmer's herd from the previous year was subtracted from the current value of the herd, to incorporate the value of herd growth. Despite the above, and the fact that certain figures in Table 2 look greater for new commonage farmers, there were no significant differences in mean annual net (direct-use) values for the goods and services rendered by cattle and goats to new and old commonage farmers ( $U = 189.0, p > 0.05$ ). Furthermore, there was no relationship between mean annual net values and type of commonage, age of farmer, years of education of the farmer and total household size ( $F = 1.19; d.f. = 4, 36; R^2 = 0.0183; p > 0.05$ ). These variables only explained 1.83% of the variation in annual net values.

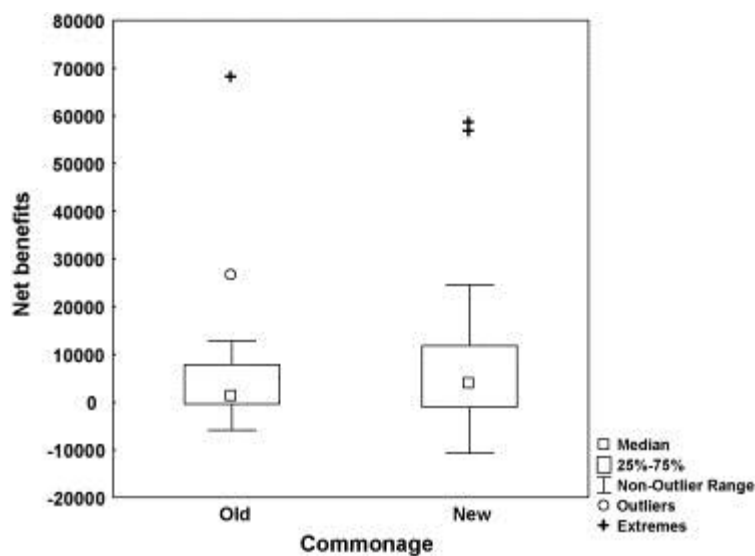


Fig. 3. The net benefits (Rands) of keeping cattle and goats per household for old and new commonage farmers. Each box and whisker plot indicates the median, quartile and non-outlier range of net benefits.

Table 2. Direct-use values (in Rand) per household associated with cattle and goats for old and new commonage farmers

Variable	Old commonage	New commonage
<b>Cattle only</b>		
Gross value	40263 ± 23384	39782 ± 38988
Production cost	29760 ± 25105	37559 ± 37261
Net value	10503 ± 21820	2223 ± 7000
<b>Goats only</b>		
Gross value	3875 ± 1386	6995 ± 1973
Production cost	5297 ± 3527	8310 ± 2305
Net value	-1421 ± 2352	-1315 ± 332
<b>Both cattle and goats</b>		
Gross value	46506 ± 33552	60567 ± 45864
Production cost	38967 ± 25263	39684 ± 24461
Net value	7539 ± 9914	20883 ± 23914
<b>Total</b>		
Gross value	32325 ± 29252	45082 ± 42138
Production cost	26018 ± 24698	35375 ± 30693
Net value	6308 ± 15358	9707 ± 18471

Where relevant, means are given together with the standard deviations.

Although the mean annual net value of livestock per farmer on new commonage was higher than that on old commonage, the farmers on old commonage averaged more money per hectare. Old commonage farmers' net livestock value per hectare averaged R473 ha<sup>-1</sup> annually, more than three times that of new commonage farmers who averaged about R134 ha<sup>-1</sup> annually.



## Governance of commonages

Sixty-eight percent and 73% of old and new commonage farmers, respectively, knew of a local livestock owners' association (LOA). However, these local institutions were weak in terms of membership especially amongst the old commonage farmers whose LOA membership was almost half that of the new commonage farmers ([Table 3](#)). A greater percentage of farmers from old commonage than new commonage were dissatisfied with their commonage management. In spite of this, a high percentage of farmers from both commonage types felt that they could talk to the municipality about their problems ([Table 3](#)). All farmers felt that they got on well with one another.

Table 3. Old and new commonage farmers' perceptions of governance of municipal commonage

Question	Commonage type	
	Old commonage (%)	New commonage (%)
Knew of the Livestock Owners' Association	68	84
Member of the Livestock Owners Association	46	74
Satisfied with commonage management	41	63
Agreed could communicate with commonage managers	86	94
Knew where commonage boundaries were	82	84
Agreed commonage boundaries were well defined	82	74
Agreed rules were simple	59	84
Agreed rules were enforced	82	74

A greater percentage of new commonage than old commonage farmers felt that their commonage rules were simple. Nevertheless, similar proportions of both types of farmers felt that the rules were enforced ([Table 3](#)). While a high percentage of both types of farmers knew where their commonage boundaries were, fewer new commonage than old commonage farmers felt that their boundaries were well defined ([Table 3](#)).

Out of the top three ranked problems on the respective commonages, the greatest problem encountered by old commonage (57%) and new commonage (47%) farmers was lack of fencing. Other than that, new commonage farmers felt that their second biggest problem was lack of general infrastructure (37%), followed by stock theft (32%). Old commonage farmers felt that stock theft was their second biggest problem (43%) followed by inadequate land to farm (14%).

## Discussion

### Characteristics of commonage farmers

The socio-economic characteristics of old and new commonage livestock farmers were similar. Both old and new commonage farmers had low levels of education. One would expect higher levels amongst new commonage farmers because they are supposed to be emergent farmers ([Ingle, 2006](#)). Low educational levels pose a problem because a well-informed committee is needed to manage the farmers' affairs ([Bradstock, 2005](#)). A committee would need to take on administrative duties such as organising regular meetings, instituting legal proceedings, drawing up agendas and keeping minutes of meetings. A committee with low educational levels will struggle to perform such duties.

Many of the farmers using commonage for grazing grew up on commercial farms. Our result agrees with [Atkinson's \(2005\)](#) findings in the Nama Karoo. Farmers should have some agricultural experience to improve the chances of successful farming on the commonage. The municipality should assess the potential emergent farmers' knowledge and should provide training where necessary.

Despite progressive policies and guidelines to ensure gender equity in the South African land reform programme, the proportion of women and youth within the farming population was low. Our findings are similar to those of other researchers ( [[Anderson and Pienaar, 2003](#)], [[Benseler, 2003](#)] and [[Davis et al., 2004](#)]). Both old and new commonage farmers relied heavily on help from younger family members with only a few hiring help. This is a trend which has been recognized elsewhere ([Dovie et al., 2006](#)). Similar to findings in the Northern Cape ([Bradstock, 2006](#)), both types of commonage farmers relied heavily on pensions. This raises concerns about the viability of the emergent farming strategy. It is highly unlikely that emergent farmers with an average age of 61 years will ever step-off the commonage and step-up to full commercial farming. Indeed, such old farmers are apparently part-timers and even opportunistic rather than emergent. To address the age and gender inequity, government needs to better implement their gender equity policies and guidelines.

### Annual net returns from livestock

The majority of the Makana commonage farmers fall within the commonage programme's very low commercial activity bracket ([Table 2](#)). On old commonage farmers averaged a net direct-use value of R526 per month from livestock. If one excludes the two outliers (extremes) from the sample, this figure drops to R184 per farmer per month. On new commonage farmers averaged a net benefit value of R809 a month, if the three outliers are excluded the value drops to R233 per month.

The DLA's (1997b) municipal commonage policy and procedures document stipulates that beneficiaries of traditional commonage should be poor. However, the definition of poverty is not given ([Atkinson and Buscher, 2006](#)). The same document points out that beneficiaries are eligible to use the new commonage if they earn less than R1500 per month as a household. However, nowhere can it be found what beneficiaries should be earning for them to be considered ready to leave the commonage and 'step-up'. The DLA document only states that the emergent farmer should have an individual lease with the municipality stating how long he/she will use the commonage before stepping-up. Among the farmers interviewed, the net direct-use values of only five farmers (on both commonage types) amounted to more than R24 000 per annum from livestock. This equates to R2000 a month per farmer, purely off their livestock. Indeed such farmers are becoming ready to exit

their respective commonages. If farmers were able to leave the commonage it would free up grazing space for other emerging farmers and also the remaining subsistence farmers.

If there was adequate information and marketing campaigns on commonage procedures, then such farmers would know that they could exercise their rights in terms of the DLA's (1997b; 2002) municipal commonage policy, and apply for funds to purchase their own agricultural land. This would also be in accordance with the Land Reform for Agricultural Development (LRAD) programme. Future studies should focus on the exit rate of emergent farmers. We hypothesize that the exit rate of emergent farmers is very low. Reasons for this could include the lack of publicity of the LRAD funding options and the fact that commonage farming is much safer financially than independent farming.

Old commonage farmers averaged more than three times the annual output per unit area of new commonage farmers. This implies that one of three scenarios could be occurring. The first is that not enough livestock is being farmed on new commonage. The second is that new commonage farmers are not farming correctly and the third is that there is overstocking on old commonage. Calculations show that old commonage farmers are running their combined livestock at a stocking rate of 1.3 ha/LSU while new commonage farmers are running their combined livestock at a ratio of 6.7 ha/LSU. Considering that the Makana area's average carrying capacity is 5.5 ha/LSU (du Plessis, 2001) old commonage farmers are overstocking their land, and new commonage farmers could increase the stocking rate. A solution for the overstocking is to move the larger old commonage farmers (in this case the two outliers) to the new commonage.

Farmers who owned both cattle and goats on new commonage made more income than those who farmed only goats or only cattle. Two reasons explain this result. First, goat farmers were not subsidised in any form whereas cattle farmers were. Cattle farmers received free veterinary medicines from the DoA. In contrast, goat farmers do not receive such medicines for their stock. Second, keeping different types of livestock leads to livelihood options which are more diverse and flexible ([Shackleton, 2000] and [Fabricius, 2004]). An advantage of such diversification is that there is a greater chance that at least one livestock type at any given time will potentially have a high market value.

Although our study looked at one municipality, our findings indicate a lack of clarity in official policy regarding the management of subsistence commonage, as well as the development of commercial commonage farmers as reported by other workers (e.g. [Anderson and Pienaar, 2003], [Benseler, 2003] and [Atkinson and Buscher, 2006]). Either new land policy legislation is needed or national departments must get more involved with local municipalities so as to help implement the existing legislation more effectively. If a new white paper is produced, then it should clearly define poverty and rules of access and management for both old and new commonage. Currently rules for old and new commonage are similar. Furthermore, the legal arrangement between stakeholders needs to be clearly defined (e.g. rentals, individual or communal leasehold, stocking rates). There is also a need for a more systematic and coherent “step-up” strategy for emergent farmers; how long they are supposed to be emergent farmers, or how much they should be earning to qualify for “stepping up”. In essence, it should address all of the 1997 White Paper's shortcomings. Some municipalities, such as the Letsemeng local municipality (which consists of the towns; Koffiefontein, Luckhoff, Jacobsdal and Petrusburg) have taken the initiative to make their own commonage policy for emerging farmers (Information Decision Systems, 2005). Policy makers could start by looking at all the local policies that have been made thus far and incorporate these into a national strategy.

We argue that because there are significant differences in production goals and management approaches between subsistence and proto-commercial (emergent) farmers ([Rohde et al., 2001] and [Hall et al., 2003]), subsistence farmers should be geographically separated from emergent farmers. This will allow the municipality to monitor emergent farmers more easily (Hall et al., 2003). Furthermore, this will reduce the chances of emergent farmers' herds crossbreeding with genetically mixed herds of subsistence farmers. Traditional commonage is typically found near towns and new commonage either adjoining the traditional commonage or consisting of separate land which can be far from town (Anderson and Pienaar, 2003). Therefore, subsistence farmers should use the traditional peri-urban commonage where there is easy access. Since new commonage was previously commercial farmland, emergent farmers should farm it as such. However, the municipality should offer technical support and start-up agricultural inputs to promote production (Bradstock, 2006).

### Governance of municipal commonage

Commonage farmers perceived local government's management capacity as weak. This example is not isolated; Atkinson and Buscher (2006) found similar results in the Free State. Inadequate management systems of most commonages result in poor maintenance of infrastructure, overgrazing and poor payment of rentals ([Benseler, 2003], [Bradstock, 2005] and [Atkinson and Buscher, 2006]). Research has shown that administrative difficulties are occurring within municipalities thus causing poor commonage management (Atkinson and Buscher, 2006). A reason for this could be that agriculture has never been a municipal function; thus municipalities have never been able to develop any experience with regards to agricultural management.

To overcome such problems, the municipality in question should look at adopting an adaptive co-management approach ([Hall et al., 2003], [Folke et al., 2003] and [Atkinson, 2005]). Adaptive co-management is a "flexible community-based system of resource management tailored to a specific place and situation and supported by, and working with, various organizations at different levels (Olsson et al., 2004)." Such an approach is a move towards participative rule-making, with commonage farmers being centrally involved in management (Lebert, 2004).

Communication is a key factor in any governance system; clear communication builds trust (Folke et al., 2005). In the absence of regular communication conflict increases, whereas low levels of conflict are associated with regular and open communication (Fabricius, 2004). In this study, a high percentage of farmers felt that they could communicate with municipal management, which is a positive sign (Agrawal and Gupta, 2005). The local municipality is very much involved with the local livestock owners' association (Makana Emerging Farmers Association (MEFA)). However, local institutions were weak in terms of membership, particularly farmers from the old commonage. If more farmers became members of the livestock owners' association, then more communication could occur within and across scales of management. More members, means more people at meetings, which equates to a greater body of informed people. Meetings are opportunities to disseminate information such as new rules and general announcements as well as allow members the opportunity to voice their concerns. Increased communication would in turn build trust between farmers and the municipality and would also lower the risk of potential conflict between stakeholders. All farmers on both commonages stated that they got on well with their fellow farmers. However, many felt that the municipality was working too slowly and not delivering on their promises which could potentially lead to a breakdown in the farmers' trust in the municipality (Folke et al., 2005).

Similar to Fabricius' (2004) findings amongst South African community-based natural resource management initiatives, local government lacked capacity as well as local institutions (MEFA). The

low level of local institutional membership could potentially have had a negative effect on farmers' perceptions of governance. Since old commonage membership was low, its members' understanding of rules and their satisfaction with management was low. On the other hand, new commonage had a greater membership body which explains why they had a better understanding of the rules and why their satisfaction with management was higher than that of old commonage farmers.

All farmers on municipal commonage are required to pay a fee for the use of grazing. However, none, except for a few new commonage farmers, paid a grazing fee. The municipality does not have sufficient funds to pay for utilities and infrastructure without user or lease fees. Interestingly, farmers argue that they will not pay grazing fees until there is sufficient infrastructure (Atkinson and Benseler, 2004; Bates, K.G., pers. comm.). This creates problems in the maintenance of infrastructure. The alternative is for farmers to apply for a government grant. However, in most cases farmers lack the know-how necessary to complete and settle funding agreements (Bradstock, 2005). Again this situation is not unique, poor payment of grazing fees is similar to what Atkinson and Buscher (2006) found in the Free State Province.

## Conclusions

This study has answered three questions. First, it has shown that on both types of commonage, there were low levels of education, very little representation of women and youth, and high dependence on social grants. We conclude that there were no significant differences between old and new commonage farmers' characteristics. Second, it has shown that commercial activity on both types of commonage was mostly low, with five notable exceptions (two farmers on old commonage and three on new commonage). We conclude that there was no difference between old and new commonage farmers' mean annual net direct-use values from livestock. Third, it has shown that commonage farmers perceived commonage management by the municipality as weak. However, it was also found that local institutions had very low membership, particularly farmers from the old commonage.

To address these current challenges we suggest that: (1) government needs to better implement their gender equity policies and guidelines; (2) farmers should be encouraged to farm with both cattle and goats; (3) subsistence farmers should be geographically separated from emergent farmers, which will allow for easier monitoring of emergent farmers; and (4) the Makana local municipality should look into adopting an adaptive co-management approach thereby allowing for more interaction with the farmers and involving them when making or setting rules.

We also suggest that either new land policy legislation is needed or national departments must get more involved with local municipalities to help implement the existing legislation better. If a new White Paper is produced, then it should define poverty and the legal arrangement between all stakeholders. It should also clarify how the subsistence and emergent user systems should operate, as well as supply a systematic "step-up" strategy for emergent farmers. Future studies should investigate the exit rate of emergent farmers and also if there is any association between previous commercial farming experience and the will to be an emergent farmer.

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