



THE ARID AREAS PROGRAMME

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South Africa's Karoo: A study of Economic Marginalisation and demographic change



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SOUTH AFRICA'S KAROO: A STUDY OF ECONOMIC MARGINALIZATION AND DEMOGRAPHIC CHANGE IN SOUTH AFRICA'S SEMI-ARID INTERIOR

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Abstract

Arid and semi-arid areas are often considered environmentally and economically marginal which has been exacerbated by economic realities, shifts in agricultural production and land use, policy implementation and general perceptions of the regions. This paper explores these themes with reference to a semi-arid landscape collectively referred to as the Karoo region, covering approximately 20% of the geographic space of South Africa and used primarily for extensive livestock farming. Despite a long-term decline economic declines, particularly in terms of agricultural output which reached a head in the 1970s, the demographics of the region, and that of the largest service centres in the area in particular are growing. While there are very real socio-economic needs and development backlogs, the situation has been exacerbated by the reality that the area has been politically marginalized. The small towns of the area are focal points of investigation and provide a lens into the economic dynamics of the area in the sense that most of the region's population live in these centres which are the key service, collection and distribution centres for what traditionally has been an agriculturally based regional economy. By the 1970s structural decline had set in and while recent trends suggest a selective and partial reversal of fortunes, in many rural districts and small towns, little seems to have improved since then. The Karoo spans the boundaries of four provinces, which have no defined response to dealing with the Karoo and its challenges. In addition, national governments see urbanization to the larger cities as inevitable, and have no complementary rural / small town development strategy which makes areas such as the Karoo underprovided for in terms of urban services. This paper provides background details regarding the Karoo, associated economic and demographic changes and policy neglect to explore the concept of marginalisation within the region.

'...society changes over time. The division of strength and power also changes both geographically and functionally' (Leimgruber, 2004, 4).

Introduction

Marginalisation manifests itself in a wide variety of forms and scales, one of the more apparent is when whole regions portray characteristics that, in relative terms, are perceived as marginal, based on diverse understandings – economic, environmental, social and political – from that found in surrounding areas. This is more evident in the geometric and environmental uniqueness of the extensive arid and semi-arid areas of the world, such as the South American pampas, the Australian Outback and the South African Karoo, which often played a critical role in the development of those

countries. It is however important to note that regions can, in relative terms, undergo a process of inversion, from being a central to a peripheral region and vice versa (Reynaud, 1981 in Leimgruber, 2007). Just such a process has taken place in South Africa's Karoo, a vast, semi-arid interior plateau covering 400 000 square kilometres, which was once the economic heartland of the country, by virtue of extensive rangeland agriculture which dominated the nineteenth century rurally-based agricultural economy of the country. However, by the twentieth century, with the development of more productive farm land and irrigation technology elsewhere in South Africa, industrialization of the country and a series of perceived economic and ecological crises, the Karoo was displaced from its former dominant economic role. In parallel, and to some extent possibly as a consequence of its increased marginalisation and distance from the new economic hubs of the country, the Karoo came to be perceived as a dry wasteland of little value, in which farming practise were often the direct or indirect cause of environmental degradation. Declining investment and agricultural produce have impacted directly on the viability and status of the rural service centres of the region, which had originally developed to meet the needs of agriculturally-based communities. Such centres were not only directly influenced by the changing fortunes of the farming economy, but also became the receiving areas for displaced farm workers and their families.

By the 21st century, the Karoo has lost much of its former stature as a unique region, being divided between four provinces, each of which see their part of the Karoo as a remote, rural interior distant from the economic mainstream. In addition, current national spatial economic policy regards the entire Karoo region as one of very low economic potential that does not justify significant infra-structural investment and is perceived to be heavily reliant on welfare support. Despite this recent political marginalisation, as will be discussed below, the Karoo reached a particular economic low-point in the 1970s. Since then, there has however, in line with the concept of inversion, been a partial reversal of fortunes in that certain of the larger centres with their diversified economies where non-agricultural driven growth has often driven change.

This paper provides a context for the study based on marginalisation literature, before proceeding to detail the situation and site of the Karoo, with a particular focus on the service centres which act as windows into the processes within the surrounding, agriculturally dominated, hinterland. They were originally established to meet the needs of the emerging rural economy, but since then these roles have often changed. The status quo in the Central parts of the Karoo, as it was in the 1970s is then examined. This was a particularly low point in the economic fortunes of the area which occasioned a significant flow of literature which is referred to. Given the degree to which long-term structural decline in the Karoo came to a head in the 1970s and the associated focus of government and related reporting this occasioned, specific emphasis is placed on period-specific data which indicates the nature of the decline which the Karoo experienced in the 1970s. Key sources in this regard are: the Central Karoo studies which were funded by the then Department of Planning and the Environment, the Cape Provincial Administration, and the economic districts covered in the study (Le Clus 1974: Introduction). The "Midlands-Karoo reports" consist of several studies undertaken in the early 1970s. In particular, there were three important studies, done by John Banach (1969), Gillian Cook (1971) and Jesmond

Blumenfeld (1971). These studies were commissioned by the South African Planning Advisory Council.

The study then proceeds to an examination of key economic and demographic data, extending from the earliest records to the present day, to establish if the area is experiencing economic marginalisation and decline and potentially associated population loss that would either accompany or result in economic decline. In the case of this latter section, as detailed below, the focus is on part of the Karoo for which long-term data is available. The paper argues that the notion of marginalisation is, to some extent, one of human interpretation placed within situation-specific contested social, political and economic-constructs and it is perceptions as much as 'real' economic and political shifts which create the idea of a region being 'in decline' or 'marginal'.

In the last section of the study, a case study approach has been adopted, whereby a sub-region of the Karoo, as opposed to the entire spatial entity, has been selected. The sub-region (see Figure 1) was chosen based on availability of comparable and continuous census data records over an extended time period. Identified trends in the study area, based on nearly 100 years of continuous record, illustrate the three core themes of the study, namely: shifts in agricultural production, small town and rural demographic change and changing small town economics. In addition to relying on a series of core interviews, agricultural data was extracted from the government agricultural census published from 1928 to 2002. Demographic data was obtained from the national census undertaken at regular intervals from 1904 and supplemented with recent data extrapolation produced by the firm Global Insight (2004). Finally, business data was derived from a survey of business directories from 1888 to 2006 (data sources are detailed at the end of the document). The study area for this part of the paper is bounded by the current political boundary of the Eastern Cape province and for purposes of this study, the area is referred to as the 'Eastern Cape Karoo' (see Figure 2).



Figure 1: Situation of Study Area
 Source: GSU, Rhodes University, 2007.

Marginalisation

Critical in geographical research are the concepts of spatial and temporal disparity, particularly as seen through the lens of longitudinal studies. Inherent in the distribution and function of economic activity across geographical space is the concept of the unequal distribution of resources, activity and control which is seen as implicit in a neo-liberal world order associated with the notion of geographical unevenness (Harvey, 2006). Difference across space expresses itself in both actual and perceived variation between regions, which themselves can be artificial constructs (for example political regions) as much as they could be distinctive geographical units (such as a river catchment basin).

Geographical analyses has traditionally focussed on quantifiable, objective regional disparities and disadvantages but more recently have begun to take cognisance of more qualitative social and cultural aspects which reflect differences both actual and perceived. This bears out Leimgruber's statement that 'the study of marginality is not simply 'objective' research but it is related to human perception' (Leimgruber, 2004, 16). In the case-study of the Karoo changing human perceptions of the region have influenced its perceived status and place in the national economy.

Assuming that geographical unevenness is a reality, certain areas will emerge as peripheral or marginal to those more centrally positioned and/or economically dominant. As has been noted, marginality can be an absolute or a relative term, which may exist as a result of economic, social, political and even perceptual processes, leading a situation in which 'marginal' areas are seen as falling outside the 'system'

(Schmidt, 1998 in Leimgruber, 2004). In absolute terms, marginal regions are areas 'located at the margin of a system as regards its socio-economic features' (Andreoli, 1992 in Leimgruber, 2004, 58), which can refer to rural areas and even inner-urban areas within cities. Marginality can also be understood as a relative concept whereby areas differ, relatively from each-other in quantifiable terms and in terms of perceived differences, leading to relative marginalisation. At another level, over and above absolute and relative differences, marginality needs to be understood as a subjective issue, whereby in terms of individual or group perceptions, certain places or peoples are perceived to be relative marginalized if they do not conform with the mainstream. Finally, value issues are associated with the concept of marginality, hence, 'marginal is understood as a synonym for disadvantage, deprived or underprivileged' (Leimgruber, 2007, 6).

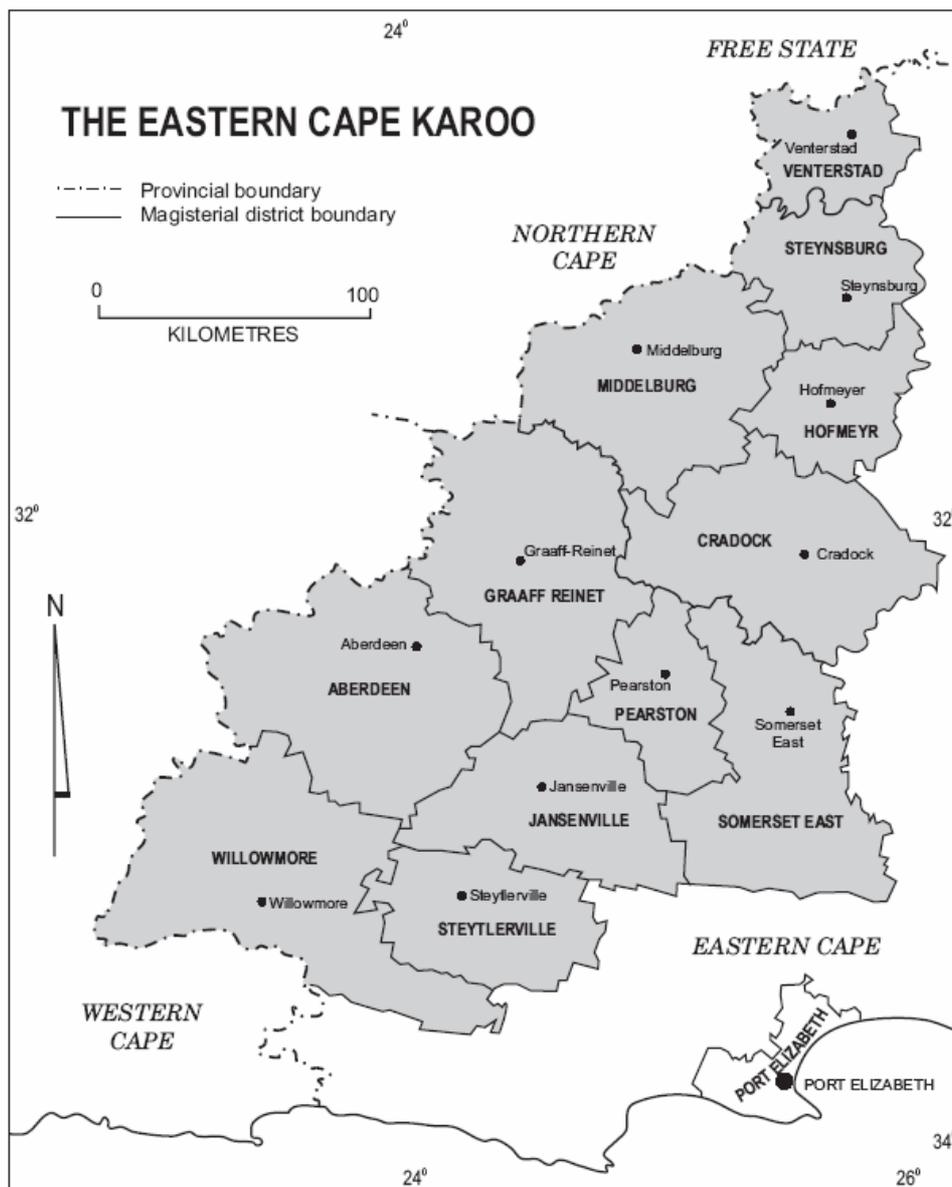


Figure 2 Detail of the Service Centres and Farming Districts in the Study Area
 Source: GSU, Rhodes University, 2007.

The process of evolving marginalisation of an area, such as the Karoo can be partially explained through the use of the interpretation adopted by Michigan geographers (in Leimgruber, 2007), namely that there are two primary types of marginality:

- a) Contingent Marginality, which is a result of the prevailing neo-classical economic framework and resultant intentional and unintentional geographic unevenness; and
- b) Systemic Marginality, which is the result of controlled political and economic frameworks, where hegemonic political and economic systems produce inequities in the distribution of social, political and economic benefits.

A by-product of the preceding is collateral marginality where-by surrounding regions could be negatively impacted on (Leimgruber, 2007). The case study however contends that such impacts are not necessarily always that clear-cut or of a negative nature, in that neighbouring or internal sub-regions may benefit, often at the expense of poorer areas.

Clearly the economic fortunes of regions evolve as a result of inherent economic characteristics, political shifts, changing land use and associated human perceptions and interpretations there-of. These in turn manifest themselves either in decisions to invest or disinvest and/or to influence associated systemic processes, which in turn can enhance or diminish the perceived centrality or marginality of a region. The latter is manifested in issues ranging from locational choice and settlement behaviour to migratory responses and urbanization and functional shifts in a region's economy and the location of activity within it.

A key finding of marginality research is the recognition that marginality is the outcome of the process of marginalisation, which does not necessarily create a fixed end-product. In addition, as noted above, Reynaud (1981 in Leimgruber, 2007) argues, 'inversion' can occur where-by a central region can become a peripheral one over time and vice versa. A dichotomy clearly exists between absolute economic differences e.g. the loss of mining in a region and relative or perceived differences in a region's value, e.g. the perceived value of a region as a tourism destination at a particular point in time. Hence, the definition of marginality becomes more awkward as will be shown through the evidence examined below. Consequentially, reality is 'not composed of extremes but of continua between extremes: a region is more or less marginal or central, depending on the point of reference from which we measure a specific quality' (Leimgruber, 2004, 39).

Reinforcement for the idea that marginality is neither fixed nor necessarily negative is the stimulus effect which change and relative marginalisation can bring about. There can be a relative trade-off between the loss of one area's activities and the gains of another e.g. banking and retail facilities centralizing in one of two areas following decline. Secondly, the decline of activity can help catalyse the creative search for economic alternatives, for example a shift in farming type. In the case of the latter, 'marginality may also be a source or stimulus of new ideas to solve the problems at the root of marginality and to develop solutions to distress' (Leimgruber, 2007, 9).

The Karoo Region

The Karoo is a semi-arid area of approximately 400 000 km² situated in the central and western interior of South Africa. It can be considered as a single eco-system, sub-

divided into the winter rainfall Succulent Karoo and the summer rainfall Nama Karoo by Rutherford and Westfall (1986) and Archer (2004) or as the Nama-Karoo and Succulent Karoo by Mucina and Rutherford (2006). It is characterised by a low population density (as low as 1.3 people / sq km) and an economy dominated by extensive rangeland agriculture. Urban settlements are widely dispersed and generally developed to service the farming, religious and administrative needs of the scattered farming communities. It is a region with an obvious west-east environmental gradient and has been subject to significant fluctuations in its economic fortunes, which have impacted on the area's demography and service centres.

In the nineteenth century the Karoo and associated pastoral activity dominated the national economy and production and the region could be regarded as having been the economic heartland of the country. By contrast, following a century of drought, war, industrialization and urbanization today the region could certainly be described as one with 'an image problem' and most people perceive the region as a harsh, degraded desolate landscape which one travels through along the main highways of the country between Cape Town and Johannesburg. According to an extreme view, the Karoo has been termed 'the dust bin of creation' (Rose's Round-Up, 2004). Such views have been fueled by the perceived decline and depopulation of the rural hinterlands and the loss of functions in small rural town (Maree, 1970; Smit, 1973).

In the contemporary period as a result, the Karoo has come to be perceived as being an area:

- in economic and demographic decline
- marginalized through its division into four provinces,
- in agricultural decline,
- with a denuded landscape and,
- with assumed small town decline.

This assertion reflects on the dominance of an urban-based value system and the perceptual as opposed to factual marginality of the region.

However, according to Beinart (2002, xix) and as we argue 'the Karoo is not simply an arid wasteland, to be viewed listlessly from railway windows, or conjured in exile reminiscences as the quintessence of an untouched South African landscape. It was not an underdeveloped backwater'.

South Africa – The Evolving Pastoral Economy of the Karoo

Prior to the mineral discoveries of the 1860s and 1880s, the South African economy was dominated by an expanding and extensive pastoral farming frontier in what was then the Cape Colony. European settlement of the interior took place from 1700 and extended well into the nineteenth century (Hoffman et al, 1999). Land was allocated by a perpetual inherited lease system to farmers by the colonial authorities, initially on the well-watered coastal plains and later in the semi-arid interior region of the Karoo. In 1829 it was recognised that 2500 ha was insufficient for commercial pastoralism in the Karoo and the authorities allowed land allocation to increase up to 12500 ha in the Kalahari. The extensive nature of the pastoral system is indicated by the fact that 99% of the 27.5 mn. ha has a carrying capacity of only 1 small stock unit / per 3-6 ha. This required much greater space, and caused two steady migration streams of farmers searching for land: The northerly migration proceeded up the west coast, and then

migrated in an easterly direction to the Cold and Warm Bokkeveld, and thereafter to the Nuweveld mountains in 1760, in the district of Beaufort West. They then migrated further eastwards, to reach Camdeboo (Graaff-Reinet area) in 1770. The easterly migration trekked along the Bree River, past the Robertson area, to reach the Great Brak River in 1730. This group crossed the Langeberge to reach the Small Karoo, although some proceeded in the direction of the Sneeuberge to reach Camdeboo in 1765. By 1780, the farmers had taken possession of virtually the entire Karoo (Vrey 1974: 6). By the early 1800s, the stock farmers had proceeded across the Orange River.

Prior to 1870, the agricultural and pastoral resources originating from this region dominated the economy of the country, in particular sheep wool that was critical to the development and expansion of the industrial revolution in Britain (de Kock, 1924). Beinart (2002, xiv) confirm this by noting that ‘for much of the period from about 1830 to 1950, pastoral production’ and wool exports were ‘the greatest staple of the country’ (de Kiewiet, 1941, 57). According to Nattrass (1981, 23) ‘the South African economy of today has its foundations in the discovery of diamonds and gold, dating back to the latter period of the 1860s. Prior to the discovery of these minerals, the economy was predominantly agricultural in nature and the rate of economic development very low’.

Over time, the growing demands for wool by the British industrial economy, led to an intensification of production, investment, the introduction of barbed wire and windmills which facilitated intensive production and new animal breeds suited to arid conditions, such as merino sheep and angora goats (Christopher, 1982; 1984a, b). Sheep numbers rose from 2 mn in 1845 to 6 mn in 1855 and 21.8 mn in 1911, with growth then being checked by drought, overgrazing and depression (Christopher, 1982). By the 1850s wool exports had increased 200-fold to 10 000 tons p.a. (Christopher, 1982; 1984b). These changes gradually transformed the small, largely self-sufficient farming districts into areas with growing linkages with an external economy dominated by Britain. Within this process small towns acted as conduits of trade, services and retail.

Sustained growth petered out in the early twentieth century through drought, devastation of the rural interior through the scorched earth policy of the British military during the Boer War and possible over-stocking and the associated erosion of grazing land in certain districts. Concerns related to enclosure of lands increasing pressure on grazing camps, the abandonment of traditional migration of stock and the farming of marginal land all played a role in this process (Christopher, 1982). In parallel, the ‘closing’ of the expanding frontier, overpopulation and uneconomic subdivision of farms all hindered growth. By 1963 one-third of all farms were regarded as being uneconomic units. Despite attempts by the Dutch Reformed Church and the Land Bank to stabilise farming communities, decline continued, exacerbated by recurrent droughts and the gradual urbanization of farming communities in an increasingly industrializing economy (Christopher, 1984b). Depopulation by the economically dominant white population was especially noteworthy with the abandonment of up to half the homesteads in some small stock districts in the twentieth century, with the rural white population falling from 98 000 to 20 000 from 1911-1980 (Christopher, 1982).

From the early twentieth century, the state had sought to stabilise rural communities and improve farming conditions through various schemes, such as subsidized voluntary stock reduction, encouraging rotational grazing and seeking to inhibit erosion of grazing land. The effects of such interventions were partially nullified by limited uptake, shifts in market prices and serious droughts, particularly in the 1970s that led to widespread farm abandonment. In recent decades, the situation has stabilised as farming has come to be dominated by a reduced number of skilled and well-resourced farmers, who have a scientific practical approach and have taken over multiple small, economic units to form more productive agri-business enterprises.

As a result of the above, former small-scale pastoral farmers have been displaced and the new farmers have differing urban needs, now bypassing the small, under-resourced smaller urban centres in favour of a limited number of core centres. The net result is a radical shift in the nature of the rural economy and the function and nature of the small towns within it. In overall terms agricultural intensity and associated output appears to have fallen as more sustainable practices are followed. This and the diminishing overall role agriculture plays in the national economy has seen the Karoo shift from being the economic heartland, to in relative and perceptual terms a marginal area.

In contrast to the twentieth century government focus on farming concerns, in recent years the post-apartheid government is adopting a strongly urban-orientated policy focus. This reflects the reality that the majority of the population has now urbanised and that the economy is dominated by the wealth production of the larger cities. In policy terms the 2003 National Spatial Development Programme and the 2007 Regional Industrial Development Strategy have divided the country into areas of high and low resource potential and economic activity and have proposed that government resources and support focus on the core nodes (The Presidency, 2003; DTI, 2007). Under such a scenario the extensive rangelands of the Karoo with its low population density has been systemically marginalised. The situation has been exacerbated by the fact that under the 1994 provincial demarcation process, the Karoo which used to fall almost exclusively within the boundaries of a single province has now become subdivided between four new ones, which tend to focus their resource on their key industrial centres and generally regard the Karoo as a rural 'backwater' (Atkinson, 2006). To date no province has devised a Karoo specific policy.

The Towns of the Karoo

Within South Africa the 'majority of towns were established to serve rural communities and predated the integration of an industrial economy' (Christopher, 1984a, 185), thus each rural community and its small service centre had to be relatively self-sufficient and little integration existed between regional service centres. Jefferson (in Myburgh, 1978, 25) notes that 'cities do not grow up by themselves. Country-sides set them up to do tasks that must be performed in central places' (Myburgh, 1978, 25). Thus, centres were strongly dependent upon the well-being of their hinterlands and, to an extent, reliant upon the fortunes of these regions to ensure the sustainability of the centres with many of the services and functions provided by the centres being linked to the region's economic activity, for example agricultural training centres, and agricultural finances.

The first Karoo towns were established in the 1780s as a response to an increase in the numbers of stock farmers in the region and ‘the desire of the authorities at the Cape to maintain control over them’ (Myburgh, 1978, 26). A number of the larger centres also served as religious or administrative centres, such as Graaff Reinet and Somerset East. Small towns sprang up, primarily as service centres for the surrounding farming communities and the population remained socially and economically isolated (Vrey 1974: 7). For the white population, the small local communities were characterised by a simple subsistence economy and an undifferentiated social structure. The black and coloured population, many from Khoi and San descent, fulfilled mainly menial functions

Integral to debates regarding changing agricultural output and degradation are the resultant impacts upon the local service centres. A dominant theme in South African geographical literature in the 1970s was the concern about the consequences of the decline of rural towns, both in terms of demographics and their role as economic and service centres (Smit, 1973; Meth, 1994). The perception being that through the processes of rural depopulation, economic change, subdivision of farms, and loss of a white ‘skilled’ population, many towns lost their functions and central place role (Maree, 1970). Thus, ‘a large number of small rural towns are no longer dependent on agriculture for their existence’ (Smit, 1973, 20;) and ‘as a result of increasing population mobility and centralized economic opportunity, the functional basis for the lowest-order places are being reduced or removed’ (Northam in Smit, 1973, 21). The issue raised is; with a decline in the original reasons for the establishment of these services centres, do the towns lose the reason for their existence and spiral downwards or do they continue to develop through an alternative growth strategy ?

The Karoo Towns in the first seven decades of the Twentieth Century

The Karoo towns achieved a growing importance during the 19th Century, and in 1837, Beaufort-West was the first town in South Africa to be proclaimed as a municipality. While most of the Karoo towns remained small and isolated settlements, certain key towns showed more spirited growth (Cook 1971: 40). During the 20th Century, the towns served a variety of functions, providing: retail shopping, personal and business services, social and cultural facilities, agricultural services, and administrative services, such as post offices, police stations, clinics and schools. (Cook 1971: 5). The differing importance of towns can be indicated in a hierarchy of places. The Karoo towns were ranked in the 1970s as follows by Cook (1971: 10, 13) and Le Clus (1974: 26) who created a hierarchy of central places in the eastern and central Karoo:

Table 1: Hierarchy of places: Eastern Karoo and Central Karoo: 1970

Order	Level of town	Typical functions	Places
5	Country town	Level 6, 7 and 8 functions, plus: Roads department, library, “Bantu administration”, (non-white) secondary school, other financial institutions, accountant/auditor, wholesaler, cinema.	<i>Eastern Karoo:</i> <ul style="list-style-type: none"> • Cradock, • Graaff-Reinet • Middelburg <i>Central Karoo:</i> <ul style="list-style-type: none"> • Beaufort West

6	Minor country town	Level 7 and 8 functions, plus: Magistrate, hardware, engineer, estate agent, construction, cartage, bottle store, produce buyer, (non-white) primary school, (white) high school, baker, electrician, plumber, dentist, boarding house, dairy	<i>Eastern Karoo:</i> Nil <i>Central Karoo::</i> <ul style="list-style-type: none"> • Carnarvon • Victoria-West • Willowmore • Sutherland • Laingsburg • Fraserburg • Prince Albert
7	Local service centre	Basic functions plus: Railway, butcher, (white) primary school, hotel, bank agency, church, clinic, doctor, speciality shop, insurance agent, lawyer, church	<i>Eastern Karoo:</i> <ul style="list-style-type: none"> • Aberdeen • Jansenville • Murraysburg • Noupoort • Pearston • Steytlerville <i>Central Karoo:</i> <ul style="list-style-type: none"> • Richmond
8	Low order service centre	Basic functions: Post office, road motor transport, police, general dealer, motor garage, tea room	<i>Eastern Karoo:</i> <ul style="list-style-type: none"> • Klipplaat • Nieu-Bethesda • Rosmead <i>Central Karoo:</i> <ul style="list-style-type: none"> • Loxton • Van Wyksvlei • Vosburg • Merweville • Rietbron • Hutchinson

What is noticeable since the 1970s, as is discussed below, is how the larger centres have gained in functions and the smaller have generally lost functions.

By the 1920s, the homogenous social structure of white Karoo communities began to change. This was a direct consequence of the gradual out-migration of whites from platteland (rural) towns which had followed the nineteenth century mineral discoveries. By the 1930s, the process of white de-population of the Karoo was well underway (Vrey 1974: 8). This change in racial profile was particularly significant, because, under *apartheid*, only whites were allowed to own businesses (with rare exceptions) until 1990. Given this fundamental link and using data provided by Vrey, the following table shows some of the differentiated white growth patterns of central Karoo towns and, by implication, the potential associated economic change. A further column, showing selected white population figures in 2001, has been added:

Table 2: White population in Central Karoo towns: 1936-1968 (Vrey 1974: 13)

Towns (in order of magnitude, 1936)	1936	1968	Trend 1936-1968	2001	Trend 1968-2001
Beaufort West	3 548	5 341	Steady growth	5 404	Static

Prince Albert	1 332	1 021	Slight decline	1495	Slight increase
Carnarvon	1 116	1 215	Slight increase	1178	Slight decline
Victoria West	1 073	908	Slight decline	1801	Doubled
Willowmore	1 020	889	Slight decline	892	Static
Laingsburg	1 007	842	Slight decline	1142	Some growth
Richmond	798	638	Slight decline	696	Static
Fraserburg	771	700	Slight decline	830	Some growth
Sutherland	537	697	Steady growth	896	Some growth
Rietbron	472	171	Major decline		
Loxton	430	189	Large decline		
Vanwyksvlei	424	190	Major decline		
Merweville	345	278	Slight decline		
Vosburg	343	220	Large decline		
Leeu-Gamka	?	212			
Hutchinson	159	168	Slight increase		
Matjiesfontein	91	29	Major decline		
TOTALS	13 466	13 708			

For the Central Karoo towns as a whole, there was a general slight increase in white population between 1936 and 1960, and thereafter a dramatic decline (Le Clus 1974: 8), with the exception of Beaufort West, Carnarvon, and Sutherland (Vrey 1974: 13). There are several potential causal factors, including a decline in the wool price after the 1950s. It is generally known that population decline of rural communities in extensive farming areas, is a normal tendency. The loss of population from the farms is particularly noticeable, and between 1936 and 1960, the farming population in the Central Karoo virtually halved, from 15 925 to 8 110 (Vrey 1974: 17). In Economic Region 10, for example (Aberdeen, Steytlerville, Jansenville and Willowmore), the rate of urbanisation was high between 1911 and 1960, due to push-factors from the agricultural sector (Banach 1969: 65). The decline in the agricultural sector caused many people to leave the farms, and this caused a knock-on decline in the small towns. Banach described the Karoo in 1969 as “lacking in economic opportunity and virtually stagnant in terms of population growth” (Banach 1969: 66). Also of note were low white birth rates and the significant of white out-migration, typically of younger people (Vrey, 1974). In the period 1936-1960, the towns of the Central Karoo lost 2000 whites due to migration, and the farms lost an astounding 15 100 whites.

Such out-migration did not affect all towns equally. Generally, the very small settlements, which only performed the minimum of services, were not so severely affected by out-migration. The large towns were also fairly stable. The main out-migration came from middle-sized towns (300-800 whites) (Vrey 1974). Out-migration is affected by several factors. Firstly, the larger the distances between towns, the less likely it is that essential services will be lost. Small towns which are situated fairly close to larger towns are likely to lose their clientele to the larger towns. Secondly, the availability of medical services reduces the out-migration of the elderly. Thirdly, as whites become more affluent, more and more whites are attracted by the bigger selection of services in the larger towns and cities. The relatively poorer living conditions of smaller towns become a distinct disadvantage for them, and contributes to the strength of the larger towns (Vrey 1974: 76).

Table 2 above also presents information from the 2001 census. Remarkably, this shows that the trend of white out-migration has largely ceased. The population of Beaufort West, Willowmore and Richmond is static. Prince Albert, Laingsburg, Fraserburg and Sutherland show some growth. Victoria West's white population has doubled. The table shows that historically many white people tended to migrate in a "step-up" fashion, from small towns to larger towns, and from those towns to the cities. This shows considerable town-to town movement *within* the region.

The downward trend in white population during the 1936-1960 period is not unique to the Karoo. The Karoo was following national trends with regards to small towns. For example, in the category of towns of 0-2000 whites, the average of all South African towns had a decline of 14% in white population. In the Karoo, during the 1936-1951 period, towns such as Richmond (-17% population decline) is roughly comparable to the national average; but other Karoo towns lost their white population at a faster rate than the national average (such as Fraserburg and Sutherland) (Vrey 1974).

In the category of towns of 2000-4000 whites, during the 1936-1960 period, the average decline in white population during the period was -34% (1936-1951) and -26% (1951-1960). During this period, Karoo towns such as Carnarvon, Laingsburg, Prince Albert and Willowmore lost more whites than the national average.

Jesmond Blumenfeld and Gillian Cook's studies show a steady decline in the economy of the Karoo and Cape Midlands during the 20th Century. Small towns, in particular, showed a long-term tendency to decline economically. Blumenfeld's 1971 analysis identified the following deficiencies of the Cape Midlands and Karoo region (Blumenfeld 1971: 144):

- The disadvantageous geographic location of the regional relative to the major national centres of production and consumption
- The lack of exploitable mineral resources and processable raw materials (with the exception of wool and meat)
- The instability of the resource base (droughts), and fluctuations in the export base, with a long-term sectoral trend towards a decline in demand for wool
- The very high proportion of external earnings accounted for by subsidies and other transfer payments to individuals and institutions in the region

A negative outcome of these trends was that "unemployment and poverty, with all their attendant social ills, are rife amongst the Bantu and Coloured populations of the region" (Blumenfeld 1971: 70). He found "a distressingly high dependency burden on Bantu workers in the region" (1971: 70). Many coloureds and blacks tended not to migrate away from the Karoo towns, because they had little likelihood of getting work or accommodation in major centres. Overall, the Central Karoo faced the following trends:

- Very rapid white out-migration
- A high level of coloured unemployment (3.2 % in 1960)
- Steady coloured out-migration, causing a relatively low coloured population growth rate
- Nevertheless, a faster coloured growth rate than a white growth rate
- A small and declining proportion of the Central Karoo population was white

The economic structure of Karoo towns in the 1970s

In the 1970s, agriculture was the mainstay of the Karoo economy, while the fast-growing sectors characteristic the rest of the country played a very limited role. The only possible exception was large towns such as Beaufort West (Le Clus 1974: 3). Total income in the Central Karoo increased at a slower pace than that of the country as a whole, and Le Clus predicted that this difference would increase in future. Declining district economic fortunes are reflected in the following Table (3) which in turn impacted on small town economic turnover.

Table 3: Average annual change in the total per capita income per district in the Central Karoo, 1954/5 to 1959-60 (Le Clus 1974: 17)

DISTRICT	Change in per capita income %
Beaufort West	-1.3
Carnarvon	-7.7
Fraserburg	-12.7
Laingsburg	- 0.3
Prince Albert	-5.4
Richmond	-3.3
Sutherland	-6.2
Victoria-West	-7.7
Willowmore	3.7
Central Karoo	-3.8

Vrey (1974: 81) differentiates between two dimensions of a local economy. The first is the *composition effect*, which refers to the type of industry which characterises a region, in terms of whether it is a rapidly-growing or a slow-growing sector. This factor certainly explains white out-migration from the Karoo during the 20th Century. This refers to the shift of the economy from the primary to the secondary and tertiary sectors. In the Karoo, this was worsened by the *local factor effect*, which refers to the growth in a region compared to other regions (or to the detriment of them). The Karoo has failed to show stronger growth than other regions. Even its strongest sector (extensive agriculture) has grown at a slower pace than agriculture elsewhere.

Because of these economic trends, the small towns of the Cape Midlands did not develop strong economies. Several towns have shown a declining ability to provide farm equipment, financial, and primary educational services since the 1970s. There has also been a steady leakage of purchasing power, largely because of the improvements in the road system (Blumenfeld 1971: 121). Blumenfeld cited numerous complaints about this from country delegates to various Cape Midlands Chamber of Commerce conferences in the 1960s. He even found a trend whereby institutions, government bodies, building and other contractors, as well as non-commercial business concerns in the region, would buy direct from suppliers outside the region. As far as construction was concerned, contracts had been awarded to outside firms who, in turn, had imported many of their supplies, and possibly even some of their more skilled personnel (Blumenfeld 1971: 152). The extent of leakage

of purchasing power depends significantly on the type of goods and services. Le Clus (1974: 73) calculated the extent of leakage for the Central Karoo (Table 4):

Table 4: Spending outside of Central Karoo towns, 1968 (Le Clus 1974: 73-87)¹

Type of goods/services	Percentage spent outside town
Groceries, liquor and tobacco	5.4
Furniture and household appliances	34.86
Clothing	24.4
New and used vehicles	36.47
Car maintenance and fuel	8.8
Hair dressing	6.79
Medical services and chemists	18.42
Dentists	49.49
Medical specialists and optometrists	83.92
Hospital services	61.22
Accountants	18.56
Gifts and donations	10.77

The impact of improved transport systems on local economies is threefold: Firstly, it may lead to *emigration* of people, which causes local service provision to decline; and secondly, it enhances *competition* amongst service centres, and the growth of stronger service centres at the cost of weaker ones. Improved transport systems can therefore harm smaller and weaker service centres (Le Clus 1974: 42). The phenomenon of the loss of spending power in the local towns was carefully studied by WJH Vrey in the 1970s. He argued that the loss of purchasing power has a direct causal impact on the decline of the quality of life of a local community. This is a negative cycle: The greater the loss of local spending power, the greater the decline in the quality of local services, which engenders a further loss of spending power. As shoppers travel to visit one specific service in another town, they decide that they may as well purchase a whole range of other goods and services in that town, and the rationale for shopping trips becomes ever greater.

As the quality of service provision in the towns declines, due to white out-migration and purchases outside the town, the service providers became ever more dependent on their growing black and coloured clientele (Vrey 1974: 98). Because of the poverty and underdevelopment of the black and coloured communities in the 1970s, this phenomenon was associated with a decline in variety, quantity and quality of retail facilities and services (Vrey 1974: 105). The phenomenon of the loss of local white purchasing power is worth noting, because it still characterises many small towns in the Karoo today. The local white communities in small towns tends to access their services in larger centres. However, in some small towns today (such as Aberdeen) there is a growing trend of coloured and black residents also making special shopping trips to larger centres (such as Graaff-Reinet) (Atkinson 2006). Middle-class black and coloured consumers are now adopting the same shopping preferences as middle-class whites, to the detriment of the small town economies.

Vrey (1974: 116) found the following averages with regards to the loss of local spending (Table 6):

¹ Some of these expenses were made in other Central Karoo towns, and the remainder was spent outside the region.

Table 6: Loss of purchasing power in different categories of towns in the Central Karoo (Vrey 1974: 114-129)

Type of town	Average loss of purchasing power ²
Railway towns (Hutchinson, Leeu-Gamka)	63.5%
Towns with a white population of 100-300 persons	14.8%
Loxton 14.2 %	
Merweville 6 %	
Rietbron 50%	
Van Wysvlei 3%	
Vosburg 9.7 %	
Towns with a white population of 300-800 persons	31.8 %
Fraserburg 27.9%	
Richmond 35.3%	
Sutherland 31.5 %	
Towns with a white population of 800-1300 persons	16.6%
Carnarvon 7.9 %	
Laingsburg 22.9 %	
Prince Albert 24.2 %	
Victoria-West 12.4 %	
Willowmore 23 %	
Town with a white population of more than 5000 persons	7.5 %

The economic impact of the farming community on the local towns is a key factor, which has changed over time. The purchasing power of the farmers made a material difference to the economies of some of the Central Karoo towns, as shown by Vrey's survey in 1968 (Vrey 1974). As far as household goods and services are concerned, the purchasing power of townsfolk was extremely strong in Beaufort West (41% of the total expenditure by townspeople), compared to 7.4% in Victoria West, 8.9% in Carnarvon and 4.8% in Prince Albert. The reduced number of farmers and the preference of those remaining to shop in larger more distant centres therefore had a devastating effect on many small town economies from the 1970s.

Blumenfeld described the towns of the Midlands and Karoo region in the following terms: "The towns in the region are generally small and low in functional status. They suffer from a lack of economic diversification and functional specialisation, and from apparently high levels of unemployment and high dependency ratios of economically inactive to economically active population. Although their populations are growing, the ratio of higher to lower income groups is falling, resulting in a lagging rate of growth in purchasing power and probably also, in some instances, providing more of a burden on, than a stimulus to, urban development" (1971: 80).

As Blumenfeld summarises: "The picture which emerges ... of the Cape Midlands and Karoo region in its national context, is one of poor and disadvantageous location relative to the main national centres and corridors of economic activity; poor resource endowments; and falling shares of national output, population and employment. More particularly, the proportion of low income-earning population groups in the

² This was calculated from an average of spending on: Groceries, fuel, meat, tobacco, car servicing, small repairs, liquor, general practitioner (doctor), men's hair dresser, women's hair dresser, gardening equipment, tyres, large repairs, furniture, electrical goods, attorney, men's clothing, women's clothing, cars, vehicle parts, gifts, chemist, hospital, dentist, optometrist, and medical specialist.

region is high and rising; dependency rates are high; and the region's industry-mix is, at best, conducive to only slow growth" (1971: 34). Like other rural and hinterland areas in South Africa, the Cape Midlands and Karoo faced a "problem ... that their populations, although growing slowly, are nonetheless increasing at a faster rate than the value of the output which their economies can produce" (1971: 34). The Cape Midlands and Karoo was a region "caught in a vicious circle of under-development":

"In particular, there is the low volume level of economic activity, resulting in structural deficiencies, a lack of economic diversification and a general lack of employment opportunities on the one hand, and the separate but related factor of the low level of economic welfare of its population, resulting in a lack of market potential, a lack of local sources of development capital and a loss of human skills and resources (both as a result of out-migration of trained personnel and as a result of the low level of training of the residual population) on the other hand. Both these socio-economic problems in turn have lowered even further the region's ability to attract significant volumes of economic activity and raise the general level of welfare of its population" (Blumenfeld 1971: 152-3).

By the 1970s, therefore, the Cape Midlands and Karoo area presented a picture of a static, and in certain instances retrogressive, economy when compared to the rest of the country (Cook 1971: 1).

Post-1970 Shifts

Since 1970, there have been several major seismic shifts on the national social and economic scene:

- Influx control has been abolished, with the result that larger numbers of black people have settled in Karoo towns
- The social grant system has been extended and improved, with the result that larger proportions of the poor population receive grants; this is a disincentive to migrate away to larger centres where jobs may be more plentiful, but it does marginally improve survival prospects and does generate low level economic turnover in the towns
- Periodic droughts lead to a decrease in the number of farms, reduced rural population, and a decline in the type and volume of goods required by the farmer. The greater variety and more specialised types of goods demanded by farmers are less likely to be supplied by the local urban places (Cook 1971: 60).
- Mobility has increased, with the growth of private car ownership and the taxi industry.
- Government education policies have changed dramatically. With the racial integration of schools, those schools with a minority of white learners have gradually lost all their white learners to larger centres (e.g. Graaff-Reinet). This also means that a great deal of middle-class spending power is lost to larger centres.
- Controls over liquor provision have been abolished, with the result that legal or illegal liquor outlets are generally left to flourish. This may be taking place to the detriment of other types of shops and services, because a greater amount of capital and purchasing power is devoted to liquor outlets.
- HIV/AIDS is taking its toll on the population of young adults and small children.

- A significant amount of “reverse migration” now takes place, with city investors seeking country homes, for purposes such as residence, art galleries, guest houses, curio shops, and coffee shops.
- Rail transport has declined dramatically, because the special protection for the rail sector under the National Party Government has fallen away; and there has been a spectacular rise in road goods transport.³

A major factor is the extension of social grants to the aged, the disabled, and to parents with young children. The magnitude of this factor still remains to be fully appreciated. As it now stands, it has the potential to stand conventional demographic wisdom on its head. In the words of J.H. Nixon (1962: Preface), “The proper starting point is the realization that a community is a place for earning a living. Population settles or expands primarily because of job opportunities”. In the case of the Karoo, it appears that this truism is no longer valid. People stay in a community because of *livelihoods*, which may include government grants.

Again, another observation which seems self-evidently true, but which should now be questioned, is that of Vrey: “Population figures in rural towns are primarily determined by the number of services and facilities which are sustained in the town. This, in turn, is primarily determined by the service area of the towns, which includes the farming community as an important entity” (1974: 93). Given the importance of social grants, this is no longer the case. Many people may reside in a town, with or without formal housing, even though social and economic services are rudimentary. Furthermore, it appears that the farming community no longer has a major impact on local services, because many farmers (especially the large and sophisticated farming enterprises) by-pass small towns altogether.

THE CONTEMPORARY ECONOMIC AND DEMOGRAPHIC PROFILE AS A REFLECTION OF LONG-TERM TRENDS

Given the rather bleak scenario sketched above for the 1970s and also the recent trends noted in the last section, it is instructive to reflect on contemporary reality and trends. The results extracted from the various census sets detailed above are graphically presented to illustrate the three themes of shifting agricultural production, small town and rural demographics and small town economies. The findings are discussed under four broad categories namely, agriculture, rural population, small town population, and small town economies. The results variously indicate continuations of the structural decline of the 1970s, certain reversals and a demographic process showing considerable variation between places.

Agriculture

Despite an on-going ecological debate regarding natural versus anthropogenic caused land degradation and associated over-stocking and grazing (Dean et al, 1995) the land under agricultural production (primarily extensive rangeland farming) has remained constant for 84 years, with a decline of only 2.5% over that time period, with 5.24 million hectares under agricultural production.

³ Blumenfeld (1971: 123) observes that, in the Cape Midlands and Karoo, “apart from the occasional taxi, cartage contractor, travel agent and other privately owned transport service, [transport of passengers and goods] are provided almost exclusively by the public sector (railways and post office)”.

In contrast to the reality that farmland has remained constant, there has been a significant decline in the number of Karoo farms as is shown in Figure 3. The total number of farms has fallen by nearly 60% in 84 years, which reflects various core themes, namely: the demise of smaller, sub-economic units, land consolidation by more successfully farmers in larger more efficient units, increasing inputs costs, economies of scale and associated resilience to periodic economic shocks, and rural depopulation.

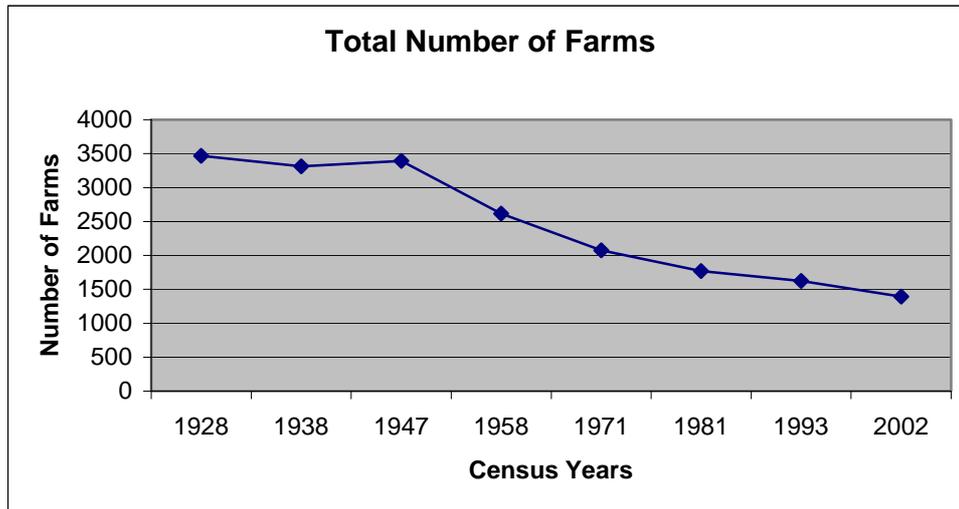


Figure 3 Number of Farms: 1928-2002

In terms of changes in actual production, comparable financial indicators are difficult to secure in the light of inflationary and market trends and currency changes in the 1960s. Instead as stock production constitutes effectively 100% of the agricultural sector, changing numbers of stock can be used, to some degree, as a surrogate for production shifts. When investigating individual livestock numbers the most apparent shift has occurred within sheep farming, which has generally been the primary livestock-type and has been used an indicator of environmental conditions. Figure 4 below indicates an obvious decline of approximately 67% in overall numbers since 1928. The trend line reflects particular crises such as the 1970 and 1993 drought which seriously depleted stock numbers and the economic boom of the early 1950s (Hobson, B., pers. com., 2007). Similarly cattle numbers also reflect the two drought periods but, in contrast with sheep numbers, have increased in recent times (see Figure 5). Although cattle numbers are lower in absolute terms, their greater grazing requirements inherently implies that there will be lower numbers than sheep on similar hectareage. Goats are the third most abundant livestock with numbers remaining relatively lower and constant, with the exception of a short-term fashion-related boom in the price of mohair in the early 1980s (Hobson, C., pers. com., 2007).

While the total stock numbers reflects a decline of 60%, if one standardised differences between animal types through the calculation of Livestock Units per hectare (Dean and McDonald, 1994) the decline reduces to 43%. It needs to be considered that the absolute decline should not be perceived purely as a negative factor. This is because improved stocking techniques, better land management and the reduction in the number of farms has introduced what are probably more effective and sustainable farming practises. This needs to be seen relative to the perceived overstocking of the Karoo in the early years of the 20th century and the resultant decline in

farming units (Beinart, 2002). What the graphs do not reflect and what does have a direct additional bearing on overall livestock numbers in the reality that in recent years nearly 20% of the farmland in some districts has been converted into extensive game farming, thus creating an artificially lower profile of the number of domesticated animals (Hobson, C., pers. com., 2007). These considerations while suggesting at a stabilising of the rural economy in an era of more sustainable management, reduced farming population and improved transport translate directly into either direct small town economic decline or the reduced impact of farming sources income in small town economies or the increased impact of farming income in the higher order centres.

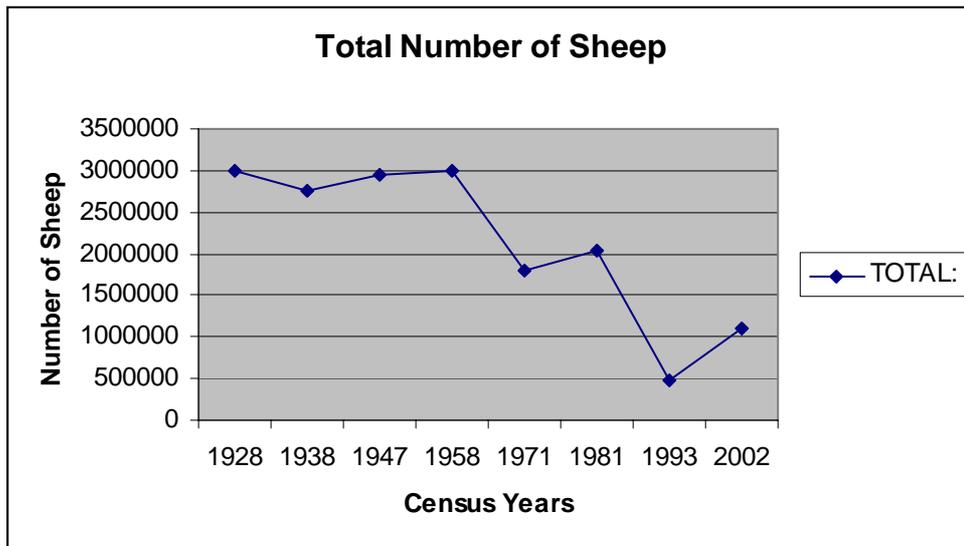


Figure 4: The Number of Sheep: 1928-2002

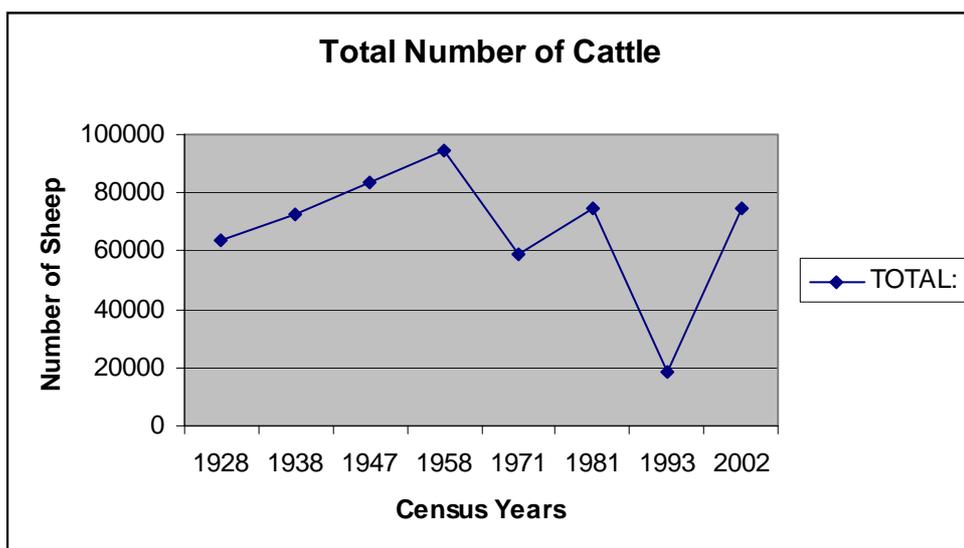


Figure 5: The Number of Cattle: 1928-2002

Rural Population

Until the 1960s the rural population increased by a modest 12% from 1904 largely as a result of natural population increase. As Figure 6 below shows, thereafter absolute

decline occurred, such that by 2004, the rural population had declined by 37% from the 1960 maximum. Rural depopulation reflects both urbanization trends in a modernising economy and the rationalization of the farming industry that has seen a decrease in the number of land-holdings and associated workforce.

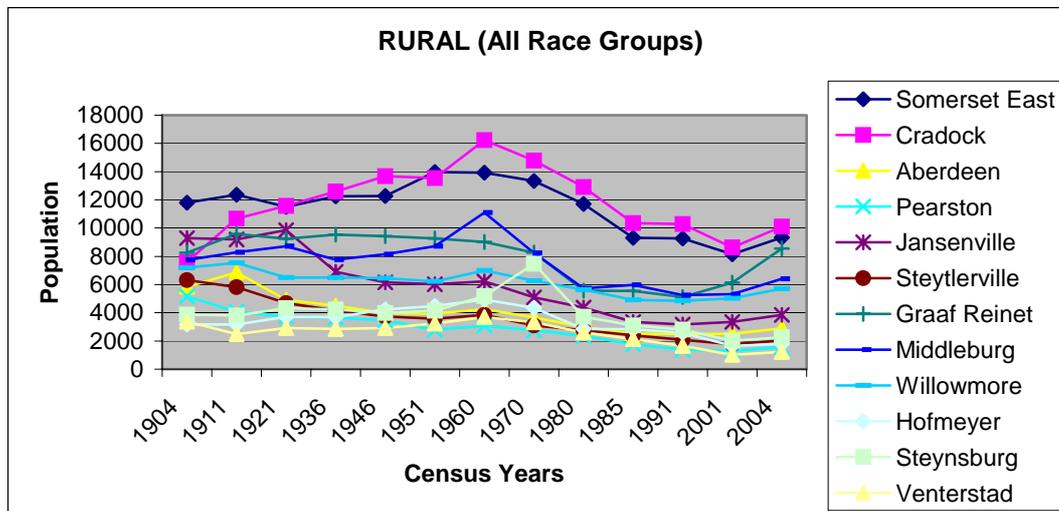


Figure 6: The Rural Population; 1904-2004

Given the entrenched, racially biased job reservation and land ownership systems which dominated South African society and its economy for most of the twentieth century, there is merit to be gained by examining racial differences. Figure 7 reflects changing rural racial dynamics which although generally mirroring the already noted post-1960 decline - at the level of individual race groups distinctive differences emerge. In the first instance the experience of the dominant black group matches that of the total (declining 62% since 1960). By contrast the numerically smaller, but economically dominant white group experienced continual decline (83%) over the same time period. A variation from these trends is that of the coloured population which, following initial decline, have subsequently increased and have recently become the dominant rural racial group. Factors accounting for this increase include natural increase, and limited urban opportunities which has seen the return of former rural dwellers or their children to home areas.

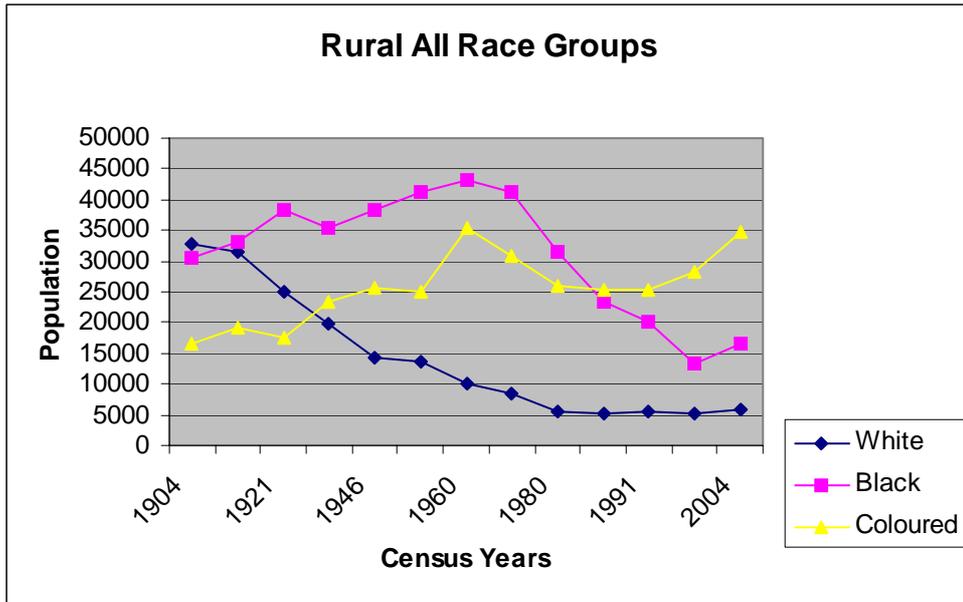


Figure 7: Changing Rural Population, by Race Groups

Urban Population

In contrast to and as a possible consequence of rural depopulation, urban population in the district’s service centres rose by 240% from 1904 to 2004, with marked growth (of between 100-160% in individual centres) since 1970 (see Figure 8). However, in ‘larger’ district towns i.e. those with more than 10 000 people in 1960 (Graaff Reinet, Middelburg, Somerset East and Cradock) growth is more evident due to: their larger initial population size, more diverse economy and the role they play as district centres. For example a 400% population growth has been experienced in Middelburg. By contrast, in smaller centres while the population has increased, rates have been far slower than in bigger centres and in overall terms a noticeable gap is emerging between the average size of the four larger and the smaller centres. The latter reflects on the centralization of functions and the diminishing importance of once-important, but economically non-diversified smaller agricultural service centres in an era of agricultural modernization and reduced dependence of towns on the farming economy.

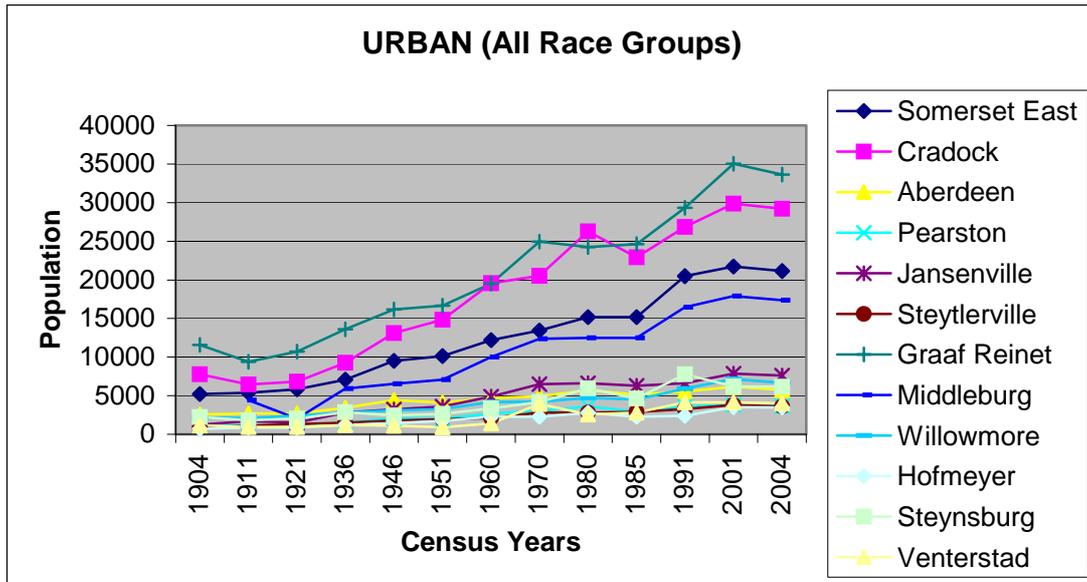


Figure 8: Total Urban Population

When one considers the issue of race in the urban centres, striking differences emerge (see Figure 9). The white urban population increased (by 45% from 1904 to 1960) to a maximum in 1960 and subsequently has declined (by 30%) to the present. By contrast, urban blacks have increased 545% and urban coloureds have increased 281% over a 100-year time span. The results reflect racially based demographic change which is taking place in South Africa in general and the very high degrees of urbanization which have been experienced since 1960.

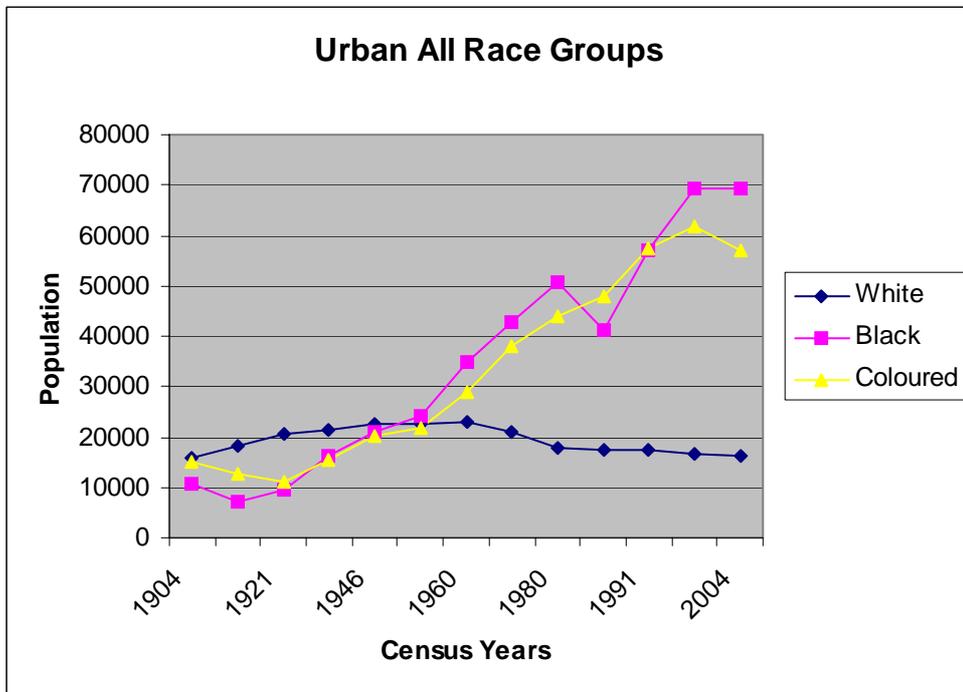


Figure 9: Rural Population, by Race Groups

Small Town Economies

In order to ascertain the changing nature of small town economies, changing numbers of businesses since 1888 was used as a surrogate to reflect the economies of the centres. All firms were considered in the analysis to reflect both agricultural links and internal dynamics. The results are reflected in Figure 10. The four larger centres (Graaff Reinet, Cradock, Middelburg and Somerset East) have once-again experienced a significant, and generally uninterrupted increase in the number of businesses since 1888 (192% increase on average). The most dramatic growth has been in Cradock that experienced a 312% increase. The eight smaller centres, while showing some variation, tend to have fewer businesses in 2006 than they had in 1888. Most small towns experienced business growth until the 1920s and 1930s depression, where-after decline set in (a 55% decline from 1921-2006 overall), the worst case, Pearston, lost 88% of its businesses.

The results, similar to those of urban population, reflect the centralization of activities in a series of dispersed larger centres, which offer a wide range of central place functions and which have experienced cumulative causation. Although it is difficult to prove a direct correlation, it would appear that the growth of the larger centres parallels the decline of the smaller. The small town economic decline of the 1970s discussed above remains a feature of the smaller centres, but in the larger centres, as a result of their diversified economies, the growing significance of new activities such as tourism, their centrality, demographic growth (often linked to access to state welfare) and their central place functions, not insignificant economic expansion is now taking place.

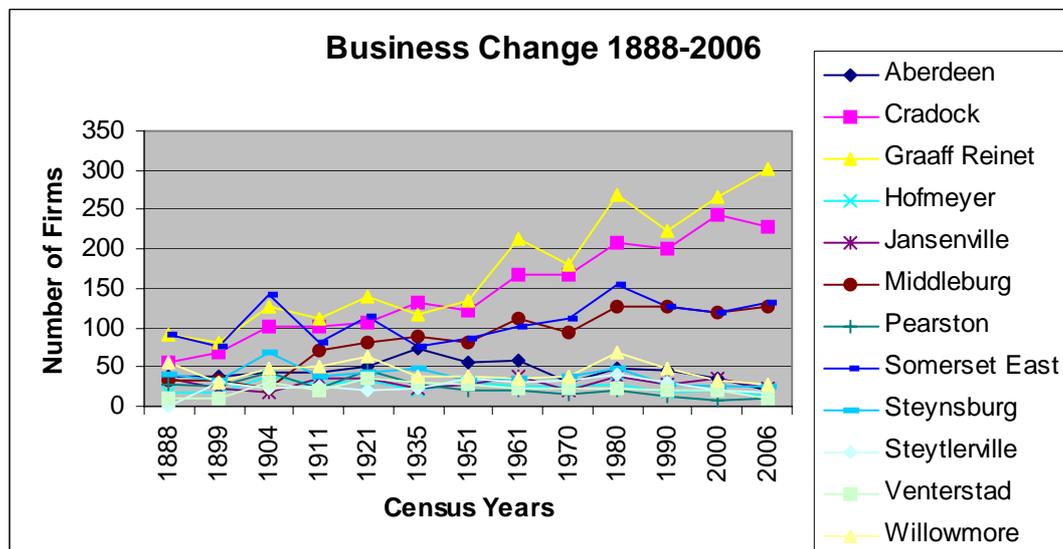


Figure 10 Changing Business Numbers

Discussion and Conclusion

The case study illustrates that the study area has experienced fluctuating fortunes over the last 100 years. Quite clearly deep-seated economic, agricultural and demographic

change came to a head in the 1970s. Since then there have been differing outcomes of what, at that point, was clearly decline across the board. While many small towns have continued a downward economic slide marked by business closure and the continued loss of the economically dominant white population, there seems to have been some stabilising of the rural economy and the larger towns are clearly in a phase of economic and demographic growth.

The most spatially evident change over the last 100 years has been from a rurally dominated region composed of, in relative terms, a large number of relatively small, well populated farms serviced by minor service centres, to an economy marked by the dominance of a limited number of large service centres, the associated marginalisation of smaller towns, and a reduced number of farming units which have experienced greater levels of commercialisation and mechanization.

In terms of agriculture, the absolute number of farms are in decline, whilst the area under production has remained constant, inferring that average farm sizes are increasing (which has implications in terms of the decreasing number of farmers and labourers). Overall the stock numbers and rates have declined in absolute terms, but in reality this reflects a shift in farming practise to more efficient systems.

In contrast to the uniform picture in agriculture, there is an obvious divide between the four larger centres and the smaller ones with a distinct difference in population growth and economic activity being experienced during the recorded time period. The larger towns (+ 10 000 in 1960) are undergoing significant population and business growth, whilst the smaller centres (-10 000 in 1960) are experiencing business loss, and limited population growth. With regards to a racial breakdown, the white population is in absolute decline, especially in rural districts, while the coloured and black urban population is increasing, the only population group increasing in rural areas is that of the coloured population.

Within the agricultural areas, rural depopulation has paralleled the introduction of more efficient farming practises that require larger sized farms and smaller labour forces to operate reduced herds more effectively and productively. It could be argued that the farm sizes of the late nineteenth and early 20th century were too small to be sustainable and efficient, thus leading to over-stocking and exploitation of the natural resources which led to the very evident land degradation of the 1920s and 1930s. Depopulation and reduced stocking rates in order to reach this more sustainable level has created the false impression that the area is in decline. Anecdotally there is emerging evidence that improved pastures are starting to lead to increased stocking rates, which could have long-term negative consequences in a system recognised as being fragile and often event driven (Hobson, B., pers. com., 2007).

The study's findings mirror the national trend towards enhanced urbanization since 1960 in particular. Although causality cannot be proved, rural depopulation in the study area seems to match urban population growth. In economic terms the degree to which activities are clustering in the four larger regional high-order centres is distinctive and parallels business closure in smaller centres. Reasons for this trend include, improved mobility on the part of farmers who are able to by-pass once – important local service centres, which are losing functions, in favour of the more distant but diversified larger economic centres, which are experiencing

agglomeration. The push factor has been exacerbated by trends in the smaller towns which mirror rural depopulation, the most obvious being the closure of schools, financial institutions and government services. The larger centres have diversified their economies which makes them less reliant on the vulnerable rural economy and more reliant on their own larger, service-sector based population.

The smaller service centres have survived economically through the emergence of a state welfare system, such that towns become points of welfare distribution and their residents are able to eke out a living in towns which often have few if any employment opportunities and have often experienced severe loss of facilities and transport connectivity. These processes tie people displaced from rural areas and long-term residents to the small service centres despite loss of higher-level economic functions, therefore the centres have not experienced the total depopulation found in the towns of other extensive rangeland economies such as that of Australia and the USA.

Having used the Karoo as a case-study to examine the notion of marginalisation, it is apparent from the data and arguments about appropriate stocking rates, that there is been no broad-scale process of economic marginalisation, although there have been short-term market-led economic fluctuations. However from both a perceptual and, more recently, a systemic level it can be noted that the Karoo is experiencing marginalisation through policy shifts and the perceptions and values of the increasingly urbanized majority of the country. An obvious form of economic marginalisation can be observed from the declining or static economic profile of the smaller service centres, which perpetuates the challenges noted in the 1970s. By contrast, through collateral processes, the larger centres, far from declining are actually experiencing growth, possibly at the expense of declining smaller centres lying within their hinterlands, which are falling victim to improved transportation and agglomeration economies. Thus the smaller towns are not merely experiencing decline but are being out-competed by the larger centres.

The results pose a series of challenging questions. Firstly, are the processes which the Karoo is experiencing a reflection of structural marginalisation or are they simply a natural rebalancing of economic activities and population distribution in a modern economic era and one based on better land management ? Secondly should the economic decline of small centres be perceived negatively, as the agglomeration that is occurring in the larger, better resourced centres now makes them better able to meet the region's needs?

The economic and population growth taking place in the larger towns, and the persistence of a strong rural economy, negates the perception that the Karoo is either in decline or is marginal. An argument can be made that, in policy terms, the Karoo needs far greater attention to capitalise on its inherent and continuing strengths, particularly within the larger of the service centres. The recent experience of the Karoo reflects evident shifts in the region's economy and demography and while change is inevitable, it does not necessarily imply decline, which accords with the assertion that '...society changes over time. The division of strength and power also changes both geographically and functionally' (Leimgruber, 2004, 4).

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