

Hanging on a wire: A historical and socio-economic study of Paulshoek village in the communal area of Leliefontein, Namaqualand

Rick Rohde
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Acronyms and abbreviations

ABET	Adult Basic Education and Training
AEC	Atomic Energy Corporation
CPI	Consumer Price Index
DOTS	Directly Observed Treatment Short Course
GCTE	Global Change and Terrestrial Ecosystems
Gear	Growth, Employment and Redistribution
GDP	gross domestic product
HDI	Human Development Index
HH	Household
INCO-DC	International Cooperation with Development Countries
MAPOSDA	Management and Policy Options for the Sustainable Development of Communal Rangelands and their Communities in Southern Africa
MRC	Medical Research Council
NGO	non-governmental organisation
OCC	O’Kiep Copper Company
RDP	Reconstruction and Development Programme
SALDRU	Southern Africa Labour and Development Research Unit
SIDA	Swedish International Development Authority
SPP	Surplus People Project
SSU	small stock unit
STDs	sexually transmitted diseases
TB	tuberculosis
UNICEF	United Nations Children’s Fund
UNDP	United Nations Development Programme
VKV region	Vredendal, Klawer and Vanrhynsdorp

Preface

Namaqualand is often considered an anomaly in South African social science research because of its distinct cultural, social and environmental conditions. No doubt, Namaqualand has many extremes: a sparse population, a harsh arid environment and a political history dominated by the perverse apartheid system which classified the majority of Namaqualanders as 'coloured' and confined them to small communal 'reserves'. Few contemporary studies have penetrated the complex history of land use, settlement and social economy of these communal areas of the Northern Cape. This report presents a case study centred on the village of Paulshoek in one such communal area (Leliefontein) in Namaqualand. It documents the history of the village and presents findings of socio-economic research covering village demographics, health indicators, a household livelihoods analysis and the function of social networks inside the village and beyond its boundaries.

Research was carried out within a larger, ongoing multi-disciplinary project focusing on land, livelihoods and agrarian issues in southern Africa.¹ Researchers at the Programme for Land and Agrarian Studies (PLAAS) have collaborated with botanists, ecologists, range managers and development non-governmental organisations (NGOs) in this project, the aim of which is to understand the complex relationships between rangeland ecology, land use, livelihoods and policies

promoting sustainable development. Although this project will only be completed in 2005, we believe it is timely to publish findings from an earlier phase of the research (1997–2000).

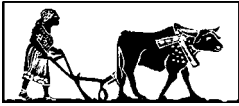
Our original intention was to include this report within a larger book on Paulshoek, but this has proved to be too ambitious. Furthermore, time has moved on and as events unfold (development initiatives, local government reorganisation, land and tenure reform), it has been difficult to draw a line under the research – there is always something new to add. Ideally, this historical and socio-economic profile of Paulshoek should be contextualised within a description and an analysis of farming practices, natural resource use, the implementation of land reform and the impact of all these on the physical environment. While it is our aim to consolidate this wealth of information within a larger whole, at present these disparate research strands remain as discrete papers and theses, a list of which can be found in Appendix 1.

The title of this report – *Hanging on a wire* – is the refrain of a popular Afrikaans song. When we heard it sung at evening gatherings in Paulshoek, it seemed an obvious metaphor for the lives of villagers throughout Namaqualand: the barbed wire fences that encircle these overcrowded communal areas are a fitting symbol of the precariousness associated with deep rural life. Such songs resonate across the diversity of South Africa's impoverished



rural landscapes. We believe that this report will contribute to a better understanding of how conditions of marginalisation and poverty in rural Namaqualand share a generic profile with the communal enclaves and former labour reserves, homelands and bantustans of South Africa. Furthermore, Namaqualand holds valuable lessons in the process of transformation for the country as a whole: environmental policy, land reform, communal tenure reform and local government reorganisation are being played out in a highly specific context. The success or failure of these can only be understood against a background of social and political history and contemporary socio-economic conditions. At the very least, we hope this report will provide a detailed background and context useful to other researchers seeking to understand rural Namaqualand and South Africa more generally.

Part 1 of this report is a short history of the Leliefontein Reserve and Paulshoek village, starting with a very broad overview of the incorporation of the Namaqua Khoekhoen into the colonial orbit during the 17th and 18th centuries. This narrative gradually narrows to an account of the settlement of Leliefontein during the 19th century and finally the formation of the village of Paulshoek during the 20th century, as described through oral history and the interpretation of recent political events.



Part 2 begins with a telescopic pan across the socio-economic landscape of the village. A brief overview of demographic and poverty indicators leads to a more in-depth analysis of conditions of health, education, employment, agriculture, migration histories and urban-rural links. A household typology, based on two extensive household surveys, creates a framework for understanding processes of social change, class formation and the dynamics of rural poverty. Finally, a brief ethnographic account of family and social networks provides important insights into how individuals exist within a web of relationships that form the core of village life.

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Endnotes

- ¹ Global Change and Subsistence Rangelands in Southern Africa, 1997–2000 (INCO-DC: ERBIC 18CT970162); Management and Policy Options for the Sustainable Development of Communal Rangelands and their Communities in Southern Africa (MAPOSDA) (INCO-DEV: ICA4/CP/2000/50006).
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- ³ Leslie Hill Institute for Plant Conservation, Botany Department, University of Cape Town.
- ⁴ Agricultural Research Council – Range and Forage Institute.

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Part 1: A short history of Leliefontein and the creation of Paulshoek

The first inhabitants of Namaqualand were hunter-gatherers whose rock art and stone tools are enduring evidence of their presence throughout southern Africa since the Pleistocene. The depiction of a small ochre sun painted on the smooth surface of a rock shelter near Paulshoek is an austere reminder of the depth of human history in this arid, open landscape.

Archaeologists are unable to establish with certainty who these people were, what language they spoke or where they came from. What can be inferred from early colonial records is that immediately prior to the establishment of the Dutch settlement at the Cape in the 17th century, at least two distinct groups inhabited the area. They were known as the Soaqua/Bosjesmans/Bushmen and the Namaqua/Hottentots. The latter spoke Nama and referred to themselves as Khoekhoen, and were undoubtedly part of a larger Cape Khoekhoen polity (Webley 1992). Distinctions between the two groups were evident up to 1850 and even later (LMS 1806b; LMS 1813; LMS 1814; WMMS 1819; Carstens 1966; Ross 1998; Webley 1992; Wilmsen 1989).

Namaqualand takes its name from the Nama-speaking Khoekhoen herders whose ancestors took part in the pastoral expansion in southern Africa approximately 2 000 years ago and who have inhabited the Atlantic coastal region of southern Africa continuously since then. Archaeological evidence and documentary records of European contact with the Khoekhoen in Namaqualand from the 1600s reveal that the Namaqua groups were a nomadic pastoral people, moving in fairly large groups. Their movements were governed by the availability of grazing and water and were therefore controlled by seasonal and annual climatic variations. The Namaquas were divided into several fairly

large clans, named after their chiefs (LMS 1803; LMS 1806a; WMMS 1819; Ross 1998; Cornelissen 1965; Wilmsen 1989). During the last millennium, Namaqua herders gathered in the Kamiesberg of Leliefontein. Surrounded on all sides by drier country, these mountains with their springs and relatively abundant water sources acted as a kind of 'oasis' in Namaqualand.¹ They provided a base for transhumance west into the Sandveld during the cold winter months and east into the summer rainfall area of Bushmanland. Because of its reliable spring water and seasonal grazing, Leliefontein formed the hub of a transhumant cycle that spanned the contrasting agro-ecological zones of the arid interior, the cool moist highlands and the coastal plains. This pastoral system comprised aggregations of up to 50 reed-mat huts in the Sandveld during the winter months and more dispersed herding units of three or four families in the grazing lands of the Kamiesberg and Bushmanland during the summer months, although this pattern varied in extent and regularity (Webley 1986). The Namaqua and other Khoisan-speaking peoples traversed the coastal littoral and the arid interior in relative isolation from other African groups until after the establishment of the Dutch settlement at the Cape in 1652.

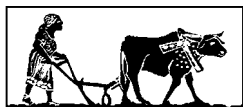


Events of the 17th – 19th centuries

The livelihoods of the Namaquas, although dominantly pastoral, also involved smelting

of metals and trading, both with other local groups and with Europeans at the coast from as early as the 17th century.² Khoekhoen society, as observed by the earliest European explorers of the northern frontier (such as Pieter van Meerhof in 1661), typically consisted of large aggregated groups of up to 73 huts and 700 Namaquas 'with about four thousand head of horned cattle and three thousand sheep, with which they were moving from place to place wherever pasture was to be found' (Theal 1907:111). These Namaqua clans were decimated during the following 100 years or so (Penn 1995:281). Smallpox spread inland from the Cape in the 1720s, wreaking havoc among the indigenous population and destroying their pastoral economy (Rhenius in Mossop 1947:139). The impact of the epidemic on the Cape's frontier populations was observed as late as the 1780s. When Carel Brink passed through Namaqualand in 1761, he observed that the Namaquas lived in great poverty with few cattle and under constant harassment from 'Bosjesmans who rob them of their stock' (Mossop 1947:29). Of course European settlers played a leading role in this largely unrecorded tragic history, and not just as passive vectors of disease:

All those tribes of Namaquas, possessed of vast herds of cattle are, in the course of less than a century, dwindled away to four hordes, which are not very numerous, and in great measure are subservient to the Dutch peasantry, who dwell among them. The latter, who have seized upon the choicest part of their country, allow them to erect their huts in the neighbourhood of their farms, on condition of their furnishing a certain number of people to protect their cattle against the attacks of Bosjesmans or wild beasts of prey. A dozen years more, and probably a shorter period will see the remains of the Namaqua nation in a state of entire servitude. Such are the effects of an encroaching peasantry, sanctioned by the low policy of a government that could descend to employ agents to effect the purchase of whole herds of cattle



for a cask of brandy (Barrow 1801:388).

The first European farmers settled in Namaqualand soon after 1750. By 1771, loan-farms in the Kamiesberg were the subject of bitter disputes between indigenous Namaquas and settlers. At least one such conflict was resolved when Governor Plettenberg instructed a European farmer to vacate Leliefontein in favour of 'the Hottentot Captain Wildschut' – a rare instance of colonial authority protecting the rights of the Khoekhoen (Penn 1995).

By 1779, when Gordon visited the area, he noted that there were 19 loan-farms in Namaqualand north of the Groene River (Gordon in Raper & Boucher 1988). Five were inhabited by married European couples. The remaining 14 farmers had taken Namaqua wives, and miscegenation became the rule rather than the exception. The offspring of these unions (Bastaards)³ took the surnames of their male parents, and generally aspired to inclusion within the more powerful colonial society of their fathers rather than the Khoekhoen communities of their mothers. For a time during the late 18th century, Bastaards were able to legally acquire loan-farms in Namaqualand. Their surnames were typically those of trekboers:⁴ Engelbrecht, Beukes, Cloete, Mostert, Bok, Brand, Meyer, Morton, Rossouw, Van Rooyen, Bezuidenhout (Penn 1995:289). Many of these names are common in the Leliefontein area today.

The status of Bastaards within the colony waned considerably towards the end of the 18th century when they were turned into bonded labourers and forced into commandos. From the 1770s onwards, they began to leave the colony, settling first in Namaqualand and later moving into Bushmanland and across the Orange River. Trekboer expansion largely ceased in the northern frontier zone by 1780. But 'until at least the 1790s Namaqualand was fairly "open" as the trekboers did not have sufficient numbers to evict the Khoikhoi or impose their will on the large numbers of Oorlam ["Bastaard"] frontiersmen in the region' (Penn 1995:41).⁵

In 1779, when Gordon visited the kraal of the Little Namaqua captain, Wildschut, in the Kamiesberg, he was informed that the clan numbered in total about 400 men, women and children under five chiefs (Gordon in Raper & Boucher 1988:253). Wildschut 'was a chief or captain to whom the Dutch company had given a cane with a brass top' (Patterson in Forbes & Rourke 1980:101). This clan, which consisted of about 150 men, women and children and 19 reed-mat huts (Patterson in Forbes & Rourke 1980; Barrow 1801), was often located in the Leliefontein area during the summer season, moving to the lower, more temperate areas in winter (Barrow 1801; Carstens 1966; Price 1976).

The extent of rapid change visited upon the indigenous populations of the Kamiesberg can be gleaned from Barrow's account in 1798, when he described the area as having been 'formerly ... inhabited by the Namaqua Hottentots' (Barrow 1801:358). He observed that a 'company road' had recently been built across the mountains and that few wild animals remained in the area where once black rhinoceros, eland, hartebeest, gemsbok, zebra and quaggas had flourished, although lions were still present.

This cluster of mountains being the best, and indeed, almost the only habitable part of the Namaqua country, has been taken possession of by the wandering peasantry, who, to the advantage of a good grazing country, had the additional inducement of settling there from the easy means of increasing their stock of sheep from the herds of the Native Hottentots, who, indeed, are now so reduced and scattered among the Dutch farms as scarcely to be confined as a distinct tribe of people (Barrow 1801:358).

Missionaries inevitably followed in the wake of such social disruption, finding fertile ground for the word of God in such desperate circumstances. The insecurity experienced by the Namaquas during this period as a result of the influx of the Basters and trekboers provoked Wildschut to seek a missionary presence that would

guarantee more social stability and land rights for his and neighbouring Namaqua clans. A fortuitous meeting between Wildschut and the Rev. Barnabas Shaw of the Wesleyan Missionary Society resulted in the establishment of a mission station high in the Kamiesberg at Leliefontein in 1816.⁶ Weakened by raids, the curtailment of migratory herding practices, drought and disease, dispersed Namaqua clans converged on the new mission station.

The Namaquas were a pastoral people who also depended on hunting and gathering, but at the mission station, however, they were instructed in how to plough the land and plant seeds (WMMS 1819; WMMS 1820). Missionaries such as Shaw viewed a permanent, sedentary lifestyle as a sign of civilisation and Christianity. He promoted cultural and livelihood changes associated with education, crop production and the construction of permanent buildings rather than mat huts, which were conducive to easy migration. This occurred with reasonable success for the periods of sufficient rainfall, when it was beneficial for the Namaquas to remain at the station. However, many left with their cattle during the dry season and Leliefontein was more or less deserted during the severe droughts of the early and mid-1820s. When George Thompson visited Leliefontein in August 1824, he found that three quarters of the settlement's population had dispersed with their livestock in August of that year – after the crops had been planted (Thompson 1968 (1827); LMS 1803; LMS 1826; LMS 1837; WMMS 1820; WMMS 1825; LMS 1820–1824). Four hundred acres (162 hectares) of land were sown with over 10 000 kilograms of wheat, rye and barley. By this time, some 400 Namaqua people and their combined herd of 4 000 cattle had sought the protection of the mission (WMMS 1832:48; Thompson 1968 (1827)).

Shaw established a number of outposts in order to follow his congregation in the annual cycle of transhumance between two or more ecological zones encompassing an annual orbit of 100 kilometres or so. These outposts were situated near reliable water supplies and eventually became settlements



that today comprise the principal villages of the Leliefontein communal area. In this way, the missionaries initially tried to accommodate, albeit regulate, the migratory lifestyle of the Namaquas (Cape of Good Hope 1889).

Although seasonal transhumance continued right through the 1800s, it became increasingly restricted and less adaptable to seasonal climatic changes. This gradual sedentarisation occurred as a result of the alienation of large tracts of private land allocated to white farmers surrounding the mission, as well as increasing population pressure within (CCR 1880; Vos 1928). Ridgill, who visited Leliefontein in 1855, recorded 700 acres (283 hectares) of land cultivated by Namaquas who 'owned 100 ploughs, 30 wagons, 400 horses, 2500 horned cattle and thousands of sheep' (Ridgill 1978 (1870):29). In 30 years cattle numbers had declined by almost 40%. This was in all likelihood accompanied by an increase in sheep and goats. A total of 268 families (probably comprising upwards of 2 000 people) were registered in the Leliefontein Reserve in 1854.⁷ By 1870, the Leliefontein mission lands were divided into a number of outstations (one of which was Moedverloer (Lost Courage)⁸ near Paulshoek), and discrete internal divisions within the reserve area demarcated winter, summer and reserved grazing lands (Price 1976). These trends in land alienation, population growth, transhumance restrictions, cropping and herd composition would continue well into the 20th century.



The mining industry, 1850–1900

Copper mines were established in Namaqualand during the 1850s and became a dominant feature of the economy in the region. The mining and export of copper affected the lives of all Namaqualanders and by 1860 copper had become the Cape Colony's second most important export (Ross 1998:3.17–22).

The main problem experienced by the mining companies, concerning which the

civil commissioner received many complaints, was that they struggled to get local, 'native' labourers. In 1857 the commissioner reported that 'they ["Bushmen" and "Hottentots"] refuse all work, and derive their living from some mysterious source' (CCR 1857). During this period the inhabitants of Leliefontein enjoyed a degree of prosperity as mixed farmers. They owned large numbers of wagons, horses and cattle and had paid for the construction of a large church at Leliefontein in 1855. Their prosperity increased with the growth of the mining economy and many used their wagons and oxen as transport riders for the mines.⁹ The expansion of a cash economy went hand in hand with these developments.

The Namaquas and Basters who did work on the mines suffered from outbreaks of typhoid during the 1870s, which resulted in many deaths (CCR 1872; CCR 1875; CCR 1876). Alcohol abuse became widespread and the Civil Commissioner of Namaqualand repeatedly described the social fracture which accompanied it as being a problem, stating that 'numbers of children have died from sheer want at the Mines, arising from the great love of drink on the part of their parents, who spend nearly all they earn on that rank poison – Cape Smoke' (CCR 1869). Another report explains that 'before the working of the mines in Namaqualand the natives of the country were well-to-do; but since the introduction of brandy they have been completely ruined. I agree ... that brandy should be kept from the native until he is more advanced and capable of self-restraint' (CCR 1872). Such comments are almost certainly laced with a large dose of racial and cultural prejudice – they foreshadow a long litany of similar observations that retain currency even today (CCR 1869, 1872, 1875, 1876; MRC 1998).

Owing to the Namaquas' and Basters' reluctance to work in the mines, a number of people of all races and from various areas were employed. In 1869 there were 144 Europeans and 624 'blacks' of different ethnic backgrounds employed at the mines. The white miners were mainly artisans from Cornwall. There were also a number of

immigrants from St. Helena, and 'Zulus and Kafirs from Portuguese territory in small numbers, Damaras of two very different sorts, Hottentots of more or less pure race, and every possible mixture between all these' (Alan & Gibson 1900).

The mines remained a profitable part of the Namaqualand economy, with exports increasing until the 1880s. But as early as 1874 the Spektakel mine output began to decrease and extreme poverty was recorded in the region (CCR 1874). In 1888 the world demand for copper declined rapidly and the world price of copper continued to drop until 1919 when the Cape Copper Company finally closed its operations (Ross 1998).

Pastoralism, drought, wage dependency and institutional change, 1870–1920

In the meantime, the fortunes of the Leliefontein inhabitants rapidly declined in

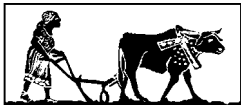
the wake of recurrent droughts during the 1870s and 1880s. The most severe of these occurred between 1881 and 1883 causing crop failure, loss of livestock and destitution (Cape of Good Hope, 1889). This was compounded by the subsequent dismissal of reserve labourers from surrounding commercial farms, and most able-bodied men were forced to leave Leliefontein to work on the construction of the Hondeklip road. Draught oxen, which had been essential to the transport trade only a few years before, were now so scarce that relief food had to be collected from O'Kiep by reserve inhabitants themselves. Between drought and the trading of cattle for transport oxen, the number of cattle declined from 2 500 in 1860 to 1 400 in 1890. Small-stock numbers doubled during the same period. A further drought struck in 1895 with the result that labour migration increased and investment in the reserve dwindled (Price 1976; Leeuwenburg 1972).



Leliefontein *circa* 1890. The prominent church buildings to the right are surrounded by reed-mat huts and a landscape showing signs of heavy grazing. (Photo courtesy of the South African National Archives)

When the Leliefontein mission was initially established in 1816, Rev. Barnabas Shaw gained the authority which had previously been held by the clan heads and governed with the assistance of a *raad*, a group selected by the people (Vos 1928). The status of the mission station was entrenched in 1854 when the Leliefontein Reserve, along with other Namaqualand mission reserves, received a Ticket of Occupation from Lord Cathcart, which conferred a form of leasehold title similar to that held by surrounding white farmers. This effectively reinforced the authority of the missionaries and entrenched the land rights of the Leliefontein Namaquas. In 1856 a civil commissioner and a resident magistrate were appointed and stationed at Springbokfontein (modern-day Springbok). Although the colonial authorities ruled indirectly, the missionary and his elected *raad* were the effective political authority of the reserve (Carstens 1966).

During the following decades the reserve's mission administration was chaotic, forcing the colonial government to intervene. Registration of the Namaqualand population took place in 1878 in order to collect a house duty on all residents and as a way of inducing the population into wage labour. This was difficult to enforce because of the migratory lifestyle of the Namaqua: trying to collect a house tax was almost impossible since the houses (mat huts) were constantly being moved (CCR 1879; CCR 1880). The decline in mission authority and control of the reserve coincided with the demise of the mixed farming economy, the closure of mines, drought and increased labour migration. The Mission Station and Communal Reserves Act of 1909 (enacted in 1913) finally brought an end to church control over the secular affairs of Leliefontein and replaced it with direct state intervention. This development conferred stable legal status and gave permanence to the Leliefontein settlement, encouraging a more-or-less sedentary lifestyle for the impoverished reserve inhabitants.



When Leliefontein became a native reserve in 1913, it had already been transformed from a refuge of peasant/pastoral production to a wage-dependent economy in which many households were semi-proletarianised. Afrikaans had become the common language, but Nama was still spoken by the older residents of Leliefontein and the population was still referred to as 'Namaqua'. Livestock farming remained the only viable economic activity within the reserve itself. Most people still lived in transportable mat huts and subsisted on a pastoral diet consisting of milk, meat and *veldkos* (wild foods) supplemented by wheat. In spite of this sedentarisation around particularly the mission school and an increasing reliance on seasonal crop production, transhumance remained a central feature of life:

For three months after the work of the harvest is over there will be a large number of children in the chief school of Leliefontein. Some of them are sent from a distance and live with friends or relations. They must bring with them what they call a 'melkding' – something to milk, a cow or two or three goats. All goes well for a few weeks and then people begin to trek to fresh pastures and the number of children drops from 120 to perhaps 20 (Morley-Crampton 1915:43).

During the winter season the majority of people trekked from the Kamiesberg highlands to outstations in the coastal *onderveld* (lowveld):

For four or five months they scatter themselves in the lowveld, 2000 feet or more below the level of Leliefontein. The people do this, not really to escape the cold, but to 'spare' the veld for the summer pasture (Morley-Crampton 1915:56).

This pattern was reversed during the summer and people moved with their herds into the fringes of the reserve which bordered the summer rainfall areas to the east. The only outstation in the Paulshoek

area was known as Moed Verloren (Moedverloer), situated on the borders of Bushmanland only a few kilometres from the present village. One of the earliest surveyed maps of Leliefontein, produced in the 1850s, describes Moed Verloren as a 'barren region, not much use – a few farmers live here' (Price 1976:62).¹⁰ Occasional church services were held in a crowded reed-mat house and a rudimentary school was overseen by a 'coloured preacher and his wife' who probably taught primarily from the bible (Morley-Crampton quoted in Price 1976:21). An indication of the remoteness of the place is conveyed by Morley-Crampton's description of meeting the people of Moed Verloren one day when 'the school master had loaded up the school-house in his wagon lock, stock and barrel, and school, scholars and schoolmaster were trekking to another place!' (Morley-Crampton quoted in Price 1976:77).

The genesis of village life: Oral histories, 1920–1946

The elderly men and women of Paulshoek agree that the origins of the village began with an exodus from Leliefontein in the early part of the 20th century and increasingly from the late 1920s as the grazing land around the mission station became overcrowded. Paulshoek was at that time an outstation, used during the months preceding the breeding season when rams needed to be kept separate from the rest of the herd. These rams were herded communally under the guardianship of an old man named Paul. The name followed naturally: 'And every time the people asked "Where can I put my ram" the people said "Send him to Paul's corner". So the place became Paulshoek' (Ouma Betjie Cloete 1999). Oom Paul was part of the large extended Josephs family – the principal inhabitants of the area during the late 19th century.

Dirk Dirkse, a relation of the Josephs family, built the first stone house in the

vicinity of Paulshoek around the turn of the century. He was one of the 'pioneer' communal farmers – the first to settle the area on a more or less permanent basis, having herds of cattle and using oxen to plough the first fields. These pioneer communal farmers probably had much in common with their counterparts among the white farmers who settled on land adjacent to the Leliefontein Reserve at this time. During the first decades of the 20th century, this scattered sedentary population gradually cleared more land as it was divided up among succeeding generations by the children of the original pioneer farmers. They continued to raise cattle and goats and to plant wheat and rye.

In the early 1920s, people from the Leliefontein area fell under the sway of the powerful utopian visionary Andrew Abraham Stockenstrom Le Fleur, who offered them a 'promised land of freedom and plenty'. Many of the people who lived in the Paulshoek area were persuaded to follow him to Steilhoogte and to sell their livestock, only to return a year or so later in destitution:

In those days, people had a very tough time. They were extremely hungry. There was a man here whom we called 'Jan Cap' and he would barter with the people. Our elders made springbok kluitjie – they knitted together skins and then people would come and buy them, maybe in exchange for a plate or a cup or something insignificant. My mother had just such a green plate, which she received in exchange for a springbok kluitjie at that time. People were so stupid that they would sell their valuables for nothing and in this way, outsiders would tell them how much food there was elsewhere and how many riches there were elsewhere, but in reality there were not. Jan Cap used to come here to recruit people for Le Fleur. To a certain extent, he was responsible for leading the people



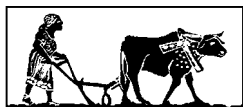
away to Steilhoogte, on the other side of Olifantsrivier [Olifants River]. Many people went there to see if they could make a better living. When they went to Steilhoogte they had to give up all their possessions. And it was in this way that a year or two later my people came back from where Le Fleur took them. They came back in 1925 with nothing (Oom Karel Joseph 2000).

The destitute returnees were able to survive by working on the Garies/Platbakkies road in exchange for basic food rations. This period seems to have been a watershed in the history of Paulshoek's development. It marked an early stage in the transition between a peasant subsistence economy based on mixed cattle and wheat cultivation to a wage-dependent economy supplemented by small stock and crops.

Also at this time, a white trader came with a coloured helper and bought livestock from the people in exchange for wine ... And it was the droughts that led to cattle dying. In those years they moved to Olifantsrivier [Olifants River] and from there to Steilhoogte and there they sold their cattle for nothing in order to be able to survive. And when they returned they started goat farming (Oom Samuel van der Westhuizen 2000).

The economic depression of the late 1920s, followed by a severe drought during the 1930s, put intense pressure on peasant production in the reserve. One old lady remembers the sights she saw as a child in Spoegrivier (one of the *onderveld* outstations) around this time:

The people were poor, very poor. I remember a boy who had no clothes, not even a jacket or pants or nothing. His mother walked around in rags. So my mother gave her some of our clothes, and she at least made him something from that (Ouma Betjie Cloete 1999).



Because reserve borders were unfenced and still permeable at the time, communal farmers were able to migrate and exploit grazing on adjacent state or commercial land. They also began to settle the more marginal parts of the reserve. Between 1931 and 1935 many families moved to Paulshoek. Some came from outside the reserve. Others moved from Leliefontein because it was becoming too crowded.

In the early days of the village there were very few of us and the land was open on all sides: we could graze on what is now commercial land to the south, east and west of us. At that time there was no need to migrate to the onderveld or anywhere else because there was enough space in this area (Oom Karel Joseph 2000).

During the 1930s, areas like Moedverloer still contained a significant cover of palatable shrubs (for example, *Eriocephalus ericoides*, *Hirpicium alienatum* and *Ruschia robusta*). Although the area had been a sparsely and sporadically inhabited outstation for many years, it was around this time, with the immigration of people from both inside and outside the reserve, that environmental change really began. In Moedverloer itself, eight Baster families, who had been evicted from white farms in Bushmanland, settled in 1938, along with 2 000 to 3 000 sheep and goats as well as donkeys. This number of animals almost doubled during the 1940s before the Basters finally moved to the Richtersveld in the early 1950s.¹¹ By this time, Moedverloer had been transformed from a veld 'rough and overgrown' with palatable perennials to an overgrazed waste (Oom Samuel van der Westhuizen 2000). The few local farmers who had moved to Moedverloer after the departure of the Basters finally moved to Paulshoek village in 1968.

In Kleinfontein, on the opposite side of the present village of Paulshoek from Moedverloer, a small stone house was constructed in 1932 by Jacobus (Ouboetetjie) Joseph. He let the

community use his building as a church and then also as a school. There were between 55 and 60 children who attended classes (in addition to the children in Moedverloer).

In 1937 there was such a terrible drought here. We were so hungry when we went to school that we ... the black people make this mielie meal and magou [a sour drink made from ground mielies] ... and we made porridge out of it. And that is just as thick [thin might better convey the meaning since magou is not very thick] as the magou. In the old days, we would take one of these 500 gram tins and in the morning, a tin like that would be made full of porridge for my brother Frik and me. Then we must drink it and live on only that till tomorrow morning again. And in 1937, that was how we were brought up. And we had no choice, you know? We had to walk to school over mountains. And if we came across a rabbit that jumped out in front of us – we were how

many? Sixteen children going to school? And if a rabbit jumped out in front of us then we wouldn't go to school for the day. We would rather spend the day catching that rabbit. We didn't have matches. We would use a stick, which we would rub against a stone. Then the stick would get so hot and we would put it into some donkey dung and hold it up to the sunlight and then it would burn. Then it would start smoking and then we would make a fire. Then we would braai the rabbit and eat it up. It wouldn't matter if we got to school that day – we would rather get a hiding: we could never resist rabbit.

We were living far apart, and just temporarily in our places. And that was in 1940 to 1945. We stayed in places such as Jan Cloete se Puts, Perdedam, T'oeroegorras, Windpoort, Pan se Plaat, Gooikloof, Golmuskie, Moedverloer. And then we moved to Paulshoek in 1946. We lived in all those places, but we all



Children queue for lunch at the Kleinfontein school, 1938. (Photo by Adonis John Andrews)

came to this little church in Kleinfontein (Oom Samuel van der Westhuizen 2000).

Between 1920 and 1960, cropland was continually expanded and subdivided as the population grew. Evidence from elderly informants and aerial photos confirm that by the end of this period, nearly all land capable of being cultivated had been ploughed at some time during the previous 50 years. This has had a dramatic effect on much of the flat, sandy valley bottoms where today unpalatable pioneer species such as kraalbos (*Galenia africana*) are the only surviving perennials. Further changes in the quality of grazing probably came about after 1960 when widespread ploughing was dying out. Until then, a system of winter and summer area transhumance meant that herds were rotated around the veld during the year.

In the '30s the people were widespread. And now, lately in the '60s, well this was the place [Paulshoek village] where everyone came together. And the number of animals that grazed in this area increased. There was enough space in the '30s. In those days, people did whatever they wanted to. You could easily have 100 animals and you could graze pretty freely. But later, five or six men's animals used the same space (Oom Karel Joseph 2000).

Magriet 'Ou Tannie' Andrews's parents were one of the first families to settle and build a permanent house in Paulshoek during the 1960s.

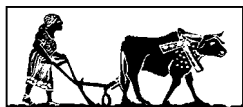
Land became scarce in Leliefontein, and then my mother and father moved here in 1935. There were already stock posts at the time, but there wasn't a settlement yet. In the beginning, people stayed on their croplands, but when they built the school in 1940, the people came to stay nearby [in Kleinfontein]. My husband was from Paarl, and he was

the first principal of the school. Then he went to work in Klipfontein for 22 years. But when he died in 1986, I came back to stay here. My parents were still here during the 1950s and 1960s, many people still stayed in matjieshuts [reed huts], but they [my parents] stayed in a house and I had extensions built on (Magriet 'Ou Tannie' Andrews quoted in Abrahams 1999:15).

During the decades following the depression, livestock numbers soared, as did the reserve's human population. This came about as a result of government policies which simultaneously consolidated white settler farming on reserve borders and promoted territorial segregation hand in glove with the migrant labour system. Leliefontein was governed by a management board consisting of locally elected representatives and a number of government appointees, the latter invariably having the power to overturn decisions made by the former.

Formal rules governing rights of residence and access to grazing were instituted along with various taxes on livestock, arable land and residential land. The convention of *boorlinge* (birthright), for instance, was one that all accepted: to be born in a village confirmed entitlement to village land. Those who were born in Paulshoek still make a point of mentioning it, and those born outside the village (which is not uncommon among the elderly) point with pride to the fact that their children are *boorlinge*, a right that can never be fully lost. The intensity of feeling which accompanies this distinction of 'citizenship' in the village is encapsulated in the words of an elderly Paulshoek resident:

They come from the cities, they go on, almost crying, when they say 'grandmother came from here' or 'my great grandfather was a Paulshoeker'. [The family] may have been absent for many years, but they come back (Magriet 'Ou Tannie' Andrews quoted in Abrahams 1999:16).



The Native Affairs Boards, Native Trusts, Boards of Management and Advisory Boards that were set up to administer the internal affairs of the reserves were in effect institutions designed to ensure that the economic development of these areas was in line with the interests of the state and the labour requirements of commercial farmers and mining companies. Throughout the 20th century, underfunding and overcrowding forced many reserve residents into the commercial agricultural and mining wage sectors. The few communal agricultural developments that were initiated by the state were tightly controlled, and support services were minimal.

The growth of Paulshoek

Until 1940, many whites were little better off than the reserve inhabitants, both of whom had suffered during the prolonged depression (Sharp & West 1984:9). However, the colour divide steadily deepened with the implementation of legislation such as the Land Settlement Act of 1940, which provided white farmers with grazing licenses that were eventually converted to ownership rights. Meanwhile, reserve families began to gravitate to the newly established village in 1942 in order to be closer to the school and church and because of new regulations relating to summer and winter grazing. During the winter, families and their livestock were concentrated around Paulshoek in kraals built just outside of the village boundary. 'Now we stood in a line and we left our croplands till the summer time, after the harvest, then we would move back' (Oom Karel Joseph 2000). A linesman was employed to enforce the exclusion of livestock from the village and to make sure that cropping areas were reserved for summer grazing and the lowlands were reserved for winter grazing. This system seemed to work for about 20 years, but a major change in the practice of seasonal transhumance occurred in the 1960s. This coincided with drought, increased mining labour migration and changing lifestyles of the younger generation.

In 1950 almost 10% of Leliefontein's population consisted of whites (some of whom had immigrated from as far afield as Cornwall and St. Helena) and mixed marriages were common (Leeuwenburg 1972:25; Sharp 1984:11). All this would change with the introduction in 1950 of the Group Areas Act. The Act confined coloured people to the reserve areas, thereby denying communal farmers access to non-privatised state land across the reserve borders (Archer & Meer 1998:10). Not only did the Group Areas Act result in a dramatic increase in the reserve population as a result of forced removals from other parts of the country, but, with the provision of pensions, it also led to many retiring coloured farm workers 'returning' to the reserves, often with their families and livestock. This expansion of the reserve population within a restricted land area was exacerbated as the new owners of adjacent commercial farms now fenced their land on the reserve boundaries with the assistance of government fencing subsidies allocated to white farmers only. The population of Paulshoek expanded rapidly during this period.

After 1950, copper and diamond mining and the fishing industry flourished, producing low unemployment with 'a modest prosperity for most, and a resurgence of the material differentiation within the reserve population which had begun in the nineteenth century' (Sharp & West 1984:11). Employment opportunities gave both white and coloured Namaqualanders a chance to overcome the uncertainty attached to farming in a marginal environment with an unpredictable climate. Some whites were able to invest capital in commercial farming by amalgamating private farms, while others moved off the land altogether. This depopulation of privately owned farms made it possible for whites to increase the size of individual land holdings, making commercial livestock farming that much more viable. Many white commercial farmers bought second farms in the summer rainfall Bushmanland region to



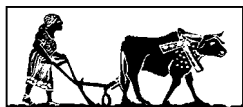
the west of Leliefontein or in the succulent-rich Sandveld towards the coast, thereby increasing their management options and effectively mimicking pre-colonial transhumance herding patterns, a practice which continues today among many white farmers.

The effect of this economic growth on local people, who in the meantime had been classified as coloureds, was somewhat different: the continuous process of class differentiation found its most perverse expression in racial separation, which was objectified in the physical division between private and communal land. The viability of commercial livestock farming was enhanced at the expense of communal farming. Newly erected fence lines coupled with a prohibition of coloured farming outside of the reserve meant that from about the late 1950s onwards, communal pastoral mobility as a response to drought and seasonal grazing conditions was increasingly confined to discrete village grazing lands within the reserve.

Such restrictions were mitigated somewhat by the fact that coloured people

were not restricted by pass laws, nor were they forced back into the reserves from urban areas like many Africans had been (Sharp 1984; Hendricks 1997). Permanent out-migration from the reserves made it possible for remaining reserve inhabitants to crop and herd livestock from this limited resource base 'and for others to be able to activate social relationships of reciprocity with them in time of need' (Sharp 1984:10). This freed the reserves from the levelling effects of progressive overcrowding leading to absolute poverty.

While many family members sought work away from the village, the inhabitants of Paulshoek were largely dependent on agricultural production. The clearing and cultivation of croplands probably reached its greatest extent during the 1950s, at a time when many young villagers still aspired to becoming small-holder farmers. Migrant labour had been a way of supplementing family incomes since the inception of the reserve system, but with the growing population pressure and drought during the late 1950s, an



A commercial farmer trekking between Bushmanland and the western Kamiesberg, 1999. (Photo by M. Timm Hoffman)

increasing number of young men left the village to become migrant mine workers. Many of Paulshoek's once extensive croplands have remained fallow since then. It was a time of rapid social change. The continued proletarianisation of the reserve population spelt the decline of mixed farming as a viable livelihood option for all but a few.

Paulshoek doubled in size during the 1960s. The new village continued to attract families who had previously resided on stock posts in Paulshoek and Leliefontein, as well as the families of agricultural labourers from the surrounding commercial farms. 'Farm labour is very unpopular because of hard working conditions and low wages ... It is usually done by older people who are otherwise unemployable, and young girls' (Leeuwenburg 1972:15). At the same time as labour migration increased, villagers became truly sedentary as a result of the security provided by village life and remittances from absent family members.

Until this time, little material improvement was discernible from one generation to the next. Ouma Sara Maarman's story is one of long hours of hard work, deprivation and the lack of respect which comes with being a female herder on the white-owned farms to the east of Paulshoek. Her daughter, Tannie Hanna, spent her childhood under material circumstances just like hers, working as part of the family unit for a white commercial farmer. The story of the family's rise to better fortunes began when Tannie Hanna met and married Oom Damon. At first they worked together as herders, moving from farm to farm. In between these periods of paid employment they began to re-establish the family in the reserve:

In the sixties we came back, mainly for the children. They were able to go to school here, and my brother was living here already. We left the children here, but we had to go on working for the farmers. We still had

to pay the levies. In 1973 we came to stay for good. For the first couple of years we were lessees, but eventually we became citizens and could work for ourselves (Tannie Hanna Jas quoted in Abrahams 1999:18).

The 1960s were a pivotal point in the social economy of Paulshoek and marks the transition from a mixed farming subsistence economy supplemented by migrant wage remittances to one that was almost wholly dependent on migrant labour and state pensions. By the end of the 1960s, Paulshoek had about 70 households, or approximately half of today's population. During the next decade, people who settled or returned to Paulshoek were no longer farmers or agricultural labourers drawn from the surrounding rural areas but predominantly migrant labourers from urban centres or the highly intensive grape and vegetable growing region of Klaver and Vredendal to the south. Prior to this, people had settled in Paulshoek for reasons associated with apartheid laws, which indirectly brought about the sedentarisation of a mobile population and the establishment of villages throughout the reserve. Families increasingly sought the security of established rights to residence, which also ensured that their children would have access to education. The aggregation of extended families provided a form of social security, not only for those in need, but also for those who had access to employment outside the village and required a family network to care for those who were left behind.

During the 1970s and 1980s, people settled in Paulshoek for very different reasons than previously.¹² Now the amenities of the village, its safety and the ability of the unemployed to survive here on very little money made it attractive to many members of extended families who had been absent, often for most of their lives. The village also grew as a result of redundancies and forced retirements from the regional mining sector. Relatively high wages and retirement packages enabled



many household heads to build comfortable brick houses, a trend that increased throughout the 1980s and into the present. Some of these returnees also invested capital in livestock, in many cases providing subsistence wages to local herders.

'Economic units'

Apartheid policy, especially during its grand phase of pass laws, forced removals and the creation of Bantustans, was often justified on the grounds of spurious development models entailing massive social engineering. The 'betterment schemes' in the homelands sought to reform communal land use and land tenure into a 'rational' and 'efficient' system, entailing the wholesale disruption of rural communities. The coloured reserves of Namaqualand did not escape the perverse attentions of apartheid planners: here the land would be 'privatised', marking the end of a long history of pastoral, communal livelihood practices. This was not the first time that communal tenure had

been cited as the cause of underdevelopment of the Leliefontein Reserve. Between 1888 and 1890, the colonial government had put forward (and reluctantly shelved) a plan to privatise Leliefontein's communal land (Price 1976:49–52). Over 70 years later, the Coloured Rural Areas Act of 1963 gave power to the Minister of Coloured Affairs to radically reform communal land tenure within the reserves.¹³ It was now possible for the minister to unilaterally divide and allocate communal land on the basis of individual tenure to 'bona fide farmers', although this would not happen until the 1980s under even more radical legislation.¹⁴ The function of communal agriculture as an instrument of redistribution – as a medium of reciprocity – was ignored in official thinking. No one in government seems to have inquired into the actual workings of communal tenure in Namaqualand or to have arrived at the obvious conclusion that the communal system's greatest weakness was the shortage of land. It was simply assumed

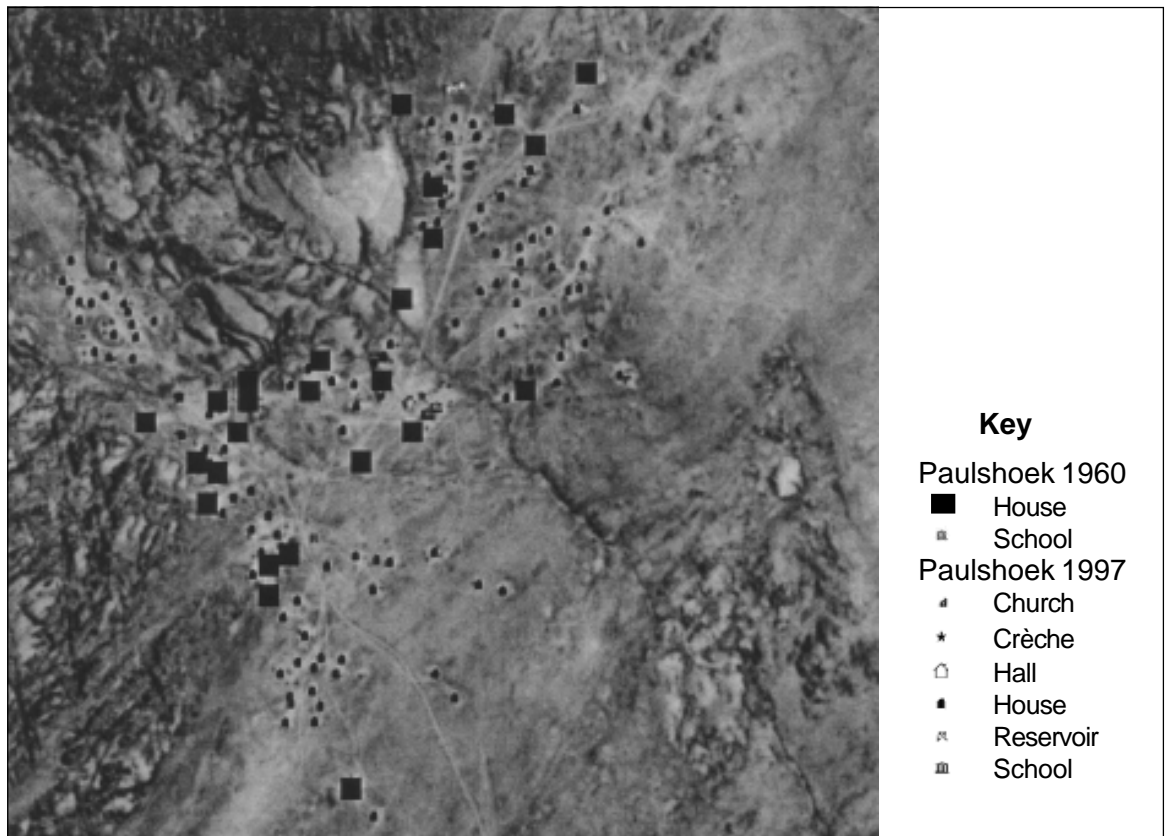
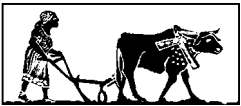


Figure 1: Aerial view showing the growth of Paulshoek village between 1960 and 1997

that a system of community membership which gave all residents access to the commons, even when most of them were not actively engaged in using these rights at any one time, was superfluous to the needs of reserve communities (Boonzaier et al. 1996:77).

Such assumptions were implicit in the legislation aimed at 'reforming' the communal land base of Leliefontein (and the other Namaqualand reserves) in the 1970s and 1980s. The provisions of the 1963 Coloured Rural Areas Act, its amendment in 1978, and its successor, the Rural Areas Act of 1979, all provided for the separation of residential and agricultural zones and promoted the subdivision of agricultural commonage into privately leased so-called 'economic units'. This scheme was first applied in Namaqualand during 1978 and implemented in Leliefontein during 1984.

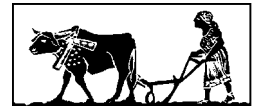
Leliefontein Reserve was subdivided into 47 farming units ranging in size from 1 500 hectares to 6 175 hectares, 30 of which were rented to individuals or syndicates.¹⁵ The remaining 17 units were set aside for communal use by 230 farmers who had been excluded from the economic units scheme. The timing of implementation could not have been worse, coming as it did in the midst of drought. As a result of being even more confined to limited grazing, many of the herds of these 230 farmers were decimated.

The village lands of Paulshoek were divided into five so-called economic units and stock fences were erected, effectively closing the commons. Previously, 30 or more communal farmers had grazed their stock across this landscape according to informal usufruct and transhumance rules. Croplands belonging to approximately 20 families were also privatised and allocated to the five new units, although in Paulshoek, unlike other villages in the reserve, these units were occupied only briefly and under protest from angry villagers.

The implementation of the economic units system exacerbated existing class divisions in the slightly more affluent villages of the reserve. Those who supported the economic units tended to be the holders of these new units: they were mostly management board members and their immediate families, who also happened to be the more wealthy and larger livestock farmers. Paulshoek, however, had few serious applicants for the new units, reflecting its status as one of the more marginal farming areas of the Leliefontein Reserve. The management boards were, on the whole, unrepresentative, incompetent, unaccountable and unpopular, and they had little support in Paulshoek.

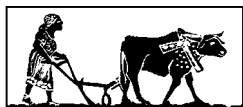
Apart from the technical issue of whether or not the subdivision of communal land actually constituted 'economic farming units' (Archer et al. 1989), the social and economic costs to the majority of communal farmers and their families seemed to have been completely left out of the reform equation. No compensation was offered to all those who had lost access to the commons, and recommendations that progressive coloured farmers be given access to land within the white commercial farming areas were also ignored. The result was grossly unfair and technically incompetent and led to tremendous hardships in the reserves. Bitter opposition to the reforms finally resulted in a case being brought before the Cape Supreme Court in 1988, which ruled in favour of the communal farmers on a technical point of law. Communal land was officially reinstated in Leliefontein, as well as in other rural areas.¹⁶

The 1990s represent another watershed period for the village of Paulshoek. With the democratisation of national politics and the creation of the Reconstruction and Development Programme (RDP), the Growth, Employment and Redistribution macro-economic strategy (Gear) and land reform programmes, many improvements are taking shape in the village. Many previous observers believed that the reserve's pattern of marginalisation,



poverty and social fracture were somehow inevitable.¹⁷ The solution of land privatisation or ‘group-based, industrial farming’ had been imposed unsuccessfully. It was suggested that the worst-case scenario of a ‘laissez-faire policy’ (which is basically what transpired during most of the 20th century), would lead to an ‘increase in absolute poverty, growth of class distinctions, migration away from the area, deterioration of physical resources and decline in internally generated capital’ (Leeuwenburg 1972:26). It is true that these processes have occurred – dire poverty exists, as do class distinctions. In addition, there has been no immediate improvement in the conservation of natural resources, and there is little to suggest that outside capital has been put to productive use inside the communal area. But is it any wonder, given the repressive and uncertain political environment of the National Party government?

Yet, the events since 1994 have shown how quickly the transformation of a rural social economy can occur. The addition of commonage through the Land Reform Programme (Rohde et al. 1999), RDP



housing, the reorganisation of local government, the inclusion of Paulshoek’s younger generation in the political decision-making processes of the village – these and other recent developments would have been unthinkable only 20 years ago. Of course there is a long way to go, and many villagers complain about the slow pace of change, but a historical perspective shows just how far Paulshoek has come in only six years. For almost two centuries the people of Leliefontein have been said to be living in a ‘land of darkness, fatigue and non-improvement’ (Barnabas Shaw quoted in Price 1976:80). Now, after several centuries of discrimination and subjugation, the people of Leliefontein have been given the political rights and the freedom to create a more positive future for themselves.

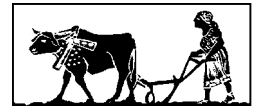
Endnotes

- 1 The name Kamiesberg is probably derived from the Nama word for water, /*gammi*.
- 2 The earliest evidence of copper trading by the Namaquas comes from the period 1660–1680, when various journeys of exploration were undertaken by Europeans from the Cape of Good Hope, particularly



Children of Paulshoek – the future? (Photo by Sophia Vytjie Klaase, Paulshoek Community Photography Project, 1999)

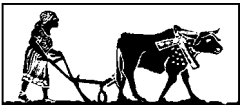
- Olaf Bergh (1682 and 1683), Simon van der Stel and Izak Schryver, who travelled in the vicinity of the present village of Leliefontein where he traded copper ore from the Namaquas. For at least a hundred years these discoveries were not pursued by Europeans, until more exploratory journeys occurred towards the end of the 18th century (Cornelissen 1965:9).
- 3 The terms 'Bastaard' and 'Baster' refer to the same social category and the change in spelling from 'Bastaard' to 'Baster' probably reflects the evolution of the Dutch language into Afrikaans.
 - 4 The trekboers were itinerant farmers, mainly of Dutch extraction, who moved northwards from the Cape Colony in search of grazing lands.
 - 5 See also Penn 1995:8.
 - 6 The mission was first established near Kharkams at Bethelsklip (Bethels Rock). When lack of water became a problem it was moved to Leliefontein village. Bethelsklip is held in very high regard by current inhabitants of the Leliefontein Reserve.
 - 7 Of these, 37 Basters, six emancipated slaves and one Afrikaner complemented the overwhelming Namaqua majority (Webley 1992).
 - 8 The outstation is also known as Moed Verloren.
 - 9 Noted by Ridgill, who visited Leliefontein in 1870. See Ridgill 1978 (1870).
 - 10 Price (1976) gives the following references:
Government Blue Book G60 – 1890, *Report on the lands in Namaqualand* by Mr S. Melville, Second Assistant Surveyor General, 30.6.1890; map of Leliefontein by W.F. von Ludwig, June 1856.
 - 11 These families were a small contingent of the so-called 'Bosluis' (bush tick) Basters.
 - 12 See Part 2 (page 51) for a detailed analysis of villagers' migration histories and reasons for settling in Paulshoek.
 - 13 This Act played a role in the establishment of villages as more permanent dwelling places in Leliefontein. The original plan was that people should be moved to just two villages – Leliefontein and Kharkams – where they could have access to schools, clinics and other services, but also no doubt be removed from the commons as well. When this failed, or was resisted, the reserve residents were 'encouraged' to settle in the nine current villages. The increased sedentarisation of the population was therefore not only a result of changing socio-economic factors, but also due to political pressure.
 - 14 See Rohde et al. 1999.
 - 15 The farming units were to be made available to people who could prove they had sufficient monetary or property resources to farm. See also Archer et al. 1989.
 - 16 As a point of interest, the economic units established in Mier in the Kalahari were not revoked.
 - 17 For example, Price 1976.



Part 2: The social economy of Paulshoek

Namaqualand is generally thought of as a peripheral or marginal area in South Africa, with a very small, highly scattered rural population dependent on a few towns and mining centres for services and administrative facilities. Covering more than 50 000 square kilometres, Namaqualand is sparsely populated by about 66 000 people, 45% of whom live in the nine communal areas scattered throughout the district (see Figure 2).¹

Covering just 25% of Namaqualand, the communal areas are home to the descendants of the Nama-speaking Khoekhoen, the first herders in the region, who arrived here with their fat-tailed sheep more than 2 000 years ago. Contact between Namaqua herders and San hunter-gatherers, and later with runaway slaves and white settlers, resulted in today's diverse Afrikaans-speaking population. Classified as coloureds under the apartheid regime, they are not confined to the communal areas, however, but also live and work on commercial farms and in the surrounding towns in a wide variety of professional, technical, skilled and unskilled positions.



The widely dispersed coloured communal areas are important social and administrative features of the Namaqualand landscape, many of which began as mission stations – places of refuge from the increasingly violent, marginalising effects of frontier colonialism. Later they became labour reserves for commercial farming and mining interests and today, although overcrowded and poor, they continue to provide a safety net against the uncertainties of contemporary life. Leliefontein, comprised of ten widely dispersed villages on a total of 192 719 hectares, is one such area (see Figure 3). Paulshoek is one of these villages.

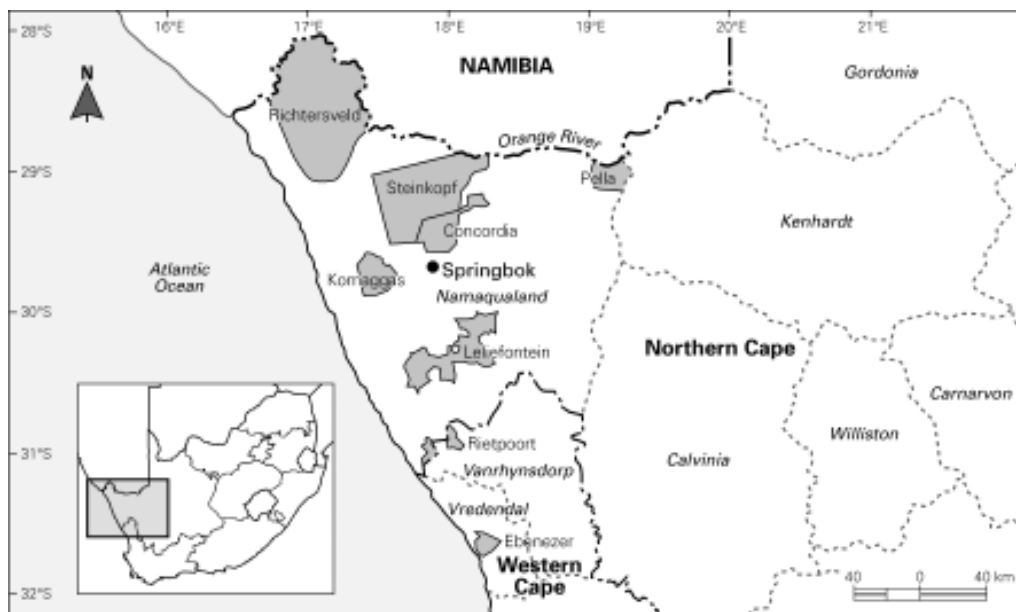


Figure 2: Map of the Northern Cape (shading denotes communal areas)

Paulshoek: A village profile

Situated in the extreme south-eastern corner of Leliefontein, Paulshoek is peripheral from both a geographical and social perspective. It is approached by gravel road from the west, 52 kilometres from Garies, the closest town and administrative centre, and is situated 27 kilometres from the nearest village of Leliefontein, where the local secondary school is located, along with a clinic and shops.² To the east of Paulshoek, the vast flat expanses of Bushmanland form the heartland of a deep rural commercial sheep farming area.

Paulshoek is typical of communal settlements throughout Namaqualand. It is a product of the same historical processes which brought about the creation and maintenance of settlements throughout the 'coloured reserves' of this region. Paulshoek owes its present peripheral status as much to this long political history of social and economic marginalisation as to its remote geographical setting (see Part 1). Yet, in spite of this, Paulshoek is highly dependent on, and connected with, the outside world through migrant labour, state welfare and kinship networks.

Located in the rain shadow of the Kamiesberg, the village itself is a collection of scattered brick and corrugated iron houses, separated from each other by neatly fenced garden areas and raked

gravel. The village is dispersed, in no immediately recognisable order, across one of the innumerable sandy outwashes that intersect the Kamiesberg massif. Paulshoek is a relatively recent aggregation, the result of changing economic and social developments that arose in the 1940s and 1950s. During this time a new school and reliable water supplies attracted people from the overcrowded village of Leliefontein, as well as from smaller nearby settlements and scattered stock posts across the 20 000 hectares which comprise the Paulshoek grazing lands. As will be shown later, people also came from further afield – from other villages in the Leliefontein communal area, such as Nourivier, as well as from the farms and settlements in the broader Namaqualand and Bushmanland regions.

Social networks between the old Leliefontein Reserve's villages are important in maintaining a strong local identity. An overarching sense of solidarity across the Leliefontein communal area has grown out of the shared history of poverty and oppression, although political conflicts and class divisions between and within the ten villages of Leliefontein also exist.

At first sight, Paulshoek might appear as a last outpost of apartheid planning: it is a sprawling cluster of 140 or so low houses, many of them little more than shacks. The houses look exposed and

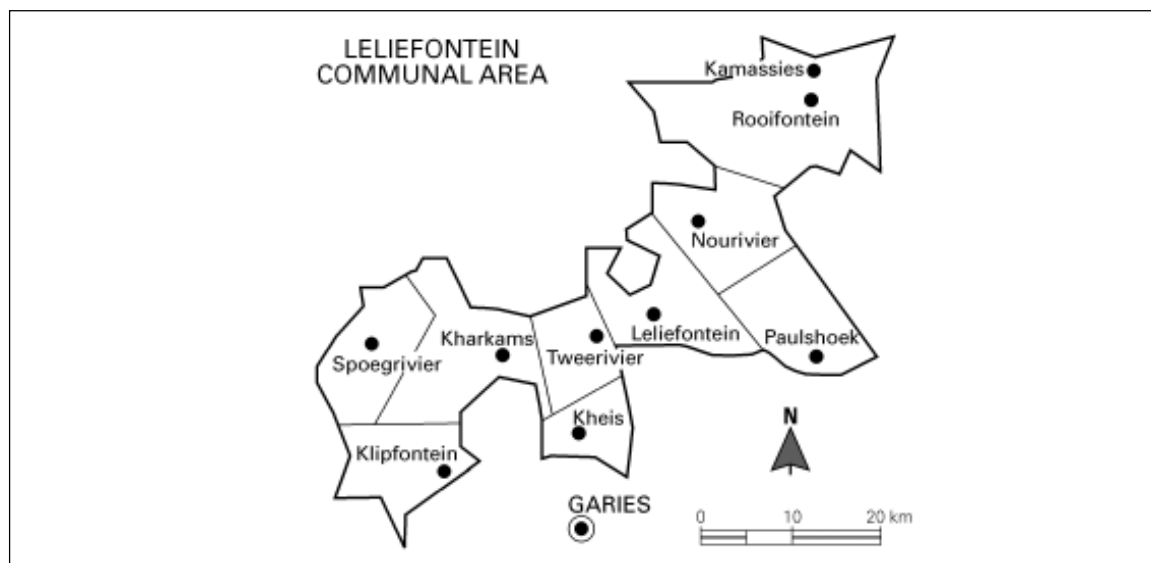


Figure 3: Map of the Leliefontein communal area showing the ten villages and their approximate boundaries

vulnerable in the huge, barren space that surrounds the village. Superficially, Paulshoek bears a generic resemblance to townships that straddle the outskirts of small *dorps* (towns) and cities throughout the Northern Cape, although Paulshoek is about as far away as you can get from an urban centre. This impression of incongruous dislocation quickly gives way to a sense of its underlying rural character. A tenacious, pragmatic informality imbues the layout of the village and the way it has grown during the last 60 years. Clusters of two or three dwellings, many with a traditional *matjieshut* (reed-mat huts) and *kookskerm* (cooking shelter) attached, are contained within fenced yards where an occasional shade tree and small flower gardens are an understated expression of the pride that many villagers take in their domestic environment. Most houses have water piped to an external tap and many have small, free-standing cubicles housing bucket latrines.³ Although socio-economic differentiation within the village is apparent in various types of housing, there is, on the whole, a homogenous feel about the mix of small, corrugated iron shacks and larger, more recently constructed brick houses.



A village hall constructed in 1995 serves as the social, educational and administrative heart of Paulshoek. It is part of a complex that includes the nursery and primary school, the burial society, the church, a playing field, the storage area for the village tractor and a new shop. A rainwater collecting system dominates the village landscape in the form of a low pink wall, crowning a smooth granite dome that protrudes from the ragged hills to the north and west. Looking back across the entrance to the village, the immediate skyline is dominated by several water storage tanks. Further afield, the village overlooks the lower lying commercial farmland to the south, where a series of folded mountains are intersected by deep, ephemeral watercourses.

There is a sense of impending change in the village, made visible by the neat new RDP houses that have sprung up adjacent to older dwellings. A brick-making project has manufactured the foundations for some 45 new houses (ten of which were completed before the project stalled in response to allegations of corruption levelled at the construction company from Springbok). These homes will replace many of the old makeshift tin



A section of Paulshoek village, 1999. (Photo by M. Timm Hoffman)

Box 1: A day in the life of Paulshoek

The day begins before dawn, with the crowing of roosters at 4.30 or 5.00am in summer. Farmers begin to make their way to nearby stock posts while others start up the cooking fires and do chores such as latrine waste disposal. Quietness pervades the cool air, even as the first rays of sunlight glimmer upon the surrounding mountains. On colder winter mornings, the village stirs slowly and warm fires break the crisp chill that carries the often broken promise of long-awaited rain.

Children prepare for school, at times to the shrill encouragement of their mothers. When available, the hired tractor also starts up early to cart water, or plough, or move sand for the RDP (or 'Mandela') housing project. Early morning travellers may also add to the bustle as a few cars and bakkies leave the village along the dusty corrugated gravel road. School starts at 7.30am, and then the village falls into a peaceful routine of daily chores. Quiet returns to the village as women clean, care for the young and elderly, and begin preparations for the daily meal.

Mostly, the pre-noon hours are set aside for housework, sewing and other odd jobs. When project work is available, such as the RDP housing scheme or the LandCare Project, men and also a few women find temporary employment. At such times the village takes on a more earnest, purposeful atmosphere. Every two weeks a mobile health clinic with a nursing sister and a medical doctor arrives at the community hall. There is always a rush to be early in the queue. The two general stores are the village's other meeting points where young and old catch up with news and gossip, especially as they wait to be served at *eind maand* (month-end), when shopkeepers tally up income and expenses and debts are settled.

And with the end of the school day the village comes to life. The shops are busy as children come to buy a few cents' worth of sweets or ice lollies. The many unemployed men in the village remain inconspicuous until the afternoons when groups congregate for amusement in the mountains overlooking the village and older men meet in each other's houses or under shady trees. The general lack of shade and cool water can make activities outside quite unbearable and on extremely hot days most people rest during the mid-afternoon, taking shelter in their houses.

Occasionally, sporting events such as rugby, soccer or netball matches are played (often without shoes) on a grassless pitch in the centre of the village. These events are taken seriously, especially when visiting teams arrive, providing an excuse for socialising well into the evening.

Stock farmers and herders lead a different pace of life from the women, children and unemployed youth of the village. Those with nearby grazing can be seen herding their sheep and goats across the hillsides that adjoin the village. Many farmers make the daily walk of five kilometres or more to their stock posts and back – quite a few farmers are well over the age of 60 and still manage this daily routine. Others reside more or less permanently at their stock posts, returning to the village every few days or on weekends to visit family and buy supplies. Farmers who are fortunate enough to have transport regularly drive out to their stock posts, taking food and other supplies to their hired herders. In the late afternoon, sheep and goats are returned to their kraals for the night, and farmers and herders rest, visit neighbours or return to the village.

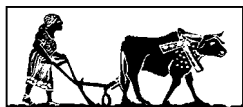


The evenings are a time when people can be seen sitting on each other's *stoeps* (porches) on balmy summer nights or around smoky fires in the *kookskerm* during winter. Night falls like a blanket covering the village, with candles and oil lamps flickering in the darkness. For those few who can afford it, a generator, gas or batteries provide a brighter light. Special occasions such as fundraising dances or video evenings are made possible by the use of a generator to supply electricity for lighting and amplifiers. These events often create a buzz of anticipation around the community hall.

The last weekend of the month sees many migrant workers returning home with wages and groceries. Family members are reunited, and the cash injection brings with it a temporary levity and revelry that can occasionally lead to physical assault and even rape and murder. The effects of such intermittent violence leave deep scars on the social fabric of this small rural village, which has no policing system and no permanent health facility or other emergency services.

Funerals constitute one of the village's more important social rituals. Extended family members as well as neighbours become involved in baking, cooking and other arrangements. A *gesangaand* (song evening) is part of the funeral and can last into the early hours of the morning before the burial. Members of the choir are proud of their talents, especially when they are invited to sing at funerals in other towns. Since it is rare that people have the opportunity to travel for pleasure or purely for socialising, such opportunities are especially precious. Practice sessions and fun song evenings form part of the general entertainment diary. Sunday church services and evening prayer meetings are also important, regular and well attended features of village social life.

During most evenings the village becomes dark and silent and is only disturbed by occasional laughter, the crying of infants or the barking of dogs. Sometimes, the low singing of groups of youth returning home can be heard echoing across the village. Now and again, a car enters or leaves along the road, or passes in the distance on the winding corrugated gravel track which connects the commercial farms between Platbakkies and Leliefontein. Eventually, all sounds and light fade away, and Paulshoek sleeps.



shacks. A new village tourist camp, located at the western edge of the settlement, is in the early stages of development.⁴ A recent LandCare Project, involving the restoration of a rainwater catchment dam and the fencing off of adjacent grazing land for rehabilitation, has brought much needed temporary employment to the village itself.

In spite of these recent developments, the village, superficially at least, appears to be a place of little activity, apart from at the end of each month and during holidays when migrant labourers, school children and extended family members return to Paulshoek. Much of daily life revolves around domestic chores, the gathering of

firewood from the surrounding veld, and the continuous coming and going between the village and its surrounding scattered stock posts. The absence of all but a few livestock within the village belies a strong, abiding link between many village families and satellite stock posts, often located up to ten kilometres distant from Paulshoek.

Village demographics and the social economy of poverty: An overview

Poverty indicators

The majority of households in Paulshoek rank alongside South Africa's rural poor. A

household survey conducted in 1995 by Surplus People Project (SPP) found that the average per capita income was R215 per month.⁵ This is below all standard measures of poverty thresholds based on income (DBSA 1998:40; Eckert 1996:245; Carter & May 1998) and in international terms is roughly equivalent to a per capita income of less than \$2 per day.⁶ Thirty percent of villagers live on less than \$1 per day: a measure used by the United Nations Development Programme (UNDP) to define the category of 'least developed country'.

The Human Development Index (HDI) is a comparative statistical measure of a country's 'quality of life'. It was created by the UN in 1990 as an improvement on the distorting use of gross domestic product (GDP) per capita as a standard measure: HDI combines life expectancy, adult literacy, the average number of years a child spends in school and average income. Although 'the results are not so much profiles of countries as silhouettes, projected against a twilight of statistics' (Hardin 2000:84), they are useful, because they indicate on a general level the ability of people to make informed choices about their lives and then to act upon a larger or smaller range of opportunities. South Africa as a whole rates 0.677 out of a possible high of 1.00, placing it within the category of countries with 'medium human development'. The Northern Cape ranks close to the country average at 0.698, comparable to Botswana, the Philippines and Indonesia. However, the HDI for Namaqualand falls to 0.428 (similar to Lesotho), while the HDI measure for Namaqualand's coloured population drops to 0.340, a ranking in the category of 'least developed countries' and comparable to Haiti, Senegal and Angola (DBSA 1998; UNDP 1999). Many sources of comparative evidence, some of which will be detailed here, indicate that Paulshoek is not untypical of coloured communities throughout Namaqualand.

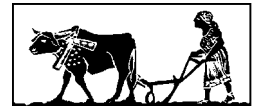
The merits of various methods of measuring poverty are the subject of ongoing debate among social researchers. Such measures include monetary income, daily caloric intake, basic needs (such as

housing, clean water, toilet facilities and sources of energy), evaluating endowments (such as health and education) and assets (labour, land, livestock and access to markets), livelihood and asset mapping, and participatory poverty assessment. The most meaningful measurements use a combination of methods over a period of time so that longitudinal data reveal the dynamics of poverty and distinguish between families who are transitorily poor and those who have little or no potential to escape the poverty trap. Throughout this report, we use many of these methods, starting from a measure of basic incomes and culminating in case studies of several household clusters over a period of four years.

Background studies and research methods

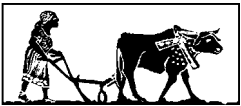
Several studies relating to community health, distribution of livestock ownership, development initiatives and local level politics have provided important source material and are referred to in the main text of this report. The MSc thesis of Thurston Marinus (1997), *Understanding local institutions and organisations relating to natural resource use and management in the Leliefontein Reserve, Namaqualand*, provided invaluable background, contextualisation and detailed ethnographic records of the social organisation of Paulshoek.

We have been fortunate in being able to draw on the outputs of several research projects which were either instigated prior to the Global Change and Terrestrial Ecosystems (GCTE) project or conducted concurrently with it. Of these, the project known as Rural Livelihoods and Natural Resource Management in Semi-arid Areas of South Africa: Leliefontein Reserve, Namaqualand (May et al. 1997)⁷ provided detailed demographic and socio-economic background information across the Leliefontein communal area. A total of 439 interviews were carried out in five of Leliefontein's villages during 1995, 75 of which were conducted in Paulshoek. Standard questionnaires were derived from the Statistics on Living Standards and Development Household Survey (1993)



conducted by the World Bank and the Southern Africa Labour and Development Research Unit (SALDRU). This database was generously made available to the GCTE team for analysis by Harry May and SPP. Several other studies made a significant contribution to the background of the Global Change research project, including the Medical Research Council's (MRC) health assessment of the Leliefontein area (MRC 1998), Olle Östensson's UN-funded model of the socio-economic consequences of the restructuring of the mining industry in Namaqualand (Östensson 1998), and Anseeuw's (1999; Anseeuw et al. 2001) socio-economic analysis of diversity among farmers in Leliefontein.

Socio-economic research in the village of Paulshoek was carried out by Hayley Rodkin, using a broad anthropological approach. She lived in the village for an average of ten days per month between August 1998 and November 1999. During this period she conducted a survey of household budgets, compiled migration histories of 30 household heads and their spouses, and supervised a basic questionnaire survey of 117 household heads. She instigated a community photography project, a village newsletter, recorded many in-depth interviews and took part in many other activities as part of the day-to-day life of the village.



Jobs, pensions, gender relations, education and natural resources

By any standard, Paulshoek is poor. And yet several mitigating factors in the demographic and economic make-up of the village make it less so than might appear from the bald statistics.

Wages and remittances earned by Paulshoekers employed outside the village in the regional economy form 51% of village income (see Figure 4). The wealthiest 10% of village households all have members employed in permanent primary sector jobs. In 1995 they earned an average of R27 000 per year, twelve times the income of the poorest 10% of households. However, interdependence within extended families and between neighbours facilitates a social and moral cohesion whereby many better-off individuals provide economic support to members of poorer households.

Large state support in the form of pensions, disability allowances and child support grants provide an underlying safety net for almost a third (29%) of village households. Only 20% of village income is accounted for by locally generated self-employment, casual labour and farming, although this is probably an underestimation of the real value of local income when the full suite of natural resource utilisation is taken into account.

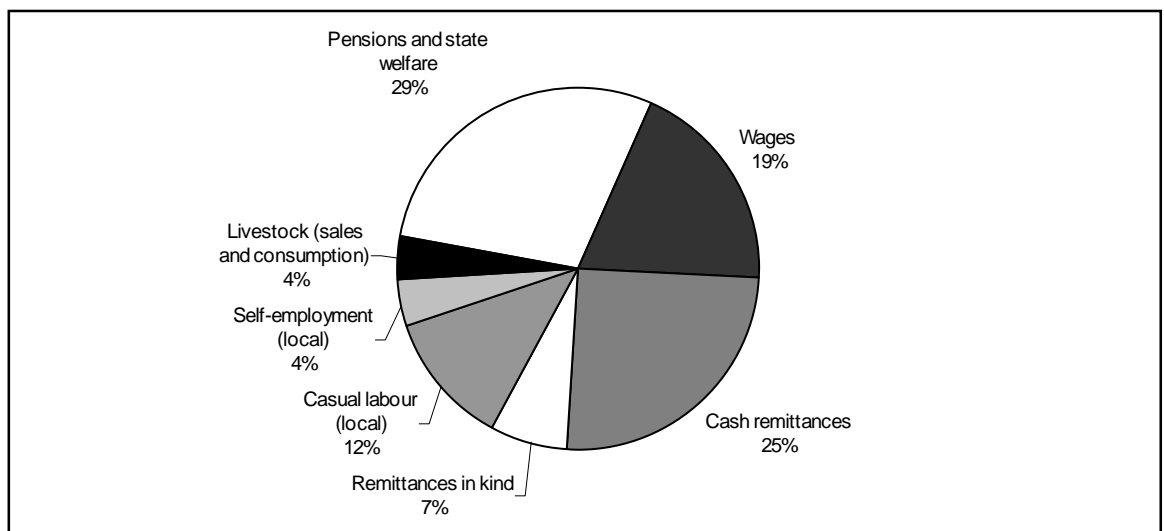


Figure 4: Major sources of household income in Paulshoek (n=75)

Source: Derived from unpublished data, SPP 1995

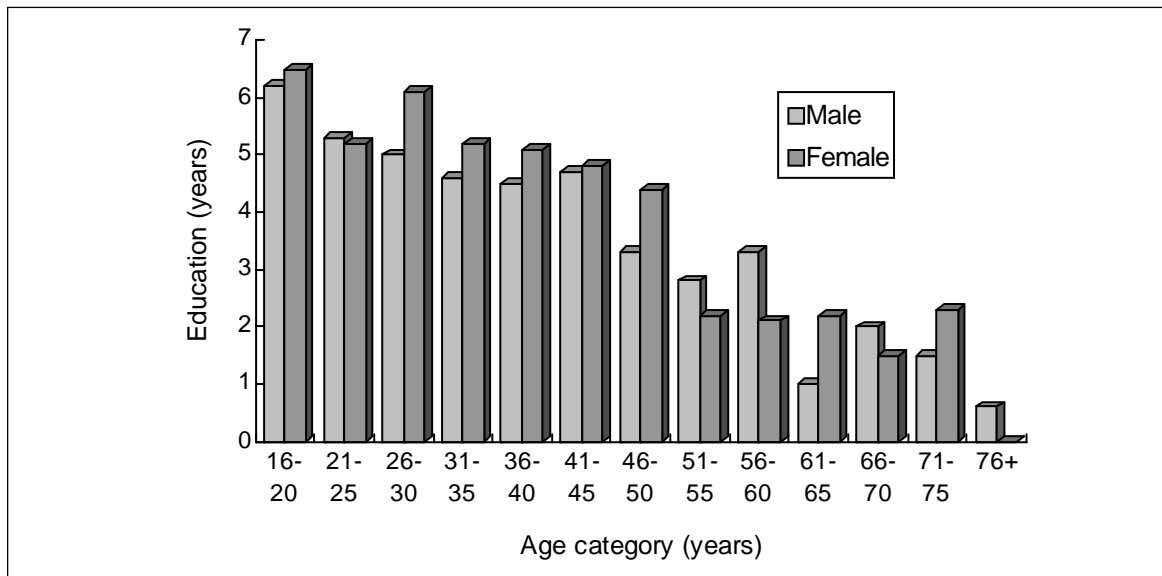


Figure 5: Educational standard of adult men and women in Paulshoek by age group (n=398)

Source: Derived from unpublished data, SPP 1995

A relatively even balance of gender relations in the village household economy adds a cohesive element to the village's social structure. Women between the ages of 16 and 50 have achieved slightly higher educational standards compared with men (see Figure 5), a situation which is unusual in developing countries where educational gender disparities often contribute to high fertility rates and poor child health.

While educational qualifications remain low (village adults have attended school for an average of four years), they are improving, especially among younger adults who have twice the level of education as their parents. The links between higher educational attainment and increased health awareness and improved life expectancy are well established (MRC 1998). Higher levels of educational attainment have also fostered a new political assertiveness among the younger generation of village adults, some of whom are rising to the opportunities afforded in post-apartheid South Africa.

Finally, the relationship between villagers and surrounding stock posts provides an enduring link with the natural resource base of the area. While livestock and crop farming are a minor factor in the cash economy of the village (4%), these activities provide a welcome supplement to

an otherwise limited diet and a latent 'capital' surplus to be drawn on in times of need. Furthermore, the use values of firewood, building material and medicinal plants add considerably to the calculation of land-based assets. The land provides a foundation for social and economic continuity, fostering a sense of group and individual identity, a cultural ethic combining interdependence and self-reliance.

Village and household population profiles

Recent surveys conducted in Paulshoek (SPP 1995; Rodkin 1999;⁸ Dirkse 1999⁹) have used the household as a basic unit of analysis. In spite of the fact that households are a notoriously imprecise unit of socio-economic analysis, these surveys provide a number of useful insights into socio-economic conditions in the village.

The resident population of Paulshoek is approximately 600 people (in 130 households), although this can rise to over 800 at the end of the month and during holidays. Overall, there is a slight skewing in the male/female ratio (46% : 54%), which is to be expected, given the absence of male wage earners from the village. However, this factor is not significant when compared with other rural 'labour reserves' in southern Africa.



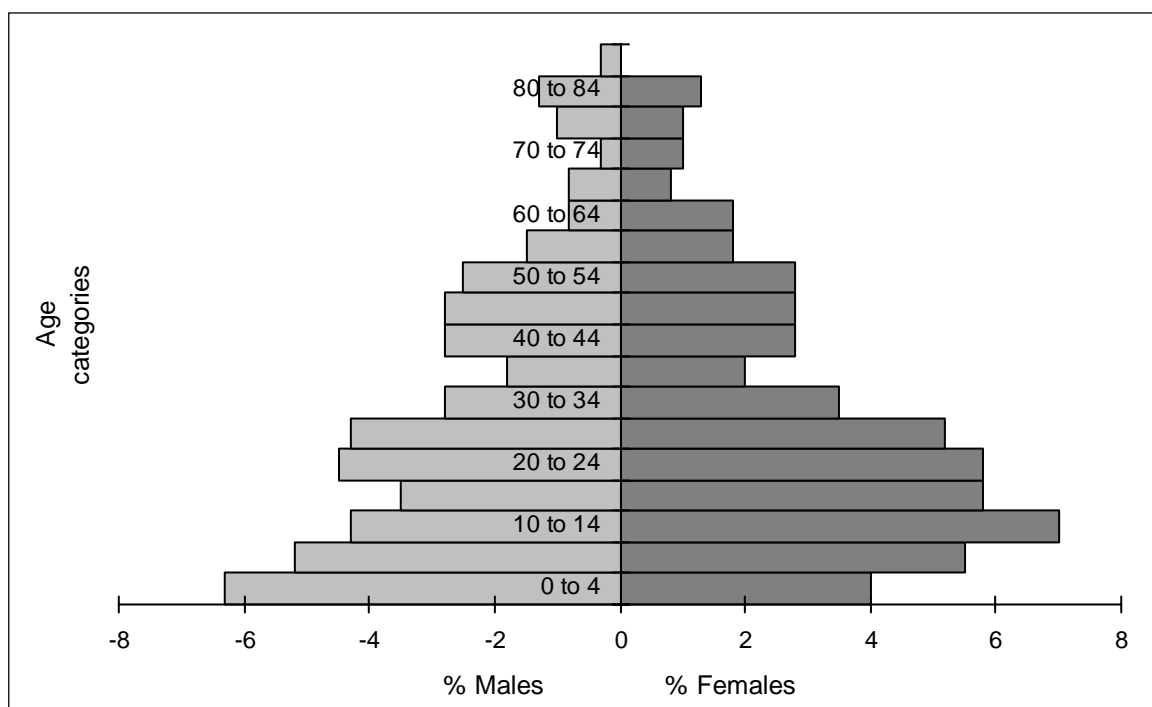


Figure 6: Population pyramid of Paulshoek by male/female age categories (n=398)
Source: Derived from unpublished data, SPP 1995

Table 1: A comparison of the percentage of Eastern Cape, Northern Cape, urban Namaqualand and rural Namaqualand populations and the percentage of the Paulshoek population in age categories (n=75)



Age group	Eastern Cape	Northern Cape	Urban Namaqualand	Rural Namaqualand	Paulshoek
<1-14	42	33	32	21	32
15-29	26	29	28	27	29
30-64	27	32	33	45	32
65+	5	6	7	7	7

Sources: Paulshoek data (derived from unpublished data, SPP 1995); other data (DBSA 1998)

The largest skewing between male and female occurs in the 15- to 34-year-old age group where there are 30% more females resident in the village than men (see Figure 6). This reflects the fact that many young men leave the village in order to find employment, enabling them to establish households of their own. Once they have done so, they often return to the village in middle age. To a lesser extent, women also leave the village in search of employment opportunities, often in domestic service.

The age structure of Paulshoek's population is similar to that of

Namaqualand as a whole, and is a closer reflection of the urban population profile than the rural population profile (see Table 1). The demographic profile of the village is almost identical to that of the Northern Cape as a whole. Paulshoek has an older population (the median age is 27 years) than many South African rural communities, such as the Eastern Cape where children under the age of 15 comprise 42% of the total. Paulshoek's population profile falls midway between the extremes of demographic transition: as life expectancy has increased, fertility rates

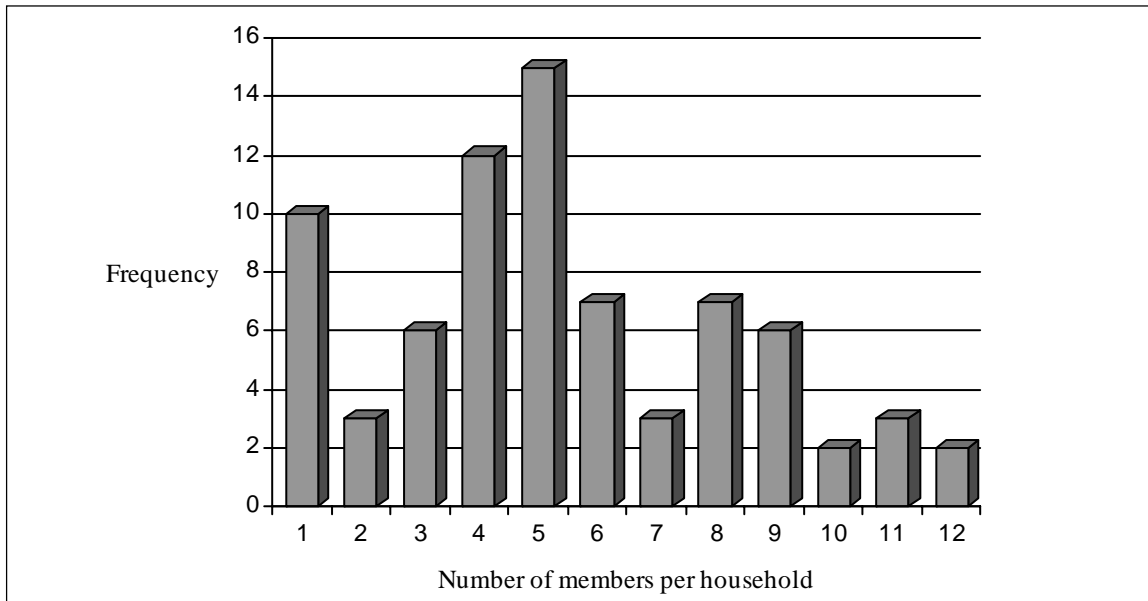


Figure 7: Categories of household size in Paulshoek (n=75)

Source: Derived from unpublished data, SPP 1995

have decreased resulting in a significantly lower growth rate (<1%) than the South African average of 2.7% (DBSA 1998).

On average, there are 5.3 people per household in Paulshoek, although this number can range from 1 to 12 (see Figure 7). More than half of the households have between three and six members but the number can change from month to month depending on work availability and the movements of family members between Paulshoek and the surrounding urban and rural centres.

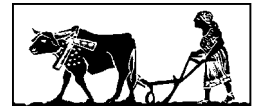
Thirty-six percent of households are *de facto* female-headed. However, when absent male migrant labourers are accounted for, female heads comprise only 12% of households. Generally, female-headed households in the village have lower educational standards, receive fewer remittances and sell fewer livestock but receive approximately the same per capita income as male-headed households. This is due to the disproportionate number of elderly female-headed households receiving pensions and state welfare.

The average age of all household heads is 55. This reflects the generational stability of households where it is common for young mothers to have children before marriage and to remain in their parental

homes. Even after marriage, it is normal for couples to live with their parents for long periods. Those who leave Paulshoek to work often entrust their children to the care of grandparents. The head and spouse make up 29% of household members, their sons and daughters comprise 50%, their grandchildren 15%, grandparents or elderly relatives 2%, and various other extended family members or unrelated family boarders 4% (derived from SPP 1995).

Social networks

The economic, cultural and moral economy which informs villagers' sense of place is mediated by the severe economic limitations inherent in village life and by experiences of extended absence by migrant labourers in the mining, farming and domestic service sectors. But identity also revolves around a sense that Paulshoek is a place of refuge, a safety net in a dangerous and difficult world. The socio-economic analysis of the village based on household surveys undoubtedly conveys a distorted image of village life, because it ignores the importance of inter-household relations inherent in extended family clusters. Kinship networks are perhaps the most important aspect of



village social structure, with extended family networks typically reflected in the geographical clustering of households around sibling and child/parent ties. Approximately 20 clusters of three or more households can be distinguished in the village. The four largest clusters include 45% of all households. Variables such as household income, sources of income, average age and educational standard, which reveal significant socio-economic stratification at the household level, are much less pronounced at the level of household clusters. This reflects the important role of social networks in ameliorating the extremes of poverty for otherwise destitute households.

Health

It is in rural South Africa, that the legacy of apartheid becomes most apparent. Unacceptable disparities in health status and access to health services are the clearest indicators of under-development and pervasive poverty (MRC 1998:1).



The health status of Paulshoek's population is related to socio-economic and environmental factors: low incomes, high unemployment, poor access to clean water, sanitation and basic health services. Child under-nutrition, high rates of teenage pregnancy, and the widespread use of tobacco and violence associated with alcohol and drug abuse are some of the main indicators of Paulshoek's underdevelopment.

Paulshoek is serviced by a weekly mobile clinic, staffed by a nursing sister. A general practitioner¹⁰ attends the clinic every two weeks and an antenatal clinic every two months. Consultations at the general hospital in Garies must be arranged by the sister or the general practitioner except in cases of emergency. Access to professional care at Garies and Springbok is limited by poor roads, long distances and the high cost of transport.

Several household surveys conducted during the last five years show that the

average maximum adult education per household is low (four years of schooling) and that the average education of household heads is even lower (three years of schooling). This has significant implications for health promotion, risk-taking behaviour and fertility.

Improvements in the health and education status of women and children are closely correlated with reductions in malnutrition, lower fertility rates and environmentally sustainable development (UNICEF 1999). Family planning and birth control are widely practised in Paulshoek. The preferred forms of contraception appear to be the oral pill and the Depo-Provera injection for single and married women. Intra-uterine devices are not very popular and women who suffer from high-blood pressure or the side-effects of oral contraception have to be persuaded to use them. HIV/Aids and sexually transmitted diseases (STDs) appear to be low in Paulshoek, corresponding with the relatively low incidence of HIV/Aids and STDs in the nearest urban centre of Garies.

A suite of factors contribute to the village's health problems:

- The average household income in Paulshoek is R1 233 per month,¹¹ with 50% of all households having incomes of less than R1 000 per month and more than a quarter living in dire poverty on less than R400 (or R80 per capita) per month.¹²
- Unemployment and poverty impacts negatively on the health of the entire family, and is also associated with problems such as substance abuse, crime and violence. Injuries following assault (stabbing) account for almost half of Paulshoek's admissions to the outpatients department of Garies Hospital. Several homicides have occurred in the village during the last five years and these were all associated with young men and alcohol abuse.
- The widespread use of enclosed *kookskerms* and 'fire houses' greatly increases the risk of respiratory disease since the smoke accumulates in these structures rather than venting through a chimney.

- The combination of poor water supplies, lack of purification, dual use of water containers for domestic chores and for storing drinking water and poor hygiene practices is responsible for the high rate of diarrhoeal disease among the children of the district (MRC 1998). The chief source of contamination of water may be the bucket style latrines, which are used by most people in Paulshoek. The waste from these is disposed of on household properties or in the immediate surroundings.¹³

Health indicators

The following statistics relating to mothers and children (MRC 1998) show some success in health care, which is attributable to improved state provision. They also indicate persistent problems associated with poor quality water, poor sanitation, economic deprivation and social dysfunction.

Positive indicators are:

- The rate of infant mortality is low, as is the incidence of premature births.
- Approximately 75% of mothers in Paulshoek give birth in hospital.
- The average weight of newborns is about 3.2 kilograms.
- Vaccination programmes achieve wide coverage and only two cases of measles were reported for the whole of Leliefontein during 1995 and 1996.

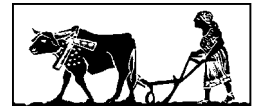
Negative indicators are:

- Approximately 13% of mothers are under the age of 19.
- Half of all mothers of newborn babies smoke and only 75% breastfeed.
- Gastroenteritis is high, especially during the months of October to December.
- Ten percent of babies born in 1996 were underweight.
- The number of underweight (40%) and severely underweight children (9%) is high, although Paulshoek has a significantly lower than average incidence.

The average incidence of severely underweight children (below 60% body mass as measured against normal weight for age) in Paulshoek is approximately 9%.

In comparison, the overall average for the Leliefontein villages is 18%. Underweight children (<3 centile but >60 body mass) account for 40% of the total number of children, which is also below the Leliefontein average of 50%. Interestingly, the MRC survey (1998) showed that Paulshoek has the lowest incidence of underweight and severely underweight children out of the nine villages in Leliefontein. The reasons for this are unknown,¹⁴ but assuming that the survey accurately reflects the weight profile of village children, this would imply that people in Paulshoek have a higher caloric intake than people in other Leliefontein villages where under-nutrition is a more serious problem. If child weight can be used as a surrogate measure for nutritional poverty, it can be deduced that the incidence of nutritional poverty in children (49%) corresponds with the fact that 50% of households have a per capita income of less than R8 per day.

The most common ailments are related to high-blood pressure. Patients seem to be very resistant to treatment, which is probably explained by the high salinity of the village water supply and patients' irregular use of medication. Other common illnesses include cardiac and pulmonary ailments which are also linked to respiratory diseases such as tuberculosis (TB) and asthma. Sixty-three percent of adults in Paulshoek are smokers and this is a significant factor in the high presentation of heart and respiratory problems. The use of strong tobacco with high nicotine and tar contents rolled in newspaper is a contributory factor. Two people died of lung cancer during 1996. Further incidences of tobacco-related deaths are likely 'if tobacco control programmes do not target these communities as a matter of urgency' (MRC 1998:14). TB is a serious problem in the Leliefontein area where 32 individual cases were diagnosed in 1996 but only seven people completed a six-month course of treatment.¹⁵ Infectious diseases account for a substantial burden of ill health and death, although chronic



illnesses caused by poor nutrition, smoking, alcohol abuse and violence are increasingly a major health concern. These are all health problems common in developing societies undergoing demographic transition.

Education

The lack of education limits employment opportunities and social mobility, making it one of the most fundamental factors perpetuating poverty (MRC 1998:6).

The positive correlation between high levels of education, employment, health and livelihood options is well established (UNDP 1999). Human capital in the form of educated labour is the most common endowment of rural households in South Africa (Carter & May 1998). In Paulshoek, positive correlations are also evident between educational attainment, frequency of household members with permanent jobs and increased livelihood options as indicated by the number of sources of household income (see Appendix 2, Spearman Rank Correlation Matrix). The strongest correlation, however, is between educational attainment and age, revealing the extent of improvement in state provision during the last 40 years.

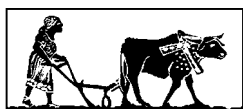
Contrary to evidence from many developing societies, it is significant that women below the age of 50 tend to have higher educational qualifications than their male counterparts (see Figure 5, page 25).

Overall, average educational qualifications among adults are low at 3.1 years for household heads and 4.1 years for adults generally. Perhaps the most important correlation between education and other factors can be seen in the higher educational attainment achieved by children from wealthier households whose parents or close relatives have permanent jobs. This is reflected in survey statistics (derived from SPP 1995) which show that the wealthiest 10% of households in Paulshoek have significantly higher educational attainment (8.6 years) compared with the poorest 10% (5.6 years).

Paulshoek has one pre-primary class of about 15 children and one primary school of 96 pupils, ranging from Grade 1 to Grade 7. The school consists of five cramped rooms with six teachers and a principal. While most parents place a very high value on educating their children, many poorer families are unable to support their children through secondary school and beyond. School fees are R288 per year, and parents have to pay extra costs for school clothes, books, stationery and other items. Secondary education facilities up to Grade 10 exist in Leliefontein and up to Grade 12 (final year of secondary education) in Garies, Kharkams and large urban centres such as Springbok. To attend school in Garies costs R300 for school fees and R1 005 for hostel fees. The 25 or so Paulshoek pupils who attend high school only return home once a fortnight if they are in Leliefontein or once a month if they are in Garies. Transport costs can be as high as R80 a trip to Garies. These costs place a high financial burden on parents or older siblings. Although the Namaqualand Diamond Trust Fund provides bursaries for a few pupils who attain high marks in their examinations, the general lack of funds inevitably leads to a high drop-out rate from secondary schools.

Some parents are reluctant to allow their daughters to continue with their education, because they fear that they may become pregnant while in hostels and place a further burden on scarce household resources. The majority of Paulshoek parents recognise the long-term benefits of investing in higher education, both for themselves and their children, but for many of Paulshoek's poorer families, secondary education is not possible.

Apartheid's legacy of inadequate education resources for South Africa's rural dwellers is etched into the life histories of the older members of Paulshoek. The post-apartheid government has attempted to redress these inadequacies through basic learner-centred programmes such as Adult Basic Education and



Training (ABET). The ABET class consists of approximately 20 learners, mostly older women with little formal education, although a few younger individuals also attend.

Household-livelihood typology

Research methods and analysis

A typology of rural livelihoods in Paulshoek was developed using several techniques including participant observation, unstructured and semi-structured interviews and household survey questionnaires. The results of two household surveys were analysed. The first (conducted by SPP in 1995) was subjected to analysis by constructing a data matrix containing all the variables such as demographic, economic and natural resource data (columns) and all the households (rows). The data was then imported into PC-ORD and a Bray Curtis ordination displayed. This allows for effective data reduction, expressing many-dimensional relationships in a small number of dimensions by extracting the strongest correlation structure in the data. The correlation structure is used to position objects in the ordination space. Objects in close proximity within the ordination space are generally more similar than distant objects. A cluster analysis was then performed, using the same distance measure (Sørensen) as the ordination. In conjunction with the ordination, the cluster analysis was used to categorise membership of (household) entities within groups, based on their similarities.

The table of correlation coefficients provides a quick interpretation of the ordination. In some cases, however, they can be misleading. As the units of the ordination are dimensionless, it is difficult to directly relate the pattern of points in the ordination to any of the measured variables. Thus, for each variable in the matrix, correlation coefficients were calculated with each of the ordination axes. These coefficients express the linear (Pearson's r) and rank (Kendall's tau) relationships between the ordination scores

and the individual variables used to construct the ordination (see Appendix 2 for Pearson and Kendall Correlation Table and Spearman Rank Correlation Matrix).

A significant correlation indicates that the pattern of change in household structure, as reflected by the distribution of households along a particular ordination axis, is significantly related to the variable being tested. For example, if Axis 1 is highly correlated with total income but with no other variables, then Axis 1 can be thought of as representing total income, and households with a high Axis score are generally those with a higher income.

Household typology based on SPP data (1995)

Five groups, varying in size from 7 to 20 households, were defined from the cluster analysis and ordination. Axis 1 was highly correlated with Total Income ($r=0.86$), as well as with several of the other income sources, especially permanent jobs and cash and in-kind remittances. Interestingly, it was also correlated with education and average age, indicating that households with a greater income were also generally better educated and comprised of younger members. Axis 2 was defined primarily by income received in the form of pensions. Livestock ownership did not relate to any of the axes, illustrating that livestock ownership occurs in all household groups, and is not restricted to any one-income typology.

The summary below describes five distinct household groups derived from an ordination and cluster analysis based on survey data collected in 1995.

Group 1: Emerging middle class households

Emerging middle class households ($n=17$) were the highest income earners, dependent primarily on wage labour remittances and local businesses. Household income was ten times that of the poorest group. Cash and kind remittances from family members in permanent employment (outside of Paulshoek) comprised 52% of Group 1's



Table 2: Average variables per household typology group based on the cluster analysis and ordination

Data	Group	Group	Group	Group	Group	Total
	1	2	3	4	5	
Number of households in group	17	15	20	13	7	72
Income data (year, rands)						
Average income from pensions	611	8 290	4 610	439	180	3 249
Average income from permanent jobs	7 729	320	0	1 015	0	2 075
Average income from self-employment	1 652	264	48	28	377	500
Average income from casual employment	968	1 932	180	3 060	1 027	1 333
Average income from cash remittances	9 414	1 739	348	754	343	2 851
Average income from kind remittances	2 405	698	143	323	214	832
Average income from livestock sale	110	47	313	212	71	168
Average total income	22 888	13 289	5 642	5 831	2 213	11 008
Average income per capita	3 691	2 291	1 524	988	388	2 076
Average number of sources	3.0	2.8	1.8	2.5	1.7	2.4
Demographic data						
Average household size	6.2	5.8	3.7	5.9	5.7	5.3
Average sex ratio	0.5	0.5	0.4	0.5	0.4	0.4
Average age	24.5	35.1	48.6	26.3	27.9	34.1
Average >15 age	3.8	4.4	2.6	3.3	3.6	3.5
Average number of adults per household size	0.6	0.8	0.8	0.6	0.7	0.7
Average support pay (rands)	155	33	15	308	9	104
Average education of household heads (years)	4.3	2.9	1.7	3.8	3.6	3.1
Average maximum education (years)	9.7	5.5	4.8	8.7	5.1	6.8
Average adult education (years)	5.4	3.6	2.7	5.2	4.2	4.1



Data	Group	Group	Group	Group	Group	Total
	1	2	3	4	5	
Livestock						
Average total small stock units (SSUs)	20.3	16.2	11.7	17.8	4.0	15.0
Average meat value (rands)	413	253	247	327	16	280
Average agricultural costs (rands)	445	337	129	264	97	268

Source: Derived from unpublished data, SPP 1995

total income. Salaries from jobs in Paulshoek and from locally owned businesses comprised 41%. Households in this category obtained earnings from the largest number of sources (average = 3). The remaining 7% of earnings were divided almost evenly between welfare payments and casual employment. These households were characterised by high levels of education and typically comprised young couples and children. Average household age was the youngest (24.5 years) of the five groups and average educational level the highest (9.7 years).

Group 1 households might be thought of as a nascent emerging middle class, living in well-constructed houses, often with cars, telephones and televisions. Their educational qualifications, work experience and social networks enable them to take advantage of employment opportunities outside the village.

Group 2: Households comprising ex-migrant labourers and dependants

The income of households comprising ex-migrant labourers and dependants (n=15) was slightly above the average village income, representing just over half (58%) of Group 1's earning levels. The majority of income derived from pensions and welfare (62%), cash remittances (18%) and casual labour (15%). The remaining 5% was divided between self-employment and livestock sales. They had the second highest age profile (35 years) and average

educational attainment (5.5 years), and were often made up of three generations.

These households have many similar qualities to those in Group 1 but probably represent a later stage in the family life cycle. Many of the older generation of family members from Group 2 households would have remitted money to the village during their working lives and would have built permanent houses there to which they could retire in their old age or in the case of injury or redundancy. In their time, these households were probably the equivalent of today's Group 1.

Group 3: Pensioners

Characterised by their reliance on state pensions, pensioners (n=20) made up the largest category. State pensions comprised an average of 82% of household income. The remaining 18% was made up of remittances. The average household income was approximately 25% of Group 1's income, although the per capita income was less skewed at 41%. The average household size was the smallest (3.7) and the average age the highest (48.6). The ratio of adult females to males was skewed more than that of any other group (3:2) with a significant number of female-headed households (12) and several households comprised of single women (6) and single men (2). This category of household also had the fewest average number of children (2.6) and the lowest adult educational attainment (4.8 years). The profile of Group 3 is one of elderly



women and men who depend almost entirely on pensions.

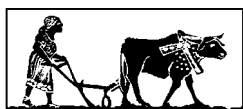
Group 4: Young families dependent on local employment and unskilled labour

These families (n=13) received approximately the same household income as Group 3 but less per capita income. These households derived the majority of their income from casual labour (52%), permanent jobs (18%), remittances (18%), pensions (8%) and livestock sales (4%).

Apart from income level, which is approximately 30% of that of Group 1, this group has a similar profile to Group 1 in terms of household size, average age and number of children. However, educational attainment of adults in this group was slightly lower than for Group 1. It is likely that the livelihood opportunities for this group are constrained by lack of access to permanent jobs outside of the village. The reasons for this are not clear from the survey data.

Group 5: Marginalised

Young, unemployed, marginal households (n=7) were a minority group, comprising 10% of village households. They represented the poorest families: average



household earnings and per capita income represented 10% of the total income of Group 1. Casual labour was the primary source of income (46%), followed by remittances (25%), self-employment (17%) and pensions and livestock sales (12%). This group received no income from permanent jobs. These households are characterised as young, with an average age of 28. While only two households were *de facto* female-headed, sex ratios of adults were highly skewed towards females in five households. Only one household consisted of a single man. These households typically had high levels of unemployment, the lowest average number of income sources (1.7) and low levels of educational attainment.

This group's livelihood options are constrained by the gender inequalities implicit in single female-headed households. Unemployment among young males, lack of access to permanent jobs and few prospects of obtaining employment are evident because of low educational standards. It is difficult to explain how this group survives on such low levels of income (R32 per capita, per month).

Box 2: Household expenditure

A household survey carried out by Rodkin in 1999 (n=30) showed that the largest proportion of the average budget was spent on food (56%), followed by energy supplies (including paraffin, gas, candles, firewood and batteries) used for cooking, lighting, heat and appliances such as radios and torches (24%). Support for the church is noticeable in relation to expenses such as transport, school fees and telephone. Only 2% of the budget was invested in livestock, mainly on items such as food and salaries for hired herders. It should be noted that only 12 of the 30 surveyed households were actively engaged in livestock farming, of which only four declared monthly expenditure on the stock post.¹⁶

Clothing and household décor expenses are missing from the list of expenditure in Figure 8 and this would be an omission in a middle class household budget. However, it is entirely plausible in a rural setting where families cannot afford to spend money on appearances. Clothing, other than the basics, is regarded as a luxury item in the context of the limited resources available to most villagers. However, Sundays, pension days and other public events are marked by people wearing their best outfits, which, even if second-hand, required a substantial output at some stage.

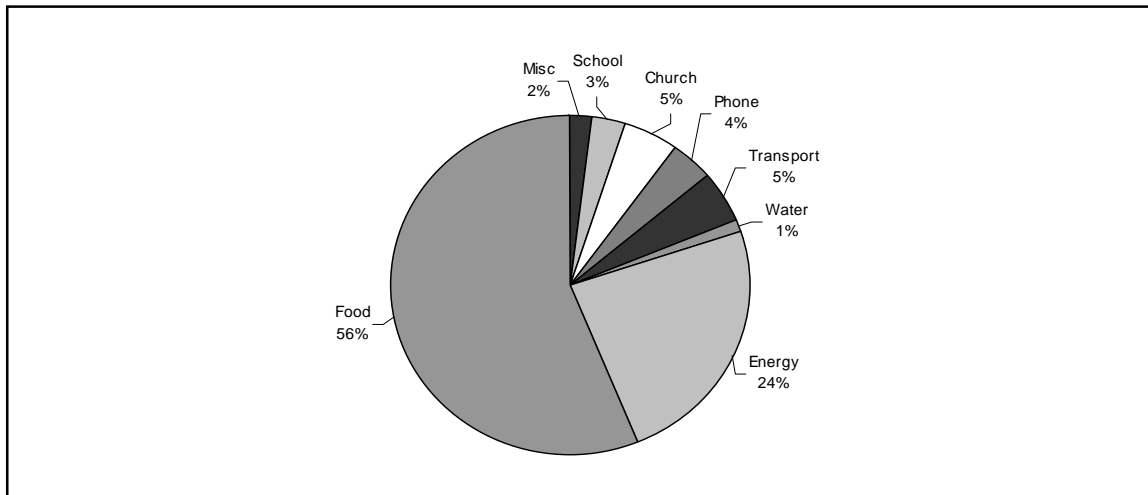


Figure 8: Categories of average household expenditure (n=30)

Changes in household characteristics over four years

A second household survey was carried out between March and June 1999, using a sample of 30 households. This was analysed according to the household typology described above in order to track changes over the intervening four-year period. Because of the small sample size, it was decided not to repeat the statistical analysis but to use the previously identified significant correlations as criteria for placing households within the typology. Five household types were derived primarily on the basis of types of sources and amount of household income weighted by secondary factors such as household size, number of income sources, average age and educational attainment. The survey sample was smaller (164 individuals) but had similar profiles in terms of age and gender to that of the 1995 SPP survey.

The results show a rise in average household income above the rate of inflation, a narrowing of wealth disparities and a significant increase in Group 4 household incomes, mainly as a result of enhanced local employment opportunities (an RDP housing project and a LandCare Project).

Group 1: Emerging middle class households

Although per capita income of these households (n=7) increased significantly,

mainly as a result of adults leaving the village, the total income did not keep pace with inflation. Eight individuals had permanent jobs. A further two were self-employed, but also had access to multiple sources of income within the household. All but one of the households had more than one source of income. In three of these households, the wife could be regarded as the main breadwinner. Three households had well-established stock posts.

There were seven matriculants in this group, four of whom were female. Only two of these females were employed permanently, in teaching and in administration. In one household both mother and daughter had matriculated. The latter is one of only two individuals in the village who have completed tertiary education. The three male matriculants were employed permanently in public sector administration, research and the skilled labour sector.

Only two of these households could be characterised as young couples with very young children. The other five households comprised middle-aged household heads and their partners.

The relatively high income of the households in Group 1 is directly reflected in their more 'urbane' lifestyles: all have bigger, concrete houses (as opposed to two- or three-roomed shacks), telephones and, except for one household, their own



Table 3: Comparison of demographic and economic data by group for a household typology of five groups, 1995–1999

Data	Group	Group	Group	Group	Group	Total
	1	2	3	4	5	
Count 1995	17	15	20	13	7	72
Count 1999	7	5	9	5	4	30
Average total income 1995	22 888	13 289	5 642	5 831	2 213	11 008
Average total income 1999	27 256	12 200	10 426	14 130	6 900	14 795
Average income per capita 1995	3 691	2 291	1 524	988	388	2 076
Average income per capita 1999	5 612	1 794	2 289	2 617	985	2 862
Average household size 1995	6.2	5.8	3.7	5.9	5.7	5.3
Average household size 1999	4.9	6.8	4.6	5.4	7.0	5.5
Average age 1995	24.5	35.1	48.6	26.3	27.9	34.1
Average age 1999	28	33	41	28	36	33.8
Average adult education (years) 1995	5.4	3.6	2.7	5.2	4.2	4.1
Average adult education (years) 1999	6.1	4.7	2.9	5.4	4.1	4.5

Sources: Derived from unpublished data, SPP 1995; Rodkin 1999



transport. They are also more likely to have television sets and radios. Households within Group 1 are the most likely to have savings accounts as well as the highest debt related to business loans and hire purchase agreements.

Group 2: Households comprising ex-migrant labourers and dependants

This was the only household category (n=5) whose total average income was less in 1999 than in 1995. Ranked by per capita income, these households moved from second to fourth place in the typology. This was partly due to an increase in the number of dependants and fewer pensioners. Pensions made up 74% of monthly income and remittances 16%. The remaining income was derived from casual labour.

This group, like Group 3, comprised mostly older individuals. All except one of the households consisted of a husband and wife and their parents, adult children and grandchildren. A widower headed one of the five households. Two of the male household heads held permanent jobs outside of Paulshoek before retiring; the rest engaged in farm labour and other jobs. Three of the households owned livestock. One of these sold all their stock during the research period, but was planning to restock when finances and veld conditions improved.

Group 3: Pensioners

Group 3 (n=9) is characterised by households almost exclusively dependent on state welfare (99%). Owing to an increase in pension payments, the total

income of this group nearly doubled. Per capita income remained stagnant, mainly as a result of the increase in the number of dependants. As with the 1995 SPP survey, Group 3 had the smallest household size. However, two households had an average size of 10.5 individuals, composed primarily of children and young adults. Both these households were struggling to make ends meet and had to make do with four old-age pensions and one disability grant to support 21 people. Their homes were overcrowded and in one of these households there were several TB patients. These two households differed from the rest of the group in that a disproportionate number of young adults were dependent on their elders. If these young adults were to remain unemployed, they would be left destitute when their grandparents passed away. In contrast to these two households, others in Group 3 led relatively comfortable lives, having accumulated possessions over the years. In one case, the household consisted only of a woman and her niece. The latter owned the house but was mostly absent because she was a migrant worker. In another case, a widow headed a household of three individuals.

Average adult age remained the highest (47) and average adult education the lowest (2.9 years). Most young adults were unemployed, although they occasionally found casual labour. There were no stock farmers in this group.

Group 4: Young families dependent on local employment and unskilled labour

Total income and per capita income within this group (n=5) tripled following an increase in permanent jobs within and outside the village. These households had the second highest per capita income, comprised of 44% permanent wages and 14% casual wages. The balance consisted of income from monthly retrenchment pay, disability grants and self-employment. The age and educational profile of this group remained the same as in the previous survey – the youngest with the second

highest standard of education. There were two matriculants in this group. Both were females in their early twenties. One was permanently employed and the other was unemployed. One was a single mother, while the other was pregnant. There was only one stock farmer in this group.

This group is typified by families with young or teenage children and will more than likely follow in the steps of Group 1, if high education and stable employment continue to feature in their livelihood setting. Like Group 1, they could be regarded as having more of an advantage than the older generations in Group 2 and Group 3, who had to contend with the oppression of apartheid.

Group 5: Marginalised

While the total household income and per capita income more than doubled in real terms between 1995 and 1999, individuals in this poorest marginalised category (n=4) continued to live from hand-to-mouth on less than R3 per day. Without assistance from other village households, families such as these would not be able to survive. This small sample of households continued to have the highest average household size, the lowest monthly per capita income and the second lowest standard of education. This group also had the second highest average household age, indicating that it contained a fair number of older people. However, only one household received an old-age pension, while the rest were mostly dependent on casual wages and remittances. No households in Group 5 owned stock, even though several individuals were employed in casual farm labour or as communal herders.



Socio-economic trends

In spite of the methodological flaws involved in this diachronic study, it is still possible to identify broad socio-economic trends within village households.¹⁷ Apart from Group 2, incomes increased in real terms, especially those of poorer households. Group 1 can still be described

as an emerging middle class of younger individuals who have the highest income and the highest standard of education and consequently better job opportunities. Group 2 and Group 3 are similar in that they consist of predominantly older individuals who receive state welfare. However, the income of Group 2 (ex-migrant labourers) actually fell significantly during this period, reflecting an increase in dependants in ageing households with few pensions or remittances.

Group 3, which is overwhelmingly dependent on pensions, has retained the same elderly, female-dominated profile but has had a doubling of household income during this period. This is related to a 30% increase in the rate of state pensions as well as additional income obtained by younger household members who have been engaged in casual project employment.

Changes during the 1995–1999 period are most apparent in Group 4 (young families dependent on unskilled or local labour). During this time Group 4's profile has become very similar to that of Group 1: households have similar educational qualifications and a similar average household age profile. Most significantly, however, per capita income has tripled, although it is still only half that of Group 1. This change is almost certainly due to increased development activity within and around the village.

It is difficult to understand how Group 5 actually survives on a daily per capita income of less than R3. One explanation, which is explored in the next section, is bound up with the fact that these poorest families are part of larger household clusters, often based on extended kinship and exchange networks.

The ubiquity of poverty is highlighted by the fact that two thirds of village households have an average per capita monthly income of only R230. This is on the poverty line, regardless of the criteria applied to the definition, and is only slightly above the UNDP's one dollar a day rule of

thumb. However, in the short term at least, income levels are improving: overall, the poorest households in Paulshoek have become less poor and wealth disparities have decreased.

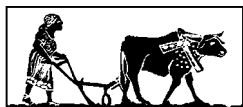
Household clusters, extended families and exchange networks

This section 'unpacks' the data relating to the household survey typologies described in the previous section by examining the interdependence of households and the dynamics of household clusters. Relations of exchange are based on kinship ties as well as bonds between neighbours and friends, many of which are evident in the spatial clustering of what might mistakenly be seen as discrete households in the village.

Five household clusters were analysed in order to illustrate the range of patterns of inter-household relationships operating in Paulshoek. This ethnographic study shows that the poorest households are highly dependent on wealthier neighbours for survival. It also reveals the unstable dynamics of household status, as the fortunes of families can change (shifting from one household type to another) as a result of unemployment, the death of a breadwinner or the career advancement of younger, educated children who remit money to their families. Household clusters form the underlying structure upon which the village social economy depends. Such interdependence ameliorates what might otherwise be absolute poverty for the village's poorest individuals. The social networks inherent in such clusters constitute a highly valuable social capital through which individuals and families are able to withstand shocks and help each other expand limited livelihood opportunities.

Spatial characteristics of social networks and household clusters

The spatial arrangements of households in Paulshoek reflect a pattern established during the early settlement of the village



by core family groups. As the village expanded, and children married and set up their own households, they often did so adjacent to their parents' and grandparents' homes. Inter-marriage between families has typically resulted in husbands moving to their wives' family cluster, suggesting the importance of matriarchal ties. Proximity enhances the interaction between related families and the interdependence among them. Such clusters are indicative of the importance of household interdependence in livelihood strategies, often serving as a means of survival for the poor, the unemployed, young single mothers and their children, the elderly and the disabled.

Many family members live or work outside of Paulshoek, and they form important links to social networks in urban areas, which lead to job opportunities. A prominent feature of village life is that individuals are constantly on the move. Large kin-based household clusters form a

permanent or durable social network which functions not only at the village level but within broader dynamic urban settings across Namaqualand and the Western Cape.

Five case studies of household clusters

Paulshoek is spatially self-contained and has a social continuity stemming from the common history of a handful of families. From this perspective, the village could be regarded as one unit of close social relations, constructed of sub-units of household clusters, extended families and individual households. In relation to outsiders, villagers see Paulshoek as a discrete entity where everyone is somehow connected and related. This sense of shared familiarity has a restrictive, conservative aspect which functions to modify behaviour and uphold moral codes, commonly expressed in the form of gossip. In the words of an elderly woman who was consoling a young pregnant girl

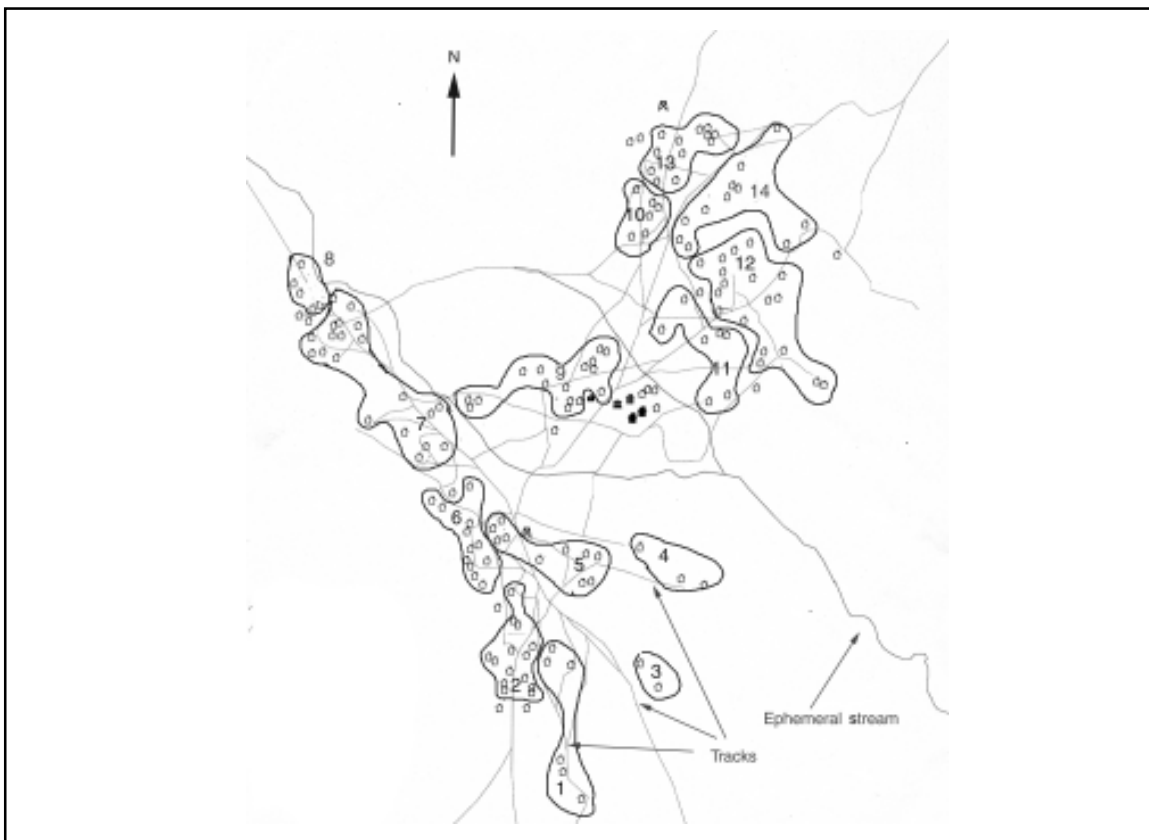


Figure 9: Map of household clusters in Paulshoek village indicating relative position and size of 14 groupings based on kinship and exchange networks

feeling the brunt of *skinding* (gossiping):

Paulshoek is a small place. Everyone talks about everyone else; there is no one who escapes gossip. That is just the way it is. People do not always mean harm – it is just that everyone knows each other's business. So, you must just go ahead, and keep your head in the air, because it has happened to so many girls. People will talk, but will quickly forget
(Magriet 'Ou Tannie' Andrews 1999).

In this maze of marriage, procreation, friendship and feuding there is a sense of community built upon a shared kinship, adverse socio-economic conditions and a historical continuity of dependence on communal land and its natural resources.

Five household clusters were analysed during 1999 and were identified on the basis of the researcher's prior experience in the village. The extended family often includes non-kin members who have close relationships with the extended family, so it is inaccurate to refer to the cluster as solely a kinship network, although it is largely so. Furthermore, women in Paulshoek often have children before marriage, and sometimes with more than one partner. These children are referred to as *voorkinders* (forechildren), but this term is rarely used disparagingly. Thus, a clear kinship network is not always easy to establish, and people do not appear to be that concerned about establishing male bloodlines in order that an individual may be accepted into the family fold. In this respect, kinship takes on a strong matrilineal aspect.

During the course of this study, each household cluster changed composition several times as babies were born, children returned from boarding school, people passed away, and individuals left the village in search of work or to visit relatives, and, conversely, returned to Paulshoek, having lost their jobs. Families are fluid entities, constantly changing in response to factors such as pregnancy, death, employment circumstances and so forth. The case studies described here tend

to give a static picture of extended family networks, but we endeavour to show that in fact families move relatively easily between household types. They often follow a pattern related to aging and life cycle, which, in turn, influences a household's capacity for production, saving, consumption and accumulation. Furthermore, the livelihood opportunities of a particular household can be significantly affected by the extent to which that household is able to draw on the social capital of inter-household exchange relationships. The case studies describe the role of networks in creating both a social milieu of solidarity and an economic safety net in Paulshoek. They describe how villagers deal with issues such as food security, crowded homes, unemployment and marginalisation.

Case study 1

Anna is a widow in her mid-seventies. Her age and her kindly and responsive personality ensure that she holds a position of respect in the community. Despite not having had any children of her own, many adults in Paulshoek have grown up under her care and guidance. Anna always has a stream of visitors, borrowers or children playing in her yard.

Although her main source of income is a state pension combined with an irregular income from paying guests, Anna leads a relatively comfortable life. This is linked to the careful management of her limited resources, the status of her deceased husband (a school teacher), who provided well for her, and the reciprocity she engages in with her family, friends and neighbours. It is often mistakenly assumed that her income is much greater than what it actually is. Anna sometimes says: *'Ek weet nie, die mense dink ek is ryk, maar dit is nie so nie. Ek moet mooi werk met my geld, om 'n bietjie voort te gaan.'* (I don't know, these people think I am rich, but it is not so. I have to work carefully with my money, just to get ahead a little bit.) However, this has not prohibited her from establishing a comfortable home, albeit



without regular running tap water, a telephone and other 'modern' comforts. The spaciousness and inviting atmosphere of her house have enabled her to accommodate paying guests from time to time, at a small fee.

Two non-relatives, who assist with domestic chores in exchange for board, lodging and a small amount of monthly pocket money, complete the household. However, the relationship runs much deeper, as these two young women have lived with Anna for a number of years, even though both have families in Paulshoek. Anna acts as a surrogate parent to them. She stipulates strict measures such as time limits for going out, how to behave in front of guests and other issues that are normally the responsibilities of parents. The mother of the youngest boarder resides nearby, but she has such financial difficulties that it is nearly impossible for her daughter to live in their small house. At times the mother does an odd chore for Anna, or simply visits to keep an eye on her child or to pay her respects to Anna.

Anna's neighbour Lysie is dependent on her for the basic necessities for herself, her three young children and one teenage son who works intermittently and has recently been arrested for robbery. He is abusive towards his mother, and does not give her money regularly. Instead, he spends his meagre earnings on drugs and alcohol. Lysie's husband works as a herder but has lost his job twice in the past year. In any case, Lysie says that he spends a large portion of his salary on alcohol. She battles daily to provide food for her young children. Although she has had no formal education, she wants to ensure that her children have a good education, but the lack of finances, food and clothing will make this nearly impossible. Lysie has uncles, a sister and other kin living in the village. She receives minimal support from them as they themselves struggle to make ends meet. Fortunately, she is able to live in her father's house because he has moved to another town. Although she is

unable to pay the yearly rates, the local administration has been lenient with her. In addition, she owes the local shops a large outstanding debt and is no longer able to buy goods on account. In order to survive, Lysie does domestic chores for Anna, who gives her food and other goods. A willing worker, she says she is ashamed of her dependency on Anna, but has to do whatever it takes for the survival of her children.

Even though she is no longer very mobile, Anna is kept up to date with the local news by a number of daily visitors who drop in for a cup of tea or a drink of cool water. Her yard is spaciouly laid out with chicken pens, a flower garden, extra sheds, a *kookskerm*, and an outside toilet. A fairly constant supply of water is ensured by a few rainwater tanks, which are regularly cleaned (and locked to prevent wastage and theft). Anna is able to help neighbours with clean water during extended periods of drought, as she can pay for and store delivered water. Such help is not usually exchanged for cash but is often done in return for food or labour, or purely because of a long established friendship and trust. Many other households have to send young and old alike on a two-hour walk across the veld to a spring for drinking water.

People are often forced by circumstances to borrow food, money or other items from Anna. Her garden is dotted with prickly-pear trees and other fruit trees. When ripe, the prickly pears are a much sought after delicacy – neighbours, friends and family ask for a few and children can be seen risking their scrawny bodies to reach the fruit, which is consumed with much relish, staining mouths and fingers. Sometimes she takes care of toddlers whose mothers are occupied by other responsibilities. At supertime especially, children rush to Anna with requests from their parents for a carton of milk, tea or bread. She says that everything is of use, and that, rather than be wasteful, she prefers to provide a plate of food for a hungry mouth. In this way,



she plays a central role in exchange relations among neighbours and relatives alike.

In return, those who are able to, repay Anna by doing odd jobs, such as collecting wood and water, or a domestic chore, such as cooking and cleaning. More often than not, people are just not able to repay Anna with cash. She deals with this philosophically: '*Dit is nie lekker om honger kinders of siek mense te sien nie. Die Here sal tog weer vir my gee – 'n mens moet glo.*' (I do not like to see children hungry and people sick, but the Lord will provide for me – one should just believe.) Her generosity is repaid with pieces of fabric, fruit, vegetables or cake that people send her regularly and by the respect she is shown by young and old alike.

Anna's secure and comfortable existence is aided by the fact that her younger sister and brother live close by. Her young nieces and nephews assist her with a variety of chores, and often keep her company throughout the day. At night, they spend many peaceful hours sitting on the *stoep* (porch) during summer or in the *kookskerm* around a warm fire to ward off the sharp cold during winter. Sometimes, a nephew of Anna's, who returns periodically from his mining job, drives her to friends in the village, enabling her to see old acquaintances who are no longer able to walk long distances. More importantly, the presence of her extended family goes beyond providing physical security. It is not only an integral part of her daily social routine, but also links her to the history of Paulshoek, to the families of her brother and sister, and, very importantly, to the stock-post system which is so much a part of life in Paulshoek. As stock farmers, both Anna's brother and sister include her in the sharing of meat and other farming products. Anna and her siblings were born in the village of Leliefontein and, like many of the other families who settled in Paulshoek, built their homes close together. This physical proximity ensures



that the relationships between Anna, her ageing siblings and their families remain strong.

The core of Cluster A is composed of several elderly siblings who generally conform to the Group 2 household type (ex-migrant labourers and their children), although Anna herself might more appropriately be classed in Group 3 (pensioners). However, Anna supports two younger women from Group 5 households (marginalised) directly from her pension as well as many other villagers on an irregular basis.

Anna's brother and sister together with their spouses are all pensioners. They give each other emotional support. They all share food and other goods, while the physically fitter ones also collect firewood and water. This combined effort ensures that these Paulshoek 'veterans' live comfortably despite their limited pension incomes. These incomes are bolstered by small amounts of cash from enterprises, such as Anna's guesthouse, and stock farming, which provides meat, milk and skins. Anna's nephews and nieces support their parents through cash and in-kind remittances, as well as providing general support to their elderly aunts and uncles.

The non-family units of this cluster, consisting of poor, unemployed adults with young children, can be classified as Group 5 households (marginalised). Anna's two 'foster' children come from such Group 5 households. Her neighbour, who is almost completely financially dependent on Anna's help, lives in a household which has slipped from the insecure position of Group 4 (young families dependent on local employment and unskilled labour) to Group 5. Without the support of the core member of this cluster, especially Anna, these dependent individuals and households would almost certainly be destitute.

Case study 2

Boeta's immediate household consists of his wife and two grandchildren, one of

whom is completing her secondary school and therefore resides in the Leliefontein school hostel for most of the month. His daughter, son-in-law and their three young children live in a house opposite Boeta's. His four other children and their families live in surrounding towns and as far afield as Cape Town. Boeta and his wife Sarie are both in their late fifties and do not receive state pensions as the qualifying age is 60 years for women and 65 years for men.

Their income is derived from multiple sources, including a monthly retirement pension scheme from the mining company where Boeta was employed as a supervisor and a range of business ventures within the village. These businesses include a shop (which is situated next door to his house), a taxi service and stock farming. As a prominent community leader, Boeta often does unpaid community work, but sometimes receives payment for funded projects. He is a leading executive member of the village development committee as well as a church minister. In addition to representing the Paulshoek community at various local authority and district level meetings, he is often called away to deliver sermons and to attend to funeral matters in other villages

Sarie is equally energetic. She does needlework or other odd jobs to add to the household income, explaining her situation as follows:

People are mistaken if they think that we are rich. We also have to save, and to count every penny in order to repay the business loan. We had to save for a long time to start up this business, and we have to work well with our money. You can think for yourself that there is not much business in Paulshoek, and often people can just not afford to pay for their few goods. They buy 'on the book', and pay a little bit every month.

Bringing up a family at the same time as moving from job to job had been hard. Initially they lived together in various towns, but after finding permanent work on a diamond mine, Boeta lived at the

mine compound while the family settled permanently in Paulshoek. He came home to his family over weekends.

They and their children are regarded as one of the dominant Paulshoek families, not only because they are economically better off, but also because they are all very active in community and social events. Holding various portfolios, Boeta acts as a community representative, which means that he frequently travels to surrounding villages or towns and often does favours for people in Paulshoek, such as picking up or delivering goods. However, 'nothing is free in this world' and so his passengers pay a taxi fee. Boeta also regularly drives to his stock post in order to check up on goats and sheep as well as take food to his hired herder. He is the official Paulshoek agricultural representative and thus an important link in local decision making and information sharing. As one of the more successful farmers, he is more likely to manage his livestock separately from other herders, whereas smaller farmers cooperate more often with each other. Information obtained during 1999 indicates that Boeta slaughtered livestock only when required for family or other social occasions, although drought conditions were a determining factor in such management decisions.

Family ties within this cluster are visibly strong. Their only daughter lives in Paulshoek and works in the family shop earning a monthly salary. Her husband also does occasional chores for his parents-in-law (for example, taxi driving), for which he receives some money. The two families share their meals together at the daughter's house every evening, while the daughter and her family eat lunch at her parents' house. Familial ties within this small group are very strong: they freely share money, food and other things. Boeta's other children live outside of Paulshoek and contribute to the parent household only occasionally. When they visit the village they normally bring vegetables or fruit. Sarie gives them meat to take back to the city.



Boeta and Sarie do not rely on financial assistance from their children. Sarie does, however, visit her children living in other towns in order to assist with sick members of the family, even if this requires lengthy periods away from home. Boeta's aged mother lives a few houses away, as do Sarie's sister and other relatives. They do not, however, borrow money or goods from these extended family members. Sarie stated that if she needed anything, she would either ask her daughter or stay without it. The presence of neighbours around the main house always seems to be in the form of paid casual labour: a culture of 'work for what you need' underlies the interrelations with relatives in the community and unrelated community members. During the period of the study, Oom Boeta was the only farmer who did not exchange his labour with other croppers or use the 'free' labour of family or friends.

Boeta's household, as the core of this cluster, falls into Group 1 (emerging middle class households), with the highest total income from the highest number of sources, the highest education of the household head and the entire household, and the highest investment in stock farming. The household of Boeta's daughter also fits the profile of Group 1, although without the continuing support of her parents, her household would have many of the features of Group 4 (young families dependent on local employment and unskilled labour). Interrelationships between Boeta's household and the households of this extended family can be characterised as much less interdependent than that of other household clusters. The financial and social independence of Group 1 households is reflected in weaker kin-based and neighbourly networks where the livelihood opportunities afforded by exchange networks are less important than the values of self-reliance, individual endeavour and prudent investment. Networks with core emerging middle class households might therefore be said to reveal a shift in moral attitude



away from maintaining broad-based exchange networks.

Since this study was conducted, Boeta has lost his leadership position in the village development forum, closed his shop because of bad debts and reduced his herd significantly. As a result, his household status is likely to change to that of Group 2 (households comprising ex-migrant labourers and dependants) with a growing dependence on pensions and occasional help from his children.

Case study 3

Grieta's extended family is one of the largest in Paulshoek. Together they form a cluster of at least six households and more than 35 individuals, with other members returning to and leaving the village as jobs are found or lost. Money is always in short supply, which makes a stable family life difficult. In addition, many family members are migrant workers. The fact that the family's income from old-age and disability pensions is supplemented by migrant remittances alleviates some of the hardships faced by other families in Paulshoek.

Grieta is a widowed pensioner in her late eighties. Her immediate household consists of nine people, including one son, a married granddaughter and six great-grandchildren. She lives adjacent to the houses of her two elderly daughters, Betsie and Nelly. Grieta's other daughter Nita also lives in Paulshoek, but not in such close proximity. Her 59-year-old son Jan and his 79-year-old wife live nearby, on the opposite side of the dirt road in a two-roomed shack.

As the matriarch of this extended family, Grieta looks after the unemployed members of her family and appreciates their efforts in bringing their contributions to the 'table'. This involves doing odd jobs such as collecting firewood or fetching water. She says that when extra cash is available, it is shared among the households to repay debts or to provide for bleaker days. It is important to maintain the dignity of those members who do not

have money. To this end, the extended family has a few shared goats and sheep. When an animal is slaughtered, each household receives its share of meat, in the ethic of *help mekaar* (help each other).

Betsie lives closest to her mother. She receives a state pension, while her 45-year-old husband does intermittent casual work. They have a 19-year-old son, who does some casual work in the village. Her husband and her son were both born in the Western Cape and settled in Paulshoek about four years ago, after having worked in various towns in Namaqualand. At their last place of employment as farm labourers, the farmer died and they did not have a good rapport with the new *baas*. They also have a few sheep and goats, and these are shared with other members of the family.

Nita and her husband have two daughters: one lives in Cape Town and the other stays in grandmother Grieta's house. The latter granddaughter's husband visits monthly when returning from his job in northern Namaqualand. Nita's husband is employed by one of the mining companies and returns to Paulshoek once or twice a month. Nita does not receive any pension and therefore relies solely on her husband's salary, which also supports their daughter's household of five children, even though her daughter's husband is employed. This, in turn, means that Nita asks her mother for financial help, and appears to depend on Grieta more than either of her two sisters.

Nelly has no children and her husband works on a farm outside of Paulshoek. He visits her whenever possible. Nelly plans to join her husband on this farm so that they could spend more time together. Even though she shares the same plot with her mother Grieta, she has her own house and in this way maintains her independence. She cooks for herself, but shares whatever she has with her mother.

Jan is in his late fifties and is married to Vytjie, a pensioner in her seventies. Because they were becoming ill more frequently, they decided to move from

their stock post to the village. They are dependent on Vytjie's pension. According to Vytjie, they just about manage to provide for the bare necessities. She says that life is very tough and that '*n mens moet elke maand skuld van die vorige maand betaal*' (every month one has to pay the previous month's debt). Despite her illness and financial circumstances, Vytjie is jovial. Her children from a previous partner do not live in Paulshoek, and are also struggling to make ends meet.¹⁸

Zara is not related to Grieta but is a neighbouring friend and considered to be part of Grieta's cluster. She is recently widowed, and shares her three-roomed home with two sons, three daughters and their five children. The death of Zara's husband, coupled with the fact that all the other adult children are unemployed, means that now the family is entirely dependent on her pension. With so many mouths to feed, Zara relies heavily on not only her own extended family, but also close neighbours such as Grieta. Such non-family exchange relationships are based on long-standing friendships.

In spite of her age, Grieta remains the hub of her family. The supportive interaction between her and her five children and grandchildren is a key to this household cluster's survival. She is particularly supportive of her 15-year-old great-grandson, who is doing well at high school. Grieta is proud of this, and insists that they must continue to find funds so that he can complete his secondary education. She concluded the interview by stating: '*Hy moet leer sodat hy 'n goeie werk kan kry.*' (He must learn so that he can find a good job.)

Grieta's household, the core of Cluster C, can be characterised as Group 3 (pensioners). However, several different household types are linked within this cluster. Grieta's children are typically ex-migrant labourers with dependants (Group 2). Her grandchildren (Group 1), many of whom live outside of Paulshoek, send remittances to their parents. Grieta's neighbour Zara is a recently widowed



pensioner (Group 3), with a large family of dependants who rely on occasional local employment and unskilled labour (Group 4).

All the households in this cluster survive on an income derived from either pensions, labour remittances or casual labour, or a combination of these. Some households have access to stable sources of income, while other poorer households have to enter into non-cash exchange relationships with relatives and other members of the community. Grieta's children have their own houses (except for one son) and each household has at least one stable source of income, be it pensions or permanent employment. Few of Grieta's offspring have children of their own, although one granddaughter has five children.

These six households are by no means the poorest households in the village. This case study illustrates how important state pensions are, not only to the elderly, but also to their children, grandchildren and neighbours. This, and the fact that Grieta's family network is extensive and diverse, means that when households fall on hard times they can be supported by others in the cluster. Grieta appears to be the driving force encouraging this type of mutual support. As the 'matriarch', she is well aware of the need for sharing and exchange among her family, not only for the sake of keeping up good family relations, but also as a long-term survival strategy.

Case study 4

Elsie is in her late fifties and is married to a stock farmer, Jacob. This is Elsie's second marriage. She has three sons and two daughters from her first marriage, and has a number of grandchildren. One son, Dirk, lives with her as does a grandson whose mother lives in Cape Town. Jacob shares his stock post with members of the extended family, including Dirk. Both Elsie and Jacob have many relatives living in Paulshoek. However, Elsie's mother and two sisters live close together and their four houses form the core of a larger household cluster.

Elsie's mother is one of the oldest villagers and still commands a strong position of respect within the broader family. This is partly due to her age and the tribulations she had to overcome in order to ensure the well-being of her family. Elsie recalls the hardships and pleasures of her childhood at a stock post many kilometres away from the village, openly admitting to having grown up in poverty. She had to walk long distances to and from school in Paulshoek each day. She left school when she was about 15 years old and found employment in Cape Town. Elsie talks fondly of the many years she spent away from Paulshoek, despite the obvious difficulties associated with being a domestic servant as well as having to rear her own family. She says that returning to Paulshoek five years ago was not easy at first. She missed having conveniences such as electrical lights, stoves and running tap water. Now, however, she has found her roots again and has re-established the closeness that comes with having a shared life with sisters and parents. Interaction between these family members happens on a daily basis. Elsie provides her mother with daily cooked meals and she also does the baking of bread for the two households (her own and her mother's). The other two sisters do household chores and provide nursing care to their mother, but financial support comes from Elsie's household.

The relationship between Elsie and her sisters is also strong. She occasionally gives financial support to her sisters, although this does not imply that her sisters are totally dependent on her. There is a great deal of sharing of food, money, manual labour and emotional support between mother and daughters. The financial interaction appears to be limited to the more immediate family members and does not extend to all related family members.

Elsie plays an active role in the community. She bakes and sews regularly for community events and also as a source of extra income. Elsie is a leading member of the Methodist Church and a former



member of the village development committee. As part of the broader Paulshoek family, she is often addressed as *Nana* (aunt), as a show of respect.

Her son Dirk has a child by the daughter of one of Anna's young protégées (Case study 1). Dirk's little boy is often brought to visit Elsie and is indulged by all his grandparents. Elsie has a close relationship with all her children who reciprocate her affection by seeing to some of her needs by buying groceries and appliances or helping out with the building of her new house. This arrangement assists Elsie to live a comfortable life despite the lack of village infrastructure.

This group of households is similar to Cluster B, with the core family group displaying Group 1 (emerging middle class) household characteristics. However, as individual household units, Elsie and her sisters would fit more comfortably into Group 2 (ex-migrant labourers with dependants) and Group 3 (pensioners) respectively. Elsie's son Dirk is likely to establish a household of his own in the near future. He is a well-educated young man who has a permanent local job and is increasingly active in village leadership roles, and his household is thus likely to take on many of the characteristics of Group 1. Dirk presently carries the cost of ploughing the family lands and maintaining the family herd. He is likely to become an even more important source of support to his mother in particular and his extended family in general. When analysed as a whole, Cluster D is relatively wealthy. A manifestation of this can be seen in the houses of Elsie, her mother and her sisters. These are spacious, well constructed and equipped with more modern appliances than the average Paulshoek home. This security is enhanced by close relationships with other family members who are employed in several of Namaqualand's small towns. The material, emotional and moral support within this extended family makes it a thriving household cluster.

Case study 5

Hettie and her husband Piet are both pensioners. Both have been involved with stock farming from their earliest years, having lived at stock posts or worked for commercial farmers. Hettie is very passionate about farming, which is noteworthy given that livestock farming is usually a male domain. This love of the 'stock -post way of life' is quite evident in the way Hettie relates historical details about her livestock and the veld. She remembers with sadness how Piet was forced to sell all their stock in early 1999 because of bad veld conditions – too many animals had become sickly or were in poor condition.

Piet is Hettie's second husband, with whom she has eight children. Hettie has one daughter from her first marriage. This daughter was badly injured in an accident when she was a baby and receives a disability grant. She has a young child. Hettie also has three married daughters who live nearby in separate houses. Her sons-in-law have jobs outside of Paulshoek and only come home over weekends. Hettie's youngest daughter is a single parent of an infant daughter. Her two unmarried sons live in Paulshoek and another son lives in the Western Cape.

Hettie and Piet were born and raised in Bushmanland, although Hettie's mother (Ouma) had strong family connections in the village. Since returning to Paulshoek, Ouma has been the *doopma* (mid-wife) to a number of village women. Ouma lives with Hettie but often visits other families in the village to whom she is related. According to Hettie, people sometimes take advantage of Ouma's good nature and her declining memory, with the result that they do not repay money borrowed from her.

The family is very close for a number of reasons. Firstly, they are sometimes treated as *inkommers* (newcomers), which means that are not always fully accepted in the village. This might be related to the



fact that Hettie is sometimes outspoken about the decisions of the village leaders and also the perception that her family's political views are different from those of the majority of villagers. Secondly, there seems to be strong animosity between their sons and other village youth, often resulting in bitter physical fights, with actual boundaries being drawn between territories. While the parents of these 'warring' factions do not necessarily intervene, it does impact on family and other relationships. On the whole, Hettie makes an effort to go about her daily life without allowing these disputes to come between her and other families. She says that the youth must come to terms with their differences in a responsible manner and that parents should not encourage violence. Naturally, these disputes and their causes are far more complex than can be explained here.

Hettie is an active person, often assisting the sickly, bathing the elderly and assisting with chores such as doing their laundry. Her daughters help with the bulk-baking of bread (about 12 huge loaves) in their mother's outside clay oven. The loaves are shared among the various family households. The families share driving costs and do bulk-shopping together in Springbok or Garies. Many of the male members contributed labour and materials to the recent renovation of Hettie's house.

Hettie's extended family is self-sufficient and helpful to each other. The celebration of the 60th birthday of Hettie and her twin sister, who lives in the neighbouring town of Kliprand, was a significant event. While friends from Paulshoek were invited to the party, the occasion was largely a family affair. One of Hettie's sons-in-law donated a *slagding* (a slaughtered goat). In relating this event, Hettie emphasised the importance of the family aspect of this occasion, particularly since she does not have many opportunities to see her twin sister.

Hettie and Piet are largely dependent on pensions with some additional income

from livestock, casual labour and some remittances. Their household displays Group 2 characteristics (ex-migrant labourers and dependants). The couple's oldest and youngest daughters and their children are totally dependent on them for support, as are their two youngest sons. The households of their three married daughters are supported by their husbands, who have permanent employment (Group 1, emerging middle class). Without this extended family support, these three adults would almost certainly fall into Group 5 households (marginalised). As a large, closely-knit group, sharing and exchange does not take place outside the extended family.

Conclusions and trends

To understand Paulshoek in terms of a collection of discrete households is almost as false as to see it as composed solely of autonomous individuals. Village life is based upon complex dynamic networks, the most obvious being embodied in household clusters based on kinship, friendship and shared histories of surviving in an adverse political and economic environment. The case studies presented here illustrate some of the ways in which household clusters function as a form of social capital within Paulshoek. Such clusters typically revolve around a core household of a respected family member. Such core households are not necessarily the strongest financially. They often consist of respected elders who embody the moral values of the group, whether these entail mutual sharing or middle class self-reliance, thereby providing continuity and cohesion to the group. Perhaps most significantly, household clusters, and the exchange networks that bind them together, tend to alleviate the worst poverty of marginalised, disadvantaged or elderly households. An analysis based on individual household surveys does not reveal the extent to which livelihood opportunities are enhanced by household networks or the dynamism of the changing socio-economic status of individual households within such clusters.



If nothing else, this ethnographic approach to household cluster analysis conveys a sense of the qualitative complexity of village life.

Livestock

The older generation of Paulshoekers can remember a time when they and their families were almost entirely dependent on farming for their survival. During the 20th century, the constraints of population growth within a limited land area, coupled with the steady development of a regional wage economy, resulted in a gradual drift away from the land. This socio-economic transformation from subsistence farming to wage dependency was directly linked to the creation of colonial and apartheid labour reserves. In these overcrowded rural ghettos the natural resource base was restricted to such an extent that people were forced to seek work in the regional economy. But in spite of the low economic value of agricultural outputs, many aspects of Paulshoek's cultural and social economy remain rooted in historical land-use practices, the most obvious being the maintenance of strong links between the village and stock posts.

Stock posts are usually situated close to water sources such as natural springs, shallow dug wells and boreholes. A few stock posts consist of a permanent dwelling and are often adjacent to rain-fed croplands. They tend to be occupied by single men or, rarely, a husband and wife. These dispersed homesteads are connected to each other and to Paulshoek by a loose network of gravel roads, dirt tracks and paths accessible by car, donkey cart and bicycle, or by foot. Owing to the spatially and seasonally unpredictable rains, transhumance across the Paulshoek landscape is an integral part of the pastoral system, as many farmers move their herds to better grazing or remove stock from the cropping areas during the growing season. Although not all farmers move every year, mobility is a central characteristic of the stock-post system, resulting in the

construction of temporary huts and kraals where recent rains or under-utilisation have resulted in more abundant grazing.

The relatively small number of stock farmers tends to obscure the fact that almost half of Paulshoek's households own livestock. Furthermore, the majority of extended family clusters in the village have direct links to stock posts. Between 2 000 and 7 000 sheep and goats¹⁹ graze an area of 20 000 hectares, the equivalent of two average sized commercial farms. A total of 30 herds²⁰ range in size from between 13 and 173 small stock with a mean of 82 goats and sheep.²¹ Many herds have multiple owners who are either family members or stock 'partners'. In at least a third of these cases, more than two people have combined their animals to form a single herd. In one well-documented case (Marinus 1997), 12 people, most of whom are related in some way or another to the 'managing owner', lay claim to at least one animal in a herd of 170 animals. Many such stock partners do not live in Paulshoek but retain links with their extended village family through occasional visits during holidays or over weekends.

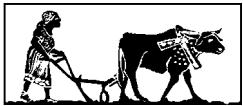
All but two stock herders are men, 60% of whom are over the age of 50 (May et al. 1997:66).²² As young men, many of these farmers worked within the farm labour, mining and service sectors of the regional economy and returned to Paulshoek in middle age, investing their savings in livestock.²³ This should be seen as a recurrent pattern rather than a symptom of livestock farming's decline. A number of wealthier farmers, who either live in the village or work in permanent employment elsewhere, also employ herders.

One third of Group 1 households (emerging middle class) have herds with an average of 29 small stock. Only one of the poorest marginalised households (Group 5), a single man with a monthly income of R130, owns livestock (28 small stock). The group with the largest number of sheep and goats, however, were pensioners, with an average of 58 small stock. This group depends mainly on state



pensions (60% of income), livestock sales (21%) and remittances (19%). On average, livestock owners receive higher incomes (+34%) than non-livestock owners. This is partly explained by the fact that livestock-owning households have four times as much income on average from permanent jobs and self-employment and twice as much income from remittances as households without livestock. However, at least 30% of this differential can be attributed to the additional income derived from farming activities. Evidence from Paulshoek is in keeping with a more recent survey carried out in Leliefontein, where only 10% of livestock owners depend on their herds as the most important source of household income (Anseeuw 1999).

Taken at face value, the productive surplus of agricultural activity represents a minor part of the village economy: generous estimates of the cash and use value of natural resources, crops and livestock are approximately 8% of total village income.²⁴ Off-take rates are low, probably averaging less than 30%. Wide inter-annual variations in rainfall, the frequent occurrence of droughts and high stocking densities mean that stock farming is a highly uncertain enterprise. And yet, it continues to play a disproportionately important role in the village social economy: farming provides an employment safety net, an investment opportunity, a source of capital in times of need and an important dietary supplement in the form of milk and meat. It is also one of the few livelihood opportunities in the village itself. Many different people engage in farming at various times of their lives as part of a suite of risk reduction and livelihood strategies. The fact that this resource is open to any villager who is able to acquire animals means that it often acts as a social and economic link for migrant labourers, both while they are away working and when they return to live in Paulshoek.²⁵



Urban-rural links

Members of Paulshoek's extended families invariably live in urban centres around the Northern Cape, and to a lesser extent in the Western Cape and Greater Cape Town. An essential facet of village life is the movement of individuals across these geographically dispersed family networks, which comprise social and economic support systems for those seeking employment and further education. Until recently, the mining sector of the regional economy has been the predominant employer, with agricultural labour on surrounding commercial farms and employment in the private and public service sectors playing a secondary role (Östensson 1998). Those with jobs in the formal sector remit income to parents, spouses and children who remain in the village. Retrenchments within the mining industry and high unemployment (32%) in the regional economy (Östensson 1998) mean that increasingly adults return to the village for varying periods of time during the course of their working lives.

Approximately half of the village's income is derived from wages earned outside of Paulshoek from permanent jobs, benefiting 51% of Paulshoek's households in the form of direct income or remittances. However, the distribution of wages and remittances from permanent employment within the village is highly skewed: only one in five households receives more than R10 000 per year from this source. These wealthiest 20% of households, with links to urban employment, have incomes in excess of ten times those received by the poorest 20% of households.

Most Paulshoekers (63%) were born in the village or in the Garies Hospital. Approximately 30% were born in surrounding Northern Cape communities and only 7% in more distant urban centres such as Vredendal, Klawer and Vanrhynsdorp (VKV region). However, most adults in Paulshoek have lived away from the village for protracted periods at

some point in their lives. Namaqualand has one of the highest urban–rural population ratios (82% : 18%) in South Africa (DBSA 1998), reflecting the aggregation of people in small towns and mining settlements and the dispersed nature of rural settlement in both the commercial and communal farming areas. Given this high level of urban aggregation, it is hardly surprising that strong social and economic ties exist between rural villages such as Paulshoek and the main population centres of the regional economy.

The majority of Paulshoek's youth reside in hostels or with relatives when they attend secondary schools in Leliefontein, Garies or Springbok. The village population almost doubles in size at the end of every month and during school holidays when children, young adults and migrant labourers return home. While Paulshoek is geographically remote, the mobility of villagers across the wider region reflects the fact that individual and household livelihood strategies are geared towards maximising the human and social capital of education and family networks in order to obtain secure employment opportunities outside of the village. Such mobility also promotes diversity in livelihood strategies. This, in turn, tends to enhance the ability of households to withstand shocks (sickness, drought, unemployment) by creating a range of activities and support networks which help to improve living standards.

Migration histories

Patterns of mobility relating to migrant labour have evolved since the 19th century – from pastoral transhumance, to labour migration associated with commercial livestock farming and mining, to contemporary patterns of urban migration most often associated with the mining and service industries of Namaqualand and the commercial fruit-growing industries of the adjacent VKV region.

This section provides case study material of how Paulshoek inhabitants migrate between Paulshoek and other

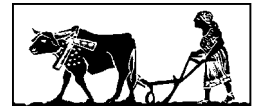
towns and provinces. It is based on data collected in a household survey (n=30) conducted between June and August 1999, asking respondents to supply information on their employment histories, including where they worked, when they returned to Paulshoek and why.

Only one informant had not worked outside of Paulshoek. She was a young married woman with a matric qualification who worked in an administrative post within the village itself. All other respondents stated that the lack of employment opportunities in the village was their primary reason for seeking work elsewhere, although all regarded Paulshoek as their permanent home.

Out-migration from the village typically involved young families or couples who moved together as a unit to other towns to seek employment. In many cases, the wives and their children returned to Paulshoek before their husbands in order to establish a home while the men carried on working. Male migrants returned to Paulshoek primarily because of retrenchment or retirement.

Today it is becoming more difficult to find seasonal agricultural work such as fruit picking. Population growth and rising unemployment in the region's towns mean that Paulshoekers are competing against an expanding pool of cheap labour. The sharp decline in Namaqualand's mining industry as well as the declining or negative growth of the national economy during the last 30 years (Östensson 1998) are probably the most important factors in the village's population growth since 1970. Many adults returned to the village between 1970 and 1995 because of dismissal, redundancy and retirement owing to age or ill health. Respondents stated that it was safer to be unemployed in the village than in a distant town where there was no family support network.

The majority of respondents stated that they held a number of posts during their working years, often moving from one town to another, or from farm to farm, mostly in Namaqualand. A few families



moved to the Western Cape, often referred to only as *Die Kaap* (the Cape), or Cape Town and its surrounding areas. The present-day northern suburbs of Cape Town have a significant number of resettled Namaqualanders, evidence of the extent of labour migration from the former coloured reserves. One family mentioned venturing beyond Cape Town to Somerset West, while none indicated having gone to other, more distant provinces.

Thirty case studies²⁶

Abie and his wife were born in Paulshoek. Having left as a young family, they lived for a number of years in Vredendal, where Abie worked in a bakery. He then moved to Kleinzee where he was employed by De Beers Diamond Mines as a foreman until his retirement in 1992. He returned to the village, where his wife and children had preceded him by nearly 20 years, although he had regularly come home during his migrant years. In the meantime, his wife had engaged in village micro-enterprises to earn extra income.



Anna is a single parent of three children. She was born in Bushmanland and worked on various farms for many years. She moved with her family to Vanrhynsdorp. She later moved to Komaggas without her children. Anna settled in Paulshoek in 1993.

Betjie is the youngest respondent in the household survey. Her father spends much of the day at his stock post. He used to work for Telkom in Clanwilliam but retired in 1998. Betjie says her father does not think about investing his retirement package for the future. Instead, he thinks only of the present, believing that his money will last forever. He has invested most of his retirement money in stock farming. Betjie has matriculated, but like so many other people, she cannot find permanent work. She dreams of having her own music band. From time to time she sings at functions with a temporary band, often travelling to other towns in order to do so. Her mother is deceased.

Boet worked at the O’Kiep Copper Company (OCC) mine in NababEEP for

23 years. His wife worked as a domestic helper for a ‘white’ family in the same town. Both were born in Paulshoek, and their large extended family kept an eye on joint family ventures while they were away. After Boet injured his back, they returned to Paulshoek in 1983 and set up a home in the village. He never received any medical aid, other than for the six weeks he was in hospital, or a pension. Boet received R15 000 in severance pay for all his years of work, then the equivalent of seven years of pay.

Carina is one of the most destitute people in the village. She is unemployed and responsible for four children, three of which are under the age of ten. Carina’s husband is a casual herder. He had just found another job in the nearby village of Tweerivier, after having lost his previous herding job a few months earlier. Carina herself used to work as a domestic worker in Vredendal, but returned to Paulshoek for the birth of her second son in 1991. Carina said that she did not want her children to grow up at a *veepos* (stock post).

Catrine and her husband are a young couple with three children. She grew up outside of Paulshoek, in Klawer and Springbok, but returned to the village with her mother while her father worked on various mines. Her husband worked in Aggenys from 1988 to 1991, at Blackmountain Mine. Currently, he travels from town to town buying and selling goods. Catrine is one of the very few people with a permanent job in the village.

David worked on various mines, but recalls the one in Aggenys most vividly. He was also a herder on surrounding farms. His family moved with him from town to town, but eventually they set up home in Paulshoek about 25 years ago. David was born in Kenhardt and his wife in Concordia. Since they had extended family members who had settled in Paulshoek, they decided to establish a home in the village, to keep the family together and to provide education for their children.

Dina and her husband worked in Somerset West until 1975. They decided to

return to Paulshoek because it was easier to set up home in a familiar place. Their young family was (and is) growing, and extended family members in Paulshoek provide assistance and support, especially since her husband now works away at the nuclear waste disposal site at Vaalputs. He returns over weekends.

Elizabeth did part-time farm work for many years. Her most recent job as a domestic worker was in Garies, from January to May 1998. Her husband works away from Paulshoek when jobs become available. Elizabeth and her husband were born in Kliprand. They established themselves in Paulshoek in 1985, as both her and her husband's parents lived in the village. Her father-in-law was born in Matjiesfontein. Although, strictly speaking, they are not originally from Paulshoek, the number of years their parents have spent in the village qualifies them as true residents of Paulshoek.

Elsie and her deceased husband, who was a prominent educator, lived at Klipfontein for about 22 years. Her husband used to give classes in other parts of Leliefontein, where Elsie was born before moving to Paulshoek with her parents. After Elsie's husband passed away, she set up home in her parents' house in Paulshoek more than 16 years ago.

Frances is married to a local Paulshoek resident who works at Vaalputs and returns on weekends or once a month. Frances was born in Malmesbury. She had various jobs in places such as Saldanha Bay and Bellville. When she married in 1978, she left work and settled in Paulshoek. Frances says this was initially very hard for her, but she would not want to move now.

Gert used to work in various Namaqualand mines, after which he was employed by Telkom for 20 years, laying lines and working as a watchman. Gert's wife has always lived in Paulshoek, caring for their family, except for brief intervals when she worked as a seasonal fruit-picker in the VKV region. Gert retired in 1993, and used his pension funds to build another house. Their first house is now

occupied by their children. Since this interview, Gert has passed away.

Hanna remarried about two years ago. Her first husband, with whom she had five children, was killed in Cape Town. She is now married to a stock farmer, who spends much time away at the stock post. Previously, he worked on the mines and then, for more than 40 years, as a herder for a farmer in Bushmanland. Hanna returned to Paulshoek in about 1995, having left the village when she was 16 years old. She held various jobs in Bellville, Saldanha Bay and Kleinsee. Although her children grew up in Cape Town, they would regularly visit Paulshoek to see their grandparents and other extended family members.

Isobel used to work as a domestic helper in Carolusberg, while her husband worked as a labourer in Garies, Springbok and other urban centres of Namaqualand until he developed health problems. Isobel also used to work on a commercial farm near Paulshoek, but moved back to the village with her husband after he had lost his job. She cannot recall the date, except that it was a number of years ago. Isobel often refers to the fact that she had no education, which makes it difficult for her to remember numbers.

Jan used to be a driver for Jowells (a long haulage transport company) and lived in Garies, returning to Paulshoek over weekends. After being injured in an accident, he resigned his job in 1997 and is now unemployed. However, he now owns some livestock and shares a stock post with a few farmers from Paulshoek. His wife Anna was born in Bitterfontein. She completed her teacher's training diploma at college in the mid-1970s. This was an important historical time for the South African liberation struggle and the year 1976 remains vivid in Anna's memory. She has taught in Mollsvlei, Lepelfontein, Bitterfontein, and other small towns. The family settled in Paulshoek in 1988, when Anna was given a post at the local school.

Klaas worked as a driver for Spoornet (the state-run railways company), while his



wife ran their home. He also worked for the OCC mine in O’Kiep. They returned in 1976 to set up home in Paulshoek, as Klaas had been retrenched. Klaas has a number of adult children who have temporary jobs in places such as Springbok and Klawer.

Luke is an enterprising person who, despite his fairly advanced age, did various short technical diploma courses offered as further training in the latter part of his working life. Over the years he worked for numerous employers, such as OCC, the Atomic Energy Corporation (AEC) at Vaalputs and Aggenys and Spoornet in Elgin and Grabouw. His family lived with him until 1975, when they returned to Paulshoek and built a house. Luke returned in 1981 after resigning from OCC. He then went to work in Aggenys until 1986, when he returned to the village permanently. He is very proud of the support he receives from his son, who also works for a mining company. Luke’s daughter has temporary work in Cape Town.

Manie worked as a machine operator for De Beers Diamond Mines in Koiingnaas. His family lived with him, but moved back to Paulshoek in about 1970. He resigned from his job in the late 1980s and settled in the village, doing various casual jobs.

Nita says that because of unemployment in Paulshoek, the family moved to Vredendal for about 18 years. Their children attended school there. Nita says that they strove hard to give them a good education. Her husband worked as a foreman on a fruit farm, while Nita picked fruit and did domestic work. When her older children finished school, and because her own mother was terminally ill, they returned to their birthplace, Paulshoek, in 1987. Their two youngest children finished their schooling in Leliefontein, but did not manage to complete their matric certificates. Nita wants to leave Paulshoek again for a nearby town, because, she says, life is easier in the towns. Her husband, a stock farmer, does not want to move again.

Oupa was born at a stock post (Gamoep) in Paulshoek. He worked for 16 years for OCC in O’Kiep as a pump operator. His family lived with him. In 1984, he resigned from OCC and returned to Paulshoek to start farming. His extended family had already settled in Paulshoek.

Patty and her husband worked in various places. Patty was born in Leliefontein, though her parents are from Bushmanland. Patty’s husband, who is well over 80 years old, has many interesting accounts of his experiences with the *boere* (commercial farmers). These include nearly being beaten to death, as well as having fallen from a horse while performing his duties. This accident caused permanent damage to his leg and limited his employment options, yet he received no compensation. Patty’s mother also relates many stories of the time they worked away from home. She used to be a very good needle-worker, and did this service and other domestic chores for the farmers. Patty herself grew up at a *veepos* (stock post), and also reared her own children at a stock post in the veld. She worked in Garies as a nursing assistant, in addition to having worked and lived in Kliprand with her first husband. Patty’s second husband was born on a stock post in Slooitjiesdam. After serving in the South African army, he returned to Paulshoek with his war veterans’ ‘package’.

Quanita was born in Leliefontein and worked in Garies and O’Kiep before marrying her husband, who worked for De Beers Diamond Mines in Kleinzee. Quanita’s husband was born in Paulshoek. They returned with their children to the village. Their daughter, son and grandson all have jobs in surrounding towns such as Springbok and Morreesburg.

Roderick worked for seven years in Klawer. His wife is from Bitterfontein. They settled in Paulshoek in 1995, after Roderick resigned from his work. Their four children all have jobs in surrounding towns such as Klawer and Vredendal.

Stefanus lived for eight years in Gamoep, where he worked as a labourer.



He was born in the Western Cape, but his wife is from Paulshoek. They moved to Vredendal for three years and then to Saldanha Bay. He was employed as a labourer, she as a domestic helper. They returned to Paulshoek in 1995, because they could not get along with the new *baas* (farmer) who had bought the farm where they had been working.

Susan has never married nor had any children. She worked for many years as a domestic worker for the *dominee* (minister) in Leliefontein. She also worked for about 25 years in Cape Town, as an assistant to a disabled woman. In 1992, after her employer passed away, she retired and returned to Paulshoek. Susan is waiting to have her application for an RDP house approved. In the meantime, she is living in the house of a relative who does domestic work in Cape Town.

Trooi was born in South West Africa (now Namibia). Her husband is from Paulshoek. He used to work in Kleinsee as a builder and a cook. They came back to live in Paulshoek in 1997.

Una and her husband worked on various farms, but spent a significant number of years at a nearby farm called Witwater. Una is well over 80 years of age, and could not remember dates very well. However, she said that because she and her husband were both born in Paulshoek, they always regarded it as 'home'.

Willemina was born in 1917 and could not remember any dates well. She worked on farms throughout Bushmanland and settled in Paulshoek about 20 years ago with her now deceased husband.

Yvette arrived in Paulshoek in 1990, after working on various farms. She was born in Bushmanland. Her uncle has lived in Paulshoek for many years, and this prompted her move to the village. Yvette was very apologetic about not having had any education, often stating that she grew up on the *plase* (farms). Despite this perceived 'disability', she made an enormous effort to be helpful during the interview.

Zara recently married her partner who works in Bitterfontein. Both have completed their matric. She has not yet

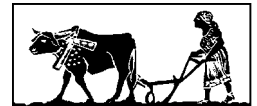
worked outside of Paulshoek, but will consider doing so if she can have her job transferred closer to where her husband is stationed. They see each other only about once a month at present. Zara does administrative work for the local authority.

A survey of migration histories

During October and November 1999, a survey of 117 household heads was conducted in Paulshoek in order to compile data on place of birth, place of previous residence and the date of arrival in Paulshoek from last residence (Dirkse 1999). Only 45% of respondents were born in the village. Of these, 45% have never moved from Paulshoek. Since residence rights are tightly linked to kinship, the population of Paulshoek might be thought of as a floating population pool with most residents living away from the village at certain times of their lives but returning in later life as a result of retrenchment, retirement or ill health. This pattern of migration characterises village life today. Forty-four percent of respondents who now live in the village last worked on surrounding farms, 17% lived in or near urban settlements of the Northern Cape, 13% resided elsewhere in the Leliefontein communal area and the remainder (6%) have returned from Cape Town, Wellington and other towns in the Western Cape (see Figure 10).

Changes in employment opportunities are reflected in the changing residence patterns of villagers between 1920 and the present. A watershed around 1970 marks the change from agricultural labour on commercial livestock farms to employment in the mines and fruit-growing areas of the region (see Table 4).

The main reasons adults gave for returning to Paulshoek before 1970 were related to educational opportunities for their children. Many of today's adults came to Paulshoek with their parents during that time. After 1970, there was a pronounced increase in the number of people who came to live in the village because of retrenchment, retirement or illness. It was also a time when life for



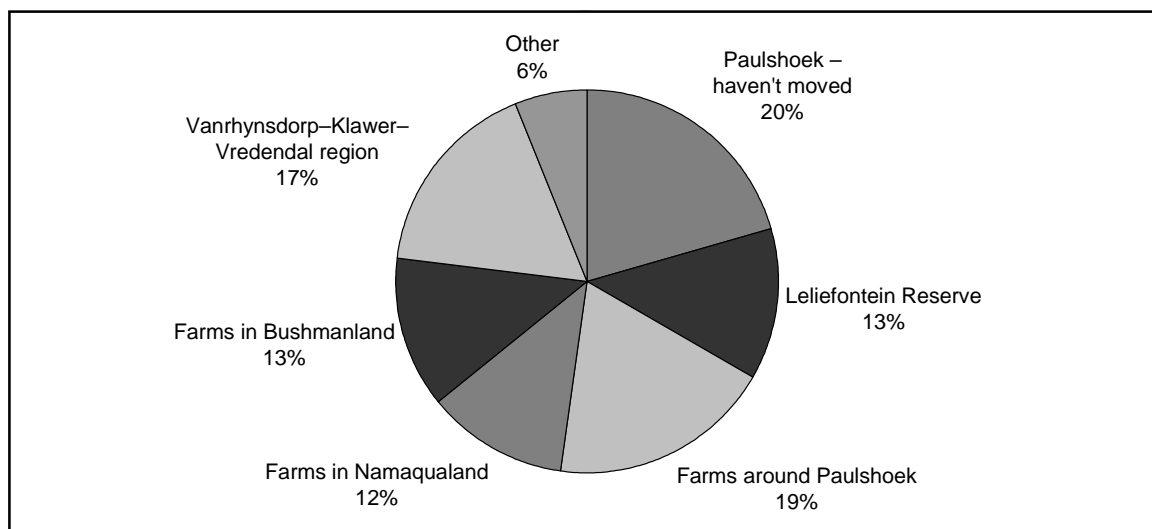


Figure 10: Last place of residence of household heads (n=117)

Source: Derived from unpublished data, Dirkse 1999

Table 4: Last place of residence of household heads by date (n=117)

Place of last residence	1920–49	1950–59	1960–69	1970–79	1980–89	1990–99
Outstation (Paulshoek)	5	2	6	0	0	0
Farm	6	12	8	0	5	1
Reserve	2	3	6	1	1	6
Town:						
Namaqualand	0	0	1	5	6	3
Western Cape	0	0	0	2	1	4
Vanrhynsdorp–Klawer–Vredendal region	0	0	1	3	8	9
Did not move	3	1	4	1	0	0
Total	16	18	26	12	21	23

Source: Derived from unpublished data, Dirkse 1999

people classified as coloured was oppressive, and many respondents indicated that village life at least had some opportunities for a better, less pressured life.

In a household survey conducted in 1995, 34 out of 75 households received remittances from 58 relatives working outside of Paulshoek. One third of household heads or their spouses were engaged in outside employment and 55%

of remittances to village households came from children of household heads.

The large number of respondents who returned to the village from surrounding commercial farms before 1970 is indicative of a permanent decline in agricultural employment. The mining industry in Namaqualand has also been under severe economic pressure during the last decade and several members of the

Table 5: Reasons for returning to Paulshoek from last place of residence of household heads by date (n=117)

Reasons for returning to Paulshoek	1920-49	1950-59	1960-69	1970-79	1980-89	1990-99
Retirement, retrenchment, illness	1	0	3	3	5	7
To be near family, death in family	0	2	3	1	6	8
Moved to place of birth or parents' place of birth	1	1	2	1	0	1
Moved with parents	6	7	11	4	3	4
For children's education	4	6	2	0	0	0
To farm crops and/or livestock	1	1	0	1	2	2
Opportunities, a better or less expensive life	0	0	1	2	5	1
Did not move	3	1	4	1	0	0
Total	16	18	26	13	21	23

Source: Derived from unpublished data, Dirkse 1999

Paulshoek community have been retrenched or have taken early retirement as a result of downscaling. At the same time, new opportunities have arisen for those younger men and women with relatively high levels of education. They have been actively recruited to take part in training courses, workshops and development initiatives associated with affirmative action, reconstruction and development programmes and local government restructuring.

The evidence from the past shows just how dependent the lives of villagers are on macro-economic and political conditions. If recent patterns are any indication of future trends, then it is likely that Paulshoek will continue to grow as villagers choose to bring their families up here and to retire from urban employment to the social stability and close family networks inherent in Paulshoek's social economy.

Conclusion

In Part 2 we have tried to reveal the basic components of Paulshoek's socio-economic life: household income, health, education, livestock farming, social networks, employment and migration histories. What emerges is a complex picture of village life where the fortunes of individuals and their families have undergone dynamic change against the background of the village's steady growth and long-term transformation. We have shown that the overall poverty of the village, as measured by income or HDI, is mitigated by the strength of social bonds that exist mainly within extended family networks and that these bonds go far beyond the village boundaries to urban areas throughout the region. This 'social capital' plays a vital, if largely unquantifiable, part in village life and probably constitutes the most important



informal village institution. We could speculate about the possibility that social networks constitute the model for other informal institutions such as stock partnerships and the regulation of grazing and that it also creates a template for villagers' engagement with formal institutions such as the church, the village development committee and local government.

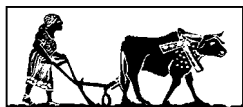
We have barely mentioned the existence of 'cultural capital' and this also deserves more in-depth treatment in further research. Cultural identity is intimately bound up with a sense of place, with the way villagers inhabit and use the landscape, and the fact that it is theirs 'by right' when there is no other place to go, that the experience of living and working in this extreme climate, marginal to all outsiders, makes it the centre of the universe for those who choose to make their homes here. One of the many unanswered questions which arose during the course of this project – 'Why do farmers continue to keep livestock when it appears to contribute so little to household livelihoods?' – could only be answered with reference to this cultural identity which links villagers to the land by conveying meaning and status as well as livelihood security. The long history that many older members of the community have had in Paulshoek also forms part of this 'cultural capital'. Not only is there a rich oral tradition about earlier land-use practices, environments, inhabitants of the village and the wider political economy of the region, but there is also considerable intellectual capital contained in people's knowledge of food and medicinal plants, which are still used extensively by Paulshoek residents today.

Social and economic diversity within Paulshoek is partly a function of history, education, health, family income, and social networks. Patterns of diversity are also generational and today's youth in Paulshoek undoubtedly have very different outlooks and opportunities than their parents. More research into the aspirations and achievements of school leavers would

provide vital clues to the future of the village. We know that education has had a very high priority on the list of parental goals and that this generation of school leavers is better educated than any in the past. The question is whether the high expectations this engenders will be fulfilled, and if not, what unforeseen consequences will result.

Another question which followed our research throughout the project was related to the importance of political and economic changes taking place throughout South Africa and, indeed, the world to Paulshoek. Events in the USA or Europe could have a devastating effect on the mining industry of Namaqualand, or on the emerging market economy of South Africa as a whole. The consequences of shocks to the global economy would have immediate impacts on the livelihoods of people from Paulshoek. However, with hindsight, we can see that throughout the later part of the 20th century, villagers have either been active agents in counteracting adverse political and economic conditions or have found ways to work productively within constrictive political and economic environments. Again, this goes back to the importance of social and cultural capital and to the fact that the village persists as a viable socio-economic entity because it has this capacity to promote and sustain social agency. In other words, in spite of the fact that some observers might dismiss Paulshoek as an unproductive, marginal dumping ground for the elderly and unemployed, it (and villages like it throughout Namaqualand) is invaluable as an agent of social and economic transformation. Perhaps it is not overstating the case to say that the country's future is dependent on the development of rural civil societies in places like Paulshoek, which exist throughout South Africa and constitute one of its greatest unrealised potentials.

Perhaps this study has raised more questions than it has answered and our aim to understand the dynamics of social, economic, political and historical



conditions of village life has been only partially fulfilled. But we believe that the publication of these research findings is a valuable step along the path of social science scholarship on Namaqualand. We hope that this report will have some part to play in helping policy makers to understand the nature of diversity, cohesiveness and potential within communities like Paulshoek. Also, by providing this raw material of socio-economic research, we hope to bring Namaqualand into the wider context of similar academic studies that are being conducted throughout South Africa. As academics, we expect that this project will lead us to a more theoretical understanding of Namaqualand's rural communities and their role in South Africa's transformation.

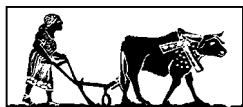
Finally, it is with some regret that we acknowledge the small amount of value that we have to put back into the village after having been given so much. We hope that this report will be of some value and interest to the people of Paulshoek, at least as a historical document, as a record of life in a village at a crucial cusp in its fortunes within the new South Africa.

Endnotes

- 1 District boundaries referred to in this report correspond with those of the pre-2000 magisterial districts.
- 2 In 2003 a liquor store was established on the main road just outside the village.
- 3 In 2002 and 2003 these were replaced by state-subsidised long-drop toilets with sealed concrete containers for the sewage, aimed at reducing contamination of the environment around the village.
- 4 In 2003 three new guest houses were constructed on top of a small rise at the north-eastern end of the village.
- 5 The Leliefontein-wide survey was carried out in 1995 by SPP under the Rural Livelihoods and Natural Resource Management in Semi-arid Areas of South Africa: Leliefontein Reserve, Namaqualand project (May et al. 1997). Seventy-five household questionnaires were completed in Paulshoek covering demographic and economic data on 398 individuals. Raw data from this survey was analysed by R.F. Rohde and S. Todd at the National Botanical Institute, Kirstenbosch, and the results are published here for the first time.
- 6 Exchange rates in 1995 were approximately R4 to the US dollar.
- 7 This project was the result of a collaborative programme between the Stockholm Environment Institute (SEI), Surplus People Project (SPP) and the Land and Agrarian Policy Centre (LAPC). Funding was provided by the Swedish International Development Authority (SIDA). Research was carried out between 1994 and 1996 and the final report was submitted in March 1997. The raw data from this survey is referred to as SPP 1995 in this report.
- 8 Rodkin 1999 refers to a survey of household budgets in Paulshoek, conducted during 1999 as part of the Global Change and Subsistence Rangelands in Southern Africa research project. Details relating to 165 individuals were obtained from 30 household questionnaires.
- 9 Dirkse 1999 refers to unpublished survey data collected in 1999 for 117 households in Paulshoek.
- 10 Information provided by Dr G. Peña, Garies Hospital.
- 11 Derived from Rodkin 1999.
- 12 Derived from SPP 1995. Survey data has been adjusted by a factor of 1.3 to reflect increases in Consumer Price Index (CPI), welfare payments and wages in 2000.
- 13 During 2002–2003, dry-system 'VIP' toilets, were built adjacent to most houses. This should significantly improve sanitation hygiene in the village.
- 14 MRC survey sample details are not available. Small sample size could possibly account for a distortion in the statistics.
- 15 The DOTS (Directly Observed Treatment Short course) programme has been instituted subsequently whereby community members are trained to oversee the daily medicine intake of TB patients.
- 16 May et al. (1997) also found an average expenditure of 2% on livestock.
- 17 The small sample size of the repeat survey and the fact that the households surveyed in 1995 were not necessarily the same as those surveyed in 1999 are the most obvious methodological flaws.
- 18 They subsequently went to live with one of these children in 2002.
- 19 Records from 1971 to 1999 show that the number of goats and sheep has fluctuated between these extremes, often during a short period of only six years, largely in response to rainfall (see Rohde et al. 1999:8).
- 20 During the period of this study, herd numbers fluctuated between 27 and 31 owing to new farmers, the amalgamation or splitting of herds and the dispersal of stock as others left farming altogether.



- 21 This data reflects the low stock numbers during 1998–1999 after several years of below average rainfall (Hoffman et al. 1999). Debeaudoin (2001) found that livestock farmers in the Leliefontein area seldom keep herds in excess of 200, because they find it difficult to keep animals safe if the herds grow too big. In addition, they could not feed large herds during droughts.
- 22 Recently, in May 2003, Wojtek Waliszewski interviewed five women in Paulshoek who had played an active role in herding in the last year. It was quite interesting how slow this information was to appear. During interviews, men were at first reluctant to admit to the existence of female herders, but slowly it emerged that there were in fact quite a few women with quite deep knowledge and experience – and not all from the generation that was born on stock posts. It seemed that the men were actually quite surprised, but not necessarily threatened, when we managed to interview these women, an indication of the deep cultural patterning associated with gender roles and livestock farming.
- 23 In the absence of a banking system that is accessible and provides the right sort of savings schemes for small investors, this is not an unrealistic investment strategy. Only now is there talk of creating a banking environment that caters for the small investor in South Africa. The interest earned on small deposits is much less than the inflation rate and the misnomered ‘savings account’ charges far more in bank charges than can be earned in interest.
- 24 Direct income from sales of livestock represents only 2% of village income. This figure doubles when meat that is consumed within the village is added. May et al. (1997:69) calculated that when the monetary value of milk, skins and draught is applied, this figure is doubled again to approximately 8% of village income.
- 25 See Debeaudoin (2001) and Modisele (2001) for further corroboration of these rationales for farmers in Leliefontein.
- 26 Pseudonyms have been used to preserve confidentiality.

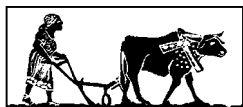


References

- Abrahams, Y. 1999. *Who are the people of Paulshoek? Culture and identity in a Namaqualand village*. Unpublished National Botanical Institute report.
- Alan, G & Gibson, D. 1900. *Sketches of church work and life in the diocese of Cape Town*. Cape Town: South African 'Electric' Printing and Publishing Company.
- Anseeuw, W. 1999. *Household, family or economic entity: A discussion document to identify the relevant economic entities for development (A case study in South Africa)*. Unpublished MSc thesis, Ecole Nationale Supérieure Agronomique de Montpellier.
- Anseeuw, W, Laurent, C, Modisele, S, Carstens, J, & Van der Poll, S. 2001. *Diversity of rural farming households and policy issues. An analysis based on a case study in the Northern Cape province*. Paper presented at the 'South Africa since 1994: Lessons and prospects' conference of the African Institute of South Africa, Pretoria.
- Archer, F, Hoffman, MT & Danckwerts, JE. 1989. How economic are the farming units of Leliefontein, Namaqualand? *Journal of Grassland Society of southern Africa*, 6(4):211–15.
- Archer, F & Meer, S. 1998. 'A woman's work is only recognised when it is not done'. *Women, land tenure and land reform in Namaqualand's coloured rural areas*. Final research report of the Future of Namaqualand Research Project, Surplus People Project.
- Barrow, J. 1801. *Account of travels into the interior of Southern Africa 1797 and 1798*. London: Cadell and Davies in the Strand.
- Boonzaier, E, Malherbe, C, Smith, A & Berens, P. 1996. *The Cape herders: A history of the Khoikhoi of southern Africa*. Cape Town: David Philip.
- Cape of Good Hope. 1888–1889. *Correspondence and report relative to the lands in Namaqualand set apart for the occupation of natives and others, 1888–1889*. Cape Town: Government Printers.
- Carstens, P. 1966. *The social structure of a Cape coloured reserve: A study of racial integration and segregation in South Africa*. Cape Town: Oxford University Press.
- Carter, M & May, J. 1998. Poverty, livelihood and class in rural South Africa. *World Development*, 27(1):1–20.
- CCCR. 1857. Civil Commissioner's Report, in *Blue-Books of the Colony of the Cape of Good Hope, 1857*.
- CCR. 1869. Civil Commissioner's Report, in *Blue-Books of the Colony of the Cape of Good Hope, 1869*.
- CCR. 1871. Civil Commissioner's Report, in *Blue-Books of the Colony of the Cape of Good Hope, 1871*.
- CCR. 1872. Civil Commissioner's Report, in *Blue-Books of the Colony of the Cape of Good Hope, 1872*.
- CCR. 1874. Civil Commissioner's Report, in *Blue-Books of the Colony of the Cape of Good Hope, 1874*.
- CCR. 1875. Civil Commissioner's Report, in *Blue-Books of the Colony of the Cape of Good Hope, 1875*.
- CCR. 1876. Civil Commissioner's Report, in *Blue-Books of the Colony of the Cape of Good Hope, 1876*.
- CCR. 1879. Civil Commissioner's Report, in *Blue-Books of the Colony of the Cape of Good Hope, 1879*.
- CCR. 1880. Civil Commissioner's Report, in *Blue-Books of the Colony of the Cape of Good Hope, 1880*.
- Cornelissen, A. 1965. *Namaqualand copper history*. Unpublished report, University of the Witwatersrand Archives.



- DBSA (Development Bank of South Africa). 1998. *Northern Cape: Development profile 1998*. Midrand: Development Business Information Unit, DBSA. (Development paper; no. 131.)
- Debeaudoin, L. 2001. *Livestock farming practices in a communal rangeland, Leliefontein, Namaqualand*. Unpublished MSc thesis, University of the Western Cape.
- Dirkse, J. 1999. [Unpublished data from a migration and residence survey conducted in 1999 for 117 households in Paulshoek.]
- Eckert, J. 1996. Fifty hectares and freedom: Field crop options for small scale farmers in the Western Cape, in *Land labour and livelihoods in rural South Africa*, edited by M Lipton, M de Klerk & M Lipton. Durban: Indicator Press.
- Forbes, V & Rourke, J. 1980. *Paterson's Cape travels 1777 to 1779*. Johannesburg: Brenthurst Press.
- Hardin, J. 2000. *The uninvited: Refugees at the rich man's gate*. London: Profile Books.
- Hendricks, F. 1997. Antinomies of access: Social differentiation and communal tenure in Namaqualand Reserve, South Africa. *East Africa Social Science Research Review*, 13(1):55–85.
- Hoffman, MT, Rohde, RF & Allsopp, N (eds). 1999. *Global change and subsistence rangelands in southern Africa, 1998/99*. Unpublished annual report for Paulshoek, South Africa. (INCO-DC: ERBIC 18CT970162.) Cape Town: National Botanical Institute, Kirstenbosch.
- Leeuwenburg, J. 1972. Leliefontein Communal Reserve, Namaqualand, in *Coloured citizenship in South Africa. Report of the second workshop*, edited by MG Whisson & HW van der Merwe. Cape Town: The Abe Bailey Institute of Interracial Studies, University of Cape Town.
- LMS (London Missionary Society). 1803. *The Report of the Directors of the London Missionary Society*. London: LMS.
- LMS (London Missionary Society). 1806a. *The Report of the Directors of the London Missionary Society*. London: LMS.
- LMS (London Missionary Society). 1806b. *The Transactions of the London Missionary Society*. London: LMS.
- LMS (London Missionary Society). 1813. *The Report of the Directors of the London Missionary Society*. London: LMS.
- LMS (London Missionary Society). 1814. *The Transactions of the London Missionary Society*. London: LMS.
- LMS (London Missionary Society). 1820–24. *The Transactions of the London Missionary Society*. London: LMS.
- LMS (London Missionary Society). 1826. *The Report of the Directors of the London Missionary Society*. London: LMS.
- LMS (London Missionary Society). 1837. *The Report of the Directors of the London Missionary Society*. London: LMS.
- Marinus, TW. 1997. *Understanding local institutions and organisations relating to natural resource use and management in the Leliefontein Reserve, Namaqualand*. Unpublished MSc thesis, University of the Western Cape.
- May, H, Allsopp, N, Bradley, PN, Cave, L, Cinderby, S, Hoffman, MT, Marinus, T, Pietersen, K, Titus, R & Williams, M. 1997. *Rural livelihoods and sustainable natural resource management – Final project report (draft)*. Cape Town: Surplus People Project.
- Modisele, S. 2001. *An analysis of functioning of rural households and typology of farming diversity*. Unpublished MSc thesis, University of Pretoria.
- Morley-Crampton, Rev. 1915. *Among the Namaqua of the far North West*. [Slide



- lecture delivered by Rev. Morley-Crampton on 2 September 1915. Typescript copy at the Cory Library, Rhodes University, Grahamstown.]
- Mossop, EE (ed.). 1947. *The journals of Brink and Rhenius*. Cape Town: Van Riebeeck Society.
- MRC (Medical Research Council). 1998. *The Leliefontein community area health collaboration – A rapid epidemiological assessment of health determinants, health status, health services and priority health issues*. Unpublished report, MRC Health Consulting Office.
- Östensson, O. 1998. *Socio-economic consequences of the restructuring and privatization of the Alexkor diamond mine*. Unpublished report on Project SAF/97/A14 to the Department of Economic Affairs and Tourism, Northern Cape provincial government.
- Penn, NG. 1995. *The northern Cape frontier zone, 1700–1815*. Unpublished PhD thesis, University of Cape Town.
- Price, WJ. 1976. *Leliefontein: Structure and decline of a coloured mission community 1870–1913*. Unpublished BA (Hons) thesis, University of Cape Town.
- Raper, P & Boucher, M (eds). 1988. *Robert Jacob Gordon, Cape travels, 1777 to 1786*. Vol. II. Johannesburg: Brenthurst Press.
- Ridgill, Rev. R. 1978 (1870). My first journey, in *Selected articles from the Cape Monthly Magazine, New Series 1870–76*, by AML Robinson. Cape Town: Van Riebeeck Society.
- Rodkin, H. 1999. [Unpublished data from a survey of household budgets conducted as part of the Global Change and Subsistence Rangelands in Southern Africa project 1997–2000, (INCO-DC: ERBIC 18CT970162).
- Rohde, RF, Hoffman, MT & Cousins, B. 1999. Experimenting with the commons – A comparative history of the effects of land policy on pastoralism in two former ‘homelands’/‘reserves’, southern Africa, in *Property rights, risk and livestock development*, edited by N. McCarthy, B. Swallow, M. Kirk & P. Hazell. Washington DC: International Livestock Research Institute.
- Ross, GLD. 1998. *The interactive role of transportation and the economy of Namaqualand*. Unpublished PhD thesis, University of Stellenbosch.
- Sharp, J. 1984. *Rural development and the struggle against impoverishment in the Namaqualand reserves*. Carnegie Inquiry into Poverty and Development in Southern Africa, Cape Town, April. (Report no. 68.)
- Sharp, J & West, M. 1984. *Controls and constraints: Land, labour and mobility in Namaqualand*. Carnegie Inquiry into Poverty and Development in Southern Africa, Cape Town, April. (Report no. 68.)
- Sharp, J. 1994. Land claims in Namaqualand: The Komaggas Reserve. *Review of African Political Economy*, 61(21):403–14.
- SPP (Surplus People Project). 1995. [Unpublished raw data drawn from a Leliefontein-wide survey carried out in 1995 by SPP under the Rural Livelihoods and Natural Resource Management in Semi-arid Areas of South Africa: Leliefontein Reserve, Namaqualand project.]
- Theal, GM. 1907. *History of Africa south of the Zambezi*. Vol. II. London: George Allen & Unwin Ltd.
- Thompson, G. 1968 (1827). *Travels and adventures in Southern Africa*. Van Riebeeck Society: Cape Town.
- UNDP (United Nations Development Programme). 1999. *Human development report 1999*. Oxford: Oxford University Press.
- UNICEF (United Nations Children’s Fund). 1999. *The state of the world’s children 1999*. <http://www.unicef.org/sowc99/>



- Vos, C. 1928. *Report on mission institutions: Namaqualand*. Pretoria Archives, Source: LDE, Vol. 3682, Reference 5977/1. (Report 3.)
- Webley, L. 1986. Pastoralist ethnoarchaeology in Namaqualand, in *Prehistoric pastoralism in southern Africa*, edited by M Hall & AB Smith. South African Archaeological Society. (Goodwin Series; no. 5.)
- Webley, L. 1992. *The history and archaeology of pastoral and hunter-gatherer settlement in the north-western Cape, South Africa*. Unpublished PhD thesis, University of Cape Town.
- WMMS (Wesleyan Methodist Missionary Society). 1819. *The Report of the Wesleyan Methodist Missionary Society*. London: WMMS
- WMMS (Wesleyan Methodist Missionary Society). 1820. *The Report of the Wesleyan Methodist Missionary Society*. London: WMMS



WMMS (Wesleyan Methodist Missionary Society). 1825. *The Report of the Wesleyan Methodist Missionary Society*. London: WMMS

WMMS (Wesleyan Methodist Missionary Society). 1832. *The Report of the Wesleyan Methodist Missionary Society*. London: WMMS

Wilmsen, EN. 1989. *Land filled with flies: A political economy of the Kalahari*. Chicago and London: University of Chicago Press.

Interviews

- Magriet 'Ou Tannie' Andrews, Paulshoek, 25 September 1999.
- Ouma Betjie Cloete, Paulshoek, 23 June 1999.
- Karel Joseph, Paulshoek, 14 March 2000.
- Samuel van der Westhuizen, Paulshoek, 14 March 2000.

Appendix 1: List of publications of the Paulshoek project

Peer-reviewed papers

- Allsopp, N. 1999. Effects of grazing and cultivation on soil patterns and processes in the Paulshoek areas of Namaqualand. *Plant Ecology*, 142(1–2):179–87.
- Joubert, DR & Ryan, PG. 1999. Differences in mammal and bird assemblages between commercial and communal rangelands in the succulent Karoo, South Africa. *Journal of Arid Environments*, 43(3):287–99.
- Riginos, C & Hoffman, MT. 2003. Changes in population biology of two succulent shrubs along a grazing gradient. *Journal of Applied Ecology*, 40:615–25.
- Seymour, CL & Dean, WRJ. 1999. Effects of heavy grazing on invertebrate assemblages in the succulent Karoo, South Africa. *Journal of Arid Environments*, 43(3):267–86.
- Todd, SW & Hoffman, MT. 1999. A fence-line contrast reveals effects of heavy grazing on plant species diversity and community composition in Namaqualand, South Africa. *Plant Ecology*, 142(1–2):169–78.
- Todd, SW & Hoffman, MT. 2000. Correlates of stocking rate and overgrazing in the Leliefontein Communal Reserve, central Namaqualand. *African Journal of Range and Forage Science*, 17(1, 2 & 3):36–45.
- Todd, SW. 2000. Patterns of seed production and shrub association in two palatable Karoo shrub species under contrasting land use intensities. *African Journal of Range and Forage Science*, 17(1, 2 & 3):22–6.

Book chapters

- Hoffman, MT, Cousins, B, Meyer, T, Petersen, A & Hendricks, H. 1999.

Historical and contemporary agricultural land use and the desertification of the Karoo landscape, in *The Karoo: Ecological patterns and processes*, edited by WRJ Dean & SJ Milton. Cambridge: Cambridge University Press:257–73.

Occasional papers

- Rohde, RF, Benjaminsen, TA & Hoffman, MT. 2001. *Land reform in Namaqualand: Poverty alleviation, stepping stones and 'economic units'*. Programme for Land and Agrarian Studies, University of the Western Cape. (Land reform and agrarian change in southern Africa occasional paper; no. 16.)
- Rohde, RF, Hoffman, MT & Cousins, B. 1999. *Experimenting with the commons: A comparative history of the effects of land policy on pastoralism in two former 'reserves' in Namibia and South Africa*. Cape Town: Programme for Land and Agrarian Studies, University of the Western Cape. (Land reform and agrarian change in southern Africa occasional paper; no. 12.)



Conference proceedings

- Palmer, AR, Ainslie, AM & Hoffman, MT. 1999. Sustainability of commercial and communal rangelands in southern Africa? in *People and rangelands: Building the future (Volume 2)*, edited by D Eldridge & D Freudenberger. Proceedings of the VI International Rangelands Congress held in Townsville, Queensland, Australia, 19–23 July.
- Rohde, RF, Hoffman, MT & Cousins, B. 1999. *Experimenting with the commons: A comparative history of the effects of land policy on pastoralism in two former 'reserves' in Namibia and*

South Africa. Paper delivered at the 'Property rights, risk and livestock development' international symposium held at Feldafing, Germany, 27 September–1 October.

Todd, SW, Seymour, C, Joubert, DF & Hoffman, MT. 1998. Communal rangelands and biodiversity: Insights from Paulshoek, Namaqualand, in *Communal rangelands in southern Africa: A synthesis of knowledge. Proceedings of a symposium on policy-making for the sustainable use of southern African communal rangelands*, edited by TD de Bruyn & PF Scogings. Alice: Fort Hare University Press.

Wyn Jones, RG, Young, EM, Hoffman, MT, Magole, L, Petersen, A, Arntzen J & Majoro, M. 1998. Global change and subsistence rangelands in southern Africa: An outline of a European Union funded project, in *Communal rangelands in southern Africa: A synthesis of knowledge. Proceedings of a symposium on policy-making for the sustainable use of southern African communal rangelands*, edited by TD de Bruyn & PF Scogings. Alice: Fort Hare University Press.



Popular articles

Todd, SW & Hoffman, MT. 1998. Communal rangelands in semi-arid South Africa. *Veld & Flora*, 84(3):82, September.

Todd, SW & Hoffman, MT. 1998. Fenced in and nowhere to go. *Veld & Flora*, 84(3):84–5, September.

Student reports and theses

Third-year project

Winter, D. 1997. *The effects of communal farming on bird biodiversity in a semi-arid environment, Namaqualand, South Africa*. Unpublished third-year project, Department of Environmental and Geographical Sciences, University of Cape Town.

Honours theses

Evans, A. 2001. *Analysis of cooking shelters in Paulshoek and the effects of harvesting on natural population of Polymita albiflora*. Unpublished BSc (Honours) thesis, University of Cape Town.

Gaika, L. 1999. *Effect of livestock on vegetation and soil of a river system in Paulshoek*. Unpublished BSc (Honours) thesis, University of the Western Cape.

Goldberg, K. 1998. *The impact of medicinal plant harvesting in a communal area in Namaqualand, South Africa*. Unpublished BSc (Honours) thesis, University of Cape Town.

James, I. 2001. *Valuing the communal resources of Paulshoek, Namaqualand, South Africa*. Unpublished BSc (Honours) thesis, University of Cape Town.

McGrath, K. 2002. *The effect of 65 years of rest from grazing on the diversity and composition of vegetation in the Worcester Robertson Karoo*. Unpublished BSc (Honours) thesis, University of Cape Town.

McKune, C. 2002. *Long-term changes on the vegetation of the Ceres Karoo under different management systems*. Unpublished BSc (Honours) thesis, University of Cape Town.

Monakisi, C. 2002. *The effect of resting on recovery of riverine vegetation in Paulshoek, Namaqualand*. Unpublished BSc (Honours) thesis, University of Cape Town.

Vetter, S. 1996. *Investigating the impacts of donkeys on a communal range in Namaqualand: How much does a donkey 'cost' in goat units?* Unpublished BSc (Honours) thesis, University of Cape Town.

MSc theses

Combrinck, A. 2003. *Grazing management in a semi-arid environment with GIS: Paulshoek as case study*. Unpublished MSc thesis, University of Stellenbosch. (In preparation.)

- Gabriels, N. 2003. *Influence of livestock on seedling establishment in succulent Karoo vegetation*. Unpublished MSc thesis, University of the Western Cape. (In preparation.)
- Joubert, DF. 1998. *Small mammal and bird community structure in commercial and communal rangelands in a semi-arid shrubland in Namaqualand, South Africa*. Unpublished MSc thesis, University of Cape Town.
- Moinde, NN. 1998. *The effects of Galenia africana on dominant perennial plant species in Namaqualand, South Africa*. Unpublished MSc thesis, University of Cape Town.
- Petersen, A. 2003. *The vegetation of Paulshoek*. Unpublished MSc thesis, University of Cape Town. (In preparation.)
- Samuels, IM. 2003. *Use of habitat by herders in communal rangeland of Namaqualand*. Unpublished MSc thesis, University of the Western Cape. (In preparation.)
- Seymour, C. 1998. *Different grazing intensities in arid rangelands: Effects on invertebrates on a communal farm in the succulent Karoo, South Africa*. Unpublished MSc thesis, University of Cape Town.
- Simons, L. 2003. *Restoration of succulent Karoo vegetation*. Unpublished MSc thesis, University of the Western Cape. (In preparation.)
- Solomon, AM. 2000. *The use and valuation of natural fuelwood resources in Paulshoek, Namaqualand and the ecological impacts on rangeland dynamics*. Unpublished MSc thesis, University of Cape Town.
- Todd, SW. 1997. *The effects of heavy grazing on plant species diversity and community composition in a communally managed, semi-arid shrubland, Namaqualand, South Africa*. Unpublished MSc thesis, University of Cape Town.

PhD thesis

- Carrick, P. 2001. *Shrub community dynamics in a South African semi-desert*. Unpublished PhD thesis, University of Cambridge.



Appendix 2: Pearson and Kendall Correlation and Spearman Rank Correlation Matrix

Pearson and Kendall Correlation of the household survey variables with three ordination axes									
	1			2			3		
	r	r-sq	tau	r	r-sq	tau	r	r-sq	tau
Income data (year, rands)									
Pension	-0.339	0.115	-0.275	-0.679	0.461	-0.652	-0.267	0.071	-0.189
Permanent jobs	0.658	0.432	0.417	-0.058	0.003	0.061	-0.430	0.185	-0.251
Self-employed	0.251	0.063	0.013	-0.061	0.004	0.043	-0.258	0.067	-0.052
Casual labour	0.105	0.011	0.128	0.219	0.048	0.246	0.243	0.059	0.228
Cash remittances	0.710	0.505	0.523	-0.143	0.021	-0.045	-0.147	0.022	-0.043
Kind remittances	0.625	0.391	0.441	-0.128	0.016	-0.017	-0.162	0.026	-0.042
Livestock sale	-0.065	0.004	0.011	-0.020	0.000	0.085	0.037	0.001	0.037
Total income	0.860	0.740	0.586	-0.375	0.141	-0.317	-0.490	0.240	-0.289
Income per capita	0.422	0.178	0.290	-0.531	0.282	-0.449	-0.530	0.280	-0.392
Number of sources	0.436	0.190	0.365	-0.163	0.027	-0.049	-0.035	0.001	-0.044
Demographic data									
Household size	0.283	0.080	0.234	0.143	0.021	0.142	0.121	0.015	0.082
Sex ratio	0.128	0.016	0.097	-0.048	0.002	0.004	0.048	0.002	0.003
Age	-0.378	0.143	-0.202	-0.293	0.086	-0.215	-0.158	0.025	-0.054
>15 Age	0.225	0.051	0.213	-0.013	0.000	0.055	0.045	0.002	0.075
Number of adults per household size	-0.227	0.052	-0.135	-0.218	0.048	-0.242	-0.085	0.007	-0.082
Household head education	0.300	0.090	0.215	0.133	0.018	0.084	0.012	0.000	0.039
Maximum education	0.404	0.163	0.243	0.114	0.013	0.139	0.075	0.006	0.059
Adult education	0.412	0.170	0.259	0.162	0.026	0.130	0.095	0.009	0.057
Livestock									
Total SSU	0.203	0.041	0.233	-0.063	0.004	-0.049	0.027	0.001	0.041
Meat value	0.214	0.046	0.235	-0.049	0.002	-0.013	0.019	0.000	-0.021
Agricultural costs	0.278	0.077	0.166	-0.069	0.005	0.067	-0.057	0.003	0.149

Correlation of the household survey variables with three ordination axes

Appendix 2: Spearman Rank Correlation Matrix (n=72)																				
	Pen- sion		Perma- nent jobs		Self- em- ployed		Casual labour		Cash remit- tances		Kind remit- tances		Live- stock sale		Total income		Income per capita		No. of sources	
	Corr	Prob	Corr	Prob	Corr	Prob	Corr	Prob	Corr	Prob	Corr	Prob	Corr	Prob	Corr	Prob	Corr	Prob	Corr	Prob
Pension	***	***	-0.322	0.003	-0.063	0.299	-0.134	0.130	-0.261	0.013	-0.245	0.019	-0.222	0.030	0.101	0.199	0.226	0.028	-0.052	0.331
Permanent jobs	-0.322	0.003	***	***	-0.079	0.255	-0.124	0.149	0.057	0.317	0.096	0.210	0.075	0.265	0.418	0.000	0.267	0.012	0.185	0.060
Self-employed	-0.063	0.299	-0.079	0.255	***	***	0.038	0.376	-0.054	0.325	-0.020	0.435	0.304	0.005	0.008	0.473	-0.033	0.391	0.304	0.005
Casual labour	-0.134	0.130	-0.124	0.149	0.038	0.376	***	***	0.037	0.378	0.019	0.436	0.041	0.367	0.091	0.224	-0.210	0.038	0.353	0.001
Cash remittances	-0.261	0.013	0.057	0.317	-0.054	0.325	0.037	0.378	***	***	0.835	0.000	-0.109	0.182	0.597	0.000	0.256	0.015	0.612	0.000
Kind remittances	-0.245	0.019	0.096	0.210	-0.020	0.435	0.019	0.436	0.835	0.000	***	***	-0.082	0.248	0.521	0.000	0.227	0.027	0.664	0.000
Livestock sale	-0.222	0.030	0.075	0.265	0.304	0.005	0.041	0.367	-0.109	0.182	-0.082	0.248	***	***	0.043	0.358	0.124	0.150	0.291	0.007
Total income	0.101	0.199	0.418	0.000	0.008	0.473	0.091	0.224	0.597	0.000	0.521	0.000	0.043	0.358	***	0.602	0.602	0.000	0.573	0.000
Income per capita	-0.052	0.331	0.185	0.060	0.304	0.005	0.353	0.001	0.612	0.015	0.227	0.027	0.124	0.150	0.602	0.000	0.166	0.081	0.166	0.081
Number of sources	-0.095	0.214	0.130	0.138	0.115	0.167	0.286	0.007	0.313	0.004	0.322	0.003	-0.152	0.101	0.319	0.003	-0.469	0.000	0.423	0.000
Household size	-0.027	0.412	0.020	0.435	0.316	0.003	0.099	0.205	0.084	0.242	0.107	0.186	0.196	0.049	0.191	0.054	-0.013	0.456	0.220	0.032
Sex ratio	0.387	0.000	-0.423	0.000	-0.123	0.153	0.009	0.469	-0.090	0.227	-0.157	0.094	0.057	0.317	-0.172	0.075	0.309	0.004	-0.071	0.278
Average age	0.030	0.402	-0.016	0.448	0.040	0.369	0.347	0.001	0.304	0.005	0.263	0.013	-0.046	0.349	0.337	0.002	-0.369	0.001	0.417	0.000
> 15 Age	0.328	0.002	-0.293	0.006	-0.105	0.190	0.010	0.468	-0.124	0.149	-0.155	0.097	0.148	0.108	-0.090	0.227	0.288	0.007	-0.102	0.198
No. of adults per household	-0.249	0.017	0.249	0.017	-0.086	0.235	-0.070	0.279	0.066	0.290	-0.021	0.430	-0.117	0.164	0.161	0.089	-0.092	0.221	-0.165	0.083
Household head education	-0.270	0.011	0.213	0.036	0.053	0.330	0.141	0.118	0.459	0.000	0.391	0.000	0.073	0.270	0.395	0.000	-0.162	0.087	0.452	0.000
Maximum education	-0.376	0.001	0.337	0.002	-0.038	0.375	-0.016	0.446	0.264	0.012	0.176	0.070	0.055	0.323	0.268	0.011	-0.095	0.214	0.129	0.140
Adult education	-0.117	0.168	0.169	0.081	0.030	0.403	0.046	0.352	0.199	0.049	0.162	0.090	0.579	0.000	0.385	0.001	0.272	0.011	0.352	0.001
Total SSU	-0.112	0.175	0.236	0.023	0.067	0.288	0.139	0.123	0.213	0.036	0.153	0.100	0.538	0.000	0.381	0.000	0.200	0.046	0.443	0.000
Meat value	-0.173	0.074	0.101	0.199	-0.005	0.483	0.295	0.006	0.149	0.106	0.204	0.043	0.394	0.000	0.254	0.016	0.054	0.327	0.350	0.001
Agricultural expenses	-0.227	0.028	-0.034	0.388	-0.097	0.209	0.204	0.043	0.125	0.147	0.136	0.127	-0.023	0.425	0.038	0.376	-0.146	0.110	0.079	0.255
Support pay																				

Appendix 2: Spearman Rank Correlation Matrix (n=72)

	HH size	Sex ratio	Av. age	> 15 age	No. of adults per HH	HH head education	Max. education	Adult education	Total SSU	Meat value	Agric. expenses											
	Corr	Prob	Corr	Prob	Corr	Prob	Corr	Prob	Corr	Prob	Corr	Prob										
Pension	-0.095	0.214	-0.027	0.412	0.387	0.000	0.030	0.402	0.328	0.002	-0.249	0.017	-0.270	0.011	-0.376	0.001	-0.117	0.168	-0.112	0.175	-0.173	0.074
Permanent jobs	0.130	0.138	0.020	0.435	-0.423	0.000	-0.016	0.448	-0.293	0.006	0.249	0.017	0.213	0.036	0.337	0.002	0.169	0.081	0.236	0.023	0.101	0.199
Self-employed	0.115	0.167	0.316	0.003	-0.123	0.153	0.040	0.369	-0.105	0.190	-0.086	0.235	0.053	-0.330	-0.038	0.375	0.030	0.403	0.067	0.288	-0.005	0.483
Casual labour	0.286	0.007	0.099	0.205	0.009	0.469	0.347	0.001	0.010	0.468	-0.070	0.279	0.141	0.118	-0.016	0.446	0.046	0.352	0.139	0.123	0.295	0.006
Cash remittances	0.313	0.004	0.084	0.242	-0.090	0.227	0.304	0.005	-0.124	0.149	0.066	0.290	0.459	0.000	0.264	0.012	0.199	0.049	0.213	0.036	0.149	0.106
Kind remittances	0.322	0.003	0.107	0.186	-0.157	0.094	0.263	0.013	-0.155	0.097	-0.021	0.430	0.391	0.000	0.176	0.070	0.162	0.090	0.153	0.100	0.204	0.043
Livestock sale	-0.152	0.101	0.196	0.049	0.057	0.317	-0.046	0.349	0.148	0.108	-0.117	0.164	0.073	0.270	0.055	0.323	0.579	0.000	0.538	0.000	0.394	0.000
Total income	0.319	0.003	0.191	0.054	-0.172	0.075	0.337	0.002	-0.090	0.227	0.161	0.089	0.395	0.000	0.268	0.011	0.385	0.001	0.381	0.000	0.254	0.016
Income per capita	-0.469	0.000	-0.013	0.456	0.309	0.004	-0.369	0.001	0.288	0.007	-0.092	0.221	-0.162	0.087	-0.095	0.214	0.272	0.011	0.200	0.046	0.054	0.327
Number of sources	0.423	0.000	0.220	0.032	-0.071	0.278	0.417	0.000	-0.102	0.198	-0.165	0.083	0.452	0.000	0.129	0.140	0.352	0.001	0.443	0.000	0.350	0.001
Household size	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Sex ratio	0.185	0.060	****	****	-0.075	0.266	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Average age	-0.443	0.000	-0.075	0.266	****	****	-0.067	0.289	0.827	0.289	-0.526	0.000	-0.453	0.000	-0.555	0.000	0.037	0.380	0.016	0.447	0.062	0.301
> 15 Age	0.814	0.000	0.231	0.026	-0.067	0.289	****	****	0.136	0.128	0.030	0.402	0.426	0.000	0.173	0.074	0.120	0.161	0.257	0.015	0.249	0.017
No. of adults per household	-0.370	0.001	0.047	0.348	0.827	0.000	0.136	0.128	****	****	-0.369	0.001	-0.399	0.000	-0.403	0.000	0.089	0.231	0.057	0.316	0.103	0.195
Household head education	0.170	0.076	-0.093	0.219	-0.526	0.000	0.030	0.402	-0.369	0.001	****	****	0.343	0.002	0.746	0.000	-0.011	0.463	-0.021	0.430	-0.041	0.365
Maximum education	0.537	0.000	0.040	0.369	-0.453	0.000	0.426	0.000	-0.399	0.000	0.343	0.002	****	****	0.701	0.000	0.187	0.061	0.246	0.019	0.113	0.173
Adult education	0.282	0.008	-0.068	0.286	-0.555	0.000	0.173	0.074	-0.403	0.000	0.746	0.000	0.701	0.000	****	****	0.126	0.149	0.169	0.078	0.090	0.226
Total SSU	0.009	0.470	0.146	0.114	0.037	0.380	0.120	0.161	0.089	0.231	-0.011	0.463	0.187	0.061	0.126	0.149	****	****	0.821	0.000	0.532	0.000
Meat value	0.163	0.086	0.023	0.424	0.016	0.447	0.257	0.015	0.057	0.316	-0.021	0.430	0.246	0.019	0.113	0.173	0.000	0.000	****	****	0.519	0.000
Agric. expenses	0.182	0.063	0.172	0.075	0.062	0.301	0.249	0.017	0.103	0.195	-0.041	0.365	0.113	0.173	0.090	0.226	0.532	0.000	0.519	0.000	****	****
Support pay	0.170	0.076	-0.170	0.077	-0.178	0.068	0.063	0.301	-0.255	0.015	0.104	0.192	0.304	0.005	0.281	0.008	0.112	0.178	0.144	0.113	0.085	0.240