Evaluating land and agrarian reform in South Africa
An occasional paper series

Land use and livelihoods
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Evaluating land and agrarian reform in South Africa is a project undertaken by the Programme for Land and Agrarian Studies (PLAAS) to respond to the need expressed by civil society organisations for independent research to evaluate progress in, and inform debates on the future of, land and agrarian reform. The reports in this series are:

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1. Introduction

This paper addresses how land reform can contribute to enhancing land-based livelihoods.

South African agriculture is often characterised as being divided into two types: freehold tenure/ commercial agriculture vs. communal tenure/ subsistence agriculture. Subsistence uses of land are generally viewed as wasteful, destructive and economically unproductive in comparison to commercial production systems. It is not surprising therefore that land redistribution programmes which transfer land to subsistence producers are often viewed with disdain. Such views inform recent land reform policy shifts aimed at enhancing ‘commercial’ agricultural production for the market rather than subsistence production. There is also an emphasis on ‘full-time’ farming on larger portions of land to generate substantial agricultural incomes.

These dualistic stereotypes are inappropriate and misleading. This dualism ignores the many cases where small-scale producers in communal areas are currently involved in production for the market (along with self-provisioning) as well as the more numerous historical examples of such involvement. We also challenge the characterisation of subsistence land uses as ‘wasteful, destructive and economically unproductive’. There is considerable evidence that land-based livelihoods have been significantly undervalued. This is not to say that there is no room for improvement. Most poor rural households encounter considerable constraints to production that limit their land-based livelihoods to a survivalist mode. The challenge for South Africa’s land and agrarian reform programme is to alleviate the constraints to production and, in so doing, to enhance land-based livelihoods amongst the poor majority beyond the survivalist mode and to facilitate commercial production for the market amongst the elite.

This dualistic characterisation of South African agriculture should be replaced by a ‘continuum of farmers’ approach that recognises and supports a broad range of large and small-scale, full-time and part-time, as well as commercial, peasant and subsistence farmers. To justify the need for this ‘continuum of farmers’ approach, this paper highlights the wide variety of productive uses of land and natural resources amongst residents of communal areas and land reform beneficiaries, and the significant value of these uses. However, we also draw attention to the constraints to land-based livelihoods in general and amongst land reform beneficiaries in particular. The lack of land is one of these constraints but it is not the only one. It is on this basis that we highlight the need for a broader agrarian reform programme aimed at alleviating these constraints.

Land use and land-based livelihoods among residents of communal areas and among land reform beneficiaries are discussed separately. We have examined the three most common forms of land use – cultivation, livestock farming and the use of natural resources. The current uses are described and, wherever possible, trends over time and the reasons for these changes are discussed. We then go on to look at land use amongst land reform beneficiaries and assess the extent to which these conform to regulations and enhance land-based livelihoods. In conclusion, we highlight some of the critical issues facing South Africa’s land and agrarian reform programme and make some recommendations for the way forward.
2. Land-based livelihoods in communal areas

The vast majority of South Africa’s poor rural residents derive their livelihoods from a number of diverse on-farm and off-farm sources. The off-farm sources include wages, remittances from migrants and commuters, and income from informal economic activities and from state welfare grants. Most surveys indicate that these are the most significant and substantial sources of income available to rural households. On-farm sources of income, such as incomes earned from the sale of crops, livestock and other natural resources, are generally believed to provide very small proportions of household income on a seasonal basis.

However, this perception has recently been criticised on two grounds. Firstly, it is based on an underestimation of agricultural production and fails to incorporate incomes derived from the harvesting and processing of natural resources. Secondly, the focus on monetary ‘income’ does not take into consideration all the non-monetary goods and services that rural households obtain from their land and its natural resources. Rural households rely on crops, livestock and a wide variety of natural resources for food security, income and many other basic needs such as water, fuel, medicine, shelter and transport. It is very difficult to attribute a monetary value to these benefits.

This underestimation of the value of agricultural production and the harvesting and processing of natural resources has led many to conclude that most rural households are displaced urban residents rather than rural producers. While this interpretation may be valid for many dense peri-urban settlements, it is not true of many rural communities. These land-based livelihoods are critical to the survival and health of most rural households, particularly the very poor. In addition to providing for the basic needs of rural households, land-based livelihoods play a vital role in reducing their vulnerability to risks – risks such as the loss of a job or a pension, drought, floods, disease and death. The ability to generate livelihoods from a diversity of key ecological resource areas is a crucial aspect of this risk-minimising strategy. Access to diverse ecological resources ensures that the household is unlikely to lose access to all its livelihood options in the event of an environmental or socio-economic disaster. Consequently, the more diverse their livelihood assets and strategies, the less vulnerable they are to risk.

Land-based livelihoods make a much more valuable contribution to rural livelihoods than the conventional wisdom dictates. There is also evidence that reliance on the land and natural resources is increasing as jobs in the formal sector become more scarce. Given this scenario, land reform could play a major role in enhancing land-based livelihoods.

Cultivation

The discussion on cultivation practices that follows draws on 20 selected case studies to identify the main features of the use of arable land in communal areas. These case studies were selected on the basis of availability of published material documenting land use practices. The selected cases studies include Shixini along the Transkei coast (Heron 1991; Andrew 1992; McAllister 2000; 2001; Andrew & Fox, in prep.), Gwabeni (Ainslie 1998), Gcinisa (Palmer 1997) and Melani (Manona 1998) from the Ciskei, three rural communities and four peri-urban communities in KwaZulu-Natal studied by Cross et al. (1996); Nkandla – a ‘deep’ rural community in KwaZulu-Natal (Cairns & Lea 1990; Ardington & Lund 1996), two contrasting rural
communities (Mamone and Rantlekane) in Limpopo (formerly the Northern Province) (Baber 1996) and a more recent study of land use in Athol and three other villages in the Bushbuckridge district (Giannecchini 2001). Two additional case studies where cash crop production is happening are also examined.

**Crop production and the use of arable land**

Generalising about crop production in the communal areas is problematic due to the great diversity of circumstance and experience in these areas. Some areas are more suitable for crop production than others. Crop production in many communal areas has also been affected by forced removals and farm evictions, and ‘villagisation’ processes linked to ‘betterment’ planning. In general, the older, more remote, and less disturbed areas tend to have lower population densities, better access to land and higher levels of crop production. Unfortunately, these better-off areas are far outnumbered by those that have experienced major social disruptions due to apartheid policies and the growth of urban centres.

It is difficult to find any studies of communal areas where rural residents are able to grow enough food for their household needs. It is generally believed that the vast majority of rural residents are not able to subsist off the land. Most need to buy maize to supplement locally-grown supplies. At the same time it seems that rural households in some communities are engaged in production for the market. Most of these appear to be small-scale producers selling food or cash crops to supplement household income. The most common cash crops are sugar and timber (Vaughan 2001; Barnard et al. 2002). There are also some cases of larger scale production for the market as in the case of the Ditsobotla sharecroppers (Francis 1999). A large survey in KaNgwane indicates that the sale of crops makes a significant contribution to household income for the majority of rural households which employ a wide variety of livelihood strategies. Only two livelihood groups did not obtain significant incomes from crop cultivation, namely non-farming households (34%) and households which focus mainly on livestock production (6%) (Makhura et al. 1998).

**Under-farming**

‘Under-farming’, in which large areas of previously cultivated land now lie abandoned, is a widespread phenomenon in the communal areas of the Eastern Cape and KwaZulu-Natal and also appears to be evident in the more disturbed communal areas of other provinces. An historical trend study of land use practices in the Transkei indicates that this process of abandoning arable land began in the first half of the 20th century but increased rapidly in the 1960s and 70s (Andrew 1992; Andrew & Fox, in prep.). However, in this area this process was accompanied by a dramatic increase in the number and size of homestead gardens – a compensating intensification strategy (Andrew & Fox, in prep.). In Limpopo and Mpumalanga, on the other hand, the total area of cultivated land appears to have expanded over time but the size of household plots has declined (Baber 1996; Giannecchini 2001). It is not clear whether intensification processes are occurring in these northern areas.

A wide variety of reasons for the under-use of arable land have been identified in the case studies. These include, in no particular order of importance:

1. A shortage of labour due to the absence of male labour, constraints on female labour linked to domestic responsibilities and urbanisation processes.
2. A shortage of per capita draught oxen and manure due to increasing population pressure.
3. A shortage of capital and income to purchase inputs due to the loss of agricultural markets and low incomes from migrant labour.
4. Difficulty in obtaining local sources of agricultural inputs and tractor services often associated with the withdrawal of white traders and poor service delivery on the part of government departments of agriculture.
5. Soil erosion due to population pressures and poor land use practices.
6. High risks of damage to crops from livestock due to labour shortages and the lack of fences, and the loss of crops to theft due to poverty, social disruptions and inequality.
7. The lack of markets for agricultural produce due to increasing competition from the white commercial farming sector and the removal of white traders from the African reserves.
8. The loss of co-operative activities to support agricultural production due to increasing inequalities and the declining resource base such as labour, livestock and finances.

It is difficult to assess which are the most important factors. There are a number of influential theories such as the Marxist, neo-classical economic and degradation theories that tend to favour one or two of these factors. However, the case studies indicate that there was a complex interaction of market access problems, resource constraints (financial, labour and technology), degradation processes and high risks that reduced outputs and encouraged people to abandon field cultivation. The spread of the HIV/AIDS pandemic can be expected to exacerbate resource constraints and disrupt co-operative social relations.

The contribution of crop production to rural livelihoods

There is some debate about the relative extent to which crop production contributes to the livelihoods of rural households in communal areas. Until the 1990s, most rural household surveys found that the sale of crops amounted to less than 10% of household income (Nattrass & Nattrass 1990; Cairns & Lea 1990; Baber & Nieuwoudt 1992; Stewart & Lyne 1988; May 1996; Ardington & Lund 1996). However, more recent studies indicate that the contribution of agriculture to household livelihoods may be much more, particularly if the savings achieved from home consumption are factored in to the calculation. These more optimistic estimates are in the range 15–28% of household livelihoods (Shackleton et al. 2001).

Another study of farmers in KaNgwane indicates that even these estimates may be too low and that average figures that lump non-farming, crop farming and livestock farming households together underestimate the importance of crop production as a livelihood option in most rural households, particularly the poorest households. The study by Makhura et al. (1998) appears on the surface to support the findings above in that agriculture contributed an average of 27.7% of household income. However, a more detailed examination of this data indicates that if the 34% of non-farming households are excluded from this calculation, the earnings from agriculture and cultivation in particular were much larger than 27.7%. While the amounts of income derived from agriculture were generally low, the majority of sampled households (66%) relied on incomes from agriculture for more than 50% of their income. This study highlights the differences within rural communities and the different livelihood strategies adopted by rural households. These differences need to be taken into consideration when considering what appropriate agrarian and land reform measures should be.
The reasons cited for these low levels of production for the market are numerous and inter-related. Neo-classical economists attribute this to the availability of higher incomes in the urban sector (via the migrant labour system), competition from cheaper products produced by commercial farmers, low profit margins for farmers (due to low prices for agricultural products and/or high costs of inputs) and a lack of access to agricultural inputs, information, skills, technology and credit (Low 1986). Other contributing factors include the small and declining size of land holdings and the lack of a land market (Low 1986; Lyne & Nieuwoudt 1991; Fenwick & Lyne 1999).

While an examination of the case studies mentioned at the beginning of this section provides some support for these theories, they do not provide clarity on the relative importance of these causal factors. In an attempt to shed some light on this issue, we propose to compare the situation in areas that we have already looked at, to that in areas where significant production for the market is occurring. Examples of cash crop production are outlined in Box 1 and Box 2.

**Box 1: Sharecroppers in Ditsobola**

This area in the former Bophuthatswana homeland has experienced a significant expansion of commercial maize cropping since the 1980s, with 66% of the land in this area being cultivated by commercial farmers under sharecropping arrangements by the late 1980s. This production expansion was achieved by a relatively wealthy group of sharecropping farmers who have been able to access increasing amounts of land, equipment, labour and finances. According to Stacey et al. (1994), the result of this process of change has been the creation of three social groups: a commercial farming class of sharecroppers, a group of wage labourers (who work for the sharecropping farmers) and a group of land rights holders who share their land. Stacey et al. identify a number of factors that have enabled this transformation. Over the last 60 or more years, these commercial farmers have taken advantage of their close proximity to neighbouring white commercial farms and marketing networks to access information about markets and technology as well as skills, equipment and markets they needed to make a living from commercial maize production. They financed the purchase of equipment such as tractors and chemical inputs through livestock sales, migrant labour, favourable terms of credit from white commercial farm employers and income derived from farming. Favoured prices and accessible markets from firstly white traders, then the agricultural co-operatives and more recently the marketing board linked to the state’s agricultural projects also played a key role in facilitating the growth of commercial farming. Then from the 1980s increasing levels of unemployment (due to increasing levels of unemployment in the formal sector) together with in-migration expanded the pool of labour available to commercial farmers. The growth in sharecropping was also enabled by increasing wealth disparities, the lack of involvement of traditional authorities in land use decision making (because all land is already allocated), and the breakdown in these institutions due to the influx of new households. In addition, relatively good returns on large-scale maize production, combined with the benefits of employment creation and income generation (for those leasing out land) may also have facilitated and encouraged the expansion of sharecropping arrangements.

These case studies of cash cropping in communal areas show that where rural households have been able to access agricultural markets (for inputs and outputs) and the necessary support services (such as credit, information, technology and support services), they have succeeded in overcoming the constraints evident in most communal areas and are producing for the market. In the process, they are bringing abandoned fields back into production, while at the same time maintaining garden cultivation for food production. This does not, however,
mean that all the constraints have been overcome. A shortage of land that limits plot size and insecure tenure continue to limit the potential for the expansion of cash cropping.

**Box 2: Sugar and timber contract farmers**

In communal areas close to commercial sugar cane and timber industries in KwaZulu-Natal, many arable fields are being used for the cultivation of commercial crops such as sugar cane and timber as well as cotton and, more recently, coffee (Vaughan 2001; Meyers et al. 2001). Sugar cane and timber are the main crops grown. This process of change has been occurring for the last 20 years in the case of timber, and even longer for sugar cane (Vaughan 2001). These crops are grown under contract to the large sugar and pulp mill companies. According to Vaughan (2001) small-scale farmers enter into a contract with these companies in which they use their arable land and labour to grow the crop and then sell it to the company upon harvest. The company provides the farmers with physical inputs, credit, extension services, machinery, technical advice and a guaranteed market.

Despite some concerns about unequal relationships, the terms of the contracts appear to be sufficiently attractive to result in the rapid increase in the numbers of rural households entering into contracts with the large companies. In 1973, 4,500 registered black sugar cane growers were producing a million tons on 15,000 ha. This had grown to well over 50,000 cane growers producing over 800,000 ha by 2001 (Bamard et al. 2002). According to Meyers et al. (2001), in 2000 there were 13,000 small-scale timber contract farmers producing 100,000 tons on 31,000 ha. Due to the small size of the plots used for contract farming (1-8 ha in the forestry sector), small-scale farmers are notably able to generate a large enough income from this activity to engage in it on a full-time basis, but it does provide them with a valuable source of income to supplement their other livelihood activities (Vaughan 2001; Meyers et al. 2001). These low incomes from small plots do not seem to discourage the expansion of contract farming. In addition, increased land agglomeration and the emergence of leasehold markets are already beginning to occur in these areas.

The growth of this commercial production has been facilitated by spatial factors. It is evident from these two case studies that proximity to existing commercial agricultural regions and networks plays a vital role in facilitating access to markets. In addition, increasing efforts on the part of the private sector to secure agricultural products from communal areas have encouraged them to provide small-scale growers with access to physical inputs, credit, extension services, machinery, transport and technical advice. In the process the private sector has helped these farmers to overcome some of the constraints to cultivation. A shortage of suitable privately-owned land, growing demand for timber and sugar, and pressures to maximise the benefits of scale are some of the factors that have encouraged the sugar and timber industries to seek contracts with small-scale growers in nearby communal areas (Meyers et al. 2001). Other facilitating factors include the fact that these out-grower schemes and maize farmers have made use of the land tenure system rather than trying to change it. The transfer of food crop production from fields to gardens, the consequent availability of abandoned arable land, and the recent increase in the supply of labour are also important factors that have facilitated this growth in cash crop production.

**Conclusions**

The situation with regard to crop production in the communal areas highlights some key issues that need to be addressed in South Africa’s land and agrarian reform programme. Firstly, it is clear that the contribution crop production makes to household livelihoods has been significantly underestimated due to gaps and inadequacies in the information base. Evidence
of large areas of abandoned land has mistakenly been interpreted as evidence of the declining importance of crop production in the livelihoods of rural households. Evidence of intensifying land use practices has also not been recognised or investigated. As a result the important contribution that crop production makes to the livelihoods of a broad range of rural households for self-provisioning and cash income has not been adequately recognised. Consequently, the dominant misconception is that crop production is irrelevant and the bulk of the people living in South Africa’s communal areas are displaced urban residents who rely mostly on urban incomes for their survival and well-being. This may account for the low priority given to the transfer of adequate and appropriate land for crop cultivation in many of South Africa’s land reform projects. However, it is clear that the old distinctions between rural and urban lifestyles have become inappropriate. They do not recognise the diverse range of on- and off-farm resources and activities that rural people depend on for their livelihoods (Ardington & Lund 1996).

At the same time, the evidence highlights the broad range of socio-economic and physical constraints to crop production in communal areas that also apply to most rural land reform beneficiaries, and that need to be addressed by the land and agrarian reform programme. The importance of access to markets and support services has been highlighted, as has the need to recognise, facilitate and encourage more intensive uses of arable land. The ability to access sufficient and suitable land for cultivation, situated in areas accessible to commercial markets and basic infrastructure, has also been identified as an important factor influencing the ability of rural households to engage successfully in crop production. The extent to which these issues have been recognised and addressed in South Africa’s land reform programme is assessed later in this paper.

**Livestock farming**

Livestock was historically a key element of the pre-colonial political economies and livelihoods of African people in southern Africa (Sansom 1974; Ainslie 2002c). Today, investment in livestock continues to be a surprisingly vibrant and often preferred livelihood option for many rural people (Düvel & Afful 1996; Cousins 1999; Kepe 2002; Ntsebeza 2002; Ntshona & Turner 2002).

Since the early twentieth century, however, livestock ownership by rural African people has been officially considered technically inefficient and thus wasteful of the limited grazing resources of the country (for example, Bembridge & Tapson 1993, but see critiques in Tapson 1997 and Beinart 1984). The deterioration of grasslands and the prevalence of soil erosion in the reserve areas were blamed on overstocking and overgrazing, which were regarded as an ‘inevitable’ consequence of livestock ownership in the modified communal tenure system that prevailed in most reserve areas. There is a tendency for observers to equate communal tenure strictly with subsistence (or sub-subsistence) production and to use the commercial production system, as practised by white farmers under freehold tenure, as the yardstick of ‘best practice’ with respect to rangeland use. This view has been criticised for ignoring or downplaying the key role of historical, political and economic interventions that restricted access to land and severely limited alternatives for investment by rural people (see Cousins 1996; 1999; Ainslie 2002a; Beinart 1992). It also ignores the multiple, often under-valued uses that rural people derive from livestock ownership within a ‘diverse and dynamic portfolio of livelihood activities’
(Shackleton et al. 2000). Current revisionist perspectives on these issues argue that the total returns (not only the returns from meat and hides) from livestock (especially cattle) can be higher in communal areas production systems than in corresponding commercial farming systems under freehold or other forms of tenure (Barrett 1992; Shackleton et al. 1999).

**Types of livestock**

While most rural people throughout South Africa keep at least some types of micro-livestock, including pigs, chickens, ducks, geese, turkeys, pigeons and rabbits, these micro-livestock constitute a frequently overlooked component of the rural household economy (Lahiff 1997; Beinart 1992:184). Rather, most attention has been focused on the cattle, goats and sheep that are held in better-watered former reserves along the eastern seaboard (Ciskei, Transkei and KwaZulu) and those formerly in the then Eastern and Northern Transvaal provinces (now Mpumalanga and Limpopo provinces respectively), namely KaNgwane, Lebowa, Venda and Gazankulu. Both between and within these reserve areas, however, differences are known to exist with regard to animal husbandry practices, including the types of animals kept, and the rates of off-take of animals. In the northern and western reserve areas, cattle are actively traded, with as much as 12% percent disposed of on the formal market (Tapson 1997:2; see below). By contrast, the former Ciskei and Transkei reserves are said to have historically yielded mostly small stock, principally sheep, and their fibre products, with cattle and goats rarely traded in the formal market. The type of livestock held by rural households is influenced by gender roles and the composition of the household, as well as the degree to which traditional transfers of cattle in bridewealth exchanges and the use of oxen as draught power continue to occur.

Livestock ownership and animal husbandry in the reserve areas still follow a largely gendered division of labour, although labour constraints can cause people to ignore these normative roles. Women are generally confined to producing livestock close to the home, such as chickens and pigs (Bank & Qambata 1999:94). While widows may be the nominal owners of cattle, goats and sheep, this is usually seen as a stewardship role in that these livestock are often regarded as the property of the eldest son, who will formally take them over upon his mother's death. These gender roles can lead to changes in livestock holdings. A significant shift has taken place from cattle to pigs as the main type of livestock held since the 1980s in the Ngxingxolo village outside East London. This shift is related to, among other things, changing gender relations, specifically the increase in women-headed households, and differences in command over household labour. Women-headed households, often with their livelihood status enhanced by increased access to state welfare grants, are asserting their preference for culturally unencumbered types of livestock (that is, those not likely to be subject to interference by men) that are kept adjacent to the homestead and are thus better suited to the daily routines and labour constraints of these households, and which can be sold easily.

**Reasons for holding livestock**

Rural people have a range of reasons for holding the types of animals they do and these reasons are subject to change over time (Shackleton et al. 2000:2–3). As a result, virtually every survey of the reasons people have for keeping livestock ranks their responses differently.
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These reasons include: cash from sales, form of employment, milk for home consumption, for funeral purposes, as a form of investment, inherited the livestock, slaughter for feasts/home consumption, for paying bride-wealth, for sale of hides and skins, because land suitable for cattle farming is available, to help others, for cow dung and for draught/transport purposes. Cousins (1996:177) argues that people's reasons for keeping certain types of livestock are related to their position in the domestic development cycle: a young man with an eye to amassing bridewealth may be more interested in the short-term fungibility of his livestock, while an older man is likely to be more concerned with building his retirement herd, and with disposing of older and weaker animals to offset household expenses. Different herd structures (for example, the ratio of oxen to cows) and the corresponding propensity of people to market or exchange animals, are also influenced by whether cattle are used by households as draught in arable production.

Benefits for non-livestock owners

Livestock undoubtedly allow for a high degree of sharing of scarce resources (milk, meat, cattle-lending for draught power, as well as the collection of dung for use as manure and to seal floors and walls) with the non-livestock owning members of rural communities (Shackleton et al. 2000:3). An estimated 7% of the net annual value of all benefits derived from livestock accrued to households that did not own any livestock themselves (Shackleton et al. 1999). Less well-off households and the owners of smaller herds appear to make greater use of a larger range of goods and services provided by livestock than households that are better off and therefore able to purchase or use more alternatives, such as tractors rather than animal draught, or pasteurised milk in place of fresh or sour milk (Shackleton et al. 2001:586). Animal

Figure 1: Map of South Africa's former homelands

(see Schmidt 1992:436).
husbandry also contributes to local employment through the frequent need to hire men to herd animals and to maintain kraals. Micro-livestock, such as chickens and pigs, also contribute to local job creation. For these reasons, most rural people have a vested interest in livestock production, even if they are not owners of large herds of prestige cattle, goats or sheep (see Tapson 1997:7).

**Livestock numbers**

Historical records of livestock numbers indicate that the per capita numbers of cattle, sheep and goats fell by almost two thirds between 1924 and 1974 at the same time as the human population grew exponentially (Lahiff 1997, quoting Knight and Lenta 1980:161). However, the ownership of livestock is not equally distributed and appears to have become increasingly concentrated and unequal over time. Although the number of households owning cattle in the former Ciskei has remained the same over time, the proportion of cattle-owning households has become reduced from around 71% in 1948 to 30% in 2000 (Ainslie 2002e). Similar historical trends are evident in the Transkei (Beinart 1992). The national livestock statistics for 1995 and 1999 (Table 1) indicate that the total number of animals in the communal areas is significant and, in contrast to the national trend, has increased (although it is unclear why).

**Table 1: National livestock census data for communal areas in 1995 and 1999**

<table>
<thead>
<tr>
<th>Livestock type</th>
<th>1995</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total number</td>
<td>% of national total</td>
</tr>
<tr>
<td>Cattle</td>
<td>4.65 million</td>
<td>36%</td>
</tr>
<tr>
<td>Goats</td>
<td>4 million</td>
<td>63%</td>
</tr>
<tr>
<td>Sheep</td>
<td>3.3 million</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

Source: Palmer & Ainslie 2002

Village-level surveys of livestock ownership in the African reserves show wide differences in the percentage of households owning different types of livestock and in the average number of livestock held. The percentage of households owning cattle ranged from a mere 10% in Lebowa to 75% in some deep rural areas of KwaZulu-Natal (Cairns & Lea 1990; Schmidt 1992; Ainslie et al. 1997; Lahiff 1997; May et al. 1997; Manona 1998; Bank & Qambata 1999; McAllister 1999).

**The contribution of livestock to rural livelihoods**

The study by Shackleton et al. (1999) into the direct use value of all goods and services that could be attributed to cattle and goats in the Bushbuckridge area is probably the most comprehensive and detailed study of this subject in South Africa to date. They found that the average net annual value of these goods and services (including savings and the value of herd increase) was R2 848 per cattle-owning household, R415 per goat-owning household, and R163 per household without livestock. R1 431 per household was the mean net annual value across all households (owners and non-owners). At an aggregate level, Adams et al. (2000) have estimated the economic value of livestock production in the former reserve and South African Development Trust communal areas at R1 200 per household per annum and the aggregate value of this sector at R2.88 billion per annum. This is the ‘invisible capital’ to which Cousins (1999) refers, and it makes a significant contribution to people’s livelihoods, particularly in
the context of reports of alarming rates of retrenchment from the formal economy.

It is particularly the value of livestock as a store of wealth that observers underestimate. This safety net function of livestock is particularly important for households with only a few animals. In many cases, vulnerable rural households have managed for several years to stave off the destitution that often follows the loss of a breadwinner by selling a few livestock each year (Shackleton et al. 2000). This ‘ratcheting down’ of assets often results in the loss of all livestock for the household. Such cases are likely to increase as the HIV/Aids pandemic spreads.

Bembridge and Tapson (1993:363) consider the ‘transport’ function of cattle (that is, draught) to be an undervalued contributor to rural livelihoods. Another undervalued contribution is that of rituals, specifically those that include the slaughter of cattle, goats and sometimes sheep, to the protein (meat) and carbohydrate (home-brewed beer and other food) intake of especially the poorest rural households. Very little has been written about this topic.

There is no evidence that suggests an overall decline in the importance of livestock to rural people. Although there are constraints on their ownership of livestock, quite the opposite appears to be the case. The declining economic fortunes of many rural households is fueling an ever-greater need for livestock that can serve as a safety-net, supplementing the cash earnings sourced in the urban sector or incomes derived through claims against the state, such as pensions, grants, and so on (Düvel & Afful 1996:435; Cousins 1999).

**Constraints to livestock production**

The major constraints to livestock production in communal areas include the following:

- a shortage of grazing resources
- the large-scale abandonment of arable production in many of the reserve areas which has left livestock without a valuable source of winter forage, namely, the maize stover that was formerly fed to livestock on post-harvest arable allotments
- the poor and variable quality of livestock in the reserve areas
- prolonged droughts
- a shortage of labour for livestock herding and consequent increasing cost of employing herders
- smaller livestock numbers due to the increasing number of funerals related to HIV/Aids and related illnesses
- high calf mortality, poor fertility, disease (especially tick-borne) and internal parasites
- the deterioration of the government’s disease control programme which was centred on a compulsory dipping programme
- the low average herd size per livestock-owning household, which discourages the selling of animals and encourages consolidation strategies (Ainslie 2002a:6)
- low beef-related prices that do not reflect the ‘true value’ of the beast to the livestock farmer (Colvin 1985:388)
- the poor quality of the cattle offered for sale at stocksales
- poor transport networks to get cattle to sales and from the point of sale to feedlots or abattoirs
- poorly developed or non-existent formal marketing channels
- arbitrarily strict regulation of the movement of livestock
• inadequate abattoir facilities in accessible rural areas
• a dearth of knowledge on the part of rural people about current market prices and related
  quality criteria
• the perception amongst cattle owners that unscrupulous buyers are intent on cheating
  them (Ainslie 2002a:6).

Recorded figures for numbers of animals sold out of the reserve areas are patchy because these
sales take place in a number of different ways and on a more ad hoc basis than in the commercial
sector. Ainslie (2002e:119; in prep.) estimated that the off-take of cattle (including sales to
roving speculators, at formal stock sales, sales to fellow villagers, slaughtering of animals for
the ritual purposes, including funerals, and ‘salvage slaughter’, that is, the slaughter and
consumption of sick animals before they die) from the communal areas of Peddie district in
1999 amounted to 29% of the total herd of 24 000 animals, or nearly 7 000 head of cattle per
annum. Although the formal marketing of animals had increased over the past three years, this
level of off-take is probably not exceptional for the ‘border’ districts of the Eastern Cape (that
is, those reserve areas which lie adjacent to better-serviced, formerly ‘white’ farming districts).

The issue of ‘overgrazing’

There has been a contentious debate about the role of livestock, specifically cattle and goats,
in the supposed ‘overgrazing’ of the communal rangelands. It was once axiomatic to equate
the communal grazing systems found in most African reserve areas with overgrazing and chronic
soil erosion, but research conducted in other parts of southern and eastern Africa since the
late 1980s has challenged this simplistic model (Ellis & Swift 1988; Behnke et al. 1993; Scoones
1995). Specifically, it has been argued that semi-arid savanna grazing systems in Africa are
‘non-equilibrium systems’, characterised by a high spatial and temporal variability of grazing
resources, which encourage herders to move their animals across the landscape in order to
maximise their consumption of the available resources. Unlike rangeland systems that are in
an state of equilibrium and thus follow a predictable succession model and which can be
influenced by manipulating stocking rates, in non-equilibrium systems, changes in grazing
resources relate more closely to changes in rainfall than to changes in livestock numbers.
Taken to its logical conclusion, this approach argues that it is inefficient to apply low stocking
rates in environments in which the rainfall varies drastically, because in this situation farmers
who have stocked conservatively would not be able to increase their herds quickly enough to
make use of all the grazing available in wet years, without resorting to ‘buying in’ stock.

Shackleton (1993) extended this critique to the communal rangelands of South Africa, arguing
that the conventional indices of what constitutes ‘overgrazing’ are subjective and based on a
set of indicators – derived from ‘white’ commercial agriculture – of what rangeland in a particular
area should look like. His data support the argument that arid and semi-arid rangelands are
inherently unstable systems, driven by rainfall, fire and other episodic events, but that these
systems are very resilient and recover rapidly after droughts or periods of rest, often as a
result of significant livestock mortalities and subsequent slow herd recovery (see Cousins
1996:172). He concludes that there is ‘inadequate evidence to support the hypothesis of large-
scale degradation’ of especially the moist (more than 800mm of rainfall/annum) and mesic
(600–800mm/annum) grasslands (Shackleton 1993:73).
One implication of high spatial heterogeneity in forage resources is that livestock herds ideally need to be highly mobile to respond to grazing availability. Boundary fences and small parcels of land limit such movement within communal areas and land redistribution areas. This has placed sustained pressure on communal rangelands. In some areas of the former reserves where the apartheid government expropriated white-owned farms and consolidated these farms into the adjacent reserve (for example, in the Ciskei), these state-owned farms have been readily exploited as 'key resource' areas by the livestock owners from neighbouring communal areas, a move which effectively 'communalised' the use of these resources (see Ainslie 1999). In many other areas, where this level of encroachment has proven impossible, the scarcity of grazing, particularly during the winter months, has a negative impact on livestock productivity. Appropriate measures in these systems would be to develop flexible responses to drought and seasonal forage deficits that would allow livestock owners to more accurately align their animal numbers to drought cycles, and thus ensure that they do not either lose their animals through large-scale die-offs during droughts or have to dispose of them cheaply in an oversupplied market.

The biggest criticisms of the non-equilibrium model relate to the extent to which the model can be said to apply to South African rangelands and the silence of its advocates regarding the seriousness of degradation in communal rangelands. Undoubtedly, degradation of rangelands, often related to increases in soil erosion, has occurred in a number of rural areas, but there is still considerable disagreement about both the extent and underlying causes of this degradation. Consequently, no consensus exists on what specific changes in livestock and range management could be introduced to slow degradation down or even reverse it (Hoffman et al. 1999).

Conclusions
Livestock, although they are unevenly distributed between households, remain a critical component of the livelihoods of millions of households in the rural areas of the country. This is particularly so for the communal areas in the reserves, where the reality of a severely limited suite of livelihood options continues to pertain. The closer attention paid over the last five years or so to how rural people in the reserves secure their livelihoods has, however, made it amply clear that they cannot afford to concentrate their efforts solely on livestock or arable farming. Given their difficult circumstances, livestock production is likely to remain one livelihood option among many that they employ selectively to secure their livelihoods.

Government programmes which seek to change land and agrarian production systems should take cognisance of the embeddedness of livestock in the rural economy, especially as a form of savings. Government should, as a result, aim to promote people’s access to livestock as well as seeking to improve their existing systems of animal production.

Use of natural resources
Rural communities of South and southern Africa are no exception to other areas of the developing world in procuring a wide variety of natural resources for home consumption or sale (Campbell et al. 1997; Cavendish 2000; Campbell et al. 2002; Shackleton & Shackleton 2000; Dovie et al. 2002; Shackleton et al. 2002; Cocks & Wiersum, in press). In South Africa, this applies to
residents of communal areas, as well as to farm labourers on commercial farms. Many different resources and species are used to supply everyday needs. Nearly all rural households use wild spinaches, fuel wood, wooden utensils, grass hand-brushes, edible fruits and twig hand-brushes, and a large proportion make use of edible insects, wood for fences or kraals, medicinal plants, bush meat, wild honey, and reeds for weaving (Shackleton et al. 2002). For any particular resource, such as fuel wood or weaving fibres, several species are used. Frequently these are not directly substitutable, and resource users know the subtle differences in characteristics and properties of each. However, increasing scarcity of preferred species can catalyse substitution by a less preferred species, as can been seen in the woodcraft industry, and for certain medicinal plant species (Mander 1998; Botha 2001). Communities in the rangelands of northern South Africa frequently use more than 300 plant species. It seems that fewer species are used in the southern regions, perhaps reflecting the relatively lower biodiversity in the landscape (Shackleton & Shackleton, in press). Individual households use dozens of species. For example, any single household in the Bushbuckridge lowveld may use as many as 20 edible fruit species, 21 edible herb species and the same number of species for fuel wood. Individual traditional healers work with hundreds of different plant species, and most rural households know many of these and may use up to two dozen species for self-medication for a range of minor ailments or for charms.

Natural resources are extracted from different parts of the landscape. Some are maintained within the home space and fields, such as the most favoured edible fruit and edible spinach species (High & Shackleton 2000; Campbell et al. 2002). Others, such as fuel wood, are extracted from the lands in the immediate vicinity. More specialised resources, such as some medicinal plants, weaving fibres, durable housing poles and the like will only be found in certain parts of the broader landscape around the village/ farm or further afield. Knowledge of these resource areas is important for a household to obtain optimal benefits from the surrounding environment.

On a temporal scale, some resources such as fruit trees, thatch grass and medicinal bulbs are only harvested at particular times of the year, whereas others such as fuel wood are available all year round. Households may collect seasonal resources and process and/ or store them for use later in the year when supply is diminished (Shackleton et al. 1998). Labour constraints may be a key factor determining when and how much of a resource can be collected. Some households may collect large amounts of a resource when they have available labour, and store it for use during other times of the year when labour availability is reduced. Stockpiles are frequently accumulated when labour demands in the fields are least. The fact that resource harvesting is not uniform throughout the year is important when researching harvesting rates.

There is growing evidence that use and dependency on natural resources is not uniform within or between communities. Recent work from India, Zimbabwe and South Africa has shown marked disparities between wealthy and poor households, with the latter being more dependent upon the goods and services provided by natural resources in their surrounding environment (Qureshi & Kumar 1998; Cavendish 2000; Ntshona 2001; Shackleton & Shackleton 2002). Consequently it is vital that the rural poor are consulted about land use changes or policies and plans that affect their access to these resources. Greater proportions of poorer households sell natural resources to generate cash income than wealthier households. There are also gender and age disparities in use of specific resources (Hansen 1998).
A declining natural resource base

Whilst there is much alarmist rhetoric around the extent and rates of resource decline, it is clear that many rural communities in South Africa are faced with growing shortages of one or more of the natural resources that they require. The causes of resource decline vary from place to place and for different resource types, and hence it is difficult to identify generic issues and possible interventions. For example, the decline in thatch grass is often attributed to early and too-frequent burning by livestock owners wishing to encourage a new flush of green growth (Ntshona 2001), whereas declines in medicinal plants are seen as a result of growing commercial demand from urban areas (Mander 1998), exacerbated by a decline in the power of rural resource management institutions. The clearing of land for urban expansion and arable fields affects the supply and availability of many resources. Where resource decline becomes acute, it has a negative impact on rural livelihoods. People mention a number of coping strategies, including increasing collection times, travelling greater distances, decreasing frequencies of collection, substitution with less preferred species, making do without, purchasing the resource from elsewhere, and substitution with alternative goods (usually purchased). The effects of resource decline on direct use value and rural productivity are little understood. Of particular concern is the maintenance of the safety net role that natural resources provide for the rural poor.

The impacts of HIV/AIDS

The impact of HIV/AIDS on natural resource use and dependency is hardly documented. When coupled with a depleted resource base around the homestead or village of sufferers, it is likely that their households will lack the physical or financial means to access the required resource, thereby exacerbating their hardship and the hardship of those around them. It may well be that a family member with the knowledge of specific resources in terms of the best collection areas, collection times, sustainable harvesting methods, and the like, could become unable to harvest if he or she suffers from the disease. Thus, the resource is no longer available to the family unit, and the local knowledge may be eroded. Whilst rural depopulation was mooted as a likely outcome of HIV/AIDS early on in the pandemic, which may have reduced demand for resources, this does not seem to be the case. Anecdotal evidence suggests the opposite, in that HIV/AIDS-affected migrant workers and urban relatives are returning to the rural areas, thereby increasing demand for local harvested resources for direct consumption, as well as sale of resources for some income generation.

Growing commercialisation

It is clear that a growing number of rural inhabitants are selling raw or processed natural resources (such as firewood, marula beer, reed mats, and woodcarvings) to generate some cash income. For many it has become a full-time occupation. For others it provides supplementary income for specific items such as school fees, funeral costs, school stationery and uniforms. This commercialisation increases resource demand and undermines local authority regulations regarding resource use and limits. The drivers of this growing commercialisation are little understood, but are clearly linked to the declining resource base and the HIV/AIDS pandemic. This is currently the focus of a research programme led by Rhodes University. The consequences are variable from place to place. There is some debate that
incomes derived from commercialisation can act as an incentive for users to attempt to implement sustainable management of natural resources to ensure benefits in the future (Shackleton 2001). This may only be feasible under certain conditions or for particular resource types, such as those which grow fast, are hardy to disturbance, and widely distributed. A key aspect is security of usufruct rights or tenure (Crook & Clapp 1998), which is in flux in many areas due to debilitated rural authority structures. The large scale harvesting of local resources by non-residents is becoming more noticeable. At times, this involves physical intimidation of the local resource users, who are powerless to react.

**Changes in the macro-economy**

The link between poverty and limited livelihood options is well understood, and poverty potentially encourages resource-degrading behaviour. Thus, poverty alleviation policies are mooted to improve environmental quality. Yet, the spatial and temporal dynamics of national policies orientated towards poverty alleviation are not well understood, especially as to how they affect rural well-being and natural resource use. Economic adjustments in the mid 1990s resulted in job losses and the return to rural areas of many unskilled migrants. This took place at the same time as subsidies and state inputs into agriculture declined. These economic changes are likely to have increased the rate of extraction of natural resources for self-provisioning and income generation.

**Limited recognition by state agencies and programmes**

The low value accorded by state agencies to natural resources in people's livelihoods means that they are not accounted for in development plans and projects (Hassan 2002). For example, land reform grantees are required to provide a business plan of how the land will be used, a plan which is usually orientated along commercial lines (Shackleton 2001). Rarely does one find reference to access to and use of edible herbs, fuel wood, reeds and thatching grass in such plans. Yet these resources are important in rural quality of life, even more so during times of need. The purchase of commercial alternatives impacts negatively on the cultural and financial status of the household. The direct use values, market values and environmental costs resulting from harvesting are also not reflected in national accounts, although this is changing (Hassan 2002). This omission helps perpetuate the notion that most communal areas are economically unproductive and are in need of improvement. This lack of appreciation of the role of rural resources is also shared by the general public. Recent articles in the print media describing famine-affected rural households in the Eastern Cape headlined the observation that the families 'had to eat weeds', not realising that this is traditional and almost daily activity, not restricted to times of famine, nor to the Eastern Cape. Until planners and policy makers come to appreciate the importance of natural resources to rural people, rural reforms will always fall short of meeting the needs of the very sector and people it is supposed to support.

**3. Land use amongst land reform beneficiaries**

In this section we briefly examine whether actual land uses amongst land reform beneficiaries diverge from uses intended in the draft Land Use Management Bill and land use regulations in
the business plans of actual land reform projects. We begin by looking at the land use regulations that apply to land reform cases and then examine the extent to which beneficiaries have complied with the expectations of state agencies and the regulations. In the process of discussing actual land use and livelihood strategies, we will highlight the opportunistic ‘straddling’ tendency amongst beneficiaries and the institutional problems related to land use and management. The Land Redistribution for Agricultural Development (LRAD) policy is not discussed in depth as it is dealt with in another paper in this series.

The data on land and resource use practices and historical changes in these in communal areas indicates that land-based livelihoods make a limited but critical contribution to household livelihoods. In most cases land-based livelihoods are essentially ‘survivalist’ strategies. Numerous obstacles to production limit the contribution of these land-based livelihoods to household welfare. These obstacles include a lack of financial resources, a lack of cattle and other livestock, a shortage of labour, high risks of damage and theft, low prices and/or a lack of access to agricultural markets. In densely settled areas which have experienced significant in-migration and resettlement, these problems are compounded by a critical shortage of land, overlapping and contested rights to land, and social disruptions. Many rural land reform beneficiary groups encounter these same problems but with additional social disruption linked to resettlement and institutional capacity problems associated with the creation and maintenance of new legal entities to hold and manage land (Hornby et al. 2001). Small land grants and the acquisition of insufficient land of low agricultural potential exacerbates the problems, and makes it impossible for many beneficiaries to hope for anything more than a slight improvement in self-provisioning.

The use of newly acquired or restored land by resource-poor land reform beneficiaries tends to follow very conventional uses described amongst resource-poor people in communal areas. These land uses include individual residential sites, communal grazing for individually or collectively owned livestock, small-scale low input cultivation for self provisioning (and sometimes small amounts of income), and the use of natural resources for basic household needs. Once again, households do not subsist off these land-based livelihood strategies, but use them to supplement off-farm incomes. This seems to be the case for the whole spectrum of land reform beneficiaries from labour tenants and ex-farm workers to beneficiaries from South African Development Trust land and traditional communal areas (Levin & Weiner 1996; Cross et al. 1996). The large numbers of beneficiaries involved in most rural land reform cases and the small land grants made available by the Department of Land Affairs (DLA) to purchase land has often resulted in the land acquired being insufficient to meet the needs of such groups, particularly with regard to grazing land for livestock. According to an informant working for the Church Agricultural Project (CAP) in the Msinga area of KwaZulu-Natal, the land acquired by the beneficiaries was not sufficient to provide adequate grazing for even half of the livestock owned by the beneficiaries (Alcock, pers. comm.). In addition, much of the land acquired for beneficiaries was not suitable for dry land cultivation or had very limited potential for such use. Consequently, most beneficiaries have not been able to access sufficient land for cultivation. As seen in the communal areas of the reserves, rural households need sufficient land with a variety of key resources areas that allow them to diversify their land-based livelihood
strategies. It seems that these needs have not yet been met by the land redistribution process. Two ‘quality of life reports’ from DLA indicate that in many rural land reform projects no production is happening and some beneficiaries are worse off (Ahmed et al. 2003). This suggests that the contributions to the livelihoods of the poor have been minimal. Inadequate land and a lack of sufficient post-land transfer support have repeatedly been cited as the major problems.

**Land use regulations for land reform projects**

There are two major ways in which authorities are trying to regulate the use of land amongst land reform beneficiaries. One is through business plans for the agricultural development of the land. As part of the process of applying for land, beneficiaries are required to develop business plans that indicate how they will use the land for productive purposes and, in some cases, how they will generate income to pay back loans. In addition to business plans, the Land Use Management Bill, once promulgated, would also regulate land use amongst all land users. The intention of this Bill is to guide decision making on land use and management, and promote the use of land use management plans. It provides guidelines for the development of land use management plans and frameworks by the post-2000 municipal government structures. The five general principles upon which such planning should be developed and implemented are: sustainability, equality, efficiency, integration and fair and good governance. The Bill does not impose specific land uses, it provides a framework for the development of land use management institutions at municipal level throughout the country.

**The LRAD programme**

In 2001 the Land Redistribution for Agricultural Development programme, a sub-programme of the redistribution programme, was introduced to provide land mainly for full-time emergent black farmers. LRAD represents a shift away for providing land for the poor to providing land for agriculture for those with the means to farm. It also indicates a lack of confidence on the part of the authorities in the ability of the rural poor to engage in agricultural production for self-provisioning or for the market. Under LRAD there has been an increase in the size of the land grants available, depending on the contribution made by the farmer. As a result of these changes, there have recently been a growing number of better-resourced small family groups or individual households accessing land through the land reform programme (Bezuidenhout, pers. comm.). However, these households usually have access to some form of off-farm income and have pooled their resources to acquire the land. Some are also supplementing their grants with their own contributions and with loans to purchase the land. Among such households there appears to be a clear intention to farm, some on a commercial basis, but the land will also be used for self-provisioning. However, it seems clear that most of these households will continue to rely on off-farm sources of income. Given the importance of diverse and multiple livelihood strategies in reducing vulnerability and ensuring survival, any policy that runs counter to this trend risks being ignored or, at worst, risks increasing the vulnerability of rural households and threatening the sustainability of these land reform initiatives.

All land reform beneficiary groups applying for grants for agricultural land are required to develop business plans which indicate how they plan to use the land for agricultural purposes. However, in most redistribution cases, the development of these business plans often becomes a bureaucratic process required to obtain land grants (Bezuidenhout, pers. comm.). The plans
are often nothing more than a statement of potential commercial use of the land, based on the activities of the previous owner, drawn up by consultants or implementing agents rather than the communities themselves, although there is usually some consultation with the beneficiaries. According to informants, few if any beneficiary groups adhere to these plans, and many find that in practice it is not possible to adhere to them. A lack of capacity within DLA means that little if any post-transfer support is provided to beneficiaries to assist with the development of land-based livelihoods. Few NGOs provide this kind of support. It is usually only in cases where the private sector has initiated a project for commercial purposes that any significant post-transfer support aimed at generating incomes from agriculture has been provided. Once the transfer of land has been completed, most beneficiary groups appear to be left to their own devices. Assistance with agricultural production is delegated to the relevant provincial department of agriculture (PDoA), the private sector or the few NGOs that provide such assistance. Unfortunately, only a small proportion of communities are able to access assistance from these sources. A particular constraint is the lack of capacity in PDoA.

This lack of adherence to business plans is not without precedent. South Africa has a long history of failed attempts on the part of outsiders (particularly the state) to impose regulations on rural land users in communal areas. While such regulations and management institutions are often designed to protect against degradation and promote productive uses of land, historically they have had very negative impacts on rural livelihoods and have often been met by both active and passive resistance. Most of these externally initiated management interventions have tried to impose regulatory systems which did not take the needs of the local residents or the local situation into account. It is not surprising that they were often ignored or only partially implemented, particularly when the capacity to impose the implementation of such regulations was weak. One should not expect this to be any different now.

Cultivation

One land use change that seems to be occurring in some land reform cases is the communal rather than individual cultivation of large arable plots. This has become a common feature amongst land reform cases where the community has had to borrow money for the land purchase or where only a portion of the DLA subsidy has been used to buy the land and a remaining sum of the money is available for the purchase of agricultural goods and services. It is not clear why this is the case, particularly given the strong tradition of individual use of arable plots in communal areas, but there are a number of possible reasons. De Wet (1999) seems to think that this is an initial stage that the beneficiaries are going through during the long process of resettlement and agricultural development, and that the decision to cultivate communally may be linked to the way in which they initially acquired the land and money as a group. The fact that everyone generally gets the same subsidy, together with statutory provisions that require the creation of legal entities through a democratic and fair process, may be important influencing factors. Local democratic political traditions and ideals may also play a role. However, it may also be a consequence of the fact that service providers often insist on the need for equal participation and collective ventures, since the land is held in common through a legal entity. In such cases, all assets related to the project are also collectively owned through the legal entity.
The experience of the Border Rural Committee (BRC) of working with such communities points to another possible cause. A lack of adequate resources and experience in individual households may encourage beneficiaries to pool their resources and effort during the early stages of agricultural development. This amounts to a risk-minimising strategy. According to BRC, in the process of engaging in such group-based activities, participants in Gasela have been encouraged by their results and feel that their productivity and income levels are greater when the group works together communally on cultivation activities (Semane, pers. comm.). This has encouraged them to expand the area of land cultivated communally. Strong community discipline and good working relationships, together with the benefits of pooling resources, may enhance their chances of success.

**Livestock**

This communal orientation with regard to cultivation is not being applied in the same way with livestock farming. Livestock farming activities tend to follow the very traditional form of individually-owned livestock grazing on communal lands. The only exception that may arise is in cases where some of the government subsidy is left over after the purchase of the land, and the beneficiaries intend to use this money to purchase livestock. There are a number of cases involving ex-farm workers that are believed to have expressed an intention to own the livestock communally (Bezuidenhout, pers. comm.; Fayi, pers. comm.). This is a very unconventional notion that may not be translated into practice. Perhaps once again this is linked to the perception that everyone has an equal subsidy and the decisions are made by the group. The observation of Hornby et al. (2001) that beneficiary groups tend to avoid potentially conflictual decisions and take risk-minimising decisions may apply here too. It certainly applies to the almost universal resistance amongst land reform beneficiaries to any notions of limiting livestock numbers to manage communal grazing.

**‘Straddling’**

Inadequate land, infrastructure and support services to sustain viable land-based livelihoods on newly acquired land appears to have encouraged a high incidence of ‘straddling’ amongst land reform beneficiaries. This term refers to cases where land reform beneficiaries do not abandon their previous land and resources to settle on the newly acquired land, but make use of both sets of resources to enhance and optimise their livelihood strategies. The Gallawater land reform case near Queenstown demonstrates this trend well. In this case a group of 102 land reform beneficiaries that were relocated from the Lady Grey district (in the former Transkei) into the Zweledinga area in the north of the former Ciskei during 1977, purchased the Gallawater A farm in 1995 using a subsidy provided by the state under the Provision of Land and Assistance Act 126 of 1993 and a loan.

Research undertaken by Mokgope (2000) and Wotshela (1997) showed that only 22 of the beneficiary households had moved onto the farm. The rest remained in residence in Zweledinga but used the Gallawater farms largely for grazing. Most of those who remained at Zweledinga were unwilling to resettle onto the farm due to the lack of housing and other basic services on the farm. They also continued to use the land and natural resources available to them at Zweledinga. This included residential sites, irrigated fields and communal grazing as well as piped water, electricity, telephones, schools, clinics and roads. So, in this case, the newly acquired land was used to supplement and enhance the assets of the households and diversify
their livelihood options. It was also clear that those beneficiaries who had moved to Gallawater A had also not abandoned their bases in Zweledinga, and many developed split households. One other factor may account for the small proportion of beneficiaries who moved to Gallawater A. Many of the beneficiaries may be beneficiaries on paper but not in reality. Here we are referring to the ‘rent a crowd’ syndrome where a few people drive the project and get others to sign up in order to swell the grant size.

According to Alcock (pers. comm.) straddling is also occurring amongst labour tenants in the Msinga area that formed part of the land reform pilot programme in KwaZulu-Natal. An average of 50–60% of beneficiaries in this area have moved onto land acquired through the land reform programmes, while the rest (40–50%) remained where they were.

The Eastern Cape Agricultural Research Project (ECARP) is a land service organisation which works with a number of ex-farm worker groupings. In the experience of this organisation, ex-farm workers living in small towns want to acquire farms for agricultural purposes, mostly for grazing for their livestock but also for some cultivation. Their preference is for farms close to the towns, although this has often proved difficult because of slow bureaucratic processes and high land prices due to the growth of game farming in the region. It is clear that these ex-farm workers do not intend to live on these farms. They wish to remain in the urban areas where many of them have houses and access to schools, jobs and other basic services.

De Wet (1999) argues that the process of settling on newly acquired land should be viewed as a long and difficult process. Because most beneficiaries are poor and there is little infrastructure on the farms, it will take most of them many years to gradually build up the resources to build houses and develop the other basic services to make it possible to move onto these farms (De Wet 1999). It is also clear from some of the restitution cases in KwaZulu-Natal that some better-off land reform beneficiaries have no intention of moving back to the land they once lost and have now regained. They invested too heavily in houses and infrastructure in the areas they were resettled to, and prefer to lease out the land that was returned to them rather than move back to that land (Alcock pers. comm.).

If we look at the situation in the reserves, straddling has been taking place for a long time. However, most of this straddling has been between rural and urban areas. What we are seeing amongst land reform beneficiaries is a continuation and adaptation of this strategy in which a variety of rural and urban livelihood opportunities are used to ensure survival and well-being. One of the important implications of this for the land reform programme is that it may undermine efforts to relieve land use pressures in existing communal areas as beneficiaries continue to exploit communal resources in their areas of origin. Unless much more post-transfer support for land use is given to land reform beneficiaries, the programme is not likely to significantly reduce the pressure on land in communal areas.

Commercial production

The use of land to produce for the market only appears to feature prominently in land reform cases where partnerships with the private sector have been developed or effective support has been provided by NGOs or government. There are some cases mentioned above where NGOs are providing beneficiaries with assistance to produce crops in communal gardens which are then used to generate income for the project or to repay loans. There are also a number of examples of redistribution for commercial production on a larger scale. One case involves
major commercial sugar corporations that are dividing up some of their estates and selling them to emergent black farmers (Vaughan 2001). In the forestry sector there have also been a number of unsuccessful attempts to enter into partnerships with poor rural communities for the production of timber on land transferred to these communities through the restitution or redistribution programmes (Andrew et al. 2000). A joint pineapple production venture is in the initial stages of development on state farms in the Peddie area of the former Ciskei. This is a partnership between a community trust representing 19 villages neighbouring the state farms (40% share), a workers’ trust (40% share), and the commercial Pineapple Growers’ Association (20% share). A former manager of the Ulincor state farms has played a key role in setting up this partnership and has been employed to manage the project. In this case the state farms are being leased from DLA (Andrew et al. 2000). The main vehicle for land reform in the fruit and wine sectors has been share equity and resource-sharing projects on individual farms.

In all of these cases the successful involvement of beneficiaries in production for the market has been facilitated through significant investments of time, effort, information, finance, skills and support services by the private sector. The motivations for the private sector parties to make such investments are varied and include social responsibility and public profile concerns, the need to increase production volumes to benefit from economies of scale, the need to access more land and cheap labour, and the need to reduce costs and risks. Experience in the forestry sector indicates that private corporations can lose interest in such ventures when they become too difficult to manage or if the benefits become marginal or unattractive due to changes in the market (Mayers et al. 2001; Andrew & Fabricus, submitted).

These cases, together with the information on rural livelihoods in communal areas, highlights the potential for the expansion and growth in agricultural production for self-provisioning and the market amongst a wide variety of land reform beneficiaries from the poorest to the wealthiest. However, it is also clear that this potential will not be realised unless substantial public investments are made in programmes aimed at providing farmers with the support services and access to markets that they need. The same also applies to the harvesting and processing of natural resources.

**Institutional problems**

Weak institutional capacity and conflicts have a direct, debilitating impact on the ability of beneficiary groups to develop and implement land use management strategies and make productive use of their resources. The process of developing the managerial and institutional capacity to enable settlement and agricultural production on redistributed land is difficult and lengthy. Even the most cohesive and well-organised groups encounter significant difficulties and conflicts which often result in the group avoiding decisions (De Wet 1999) or adopting ‘risk minimizing decisions and strategies’ (Hornby et al. 2001). Internal differences in aspirations, experience, skills, incomes, resources, education levels and orientations make it difficult for groups to make consensus decisions or decisions that accommodate the different needs within communities. These difficulties are greatly exacerbated when the beneficiaries are living and working in different locations without sufficient communication and transport networks, which is often the case (De Wet 1999; Wotshela 1997).

There are also a number of different types of institutional problems that complicate the process of land reform and impact on land use. Overlapping institutions and conflicts between
existing and new institutions are one case in point. These problems are evident in some areas such as KwaZulu-Natal, where the new legal land-owning entities (usually communal property associations or trusts) are created on top of pre-existing traditional land administration institutions such as tribal authority structures (Hornby et al. 2001). Then there is the case of farm workers and ex-farm worker groups. These beneficiaries come from diverse, sometimes unrelated, backgrounds, with no pre-existing institutions or organisational experience, little capacity and low levels of education. This absence of any pre-existing institutions means that these groups have an extremely limited capacity to develop and maintain management institutions, and they therefore require a heavy investment of ongoing outside assistance (Naidoo, pers. comm.).

Given these institutional problems, implementing the land use management legislation and enhancing management capacity in communal areas and amongst land reform beneficiaries will not be easy. Firstly, there is a concern about whether rural residents will have the opportunity to participate in the process of developing land use frameworks which takes place at a municipal level. Although the legislation requires that all affected parties participate and that they are assisted to do so, given the limited capacity at local government level, it is difficult to imagine how the necessary assistance will be provided to these communities to enable them to participate fully. In addition, the considerable conflicts in some areas between traditional authorities and the new government structures will also present a major obstacle. The tendency amongst disadvantaged rural communities to avoid making potentially difficult and conflictual decisions, together with widespread institutional problems at the village level, will make it very difficult to effect any changes in land use in these areas through these frameworks. There is also likely to be considerable resistance to any measures interpreted as attempts on the part of the state to interfere in local land use, thus indicating the need to build upon rather than override the customary land use practices of poor people.

Co-ordinated municipal planning is necessary, but effective land use management in communal areas could only be possible if it is developed and implemented by legitimate management institutions at the village level. Given the severe shortage of land and the oppressive history of state intervention in land use, external attempts to impose land use regulations and plans are likely to be ignored or resisted, even if they come from legitimate municipal government structures. There is little hope for effective land use management in communal areas without strong and legitimate village-level decision-making institutions. Municipal government institutions are too distant and lack the capacity to fulfil this role. Even some communal property associations involving large numbers of beneficiaries spread out over a wide area or living in different locations are probably too large to manage land use. They might be able to oversee, monitor and provide advice, but are unlikely to be able to implement or impose land use management programmes at the village level.

It is no simple matter to develop effective administrative and management capacity at the village level. This is particularly the case in beneficiary groups which have been relocated or had their numbers swelled by new immigrants, or are composed of a diverse group of ex-farm-workers who may have few ties to one another, or where considerable conflicts exist between traditional and civic organisations. Even in many relatively settled communities in communal areas, local land use management institutions are weak and ineffective. In Gwabeni village in the Ciskei, Ainslie (1999) found that absenteeism amongst household heads and livestock
owners, together with customs, attitudes and activities that undermine or limit the participation of women in community decision-making structures, seriously undermined the ability of the Gwabeni community to manage land and resource use. Social inequalities and differences in priorities and interests between different stakeholders exacerbated the problems.

4. Conclusions
The land use practices and livelihood strategies adopted by poor rural people are influenced by the amount and productive potential of land available, tenure security, customary uses, and access to labour, labour-saving technologies, co-operative social institutions, capital, livestock, knowledge/skills and markets for inputs and outputs. An effective state-sponsored programme aimed at enhancing rural livelihoods cannot expect to achieve this objective through a narrow focus on land redistribution alone. A broader multifaceted strategy that can alleviate a wide range of constraints to production is needed. An examination of land use and livelihoods amongst land reform beneficiaries supports this argument. In theory, providing additional land to existing dense settlements should enhance land-based livelihoods by alleviating the shortage of land and natural resources. As indicated in Shackleton et al. (2001) and in this report, the benefits that rural households in existing communal areas derive from crop and livestock production and natural resources are significant, and much greater than previously thought in academic and government circles.

While the land reform programme has the potential to enhance rural livelihood opportunities for self-provisioning, in many cases it does not appear to have achieved this. Taking De Wet’s (1999) views into account, it may take some time before land reform beneficiaries are able to realise the benefits of access to more land due to acute resource constraints. This suggests that it may be too soon to assess whether land redistribution has enhanced land-based livelihoods. Other factors that may undermine the potential of land redistribution to enhance land-based livelihoods include: the transfer of low potential agricultural land and the lack of basic infrastructure on this land; the transfer of land that does not provide a variety of key ecological resource areas to support diverse livelihood strategies; the transfer of small areas of land to large numbers of beneficiaries; the transfer of land distant from currently occupied land; and the lack of post-transfer support services aimed at enhancing land-based livelihoods. In addition, the lack of effective management institutions in situations where large numbers of beneficiaries gain access to insufficient areas of low-potential land may quickly result in the degradation of these resources and undermine the potential for the enhancement of land-based livelihoods.

We can be much more confident in asserting that land-based livelihoods can be enhanced in cases where larger areas of land or going agricultural concerns are transferred to fewer people and significant post transfer support services are provided. However, this only benefits a few. The more difficult task is to find ways of enhancing land-based livelihoods for the majority of the rural poor. One option is to accept the straddling strategy as a necessary and effective interim strategy to maintain and enhance rural livelihoods for the poor. It allows them to maintain their existing livelihood strategies and enhance them through the use of additional land and natural resources.
Farming is one of a package of livelihood strategies adopted by poor rural people. Even well-off rural households investing in commercial farming still rely on earnings from off-farm sources to supplement household income and generate capital to invest in farming. The increasing reliance on diverse livelihood strategies has been recognised as an essential risk-minimising strategy by rural households. Farming is a very risky business due to the vagaries of the weather and the volatility of agricultural markets. Globalisation and liberalisation processes have increased the risks of farming by reducing the level of protection and support for farmers and increasing the competition from heavily subsidised agricultural products on the international market. We need therefore to accept and support the need on the part of land reform beneficiaries to diversify their livelihood strategies.

Having said this, it is still clear that not enough is being done to encourage the growth of small-scale commercial crop production such as the out-growers in KwaZulu-Natal. To achieve this, there is an urgent need to facilitate access to markets. Improvements in security of tenure in communal areas could also enhance this process. Much more could also be done to promote the growth of viable rural livelihoods related to livestock farming or natural resources though improved access to (input and output) markets and support services. There are also considerable opportunities for the growth of value-adding enterprises such as tanning and leatherwork, if access to markets can be secured.

Despite widespread concern in government and NGO circles about poor land use management in land reform cases, viable and effectively implemented land use management is almost completely absent in South Africa’s land reform programme. Although there are few problems with regard to use of individual residential and arable sites, the use of grazing and natural resources appears to be completely unmanaged. Interviews with key informants working with land reform beneficiaries indicate a widespread resistance on the part of beneficiaries to consider any limitation on livestock numbers. This is to be expected given the history of dispossession, the anger and resistance to livestock limitation efforts during the apartheid era, overcrowding in communal areas, and the widespread dependence on livestock farming to supplement household livelihoods.

The situation is one of too little land, too many people, widespread resistance, very limited capacity and major institutional conflicts. Trying to impose rigid land use management plans in this context is a pointless exercise. It is difficult to see how effective land use management can develop unless all of these problems are addressed and the problem of land shortages is prioritised. The current thinking in rangeland management suggests that an adaptive management strategy may be more appropriate than the imposition of strict limits on livestock numbers based on traditional measures of carrying capacity. Such a strategy would have to be developed and applied by local land users based on their assessment of the local situation and would need to respond to changes in biophysical and social factors. The development of effective village-level management institutions would be an essential element of this strategy. By ‘institutions’ we mean not just organisations, but also rules, norms and practices. While some less disturbed rural communities in the old reserves may have effective institutions that already practise adaptive management strategies, most groups of land reform beneficiaries are not likely to have such institutions. Appropriate and legitimate structures may exist in some beneficiary groups, but the norms and practices may still need to be developed. In some cases
there may be structures but these may not be legitimate. In many cases it is possible that no structures, norms or practices exist. The effort required to develop these institutions will be substantial. The traditional technocratic approach of setting and imposing limits and regulations often appears to be an easier option, but experience has shown that this does not work.

The way forward

The political, social and economic changes wrought during the colonial and apartheid eras did not just take away the land that belonged to South Africa’s black people. It also took away labour, livestock and savings, interfered with customs and traditions, and manipulated and disrupted (and in some cases destroyed) households, kin and neighbourhood relationships and social institutions. In the process, the wealth and productive agricultural capabilities of rural people were seriously undermined and eroded and their participation in the South African economy constrained largely to very limited off-farm wage employment, and the consumption of commercial goods and government grants and basic services.

A well-funded and large-scale land redistribution programme could restore the land lost, but a narrow focus on the transfer of land cannot even begin to address the other social and economic losses and disruptions. On its own, land redistribution is unlikely to enhance the livelihoods of the rural poor beyond a survivalist level. It also cannot ensure that small-scale or large-scale commercial farmers will expand their involvement in agricultural production for the market. In order to address these issues, the land reform programme needs to be part of a much broader economic, social and political rural development programme. We need to recognise that land reform is a necessary but not a sufficient condition for rural development.

Such a rural development programme (including the land reform programme) should address the livelihood needs of a wide variety of rural households. Only a small minority of rural households are able to generate substantial incomes from the sale of agricultural and natural resource products. If poverty alleviation is an objective of this rural development programme, then the programme must aim to do more than promote subsistence. It must provide opportunities for rural households to improve and diversify their livelihood options and, in particular, enhance the contribution that land-based activities and resources make to household incomes. These incomes do not have to be large or equivalent to full-time wage employment, but should supplement incomes derived from a number of other sources. In order to achieve this, rural people need more land, more tenure security, more support services, and effective access to markets for inputs and outputs.

Critical issues facing land and agrarian reform

The enhancement of land-based livelihoods for the rural poor requires much more substantial investments in the redistribution of land to alleviate the shortage of land amongst the poor and those farmers who are willing and able to engage in agricultural production for the market. The land redistribution programme as a whole has not provided adequate quantities of land to meet the needs of the poorest residents or the small-scale market-oriented farmers living in the communal areas. Perhaps this is because the authorities do not recognise the importance of land-based livelihood strategies amongst the rural poor, or have little faith in the potential for these livelihoods to be enhanced.

The redistribution of land is necessary but not a sufficient condition for the enhancement
of rural livelihoods and rural development. Many but not all rural people need greater access to land. However, most rural residents need enhanced security of tenure and better access to markets and support services to enhance their land-based livelihoods. Very few land reform projects, except those initiated by NGOs or the private sector or in partnership with the private sector, facilitate the integration of beneficiary groups into commercial agricultural markets or provide opportunities for rural households to generate small amounts of income from their agricultural produce or natural resource products.

Relying on the private sector or NGOs to meet these needs is obviously not working and cannot meet the scale of the demand for such services. While the role of these sectors should be encouraged, there is a critical need for much greater direct state support in the development and expansion of markets and support services for small-scale and emergent producers.

There exists the potential to create a network of national, regional and local institutions which can stimulate and support the development of the full range of rural enterprises, including the production and sale of agricultural produce and the harvesting, processing and sale of natural resources (Philip 2000). This model should be taken into serious consideration as a vehicle for promoting economic development in South Africa’s reserves and amongst land reform beneficiaries. However, if it is to facilitate the production of a wide range and large volume of agricultural products for the market, then this network of development centres would need to do more than provide training, inputs and support services. It would also need to provide opportunities for producers to access non-local markets for agricultural and natural resource produce. In the absence of direct contracts between producers and large agri-corporations, the large number of scattered small-scale producers need someone or some institution that can buy their produce, store it, transport it and sell it to the wholesalers, agri-corporations or retailers in urban centres.

Policy recommendations

1. South Africa’s land reform programme should strive to enhance the multiple livelihoods of a wide range of rural land users. It should not be limited to the wealthier elite with interests in large-scale commercial farming, but recognise the high value of land-based livelihoods for self-provisioning and small-scale income generation.

2. The different needs within rural communities need to be recognised and efforts made to ensure that the most marginal groups are successful in accessing the support they need.

3. Higher priority and attention should be paid to exactly how beneficiaries are going to produce an income from the land they acquire, how land-based activities can be integrated with other livelihood activities, and how livelihoods can be sustained over the longer term.

4. Land redistribution initiatives must plan for and implement schemes that allow people to practise diverse livelihood options aimed at improving security and reducing vulnerability, and thus should allow for arable farming, livestock husbandry and sustainable cropping of natural resources, rather than a concentration on one of the three.

5. The scale of land redistribution should be substantially increased to allow more people (including the poorest groups) to access sufficient agricultural land for crop and livestock
farming and the harvesting of natural resources.

6. The choice of land for redistribution should be guided by the livelihood needs of beneficiaries. The agricultural potential of the land, the availability of a variety of key resource areas, and proximity to markets and processing networks and basic infrastructure should inform the choice of land for redistribution rather than the availability of land on the market. This would require the state to adopt a more co-ordinated and interventionist approach to land acquisition.

7. Legislation aimed at providing greater security of tenure for residents of communal areas must be developed, adopted and implemented as a means of facilitating the growth of leasing and sharecropping arrangements that could stimulate the growth of agricultural production for self-provisioning and the market.

8. The land reform programme should recognise the importance of small plots and gardens for self-provisioning and adapt settlement planning processes to facilitate the intensification of cultivation in homestead gardens. This may require giving beneficiaries a choice of types of residential sites that range in size, location and access to services.

9. The land redistribution programme should take cognisance of the embeddedness of livestock in the rural economy and aim to promote people’s access to livestock as well as to improve their existing systems of animal production, through the expansion of animal husbandry and veterinary services.

10. A great deal of support should be directed towards the development of local institutions which are tasked with overseeing the management of common property rangeland resources in order to maximise production and ensure the sustainable use of grazing resources.

11. Aspirant black commercial livestock farmers in the reserves should be targeted as land reform beneficiaries in order to relieve some of the pressure on grazing resources in the reserve areas.

12. The initiation of a livestock marketing programme such as the AgriLink programme, informed by detailed research about existing rural livestock markets, could strengthen local capacity to manage viable rural livestock and commodity markets (for example, wool).

13. Land reform should be integrated into a wider agrarian reform and rural development programme aimed at enhancing the multiplicity of diverse rural livelihoods. As part of this process, considerable investment should be made by the state in developing the institutional capacity (including private sector capacity) to deliver the inputs, outlets and support services needed by rural households to enhance (on and off-farm) livelihoods beyond the survivalist level, and begin or expand production for the market. Such institutions could provide the support needed to bring developing enterprises within reach of poorer households, particularly those headed by women.

14. The private sector and commercial traders should be given incentives and assistance to expand market opportunities for rural households and land reform beneficiaries.
Endnote

1 Little of the published literature on South African land reform cases gives much attention to land use issues. Consequently, it was necessary to supplement the information from this literature with the views and perceptions of outside support agencies working with land reform beneficiaries. A list of key informants is in the Appendix.

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Appendix: List of key informants

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<thead>
<tr>
<th>NAME</th>
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<tr>
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