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Klapmuts Backyard Dwelling Survey

A hazard and vulnerability assessment



June 2016

Disaster Risk Studies Honours Class

Department of Geography & Environmental Studies

This report represents a synthesis of information collected by Honours students as a practical field-based service-learning exercise for the Disaster Risk Studies Module



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Executive Summary

The town of Klapmuts is considered to have a medium development potential (Van Niekerk *et al* 2010), but has also been identified to have high social needs and, as a consequence perhaps, is failing to realise its full potential. This suggests an imperative to understand the risk and vulnerability context of the Klapmuts community, manifested in particular by growing levels of informality, particularly in terms of the proliferation of backyard dwellings.

A community risk and vulnerability assessment is a fundamental step to inform development planning. Such assessments explore local lived realities and other social dynamics, with a view to designing and ensuring the sustainability of development interventions and service delivery programmes. The assessment process, which directly involves members of the community in the identification of key development issues and the collection of relevant information, provides grounded insights into how risks and associated vulnerabilities are being generated, and identifies possible solutions. The collaborative nature of the process also helps to create a framework for a reciprocal exchange of information between community members, municipal authorities and key local role players.

In response to the need identified by Stellenbosch Municipality for an informed understanding of the living conditions among growing numbers of backyard dwellers in Klapmuts, Disaster Risk Studies post-graduate students from the Department of Geography & Environmental Studies at Stellenbosch University undertook a research project between 29 March and 8 April 2016. Working in collaboration with the Klapmuts community and Stellenbosch Municipality, students were tasked to determine the risk and vulnerability context of backyard dwellers. This involved a qualitative risk assessment of backyard dwellings in a designated survey area consisting of all subsidy housing constructed between 1997 and 2009, but excluding other subsequent housing developments built after 2012. A sample of 150 backyard households was interviewed, while the spatial extent of all houses accommodating backyard dwellings was recorded.

The findings were intended as a barometer of the social needs of the Klapmuts community and the project outputs included:

- Maps illustrating the spatial extent of backyards in the area.
- Quantitative and qualitative information detailing backyard living conditions.
- A detailed risk profile of the backyard population of Klapmuts.

This report presents the findings of the survey. Beginning with an overview of the development history and most recent demographic and socio-economic profile of Klapmuts, the report explores the issue of backyard dwellings in South Africa more generally, making reference to other research. It then presents the findings of the research project, with a focus on illustrating the realities of life and the risk profile found in the backyards of Klapmuts and identifying some of the key developmental problems that were identified in

the area. The report concludes with recommendations for possible municipal policy development and risk reduction interventions, providing some final reflections.

1. Introduction

A community risk and vulnerability assessment is a fundamental step to inform development measures grounded on local risk dynamics with a view to ensuring the sustainability of interventions and service delivery programmes. It provides insights into how risks are generated and can be reduced. It is primarily concerned with putting local communities at the forefront of the risk and vulnerability identification process, thereby allowing ownership and control of the assessment by local residents themselves. In this way the participatory process that is undertaken helps to create a framework for a reciprocal exchange of information and strategies between local authorities, key role players and local community members.

Discussions held with Stellenbosch Municipality officials and Klapmuts community leaders, and confirmed by a review of existing literature, suggested that Klapmuts had high social needs and was considered a highly vulnerable and hazard-exposed community. A local ward councillor had also highlighted the need to establish the vulnerability context of the Klapmuts community, manifested by growing levels of informality, particularly in terms of the proliferation of backyard dwellings being noted there.

Currently relatively little is known about the risk profile of backyard dwellers, while the spatial extent and temporal growth of this form of accommodation is poorly understood, suggesting the need for small-scale local studies to inform current understandings of this growing South African housing phenomenon. In addressing this identified lack of knowledge, this study was initiated as a collaborative information-gathering exercise on behalf of the Klapmuts community and supported by the Stellenbosch Municipality.

1.1 Purpose of the research project

In 2016, in collaboration with Klapmuts community leaders and the Stellenbosch Municipality, an assessment of the spatial extent and risk context of backyard dwellings in a low-cost housing area of Klapmuts was undertaken by the Research Alliance for Disaster & Risk Reduction (RADAR) from the Department of Geography and Environmental Studies at Stellenbosch University¹. The small-scale study of backyard accommodation followed two previous research projects conducted in Klapmuts: A community risk assessment of the Mandela City informal settlement (DiMP 2012) and a hazard identification project conducted with Grade 7's from Klapmuts Primary School in 2014 (in which the children identified and

¹ Geography and Environmental Studies Honours students taking the Disaster Risk Studies module annually undertake a practical field-based project. Over the last four years these have included risk research on behalf of communities and local municipalities across the Western Cape, namely Matzikama Municipality – Vredendal North (2012) and Doringbaai (2013); Overstrand Municipality – Zwelihle, Hermanus (2014) and Breede Valley Municipality – Steenvleit, Touws River (2015).

photographed local hazards). After several meetings held with officials from the Stellenbosch Municipality, members of Klapmuts community organisations and local leaders, a research project was sanctioned and then collaboratively planned and designed.

This report presents the findings of the risk and vulnerability assessment that was undertaken. It is intended for distribution to relevant municipal sectors, community leaders and organisations working with the Klapmuts community.

1.2 Methodology

The risk and vulnerability research was undertaken in three residential areas of Klapmuts between 29 May and 8 April 2015. During this period meetings were held with municipal officials as well as with local community-based organisations already working in the community to discuss and identify key development issues and prevailing institutional constraints. These interactions preceded a field-based workshop held with members of local community-based organisations (CBOs), followed by household interviews and a questionnaire-based survey of backyard dwellers to capture the multiple, and perhaps varying, perspectives on risk and vulnerability in Klapmuts.

The project included the following activities:

- Meeting with key municipal stakeholders in order to understand the municipal perspective on the development challenges posed by backyard dwellers/dwellings (29 March).
- Workshop held with local community stakeholders to understand their perspectives on the proliferation of backyards and associated risks (4 April).
- Survey of households with backyards (incorporating interviews with 150 backyard dwellers) and the collection of spatial data recording the location of backyards (5 - 8 April).

The survey covered the housing areas of Klapmuts located to the South of Merchant Street, built between 1997 and 2009, omitting more recent housing developments in the South-eastern parts, and those houses located North of Merchant Street. The research area was divided among three field survey groups, who each conducted 50 household interviews with backyard residents. This constituted roughly 20% of the formal houses accommodating backyard dwellers in the survey area. The three survey areas are illustrated in Figure 1 below. The location of every formal house accommodating backyard dwellings was also recorded during the household survey in order to illustrate the spatial extent of backyard dwellings across the survey area.

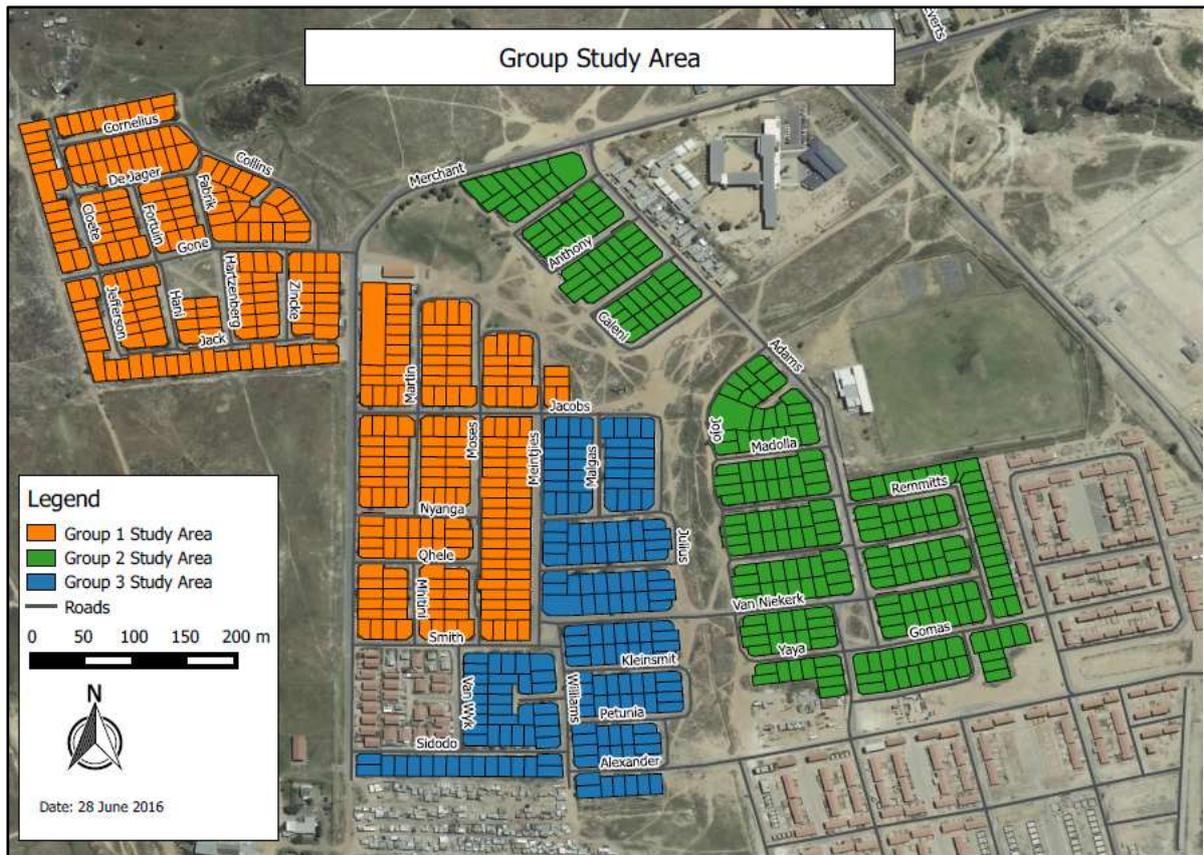


Figure 1 Location of three field survey areas

The project outputs included:

- Maps illustrating the spatial extent of backyards in the area.
- Quantitative and qualitative information detailing backyard living conditions.
- A detailed risk profile of the backyard population of Klapmuts.

This report synthesises and presents these research outputs.

1.3 Ethical considerations

Several preliminary meetings were held with community leaders and municipal officials over several months preceding the field work in order to plan and design the project collaboratively. This also ensured that the project was acceptable to the key stakeholder groups. In addition considerations of ethical research practice resulted in the following measures being taken:

- The Stellenbosch University prescribed ethical clearance process was followed and institutional authorisation received prior to the commencement of field work.
- An *Informed Consent* form, drafted in English and Afrikaans, explaining the nature of the project, respondents' right to anonymity and confidentiality of information

was presented verbally to all respondents in the survey and the community workshop.

- Data collected contained no identifiable personal details besides the spatial location of all houses accommodating backyard dwellings in the survey area.
- Community facilitators accompanied students in the field to ensure student safety, guide them around the community and facilitate community engagement.
- Only information voluntarily provided by residents was collected. Most backyard residents were very willing to participate and talk about backyard living and associated hazards, with only six of those approached declining to be interviewed.
- Community leaders were tasked with broadcasting information about the survey to the community several weeks before the field work commenced to ensure that the presence of the students was anticipated and the nature of their project understood.

1.4 Limitations of the study

- The research period was short – commencing with a desk top review followed by planning meetings and only one week of field work.
- Due to the limited time available, the project was confined to a survey of the older housing developments in Klapmuts (built between 1997 and 2009), while backyards in the several new housing developments were omitted. A future study might survey these areas of Klapmuts for comparison.
- The project was a service-learning and training exercise for post-graduate students. Nevertheless it provides decision-makers and community members with valuable information to inform planning, with the aim of deriving longer-term benefits to the community.
- Although every attempt was made to identify and include influential members of the community in the planning workshops, some may regrettably have been omitted.
- Given that 2016 is a local government election year, it was decided not to include political figures such as ward councillors in the process to ensure neutrality and longer-term efficacy.
- Several interviews with backyard dwellers were conducted in the presence of their landlords, which may have prevented accurate and /or honest responses.

2. Placing Klapmuts in context

The town of Klapmuts is situated within the Stellenbosch Municipality jurisdictional area, located within the Cape Winelands District. Recent census data suggests that the population of Klapmuts has grown to over 8 000 people. Considered in a 2004 study of Western Cape towns (Van der Merwe *et al* 2004) to have medium development potential, a later review (Van Niekerk *et al* 2010), found that the town was failing to harness this potential, being undermined by significant social needs, identified in both studies.

2.1 Geographical location

The town of Klapmuts, today covering an area of 1.76 km², is situated approximately 15km from Stellenbosch (See Figure 3), close to the towns of Paarl and Franschoek. Surrounded by agricultural and conservation areas (See Figure 2 below), it forms the major part of electoral Ward 18, which has been identified as a key municipal development node. Since 1997, large scale construction of subsidised low-cost housing has expanded the footprint of the town, which has included road infrastructure, and several new industrial and commercial developments. A new shopping complex opened for business in September 2015.

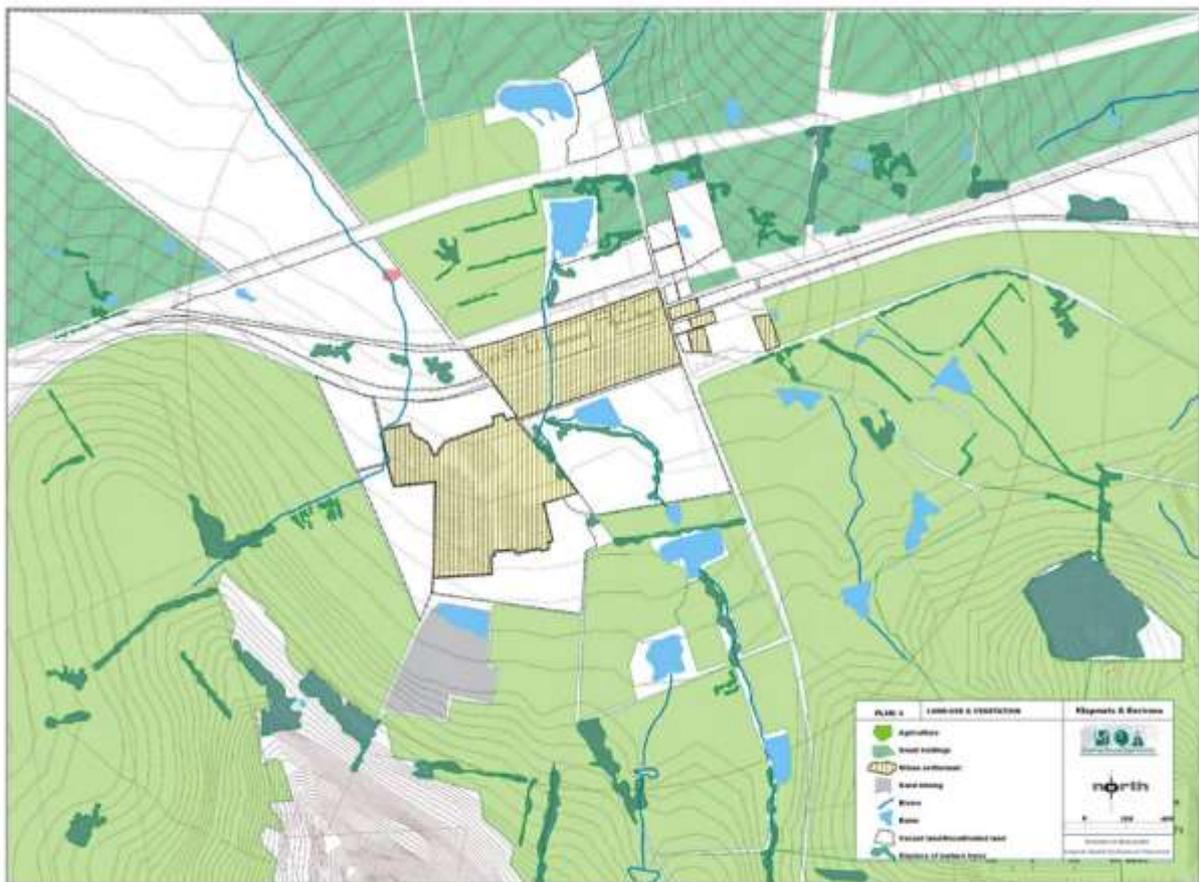


Figure 2 Klapmuts and Environs-Land and Vegetation

Source Klapmuts SDK 2007

Klapmuts comprises four sub-places, namely Bennetsville, the older part of the town; Klapmuts SP, situated across the railway line adjacent to a new shopping precinct; Weltevrede Park, currently the most densely populated (See Table 1 below) and the area in which the research was conducted; and Mandela City, an informal settlement abutting the agricultural land South East of Weltevrede Park.

Table 1 Physical area and population count for sub-areas of Klapmuts

Name	Type	Population	Area (km²)
Bennetsville	Sub Place	1249	0.51
Klapmuts SP	Sub Place	129	0.56
Mandela City	Sub Place	664	0.04
Weltevrede Park	Sub Place	5661	0.65

Source: Frith 2013

The next section provides a brief development history of Klapmuts, from its humble origins as an 'outspan' town, through its slow development up until the late 1990s, and its subsequent rapid growth under the administration of Stellenbosch Municipality.

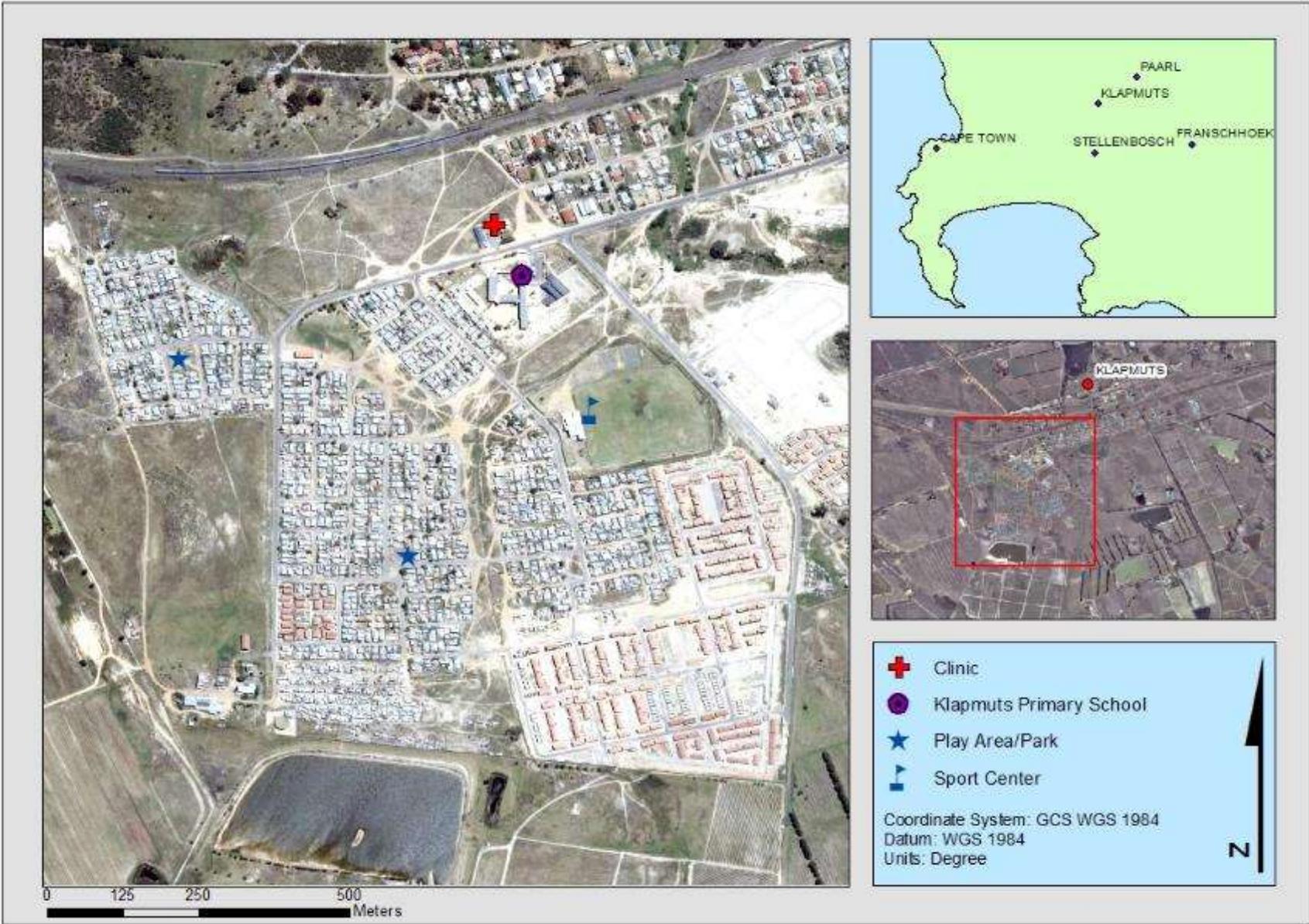


Figure 3 Location of the study area

2.2 Origins and historical background

The hill known today as Klappmuts was originally named in 1657 by one Abraham Gabbema, a Dutch East India Company Fiscal and Bailiff, when he and seven officers explored the Berg River Valley. Gabbema chose the names 'Clappmutsbergh', 'Diamant' and 'Paarl Berg' to describe the surrounding local hills and mountains, making reference to features that reminded him of his Dutch homeland. (For example, 'De Clappmuts' resembled a sailor's cap with flaps). Jan van Riebeeck later thought that the hill resembled a typical Dutch farm maiden's hat with "muts" worn at that time. The name 'De Clappmuts' was later vernacularized to 'Klappmuts' (SAHRA n.d.).

During the 17th and 18th centuries the land around Klappmutskop was divided into freehold land grants used primarily for grain production and stock farming. There was also an emphasis on wine production in the greater Klappmuts area that continued until the end of the 19th century. During this period an important feature of the area was the 'Clappmuts Outspan'. Outspans served as resting places for farmers driving heavy ox-wagons to and from the Cape markets. The Klappmuts outspan provided sufficient water and grazing land and was a critical stop over for farmers travelling from places such as Franschoek (SAHRA n.d.).

Klappmuts developed initially as several clusters of informal dwellings, housing farm workers from the surrounding area. It was only after the opening of the railway line between Cape Town and Paarl in 1863 that the town really started to develop. It was originally known as the 'Village of Bennetsville' although the names 'Bennetsville' and 'Klappmuts' were used interchangeably during the town's early history. Late in the 1890's the Klappmuts hotel was built by the Ward family, and at the turn of the century a lock-up facility and convict station was established near the Klappmuts railway station. Convicts were employed as free labour in nearby rural areas and towns.

In the early days of its history Klappmuts was inhabited by a poor and marginalized community, many of whom were either unemployed or working in unskilled jobs, such as farm labour or railway construction. Due to the lack of basic infrastructure and services the town only developed slowly, and other than the railway houses and the Klappmuts Hotel the first formal buildings were only built after 1960. Indeed, until 1996 boreholes were still the only source of water in the town and bucket toilets were generally used.

Klappmuts initially fell under the jurisdiction of the Winelands District Council, and in terms of apartheid separate development policy was designated as a Coloured area. With changes in local government following the transition to democratic government in South Africa, Klappmuts became incorporated into Stellenbosch Municipality in 1995 and would later be identified as one of 14 interconnected municipal nodes targeted for future development.

2.3 Community Profile

2.3.1 Population size and growth

According to census data, the population of Klapmuts has grown substantially over the last two decades. While the 1996 census counted 1 515 residents, the 2001 census showed that the population had grown to around 4 000 in only 5 years (MCA Africa 2007). With a population growth rate of 32% over this period, Klapmuts was the fastest growing population in the Stellenbosch municipal area. By the time of the 2011 census, a decade later, the population had almost doubled to 7 703 (Frith 2013). The dramatic population increase is due to several factors: natural internal growth, in-migration from the Eastern Cape and other areas and also, possibly, the influx of farm workers².

The following table, drawn from Frith (2013), provides details of the demographics of Klapmuts recorded in the 2011 national census. It indicates the perpetuation of a predominantly Coloured population, some two thirds of all residents, with Afrikaans the most commonly spoken first language and a very slight majority of male residents.

Table 2 Demographic census data

Gender	People	Percentage
Male	3859	50.10 %
Female	3844	49.90 %
Population group	People	Percentage
Coloured	4945	64.20 %
Black African	2582	33.52 %
Other	78	1.01 %
White	75	0.97 %
Indian or Asian	22	0.29 %
First language	People	Percentage
Afrikaans	5561	72.25 %
isiXhosa	1662	21.59 %
Sesotho	184	2.39 %
English	144	1.87 %
Other	67	0.87 %
Xitsonga	19	0.25 %
Setswana	18	0.23 %
Sign language	17	0.22 %
isiZulu	12	0.16 %
isiNdebele	6	0.08 %
Sepedi	3	0.04 %
SiSwati	1	0.01 %

Source Frith 2013

² Many backyard dwellers, when questioned about their former place of residence, claimed to have lived previously on farms.

2.3.2 Socio-economic characteristics

In the 2001 census survey, Klapmuts demonstrated a very high dependency ratio, with more than half the inhabitants either younger than 15 or older than 65 years. At that time only half of the economically active population of Klapmuts was employed in the formal economy (Provincial Government, 2007). Following the 2011 census, the Bureau for Economic Research (BER) undertook a detailed study of the socio-economic profile of the whole Stellenbosch municipal area (BER 2013). This has been referred to extensively in the next section of the report that describes the current situation in the Klapmuts community.

Unemployment in Klapmuts has increased significantly over time. For example, the promulgation of the Extension of Security of Tenure Act (ESTA) in 1997 impacted heavily on employment in the agricultural sector, with farmers rationalising their labour force. A recent report (Harbour & Van der Merwe, 2010) argues that farmers have gradually moved away from employing permanent staff living on the farm, and increasingly prefer to employ temporary staff living elsewhere. It has also been shown that between 1995 and 2011 the agricultural sector contracted significantly (BER 2013). According to another report (Harbour & Van der Merwe 2010), the manufacturing sector provides the majority of employment opportunities in Klapmuts (29%); followed by agriculture (18%), wholesale and retail trade (16%) and the construction sector (12.5%). The global economic recession had a major impact on employment across many sectors in the Stellenbosch area, most notably agriculture (BER 2013).

Analysis of 2011 census data (BER 2013) shows that more than 600 people were unemployed in Klapmuts in 2011 (See Figure 4 below). However, as Figure 5 shows, employment levels in Klapmuts were significantly better than many other wards in the municipal area.

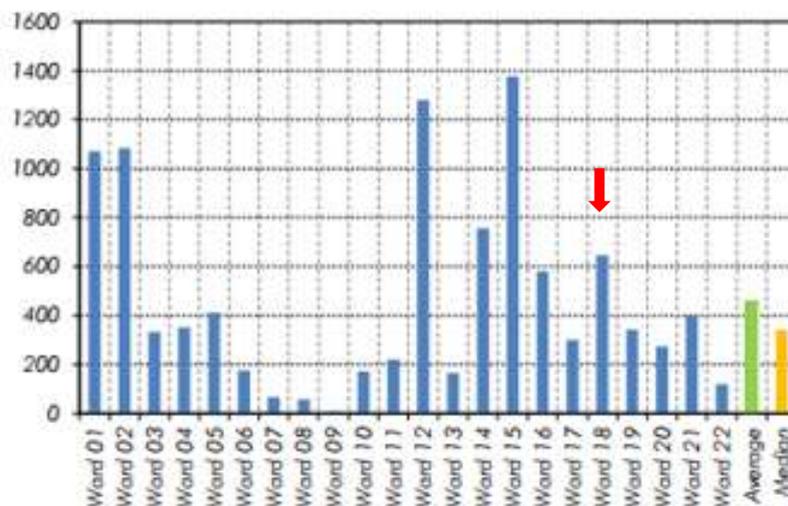


Figure 4 Unemployment by Ward (Klapmuts represented by Ward 18)

Source: Bureau for Economic Research 2013

While the 2011 census figures indicated lower unemployment, the number of residents had also increased dramatically, suggesting that the percentage of those with employment might not have improved (MCA Africa 2007).

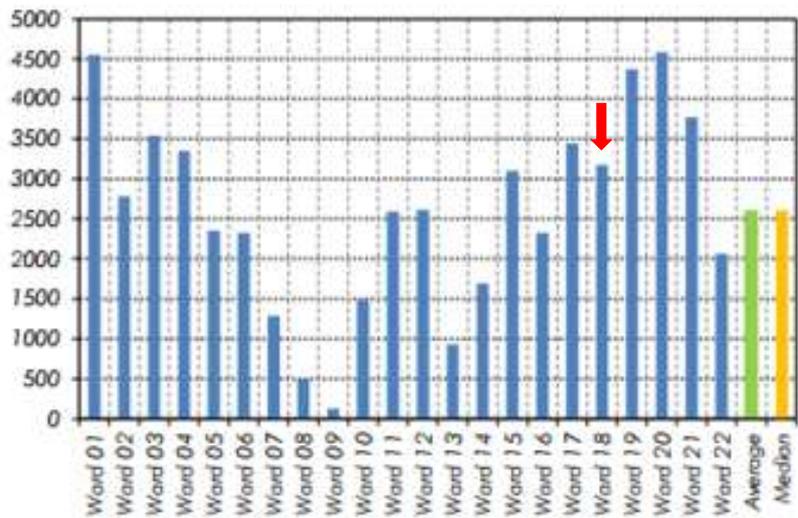


Figure 5 Employment by Ward (Klapmuts represented by Ward 18)

Source: Bureau for Economic Research 2013

According to members of the Klapmuts Ward Committee, interviewed in 2012 (DiMP 2012), seasonal unemployment has become endemic, most severely affecting people employed in the agricultural sector. Recent estimates for Klapmuts place the functional unemployment rate (permanent unemployment plus seasonal unemployment/underemployment) as high as 67% (Anthony, personal communication in DiMP 2012). In 2012, representatives from the Klapmuts community indicated that a typical daily wage for unskilled workers was in the region of R50-R60 per day (DiMP 2012), suggesting that household incomes are generally low. Conversations with Klapmuts farm workers undertaken in 2012 revealed that a weekly wage of R250.00 was still a fairly average remuneration (*Ibid*)³.

Figure 6 below illustrates that, in terms of monthly income, Klapmuts is ranked relatively low in comparison to most other wards in the Municipal area.

³ Many of those working as temporary labourers on local farms reportedly once lived in the Bloekombos community in Kraaifontein but moved into the area to reduce transport costs.

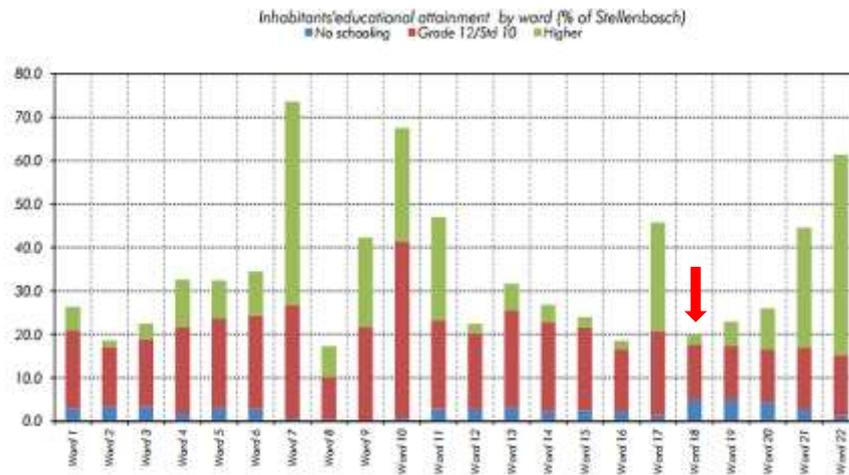


Figure 6 Monthly income by Ward (Klapmuts represented by Ward 18)

(Source: Bureau for Economic Research 2013)

One of the factors that may underlie high levels of unemployment is the generally low level of education and lack of skills development in the Klapmuts community.

- Roughly 5% of people living in Klapmuts have received no education at all – the highest level found across the entire municipal area (See Figure 7 below). As this number has reduced by half since the 2001 census when 10% of the population were found to have had no schooling (MCA 2007), it can be assumed that many older people who have subsequently passed on contributed to the larger number in the earlier census.
- Only 12% of the people in Klapmuts have achieved Grade 12 (matriculation certificate), although this represents an improvement on the 2001 figure of 7.2%.
- Only 3% of the Klapmuts population have achieved further education and training qualifications, more than double the 1.4% figure recorded in the 2001 census (MCA 2007: 13).

The town is fortunate to have a well-resourced primary school, Klapmuts Primary that currently has more than 1300 registered learners. First established in 1976, the school was completely redeveloped in 2010 at a cost of R27m and opened again in September 2011 (Attwell 2011). The school now offers not only greatly improved teaching facilities, including an expanded pre-primary section, but also a well-resourced library and computer centre that is made available to the general public after hours. This provides senior school learners, who currently have to travel to Stellenbosch, Paarl, Kraaifontein or even as far as Wellington to attend high school, further education and training facilities, with a homework and research facility.

Klapmuts currently has no high school or technical training facility, although this has been prioritised in the Stellenbosch Integrated Development plan (Stellenbosch 2015). Due to

high levels of poverty, many households find the costs associated with sending a child to one of the high schools in towns such as Paarl and Stellenbosch unaffordable. It is not uncommon for children to drop out of school after primary school. Local residents also argued that the safety of pupils travelling by train is a major concern for parents.

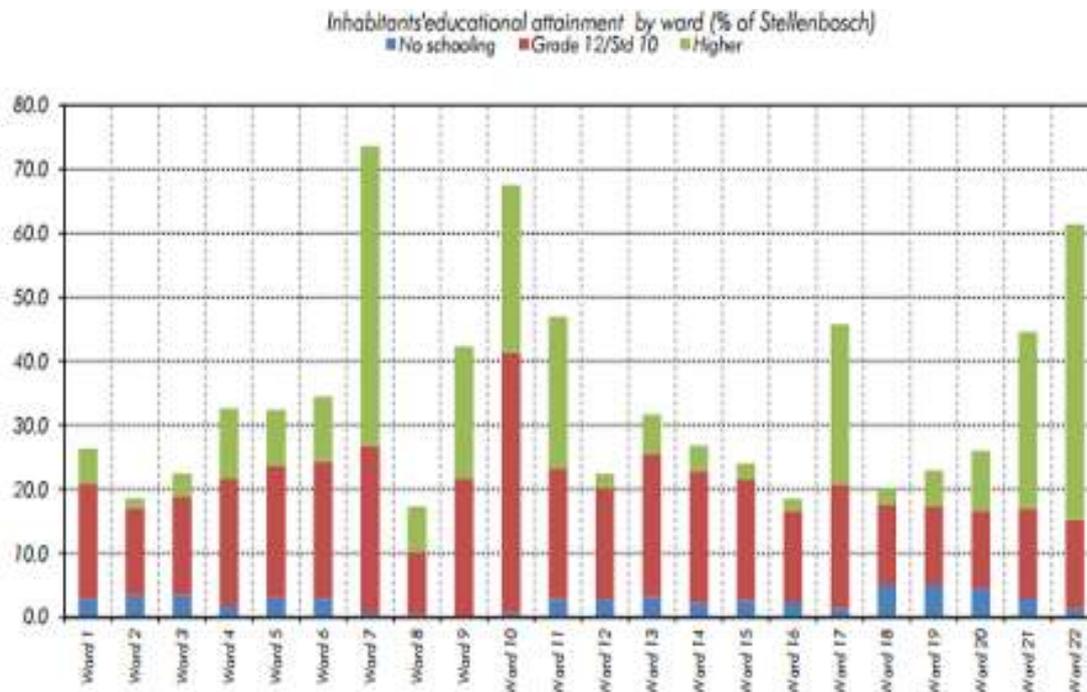


Figure 7 Educational attainment by Ward (Klapmuts represented by Ward 18)

(Source: Bureau for Economic Research 2013)

2.4 Housing, resources and local services in Klapmuts

From its beginnings as one of the most disadvantaged communities in the area, consisting of less than 200 formal dwellings (770 households) in the early 1990s (UN-Habitat 2000), Klapmuts has slowly developed into the sizable town we see today. By the time of the 2011 census there were around 2 300 households in Klapmuts of which slightly more than half occupied formal houses, while others still lived in informal structures (MCA 2007).



Figure 8 Mandala City - 2005



Figure 9 Mandala City 2015

Sometime in the early 1990s the Mandela City informal settlement was established. From a sprinkling of shacks, the population of the settlement has grown dramatically over the last decade, as evidenced by historical Google Earth satellite imagery in Figures 8 and 9 below.

Box 1: A brief history of Mandela City informal settlement, Klapmuts

Mandela City was reportedly established some time before 1996, some say as early as 1993. The name is thought to refer to the release of Nelson Mandela from the Victor Verster prison in nearby Paarl and could provide a clue to an even earlier establishment date, around 1990. Originally situated about 700-800 meters away from its current location, Mandela City was later moved to accommodate one of the first new housing developments (between 1997 and 1998), but kept its original name. After the move only 18 of the original dwellings remained and no basic services were initially provided. The first settlement dwellers were all Xhosa-speaking and came from surrounding farms. They shared land already being utilised by Klapmuts small-holder farmers waiting for the Municipality to identify alternative land on which they could farm. (According to one source the land was previously municipal commonage). Since 2005, increasing numbers of people have migrated to the settlement and the demographic profile has changed to incorporate several other language groups, though the settlement remains predominantly Xhosa-speaking. Electricity was provided in 2010 and other basic services, such as communal flush toilets and standpipes, as well as waste removal are now provided. Since 2012 many households from Mandela City have received formal housing in Klapmuts, while many others have moved into backyard accommodation. The number of informal dwellings continues to grow with the continued influx of new people. (DiMP 2012).

In 1995, following the integration of Klapmuts into the Stellenbosch Municipality, the development of Klapmuts began in earnest after a mass public meeting was held to discuss the community's housing needs. This resulted in the establishment of a Development Forum comprising some 50 members, led by two community leaders who had a vision for the community. The Forum was charged with representing the whole community and working collaboratively with the Municipality to guide development. The Development Forum identified the most critical development priorities of the Klapmuts community, uniting what had previously been two communities that had been unable to find common ground, each having their own development agendas (UN Habitat 2000).

The Forum made tangible progress, firstly by successfully increasing the percentage of households paying for municipal services from "virtually zero to about 95%" (UN-Habitat 2000: 2), and then by facilitating community participation in the design and implementation

of housing and infrastructure projects (UN-Habitat 2000). In July 1996 a bulk water and sanitation project was completed together with an upgrade of the reticulation system to service existing houses. Money for these developments was raised through the Municipal Infrastructure Grant (MIG) and the Provincial Housing Subsidy Scheme.

Housing development has been undertaken in several stages since 1997. Details of the phased housing development in Klapmuts are summarised in Table 3, and spatially represented in the image below.

Table 3 Historical summary of housing developments in Klapmuts

Year	No. houses built	Details
Pre-1997	None	Klapmuts consisted of 5 informal areas and no formal housing
1997-2000	770	First phases of formal housing development: Absorbed a large portion of shack dwellers from La Rochelle and Mandela City
2009	52	Small area adjacent to Mandela City on Eastern boundary
2013	99	Small area below sports field on Western boundary
2012-2014	831	Developed in 3 phases. Included infrastructural services, road infrastructure and construction of top structures.
TOTAL	1752	



Figure 10 Phases of housing development in Klapmuts

Despite large-scale housing development in Klapmuts since 1997, including both state-subsidised and gap housing settlements, housing supply in the area remains a significant challenge (MCA Africa 2007). The survey revealed that backyard dwellers found the allocation of new housing opportunities to be fraught with problems and particularly that waiting lists were inaccurate⁴.

In response to population growth, and housing shortages, the number of backyard dwelling structures is thought to have grown significantly, a trend that has been recorded throughout South Africa, but particularly in the Western Cape (Turok & Borel-Saladin 2015; Lategan & Cilliers 2013).

Other developments in Klapmuts have continued simultaneously to housing construction. In 1999, the restoration and landscaping of a 2km section of the main river through Klapmuts was completed (UN-Habitat 2000). A new Klapmuts Clinic, built to replace an older building which had become too small to service the growing community, was opened around the year 2000. Principally a provincial primary health care facility, the clinic also provides HIV and TB-related treatment (Info4africa 2014). It replaced the old clinic, which had become too small for the growing community and is today being used as a crèche.

2.5 Community organization/ leadership structures

Klapmuts is part of electoral Ward 18 in the Stellenbosch Municipality and is represented by an elected Ward Councillor. In addition to official political representation, however, Klapmuts also has several local community leaders, among them some of the elders who have been part of the developmental history of the town, initiating and driving projects.

Klapmuts has a functional Community Police Forum (CPF) with an executive Committee that is elected on a regular basis. Although the Forum includes representatives from the community (ratepayers, civic organisations and religious institutions) as well as the school and local businesses, the chairperson and deputy-chairperson are always members of the community. The CPF works in partnership with the local Klapmuts police and a yearly community safety plan, developed and implemented by the CPF, forms part of the Klapmuts Police Station operational plan.

Klapmuts also has a neighbourhood watch. Currently chaired by Ms Christine Hinkerman with Mr. HM Mentoor as deputy-chairperson, the group is pro-active in trying to reduce crime. For example, after a meeting held on Saturday, 9 April 2016 together with the police, it was decided to close down several taverns believed to be the root cause of crime and

⁴ Several respondents reported that upon checking their progress on the municipal housing waiting list they discovered that their names were missing.

violence in the area (Mentoor personal communication May 2016). The group also took the initiative to cut down bushes after a girl was raped there.

Despite these positive community initiatives, the general feeling gathered during field research is that Klapmuts currently lacks robust community structures and strong representative leadership and that general levels of community cooperation need to be improved. Reportedly only a limited number of community members currently involve themselves in community issues and in driving local development.

2.6 Current developmental priorities and constraints

The old Klapmuts Structure Plan, approved by the Stellenbosch Municipality in 2001 in terms of the Western Cape Land Use Planning Ordinance of 1985, described the overall planning objective for Klapmuts as *“the creation of a compact village retaining a rural way of life by sustaining continued agricultural development through the protection of large agricultural units”*. The Structure Plan did not however, anticipate the rate and scale of increasing development pressure in and around Klapmuts, jurisdiction boundary changes (that later divided Klapmuts jurisdiction area into two parts located on either side of the national road and falling under two local municipalities), nor fundamental changes in the policy environment.

Local policies have historically failed to address the contemporary development challenges of the town. The Growth Management Strategy (1996), for example, that aimed to address the growing need for low-income housing provision, anticipated a population of under 2000 people by 2015, and as such quickly became obsolete. By contrast, the more recent Klapmuts Spatial Development Framework (2007) explicitly identifies Klapmuts as a key development node focused on urban growth rather than sustained rural appeal.

Klapmuts today poses longer-term development challenges, as continued population growth places existing infrastructure under increasing pressure. Bulk water infrastructure, such as a reservoir and feeder pipes, as well as an upgraded waste water treatment works are just some of the urgent development priorities (Stellenbosch SDF 2012). The Klapmuts clinic is under increasing pressure to provide health care services to a growing client base, resulting in long queues to see the limited nursing staff, while there are no doctors. The need for the upgrading and expansion of the clinic facility and available health services needs to be prioritised.

Following a needs analysis, the third annual review of the Stellenbosch 2012-2017 Integrated Development Plan (IDP) in September/October 2014, clearly identified several other development priorities for Klapmuts. These included, the provision of a cemetery, youth skills development projects, ‘wheelie bins’ for household refuse, a taxi rank, a high school and land for housing in response to growing numbers of backyard dwellers.

3 Backyard dwellers – a unique and growing developmental challenge in South Africa

The earliest recorded backyard dwelling in South Africa was located on the East Rand in 1910 (Gauteng 2015). This form of accommodation gained increasing popularity in the Gauteng area in the 1920s and 1930s, when the lure of the booming mining and industrial sectors attracted vast numbers of labour migrants seeking affordable and well-located accommodation. According to Crankshaw *et al* (2001), what makes the South African backyard housing market unique is that tenants frequently rent space and construct their own dwellings, whereas in other parts of the world it is the landlords who build backyard accommodation with a view to taking in tenants.

Backyard dwellings today have become a common feature of the South African urban landscape (Rubin & Gardner 2013; Tshangana 2013; Turok & Borel-Saladin 2015). In 1996, the first post-apartheid census recorded more than 400 000 people living in informal backyard dwellings. A survey undertaken by the South African Institute of Race Relations in 2008 discovered that this number had grown to more than 590 000 households, roughly a third of all South African informal households, with the remainder found in informal settlements.

3.1 The expansion of backyarding in South Africa

A recent South African Local Government Association (SALGA) report (Tshangana 2013) found that a quarter of all South Africans now live in some form of rental accommodation. Backyard rental accommodation is one of the fastest growing housing sectors, creating housing opportunities for nearly two thirds of those households unable to access formal types of housing. The SALGA report also found that from 2007 to 2011 *'backyard dwellings absorbed two thirds of new households, twice as many as those absorbed into informal settlements'* (Tshangana 2013: 2). A comparison of 2001 and 2011 census data shows that, contrary to prevailing perceptions, the proportion of households living in backyard dwellings has been increasing more rapidly than those in informal settlements (Turok & Borel-Saladin 2015). The Western Cape in particular has experienced a significant growth in the number of backyard dwellings, from 71 879 units in 2001 to 129 167 in 2011 (Zweig 2015).

3.2 The developmental implications of backyarding

The proliferation of backyard dwellings, while inadvertently answering to the aim of National Development Plan, which calls for the densification of urban areas to prevent further urban sprawl, is also posing a critical development challenge to local authorities in terms of increased infrastructural need and service provision. It is also contributing to an increasingly risk-prone environment. Although living in more formalised living environments, research has shown that most backyard dwellers are living in hazardous living

conditions with constrained access to resources, such as ablution facilities, running water, toilets and electricity, and often exploited by landlords (Gunter 2014; Lemanski 2009; Zweig 2015).

Backyard accommodation offers a flexible housing option, especially for low-income households, in terms of location and affordability. However, despite evidence of its significance as a viable housing solution to a growing number of South Africans, backyard accommodation has generally been disregarded by state housing policy that has focused instead on the large scale delivery of low-cost housing. However, subsidy houses are generally too small to accommodate expanding families, inevitably encouraging expansion into backyards. Thus, while failing to keep pace with housing demand, state housing programmes have unintentionally provided opportunities for the simultaneous expansion of backyard accommodation (Lemanski 2009), both for immediate or extended family members and rent-paying tenants. The recent Integrated Urban Development Framework (IUDF) acknowledges this reality and that *'there is a lack of sufficient social and rental housing for the lower end of the market, especially on well-located land with good access to socio-economic opportunities (2016: 61)'*.

3.3 Policy movement to accommodate backyarders

Although generally acknowledging backyard dwellings as an important alternative source of accommodation in light of municipal housing shortfalls and long waiting lists, most municipalities have not extended basic services to backyard residents. But the tide has begun to turn with the preparation of a draft policy, the *National Housing Programme for the Provision of Basic Services to Backyard Residents* undertaken by the National Department of Human Settlement. This aims to improve the lives of backyard dwellers by supporting municipalities to provide basic municipal services and facilities.

Recently there have been some creative attempts at both provincial and metropolitan level initiatives to address the issue of backyard infrastructure provision and upgrading:

- The City of Cape Town, which has long identified the need to improve conditions in backyards, began an initiative focusing on existing metropolitan housing stock. After assessing the situation, the City began investing in upgrading infrastructure capacity in order to improve services to backyard households. This has included the extension of infrastructure connections to backyarders, the provision of shared standpipes and ablutions, prepaid electricity connections and up-scaled refuse removal, generally employing local labour and particularly focused on women's empowerment.
- After undertaking several pilot projects, the Gauteng Provincial Government has developed the *Gauteng Policy on Backyard Rental Housing*, which became effective in October 2015. This aims to support and encourage rental housing opportunities

through various means, including the establishment of a Rental Housing Tribunal to settle disputes, facilitating the provision of basic infrastructure and the relaxation of restrictive by-laws to stimulate a viable and more robust backyard rental market.

Thus, support for the rental housing market is already being tested at sub-national scales, stimulated by the development of a national programme that seeks to encourage and support a rental housing market.

4. Backyard dwellers of Klapmuts: Survey findings

4.1 Spatial extent of backyard dwellings in Klapmuts in April 2016

The Risk and Vulnerability Assessment of backyard dwellings in Klapmuts began by recording the extent of all formal houses accommodating backyard dwellings in the survey area. As not all houses accommodating backyards could be visited, only the location of houses with backyard dwellings could be ascertained, while the numbers of actual backyard dwellings was not recorded. The map (See Figure 11) is therefore only indicative of the spatial extent of backyarders and does not provide a numerical count.

In 2001, when an earlier census survey of backyard dwellings in Klapmuts was undertaken, only 5% of the houses were found to be accommodating such dwellings. In 2011, the census showed that the percentage had more than doubled to 13.4%. However, as Figure 11 below clearly illustrates, the extent of backyard dwellings has increased substantially since then, with the majority of formal dwellings hosting backyard households. (It must be noted that the survey did not include the new housing development areas where the extent of backyard dwellings may be different).

As is evident from Figure 11, the density of backyard accommodation in the formal housing areas is uneven and differs across the survey area, with densities far greater, for example in the older part of Weltevrede Park (in the North Western corner of the study area). There are several possible reasons for this observable spatial difference in backyard densities. Firstly, the higher number of backyard dwellings found in earlier housing developments may be due to the larger available space allocated for each plot at the time of these housing programmes. When Stellenbosch Municipality began to develop subsidised housing in 1997/8, plots were reasonably large (between 200m² and 250 m²). When higher density and different housing typologies became the order of the day (in terms of national policies) the plot size was significantly reduced (between 80m² and 100 m²). However, newer housing areas may also be less densely populated with backyard dwellings because of reduced demand, following the delivery of several housing developments built more recently in Klapmuts. Given the number of backyard dwellers who claimed to be on the housing list during the survey, the latter suggestion is unlikely.

4.2 Demographics and general details of backyard dwellers in Klapmuts

4.2.1 Housing histories of backyard dwellers

The survey found that the previous places of residence of Klapmuts backyard dwellers ranged from those who had previously lived elsewhere in Klapmuts to those who came from far more distant areas. Table 4 below summarises the histories recorded in the backyard survey data.

Table 4 Previous places of residence of Klapmuts backyard dwellers interviewed

Previous place of residence	Count	% of respondents
Main house	18	12
Other place in Klapmuts	57	38
Elsewhere in Western Cape	60	40
Elsewhere in South Africa	7	5
Foreign country	7	5
TOTAL	149	100

Half the respondents were found to be long-term residents of the Klapmuts community. As the table above demonstrates, this number constitutes 12% of Klapmuts backyard dwellers who had lived previously in the main house, (suggesting that they are either direct or extended family members of those living in the main house), and 38% who had lived somewhere else in Klapmuts before moving into their current backyard dwelling.

A significant number of those interviewed (40%), however, said they had come from other parts of the Western Cape. Interestingly, many had lived previously on farms. This reflects similar findings from research conducted in both informal settlements and backyard communities in the Western Cape over recent years (DiMP 2012; DiMP 2013; DiMP 2014; RADAR 2015), which have consistently found that many elderly farm workers are being forced to live in informal accommodation after retiring or becoming too old to work.

Contrary perhaps to prevailing perceptions regarding the influx of outsiders and foreign migrants, few backyard dwellers in the survey area were found to have originated from outside the Western Cape, and very few were found to be foreigners (only 7 foreign backyard households were identified in the survey). It was suggested, both during the community workshop and during household interviews, that most of the new 'foreigners' living in Klapmuts backyards are living in the newer housing areas that were not covered by this survey. Further research among the new housing areas is needed to test this hypothesis.

Almost half (49%) of the backyarders interviewed said they had lived in a backyard dwelling before, while slightly more than half (51%) had not. This serves to illustrate the importance of backyard accommodation as a housing option for low-income dwellers faced with limited alternatives.

4.2.2 Waiting for formal housing

Two thirds of respondents claimed that they were registered on the municipal housing waiting list for formal housing. The periods of waiting varied, from only a few months to more than 10 years. Oldfield & Greyling (2015: 1100) suggest that *'waiting for state-provided homes is normal, a taken for granted, everyday, intergenerational condition [that] ...people continue to wait for, to hope for, and to expect'*. Table 5 below summarises the recorded waiting periods among the survey sample, and clearly illustrates that most of those on the housing list have been waiting more than four years to be allocated a formal dwelling

Table 5 length of time respondents have been on a housing waiting list

Waiting period	Count	% of respondents
Less than a year	2	1
1 - 3 years	32	29
4 – 10 years	55	58
More than 10 years	11	12
TOTAL	100	100

Almost two thirds of respondents said that they expected to be homeowners in the future. While the reasons why others did not, was not probed in the survey, it is interesting to note that half the foreign survey respondents also believed they would own homes. South African backyarders from areas outside of Klapmuts generally felt very positive about owning a formal house in the future, suggesting that many of those living in backyard dwellings in Klapmuts may have selected to do so as a strategic stepping stone to receiving a formal house in an area prioritised for future housing development.

4.2.3 Employment profile

Most recent census employment data for the Klapmuts community as a whole indicates a formal unemployment level of 16.5% (i.e. the total number of unemployed divided by total number of employed and unemployed). However, this figure is somewhat misleading as a consideration of the broad unemployment level (which includes unemployed, discouraged, and non-economically active persons in the working age population) is disturbingly high at 46.7% (StatsSA 2011). The survey sought to determine the employment profile among backyard dwellers for comparison, recording the nature, scale and length of terms of employment. Unfortunately most respondents did not provide details for all household members, resulting in uneven/missing data and preventing quantitative analysis⁵. It was possible, however, to determine some general employment trends, which are described below.

Unemployment was found to be high among backyard dwellers, while most employed backyard respondents worked in unskilled labouring jobs, mostly in agriculture or construction, with many others working as domestic workers or gardeners. Quite a number

⁵ Due to uneven data recording information about livelihoods collected among Klapmuts backyard dwellers could not be aggregated or statistically analysed.

of people were employed in more skilled jobs in the retail sector, suggesting that new local developments such as the shopping centre have been successful in creating jobs for local residents. Security jobs, mentioned by several respondents, are possibly also associated with nearby commercial and industrial developments. Many other respondents claimed to be retired; again illustrating that many elderly people in Klappmuts are living in backyard accommodation.

Almost half of those who responded to a question about periods of employment, were found to have full-time jobs, 12% were self-employed while over a third worked only part-time (including seasonal workers). However, as few people responded to this question these findings are merely indicative and cannot be generalised to the backyard community with any certainty.

Given the high levels of unemployment reported, the survey sought to establish the level of grant dependency among backyarders. Two thirds of respondents claimed to be grant recipients, with more than 80% claiming child grants, 9% disability grants and 9% old age pension grants.

Table 6 Relationship between proportion of grant recipients and gender of household head

Gender of household head	(N) Grant recipient	(N) Non- recipient	(N) Total
Male	66	33	99
Female	15	7	22
Total	81	40	121*

**Not all survey respondents answered this question*

Table 6 illustrates that more male-headed than female headed households reportedly claimed grants. However, this actually reflected the high number of male-headed households and was not a significant finding.

4.3 Tenancy in backyard accommodation

4.3.1 Finding accommodation

The survey investigated how people had found their backyard accommodation. For more than half (55%) respondents this had been through word of mouth, while 38% said it was because they were family of those living in the main house. However, two respondents (both foreigners) said they had simply walked door to door, while nobody had responded to an advertisement.

The majority of backyard dwellers had built their own backyard structures (70%), while the remainder had moved into existing structures. This suggests that acquiring backyard accommodation is generally a two-step process: 1) Finding a space in a willing homeowner’s yard and 2): Building a structure to suit one’s need in the available space and depending on

personal resources. This hints at the flexibility of backyard accommodation as a housing option, i.e. that it can be designed according to available resources and to suit need.

Half (50%) of those interviewed were found to be related to their landlord, frequently the grown-up or married children of the landlord, while another 20% said the landlord was a friend. However, 30% of the backyarders interviewed were tenants with no relationship to the landlord.

The majority of landlords (89%) were living in the main house, while there were only a few absentee landlords. This could be different in the new housing areas, where many foreigners are reported to be living.

In only one case was the landlord found to be renting out the main house and living instead in the backyard dwelling. This was an income generating strategy. In another case the landlord was living in the backyard structure because the main house had burnt down and the household did not have the resources to rebuild. Another interesting case was that of a divorced wife whose husband reportedly still lived in the main house. This has some resonance with findings from research undertaken in two informal settlements in Paarl⁶ where, due to limited means, divorced or separated partners from low-income households had moved into nearby informal dwellings in order to remain close to their families and critical support networks.

4.3.2 Rental agreements and conditions of tenancy

Only three quarters (75.6%) of respondents stated the nature of their rental agreement. Of these, 59% had some kind of agreement with their landlord, while the remainder (41%) did not. While the majority of the former (87%) only had a verbal agreement, almost 9% were in possession of an informal document, and only two households had more formal agreements (in the form of police affidavits). Notably, the type of agreement was not significantly influenced by the relationship between the backyard dweller and the landlord, although no formal agreements were found among backyard dwellers who were family members of the landlord. Table 6 below indicates the count of each agreement type across the survey sample.

Table 7 Numerical count of rental agreement types among survey sample

Agreement/Contract type	Family	Friend	Tenant	Total
None	35	4	11	50
Verbal	33	21	29	83
Informal document	1	4	2	7
Formal document	0	1	2	3
Other	1	0	0	1
TOTAL	70	30	44	144

*Data missing from 10 questionnaires

⁶ Research was undertaken in 2014 in Chester Williams and in 2015 in Lover’s Lane in Paarl.

Generally rental amounts ranged between R200 and R400 per month (46% of those interviewed), while 30% of respondents paid between R400 and R1000 per month, and only three households paid more than this. It is clear from Table 8 below that rental amounts are spread fairly evenly among family, friends and tenants.

Table 8 Rental amounts recorded in the survey sample shown according to relationship to landlord

Rental price categories	Relationship to landlord			Total
	Family	Friend	Tenant	
Up to R200 pm	11	4	7	22
R201-R400 pm	14	15	18	47
R401-R999 pm	10	6	15	31
>R1000 pm	1	0	2	3
Total	36	25	42	103

Some backyarders were not paying rent at all, while others admitted to paying only infrequently (i.e. when they have money). While most respondents (75%) paid rent on a monthly basis, 12% paid weekly and only three households paid on a fortnightly basis. It was difficult to ascertain what was included in the rental and what constituted additional costs, but the survey was able to identify that while electricity was generally an added cost, water and solid waste were not generally charged for.

Reciprocal assistance among backyard and landlord households was found to be common, with many respondents reporting shared child and/or other caring support. Whether care is in lieu of rental and/or charged for as a livelihood exercise was not ascertained.

While poor landlord-backyard dweller relationships has been frequently mentioned in the literature (Morange 2002; Lemanski 2009; Turok & Borel-Saladin 2011 etc.), only 21.5% of respondents reported such problems. These were mostly related to interruptions in electricity supply, issues regarding payment of rent, but also included concerns about privacy and safety. Figure 12 below provides a proportionate summary of the issues mentioned in the survey.

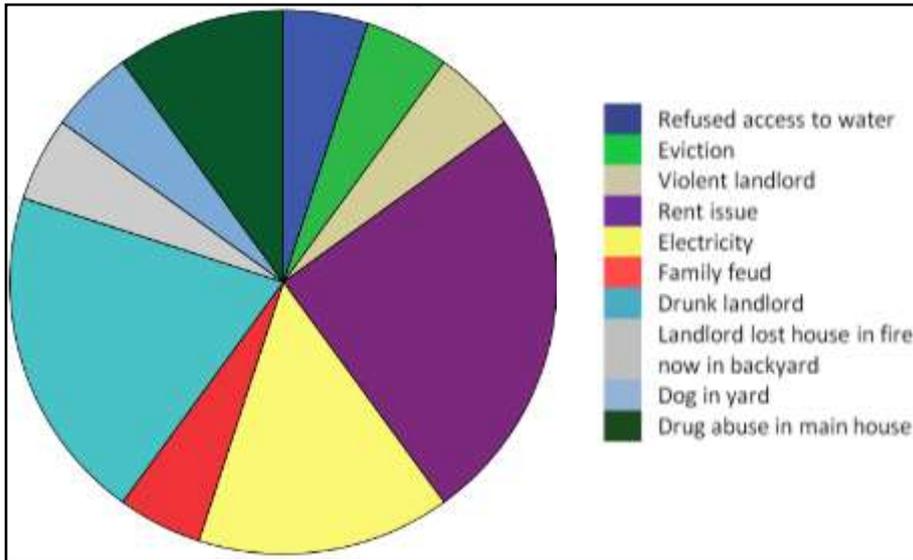


Figure 12 Details of problems with landlords reported by backyard dwellers

4.3.3 Period of tenancy

Periods of backyard tenancy ranged from several months to several years. As Table 9 below illustrates, while most backyard tenancies are fairly long term (30%), lasting more than 5 years, the number of shorter tenancies is also substantial, showing evidence of a dynamic backyard housing market. The number of new rentals (14%) also suggests that the backyard sector continues to grow.

Table 9 Periods of backyard tenancy across the survey sample

Length of backyard tenancy	Count	% of survey respondents
Under 1 year	21	14
1 - 2 years	42	28
3 - 4 years	29	19
5 - 10 years	45	30
More than 10 years	13	9
TOTAL	150	100

Having provided some background information regarding the nature of backyard renting in Klapmuts, the next section describes the prevailing living conditions found among local backyard dwellers in more detail. The evidence is overwhelming that Klapmuts backyard dwellers, like those described elsewhere (Govender et al 2011; Lemanski 2009; Zweig 2015) live in precarious circumstances, with constrained access to basic services that pose significant a threat to their health and general wellbeing.

4.4 Living conditions among backyard dwellers

4.4.1 Backyard dwelling construction

While 52% of backyard dwellings visited during the survey could be described as informal 'shacks', 46% were identified as 'Wendy houses', and only four were built of more permanent materials, such as brick and mortar. Most backyard dwellings lacked a firm foundation, with the ground underneath the dwelling floor generally sandy and porous. Many residents (42%) complained of living with constantly damp floors, partly due to the upwelling of water due to the high local water table. It was also noted that many backyard dwellings had no windows and therefore offered little ventilation.

The photograph on the left in Figure 13 below shows an example of one of the more robustly built formalised backyard dwellings, built with corrugated iron sheets on a concrete foundation, and insulated against the weather. Water and electricity is supplied from the main house. By contrast the right hand image shows a rudimentary structure, built from salvaged materials, with existing yard walls providing two sides of the dwelling and helping to support the structure, which was not provided with even basic services. The quality of construction differs from one backyard household to another, determined by the socio-economic conditions of the household.



Figure 13 Examples of informal backyard dwellings

Most backyard dwellings offer inadequate protection from the weather. Respondents frequently complained of poor insulation, suffering excessive heat in summer and bitter cold in winter, when heavy rains also frequently result in leaking roofs and damp walls.

Backyard dwellings also consist of more robustly constructed pre-fabricated Wendy houses (See examples Figure 14 below).



Figure 14 Examples of wooden Wendy house structures

Though seemingly offering a superior form of accommodation to the informal shacks shown in Figure 13 above, wooden dwellings tend to become brittle with age, becoming susceptible to water logging, and leaking, with the planks warping over time. As a method of weatherproofing Wendy houses are often painted with diesel, increasing the potential fire hazard.

While most backyard dwellings in the Klapmuts survey area are built as separate living units (80%), others are not free-standing, either built directly onto the main house (15%) or joined to other backyard dwellings (5%). The addition of extensions and other informal structures can often provide not only living space but also livelihood opportunities and local services. In Figure 15 below a small corner-shop has been built as an extension to a formal house. The owner of the business lives in a backyard dwelling at the back of the house and operates the business from the front.



Figure 15 Small business built onto the side of a formal house



Figure 16 Location of crèches in Klapmuts

Another example of the creative use of backyard business spaces are crèche facilities. In a recent research project undertaken by the Centre for Geographical Analysis at Stellenbosch University, eight crèches in the Klapmuts urban area were identified, several of which were operating from extensions built onto the main house. Figure 16 shows the spatial distribution of these crèche facilities, with four located within the survey area.

4.4.2 Living density among backyard dwellers

The issue of increased living density and lack of privacy was discussed at length during the workshop held with community members and was also raised frequently in conversations with backyard dwellers during the field survey.

For some residents of Klapmuts, particularly those who choose not to accommodate backyard dwellers, it can be frustrating when a neighbour decides to allow backyard dwellings. Many argued that backyard dwellings can present hazards for neighbouring properties for several reasons:

- increased fire hazard
- raised noise levels from people living in backyard households
- unsanitary conditions due to inadequate ablution and waste water infrastructure
- increased levels of solid waste, attracting vermin

Thus, the presence of backyard dwellers, although generally tolerated, is not always welcomed. Backyard dwellers themselves also complained about sharing the backyard with other tenants, as this limits personal privacy and reduces living space, as well as play areas for children.

Although the survey did not investigate how many backyard dwellings were located in each yard due to the anticipated reluctance of residents to disclose this information, the number of people living in each backyard was established in order to determine levels of residential density in backyards. Table 10 below provides a summary of the survey findings. It illustrates that although most backyards host between 1 and 4 people, more than a third are accommodating as many as 9 backyard dwellers, contributing significantly to population density on a single plot. In one instance up to 16 people were found in a single backyard.

Table 10 Summary of population density in backyards

No. of people living in backyard	Count	% of sample
Single person	10	6.5%
1-4 people	83	54%
5-9 people	55	36%
More than 9 people	5	3.5%
TOTAL	153	100

Backyard dwellings in Klapmuts are generally either one or two-room structures, as can be seen in Table 11 below which summarises the number of rooms in backyards recorded in the survey. This reflects similar findings from previous backyard surveys undertaken elsewhere in South Africa (Turok & Borel-Saladin 2015).

Table 11 No. of rooms in backyard dwellings

No. Rooms	Count	% survey sample
1	63	41.2
2	56	36.6
3	22	14.4
4	19	6.5
More than 4	2	1.3
TOTAL	153	100

4.4.3 Toilet and ablution facilities

Access to ablution facilities for backyard-dwelling households varied across the survey. More than 55% of those interviewed made use of a toilet located inside the main house, which was generally shared with between 4 and 8 other people, including residents of the main house and other backyard dwellers. However, 17% of respondents claimed that between 9 and 16 people shared one toilet, which has serious implications for community health. Research by Govender and colleagues (2011) found that the use of facilities in the main house by backyard tenants increases opportunities for the spread of disease and for the contamination of food. They found that backyard dwellings also pose heightened health risks to those living in the main house, often to an even greater extent than the backyarders due to living more proximally to the shared resources and ablution facilities.

Almost 28% of backyard respondents made use of a toilet facility within their own dwelling, frequently referring only to the use of a simple bucket, as opposed to a toilet *per se*. While households using buckets inside their dwellings were not asked how or where they dispose of the resulting human waste, it can be assumed that this poses another significant health hazard. During the survey human excrement was observed in several backyards. Due to poor relationships with landlords, or perhaps because of absent landlords, three backyard households claimed that they made use of a neighbour's toilet facilities, while several others either reported having no facilities at all or did not want to disclose where they accessed a toilet. These findings are summarised in Table 12 below.

Table 12 Location of toilet facilities used by backyarders

Location of toilet facilities	Count	% respondents
Inside main house	83	53.9
Inside backyard dwelling	48	27.9
Outside in backyard	17	11.0
Neighbour	3	1.9
No facilities	2	1.3
'Other'	2	1.3
Undisclosed	4	2.6
TOTAL	154	100

Over three quarters of those interviewed (75.3%) conducted their personal ablutions inside their own dwellings, with only 16.2% using bathroom facilities inside the main house and others making use of a tap in the yard. The survey found that while landlords hosting small numbers of backyard dwellers tend to allow use of the bathroom inside the main house, those accommodating larger numbers of backyard dwellers prefer not to allow access, with backyarders either conducting their ablutions inside their dwellings or in the yard. Access to ablution facilities across the survey sample is summarised in Table 13 below.

Table 13 Location of ablution facilities used by backyarders

Location of ablution facilities	Count	% respondents
Inside backyard dwelling	116	75.3
Inside main house	25	16.2
Outside in backyard	7	4.5
Neighbour	1	0.6
Undisclosed	5	3.2
TOTAL	154	100

Access to running water varied between households. A third (32.5%) of respondents said they made use of taps located outside in the yard, while 41% had access to a tap in the main house. However, 27% of those interviewed claimed to have running water available within their backyard dwellings, suggesting that the *ad hoc* plumbing of running water into backyard dwellings is quite common.

4.4.4 Laundry and dish-washing facilities

Water for cooking, washing and cleaning is generally collected from a tap in the yard or from the main house and stored inside the dwelling in a plastic container, similar to informal settlement households. Most backyard dwellers do not use the main house for these chores. Table 14 summarises where backyard dwellers generally wash dishes and do laundry. (Only 100 households replied to these questions, therefore the count shown and relative percentages are equal).

Table 14 Location of backyard laundry and washing facilities

	Where wash dishes? (n/%)	Where do laundry? (n/%)
In own dwelling	80	54
In main house	14	18
In yard	6	26
Other	0	2
TOTAL	100	100

Given the demonstrated prevalence of backyard dwellers using their own dwelling or the yard for conducting household chores (Table 14 above), grey water disposal presumably contributes both to increased health risk and susceptibility to flooding in backyards.

4.4.5. Grey water disposal

Stormwater drains in the street are frequently used for the disposal of household grey water, even by formal households. In many cases these were found to be blocked with rubbish, preventing effective drainage and resulting in overflows into the street. These typical conditions are illustrated in Figure 17 below. Standing pools of grey water were commonly observed in back yards accommodating backyard dwellings.



Figure 17 Typical examples of a blocked stormwater drain and backyard ponding

In one instance a backyarder was found to have both a sink and a washing machine inside the backyard dwelling. In this case dirty water was simply being piped out of the dwelling and straight onto the ground outside the dwelling, for which no further drainage was

provided. Together with other photographic evidence collected during the survey, this suggests that backyard dwellers commonly dispose of grey water indiscriminately in the yard. In this regard the findings of the survey concur with those of the study undertaken by Govender *et al* (2011), which investigated levels of contamination among three backyard communities in Cape Town. Water samples taken from standing water in the backyards, from running streams in the street and from rainwater roof runoff were tested across a large sample of households and found to contain high levels of faecal bacteria and E.coli contaminants. The study found that grey water was commonly disposed of in one of the following places:

- The toilet and/or kitchen sink of the main house
- A drain outside in the yard (Govender *et al* 2011: 340)

Similarly the Klapmuts survey found residents were generally using one or more of these disposal methods, with some backyarders admitting to throwing dirty water out in the yard. However, as Table 15 below illustrates, a large number of backyarders dispose of waste water directly into the street.

Table 15 Grey water disposal practices among backyard dwellers

Grey water disposal	Count	% respondents
In yard	67	44
In toilet	52	34
Other drain in house	18	12
Street	14	8
Missing data	3	2
TOTAL	151	100

Many backyards were found to have no outside drains while where they did exist they were often blocked or overflowing. The survey found that rudimentary drains such as the one pictured on the left in Figure 18 below are also used to dispose of human waste.



Figure 18 Examples of ponding and rudimentary drainage/sewage system in backyards

Adequate drainage infrastructure is generally lacking in backyards accommodating dwellings. Thus, after heavy rainfall water often collects in the yard and causes localised flooding, resulting in pools of standing water in the yard. In light of service shortfalls, backyarders often organise drainage, wastewater and sewage systems in quite creative ways. In the left-hand image in Figure 18 above, a gutter pipe has been directed towards an informal drain, while in the second image a plastic packet has been used to repair a leaking ad hoc sewerage pipe leading from an informal dwelling.

Govender *et al* (2011) found that pathogens are transmitted through complex pathways at household level, particularly in the context of backyard dwellings where many people share ablutions and basic infrastructure is generally inadequate. This contributes significantly to contaminated living spaces, not only in the backyard, but also in the host household, where densified living increases person-to-person contact.

4.4.6 Electricity provision

Typically most backyard dwellers in Klapmuts were found to have access to electricity in their backyard dwelling (96%). This is generally supplied from extension cables connected to the main house (See Figure 19 below). However, 22% of those interviewed said they had their own electricity meters, while several others had no electricity supply at all.

Generally a multi-plug is used inside the backyard dwelling to connect a variety of electrical appliances, though the number and type of appliances differs from dwelling to dwelling. Table 15 below illustrates the prevalence of a range of electrical appliances noted in the survey.



Figure 19 A typical electricity connection from main house to backyard dwelling

Typically most backyard homes had an electrical cooker, most often a 2-plate stove. They generally had lights, a television and a cell phone charger. Few households used heaters and only 10% had computers. Other appliances found less often included microwaves, washing machines, hair dryers and irons, and, occasionally sound systems. This suggests that multi-plugs are frequently overloaded and pose a significant fire threat.

Table 16 Prevalence of electrical appliances in backyards

Appliance	% backyard households with appliance
Stove	92
TV	84
Fridge	73
Heater	35
Cell phone charger	80
Lights	88
Computer	10
Other	25



Figure 20 Panoramic view of interior of backyard dwelling showing living and cooking space

The home in Figure 20 above was among a small number recorded with modern facilities and appliances such as tiled flooring, a large refrigerator and washing machine, television, a kitchen sink and a stereo sound system. Cooking was done on a stove with an oven, located out of sight behind the fridge.

Payment for electricity supply is usually either included in the rental or is an additional cost paid to the landlord. Some landlords do not supply their tenants with any power supply, in which case some backyard dwellers draw their electricity supply from neighbouring properties or have none at all.

But even a paid supply of electricity is not without problems. For example, when relations become strained between landlord and tenant, landlords will reportedly often cut the power supply to the backyard dwelling concerned. Another problem backyard dwellers reported was that after paying for electricity, the supply sometimes runs out due to other tenants or even the landlord using it up. There is no recourse for aggrieved tenants when this occurs.

4.4.7 Cooking facilities

The survey determined that 45% of backyard dwellers cooked in a space inside their own dwelling, while a third of respondents had a separate kitchen 'room', or designated kitchen area, inside their dwelling (as in Figure 20 above). Another 22% said that they cooked inside

the main house, suggesting that family members or friends who are living in the backyards share cooking and meals, together. Many backyarders reported sharing meals in the main house.

Three quarters of those interviewed cooked on a 2-plate electric stove (75%), while 22% make use of a full stove with an oven. Only 3 respondents were using gas cookers.

4.4.8 Solid waste management

Indiscriminate solid waste disposal is a serious problem for people living throughout the community and is not related only to the presence of backyard dwellers. Open public spaces are frequently used as dumping grounds for waste materials and re-directed runoff water, even public parks where children play. Discarded waste commonly includes glass, metal, paper, organic and electrical waste, as well as biological waste like used nappies, and bags of solid human waste from bucket toilets used in backyards during the night.

Stormwater drainage channels are generally clogged with litter (See left-hand image in Figure 21 below). The indiscriminate dumping of waste thus also poses both a flood and serious health risk. In Figure 21 below, children are seen playing in the bottom of a drainage ditch being used as a rubbish dump.



Figure 21 Rubbish collecting in drainage ditch and dumped on open plot

Backyard dwellers generally make use of the municipal 'wheelie' bins provided to the landlord. This is usually pre-arranged with the landlord. However, many residents complained that when several households live on one property bins quickly become full, forcing both backyarders and host household residents to dispose of their waste elsewhere. It was suggested that backyard dwellers should also be provided with separate municipal bins in order to reduce solid waste build up in yards and stop indiscriminate dumping in public areas.

The inadequate disposal of waste has had other consequences for the Klapmuts community. A serious rat problem was reported during the survey, as were flea and cockroach infestations. In addition to solid waste problems, standing pools of water from discarded

grey water, leaking taps and even sewage, provide fertile breeding grounds for mosquitoes and flies in summer months. These kinds of conditions are more generally found in informal settlements, but clearly are now also being manifested in informal backyard environments.

4.4.9 Position of backyard dwellings on a plot

People adapt space in the backyard in order to meet their needs. Backyard dwelling neighbours also often help each other so that layout often follows function, such as shared play spaces for children or communal washing lines as shown in Figure 22 below.



Figure 22 Informal backyard dwelling plot layout

Access to the backyard is usually through the yard (80%). Only 16% of backyards interviewed had their own separate street entrance, while 6% said they only had access to their dwelling through the main house.

4.4.10 Summary of living conditions

The survey findings have been shown that backyard environments are not very different from those found in informal settlements, with limited access to services, the frequent use of substandard building materials and compromised health conditions due to inadequate sanitation, poor waste disposal practices and unhealthy living conditions.

4.5 General risk profile

The study, mirroring the findings of several other backyard dwelling studies, found that many suboptimal living conditions generally associated with informal settlement living are also prevalent among backyard dwellers in Klapmuts. These include overcrowding and limited access to basic services.

The insert below, taken from a survey interview, provides a good example of a typical backyard living scenario.

She lived in the back yard with her boyfriend and child. She had water and electricity available within her dwelling. A washing machine was available for her

to use in her mother-in-law's house on the property as well as a toilet. Grey water from the sink was piped out of the dwelling and onto the ground outside the dwelling. Gaps in the wooden Wendy house meant that wind and damp was a discomfort and health hazard that she and her family faced regularly. Rainwater runoff ran down from the plots across the block and through her yard. However her dwelling's floor was kept dry as it was raised above the ground. Her baby was often suffering from colds and a runny nose. She had taken him to the clinic, however long waiting times in queues and the travel time to the clinic and back had discouraged her from going often. She was on the waiting list for a house in Kraaifontein and said she would leave immediately if provided with one.

High levels of unemployment and constrained household income among backyard dweller's and landlord households alike result in a lack of resources and limited capacity to reduce risks by taking preventative or mitigative action, such as waterproofing and insulating backyard dwellings. Several key risks were identified during the survey by community members themselves. These are listed and summarised below.

4.5.1 Environmental health

More than 70% of respondents identified health risks as their key concern. These were manifested in several ways.

Poor sanitation and hygiene

Dirty water and sewage often collect in backyard areas, commonly also the play areas for children and the access routes between the backyard dwellings and the street or the main house. The yard thus creates a pathway for contagion associated with contaminated water. This poses a health risk not only to the backyard dwellers but to all those living on the property.

With many people using one toilet they can be considered similar to communal toilets, with all the problems usually associated with communal ablutions, such as poor levels of cleanliness and hygiene, flush systems put under severe pressure and frequent blockages. Many backyard residents also discard of human waste in the yard or on nearby open areas.

There is often no nearby tap at which to wash one's hands after using the toilet. When a toilet facility is located inside the main house, the tap is often in the kitchen where food is also prepared, posing the risk of food contamination. Where toilets are located outside in the yard, or buckets are used, it is likely that hand-washing is skipped, again with consequences for the health of the backyard household.

A third of respondents also reported problems with standing water in the yard, which they argued contributed to unsanitary living conditions. Although seldom attributed to the actions of their own households, backyarders claimed that leaking taps, sewage leaks and the density of backyard dwellings contributed to this problem. The unsanitary conditions

make the prevalence and transmission of diseases a significant risk to health, particularly those resulting from oral-faecal, water and food-related pathogens.

Inadequate insulation and weatherproofing

In winter months inadequate insulation and weatherproofing of backyard dwellings result in leaking roofs and walls, as well as damp floors, contributing to poor household health and general living hardship. High summer temperatures were, however, also said to be a problem and both the household survey and community workshop reported high rates of Tuberculosis and asthma. Respiratory illnesses such as chest colds, flu, asthma and bronchitis were frequently reported, particularly among small children.

Windy winter conditions often drive cold air through gaps in the building structure causing discomfort, particularly for children and the elderly. Backyard dwellers use many types of material to insulate and waterproof their dwellings, depending on available resources. Strategies ranged, for example, from simply using old rags to block holes to purchasing costly sealants. The survey showed that very few backyard households use heaters, presumably because of the cost of electricity, preferring to prioritise limited power supply for cooking, lighting and watching television.

Solid waste disposal and waste collection services

Backyard dwellers generally reported that they place their refuse in the municipal bin provided to the main household, unless this is not permitted by the landlord, as was the case in several instances. The space shared in the municipal bin becomes inadequate when many people are living on one plot. The build-up of refuse also creates bad odours and attracts vermin, with consequences for neighbouring properties as well.

Lack of adequate waste disposal facilities causes backyard and landlord households alike to resort to dumping refuse in open public spaces and on empty plots, driving up the risks associated with vermin, and causing pervasive bad smells. Windblown refuse also blocks storm water drains, causing running streams of contaminated water in the streets. Local public parks are also common dumping grounds for household rubbish, attracting dogs and rats. As parks are frequented by children, the dumping of waste has consequences for child health.

Vermin and insect infestations

The infestation of rats, mice, cockroaches, flies and fleas reported by backyard residents is not only due to the unsanitary living conditions often found in these backyard areas, but is also the consequence of indiscriminate dumping of solid waste in open spaces. Flies are also associated with pig farming in adjacent informal farming areas, which has health consequences for the whole community. Some backyards were also found to be accommodating livestock such as pigs, cows and chickens, which was clearly an income-generating activity for the householders, but attracted many flies to the area.

4.5.2 Fire

Backyard dwellers in Klapmuts generally expressed their fear of fire, identifying it as one of their priority risks. Substandard and flammable building materials are generally used in backyard dwelling construction, while the lack of a formal electricity supply results in informal connections that are prone to short circuiting and sparking. These conditions, similar to those found in informal settlements, make backyard dwellings prone to fire.

Ability to fight fire is also constrained by limited access to water supply, as illustrated in Figure 23, where someone can be seen trying to extinguish a flaming fire with a simple garden hose. The images below (captured by students while undertaking the survey) demonstrate how a fire that began in the main house, quickly spread to the backyard dwellings and threatened the next door property. The main house and several backyard structures were destroyed in the fire.



Figure 23 Klapmuts May 2016 fire event

The density of backyard accommodation and the storage of building materials and other articles in backyards contributes to fire fuel loads, contributing to fire risk, putting several households in jeopardy in the event of a fire as illustrated in Figure 23 above.

Respondents explained that many fires are started by electrical shortages and frayed wiring associated with illegal connections. In one survey group alone, 26% of respondents had experienced a fire incident while living in Klapmuts.

Several backyard dwellers living in wooden Wendy house structures described how they use diesel oil to treat the wood on the outside of their dwelling to make the wood more pliable,

so that the planks swell a little, reducing the amount of rain and wind entering through gaps in the walls. In other cases newspaper is used to stuff into gaps as insulation against the cold. These two coping strategies increase fire risk, providing extra fuel for fires.

In addition to household fires, residents living along the eastern boundary of Klapmuts claimed that they are also exposed to veld fires, particularly in the hot summer months. This area is highlighted in a map in Figure 24 below. The lack of fire-fighting services in the vicinity of Klapmuts is a cause for concern among community members, who related how fire outbreaks very quickly get out of control and exceed local capacity to extinguish.



(Several other hazardous areas have been included in this map of one of the three survey areas. These include an informal pig farm that is posing a health hazard to nearby properties and an associated increase in flies, a large open dumping area, several water and other pollution hot-spots, and the location of a leaking municipal water pipe).

Figure 24 Veld fire risk map of one of the survey areas

4.5.3 Flooding

High average rainfall occurs during the winter months, between May and August, but is highest in June, averaging around 131mm (<http://en.climate-data.org/location/189610/>). Heavy rainfall falling over a short period of time results in household drains and blocked stormwater drains overflowing. The blockages in stormwater drains result from windblown refuse as well as discarded household rubbish emptied into them deliberately. Due to the many untarred roads still to be found in this part of Klapmuts, rainfall runoff washes sand and gravel into the stormwater drains. Siltation thus also impedes the flow of water and prohibits effective drainage.

Heavy rainfall, which commonly results in leaking roofs and walls in backyard dwellings, also causes the water table to rise, with water welling up under backyard dwellings, causing floors to become wet and walls to become damp. Pooling/ponding also occurs in yards without adequate drainage, often running directly into backyard dwellings.

As illustrated in Figure 25 below, most formal houses lack guttering to catch rain water and direct it away from the house. Thus, water simply runs off the roof and into the yard, where it collects. In densely settled yards this leads to ponding of rainfall runoff that cannot drain away and collects in pools of standing water. Such water becomes polluted and contaminated, posing a health threat to all the households accommodated on the property.



Figure 25 Example of a typical subsidy house in Klapmuts with no guttering

Cooler temperatures occur in winter months, generally averaging below 15°C. Many backyard dwellers, even those living in more robust structures live in perpetually damp conditions throughout winter, often resulting in respiratory illnesses, particularly among young children and elderly residents. Given the high prevalence of tuberculosis reported in Klapmuts this is particularly concerning.

4.5.4 Crime

The literature suggests that most people feel safer living in a backyard than in an informal settlement, and increased security is a consideration when choosing to live in backyard accommodation (Morange 2002). The survey tested perceptions of safety among backyard dwellers, and found that while almost three quarters of respondents (74%) said they felt safe in their backyard home, 26% did not feel safe. This is illustrated in a quote taken from an interview:

The informant said that she did not feel very safe living where she did, on the corner of the street and opposite an open field and runoff zone. She pointed out that a tavern was situated further up the road from her dwelling and that drunkenness and gangsterism was a problem. She had witnessed numerous violent attacks and heard gunshot and shouts on numerous occasions in the street outside and over the fence outside her dwelling. She lived in fear

especially for the safety of her child. She slept with a knife under her bed and a copper pipe under the couch in her sitting area. She mentioned that people around the ages of 25 were attacking kids around 18 years old and that these perpetrators were from Kraaifontein. Gangsterism and drugs were reasons for this behaviour.

Most backyard dwellings were found to be visible from the street, so that the movements or presence of backyard dwellers could be monitored by criminal elements. Generally (75%) people said that they were satisfied with the security features in place, but others were concerned about safety, and 11% said that the landlord should provide extra security.

The survey recorded the safety features employed on properties with backyard households and by the backyard households themselves. In the survey, 83% of backyarders stated that they had added safety features. Fencing was the most frequent observed safety feature, but gates and dogs were also common. Barbed wire had been used to reinforce perimeter fences in thirteen homes, while only two backyarders had installed burglar bars. More than a third of households had dogs on the property, suggesting a high need for protection against crime. However, dogs belonging to the landlord also reportedly posed a threat to backyarders, particularly to their children and people visiting them.

Crime and violence were frequently reported during the survey. A great deal of crime is related to drug abuse as the insert below taken from an interview illustrates:

One respondent and her family, whose dwelling is located next to an open field, reported that she does not feel safe living there. She confided that during night time she hears the drug dealers and users at the back of her house. She also reported that her husband has caught them dealing on one occasion. The lady works half day as a domestic worker. One day when she got home she caught the group of addicts vandalising her dwelling. She phoned the police to report the crime, but the police never arrived at the scene.

Although not peculiar to backyard dwellers, the issue of local gangsterism was mentioned frequently. Gangsters, who are said to have originated from the Kraaifontein area and moved into Klapmuts, have reportedly gradually influenced local youths. They were said to rule by fear so that the community is scared to confront them. Gangsterism is also associated with increased drug abuse reported by members of the Klapmuts community.

The growing number of taverns being established in the area was also considered a problem related to high crime rates. Behaviour associated with the taverns is creating fear and insecurity among local residents, who complained of frequent fighting, often involving guns, drunken driving as well as public urination.

Community members complained about the lack of policing in the area, frequently voicing dissatisfaction with the local South African police service and their response to criminal activity in Klapmuts. They argued that crimes are underreported, particularly rape cases,

partly because of a general mistrust of the police, but also because of fear of reprisals from criminals themselves. The issue of police collusion (such as reportedly providing advance warning of raids to criminals) suggests the need for internal investigation by the SAPS. The recent appointment of a new station commander at the Klapmuts police station (Eikestad News 14 July 2016) may begin to address this problem.

4.5.5 Summary of backyard risk profile

The backyard community of Klapmuts is prone to a variety of risks that directly affect their everyday lives and wellbeing, but also have consequences for the longer term development of the whole community. Most of the risks identified among the backyards of the formal housing survey area are also commonly found in informal settlements.

5. Recommendations

The backyard dwelling survey revealed several key development issues that need to be addressed. The section below provides recommendations for key role players.

Municipal Housing/Human Settlements Department

- The Municipality needs to investigate cases of missing applicant names on the housing list in order to rebuild and reinforce community trust in the housing application process.
- A Municipal backyard policy is necessary to safeguard the rights of both backyard dwellers and landlords. Such a policy should facilitate:
 - The creation of a standard rental contract provided with legally binding terms and conditions that are enforceable by the Municipality;
 - Clearly articulated and unambiguous contractual rights and obligations provided for both tenants and landlords in the rental contract;
 - The establishment of a municipal rental bureau to which backyard tenancy infringements and rights-based issues can be brought for mediation;
 - A pilot test period, allowing for extensive public consultation, informed by legal process, in order to test the efficacy of a backyard policy, allowing for adaptation and revision before a final roll-out stage.

Emergency response, fire-fighting and crime prevention services

- The nearest fire service is currently located in Stellenbosch, preventing effective and timeous response to fires. The provision of a local satellite fire station should be considered;
- Criminal activity, particularly related to drug peddling and gangsterism, is on the rise in Klapmuts and needs to be addressed with some urgency;
- Existing community crime-prevention initiatives should be supported by both the South African Police Service and Stellenbosch Municipality;
- The current location of the police station undermines effective policing. Relocation closer to the Klapmuts community could assist in addressing the high crime rate.

Health services

- Clinic services need to be expanded to accommodate a growing client base;
- The proliferation of flies, related to informal stock farming, poses a health hazard and needs to be addressed by the Environmental Health Department and other role players.

Municipal solid waste services

- Municipal 'wheelie' bins should be provided to backyard dwellings;
- The frequency of waste collection should be increased to prevent dumping;

- Recycling initiatives should be piloted and incentivised to prevent dumping and provide part-time employment;

Municipal Water & Sanitation

- Grey water disposal practices by backyard dwellers and poor existing drainage facilities need to be addressed. Solutions should be sought in consultation with landlords and backyarders in order to identify creative solutions, drawing on existing adaptations, but supported more effectively with advice and collaboration from municipal engineering services.

Community organisation

- The Klapmuts community requires a strong and unified leadership structure to effect positive and progressive developmental change and represent local interests in multi-stakeholder forums. Currently this is lacking.
- Strengthened community involvement and public debate is needed to address local issues, such as escalating levels of crime and indiscriminate disposal of waste.

6. Priorities for future policy-development

The recently published South African Integrated Urban Development Framework (IUDF 2016) acknowledges that:

‘Backyard rentals provide affordable rental accommodation for lower-income groups and for people not needing permanent accommodation. These rentals also offer owners income assets. Cities need to develop strategies to extend basic services to backyarders, assist with creating more permanent structures and enhance tenant security’ (2016: 65).

These words provide clear direction, not only to large metropolitan authorities, but also to local municipalities, faced with housing shortfalls and growing populations. They encourage local innovation. The development of a municipal backyard policy to guide future development offers the opportunity for progressive future-oriented planning, giving consideration not only to the backyard dweller, but also the landlord and the surrounding community.

Support for the backyard housing sector is now a growing area of focus at national level, but also increasingly at municipal scale. The recently published Integrated Urban Development Framework (IUDF) acknowledges that *‘a wider variety of affordable rental options is important in order to meet the need for flexible, easy-access accommodation for a mobile population, accompanied by a strong rental management approach’ (COGTA 2016: 65).*

While, as Turok & Borel-Saladin (2015) have argued that *‘living in a shack structure is not a positive experience for most people’ (2015: 14)*, the positive contribution of the backyard housing sector must not be discounted; most notably its role in the prevention of urban sprawl through densification and augmentation of housing supply in light of current shortages. It is important to build on these positive aspects for future development planning. In particular this should incorporate the following considerations:

- Encourage/incentivise small-scale landlords to provide adequate, affordable shelter;
- Facilitate densification through provision of expanded services to backyard dwellers;
- Provide opportunities for household entrepreneurs to operate in low income areas;
- Revise land-use planning regulations to accommodate backyard dwellings;
- Make provision for the incorporation of bulk infrastructure and services in anticipation of backyard structures in all new low-cost housing developments;
- Development of a backyard policy that, although focusing primarily on housing need, also addresses unemployment and poverty, acting as a catalyst for broader social and economic upliftment processes. (Paraphrased from Turok & Borel-Saladin 2015).

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