Enumeration Report

Kanana Informal Settlement Pocket

DECEMBER 2016

A member of the SA SDI Alliance

CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

Western Cape Government
Human Settlements

C·O·R·C

SA SDI ALLIANCE

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LIST OF ACRONYMS AND ABBREVIATIONS

CoCT – City of Cape Town (refers to the municipality)
CORC – Community Organisation Resource Centre
The Department – Department of Human Settlements
EPWP - Expanded Public Works Programme
FEDUP – Federation of the Urban and Rural Poor
GIS – Geographical Information Systems
GPS – Global Positioning System
ISN – Informal Settlement Network
MEC – Member of the Executive Council
NGO – Non-Governmental Organisation
Province – The Western Cape Government
PSC – Project Steering Committee
SC – Sub-Council
SA SDI Alliance – South African Slum Dwellers International Alliance
SDI – Slum Dwellers International
StatsSA – Statistics South Africa

GLOSSARY

Enumeration:
An enumeration entails the gathering of socio-economic data and shack numbering for all households in informal settlement pockets.

Household:
A group of people under one structure sharing one common area. If the structure is divided and a different door is used to enter the next area and the common area is not shared, then that can be considered as a different household.

Household head:
The household head is a person who is recognized as such by the household. She or he is generally the person who bears the chief responsibiloty for managing the affairs of the household and takes decisions on behalf of the household. This person does not necessarily have to be the breadwinner.

Informal settlement pocket:
According to the City of Cape Town, an informal settlement pocket consists of one or more informal structures, which are known to the community as a unit with a unique name. It could be a stand-alone portion or form part of a larger grouping. An informal settlement area consists of one or more informal settlement pockets due to the geographical position and/or contiguous nature of these pockets.

PREFACE

The Community Organisation Resource Centre (CORC) is a support NGO linked to the global network of the urban poor known as Slum Dwellers International (SDI). In its role as a support NGO, CORC supports the social processes of two poor-people's movements, the Federation of the Urban and Rural Poor (FEDUP) and the Informal Settlement Network (ISN). CORC assists FEDUP & ISN to develop strategies for inclusive cities. This includes facilitating engagements with formal roleplayers like the state and supporting the development of savings, information-gathering and community-led development strategies. A second NGO, the uTshani Fund, provides finance for the urban poor. Together, these two social movements, along with the two support NGOs, form the South African SDI Alliance. One of the alliance's most important tools over the last two decades has been information collection through the profiling and enumeration of informal settlements. This report is a reflection of community-driven data collection processes implemented by the alliance that have proven to be far more effective in gathering accurate data about informal settlements.

Residents walk from Kanana to the N2 highway

EXECUTIVE SUMMARY

A dense concentration of informal settlements is located along the N2 between Borcherds Quarry and Airport Approach Road. These include Kanana and neighbouring settlements Barcelona, Europe and Vukuzenzele. Kanana extends over 23,14 hectares at a density of 159 dwellings per hectare, and is bounded by the N2 highway to the north, Steve Biko Street to the west, and NY111 along the south west. In Kanana, 6697 residents make up 3036 households; an average household size of 2,1 people per household. In 1989 backyarders from Gugulethu first erected dwellings on a discontinued landfill site, and the settlement has grown rapidly over the past 27 years.

Kanana's proximity to the N2 highway

The Western Cape Government Department of Human Settlements appointed the Community Organisation Resource Centre (CORC), through a competitive tender process, to conduct an in-depth enumeration of Kanana, which forms part of the Airport Informal Settlement Precinct consisting of ten (10) informal settlements, namely; Barcelona, Gxagxa, Lusaka, Kanana, Vukuzenzele, Europe, Thabo Mbeki, KTC, Tsunami IDA/TRA, and Hlazo Village. Kosovo was also enumerated as a priority project in the southern corridor. CORC works in partnership with the Federation of the Urban and Rural Poor and the Informal Settlement Network, who mobilised, trained and provided on-going support to Kanana community members to act as enumerators in this study.

Data collection took place over two phases due to local government elections: 20 days in June and 20 days in September 2016. This was followed by a verification and analysis of the data collected. The methodology included the use of locally trained fieldworkers and the utilisation of Trimble devices to ensure a level of geographic accuracy. Through CORC employment and the Expanded Public Works Programme of the City of Cape Town, 64 short-term employment opportunities were created in Kanana during this study.

3415 dwellings were numbered of which 3036 dwellings were enumerated, resulting in a response rate of 91%. During the enumeration, eight out of ten times household heads were the primary respondent to questions, followed by those closely associated to the affairs of the household such as boarders (7,4%) and spouse or partner (5,7%). This means that the most reliable sources of information related to households were obtained.

Single people account for 48% of all households, of which 66% are male, 75% are younger than 35 years old, and 90% have never been married (and are potentially without dependents). The dwellings of single households in Kanana can be characterised as small (59% of all dwellings are less than 30 square metres), single room (41% of all dwellings), and recently occupied (33% of residents reported to have lived in their dwellings for less than five years). When considering all dwellings only 15% of households enjoy shelters of 35 to 60 square meters. Although 78% of respondents asserted to own the dwelling they live in, 638 households (21% of total households) are subordinate to a lessor. It is therefore important to take the informal property market into account when planning settlement upgrading.

The majority of Kanana residents face economic hardship, and the unemployment rate is 53% according to community responses. The majority of households (95%) earn less than R3,500 per month, while 26% of households report to have no income at all. 31 to 35 year-olds are the most economically active, followed by 41 to 50 year-olds. Youth aged 19 to 30 years make up 29% of the total population and are particularly affected. 61 in every 100 youth are unemployed. Women are particularly affected by the shocks related to unemployment since 62% of the unemployed youth are female. Only 2,6% of youth are reportedly self-employed and 36% of youth earn no income. According to the enumeration data, 2049 people receive the Child Support Grant, 136 pensioners receive the old age grant and 56 people receive the disablility grant.

There are 2006 children in Kanana, accounting for 30% of Kanana's settlement population younger than 18 years old. 44% of children are enrolled in primary school, 20% are enrolled in pre-school, and 15% are enrolled in secondary school. College and university attendance is extremely low. 19% of potential school-goers do not attend school. 48 of 100 children attend schools in Gugulethu and 22% attend school outside Cape Town.

The difficult soil typologies of the discontinued landfill site make provision of more permanent services difficult, and substantial land rehabilitation will be required prior to settlement upgrading. Despite these constraints, progress has been made in delivering services. Households reported their access to electricity as 47% prepaid, 43% illegal connection, and 10% have no access to electricity. Water and sanitation services are also lacking as the community grew over the years. At current levels there are 56 taps which results in a ratio of 57 households per water tap. There are 824 temporary toilets which results in a ratio of 4 households per toilet.

This enumeration outlines and details evidence to inform the planning and development strategies for the Airport Precinct initiative. Making use of data collected through this study not only improves the evidence base from which settlement planning occurs, but has also proved to build the capacity of informal settlement communities as central partners in upgrading initiatives.

STRUCTURES

NUMBERED 3415[1]

ENUMERATED 3036

HOUSEHOLDS 3199

SANITATION 1:4
Toilet to household ratio

WATER 1:57
Tap to household ratio

ELECTRICITY

PREPAID 47%

ILLEGAL CONNECTION 43%

NO ELECTRICITY 10%

DISASTERS AND RISKS Flooding every winter, shack fires

UNEMPLOYMENT RATE 53%

MAIN PRIORITIES Access to formal housing, waste collection and access to toilets.

UPGRADING CATEGORY Many constraints. May need relocation if land is not rehabilitated.

MAJOR CONSTRAINTS Located on top of a landfill.

1 All information reflected in this report is based on the analysis of data collected during the enumeration exercise, unless otherwise stated

1. INTRODUCTION

01 Introduction

South Africa, like other developing countries, has seen a rapid rise of informal settlements in major cities.[2] This increase is attributed to a number of factors which can be grouped under two broad categories i.e. urbanisation and population growth. In terms of urbanisation, people migrate into cities in search of greener pastures. Upon arrival, they find it near impossible to secure affordable housing and are often forced to find accommodation in informal settlements. With respect to population growth, Census figures have shown a consistent increase in the population size and growth rates of the country. In addition, there is a growing phenomenon of young adults who split from families in order to set up home elsewhere in pursuit of independence. This further compounds the problems associated with housing demand.[3]

It is expected that housing would be affected by increases in population size and the decline of household size, which puts an additional strain on the state's available resources to provide adequate housing for the population.

Entry to Kanana from N2 highway

Trends in population increase and growth in informal settlements

The Western Cape Province accounts for 11.2 % of South Africa's total population with 5 823 000 residents; of this the City of Cape Town metropolitan area is home to 64% of the Province's residents (StatsSA: 2011). The population size in the Province increased by 2.6% per year between 2001 and 2011 while the average household size declined from 4 in 1990 to 3.4 in 2011, placing increased pressure on the demand for services and housing.

Informal settlements are home to millions of people in developing countries. Between 1994 and 2011, the number of informal settlements in South Africa increased from approximately 300 to about 2 700 and it is estimated that 1.25 million households live in these settlements (NDHS, 2014). According to Statistics South Africa (Stats SA), 142 706 households lived in shacks (not in backyards) and informal residential areas in the Western Cape at the time of the 2001 Census. This figure is compared to 191 668 at the time of the 2011 Census (HDA, 2013:11). In 2013, approximately 193 000 households lived in 204 informal settlement areas in

2 HDA. 2013b. South Africa: Informal Settlements Status.
3 Todes, A. et al. 2010. Contemporary South African Urbanisation Dynamics. *Urban Forum*, 21:331–348

01 Introduction

the City of Cape Town and this number increases each year. These statistics clearly illustrate that government needs to address informality as a matter of priority. As a starting point, policy and implementation need to align to the Western Cape Department of Human Settlements' strategic direction of allocating more resources to the Upgrading of Informal Settlements Programme (UISP) in order to improve the living conditions of informal settlement dwellers and those living in backyards who continue to wait for a housing opportunity.

Catalytic projects – creating opportunities at scale

In 2014, the national Minister of Human Settlements announced that the Department would embark on the delivery of catalytic human settlements projects to capitalise on the economies of scale of such projects. Subsequently, the Minister of the Western Cape Department of Human Settlements (WCDHS), Bonginkosi Madikizela announced in his 2015 Budget Speech that the Department had identified 5 catalytic and 9 priority projects in the province, which would be funded and jointly implemented with the National Department of Human Settlements (NDHS).

The Southern Corridor Integrated Human Settlements Project is one of the catalytic projects and is comprised of several projects within the City of Cape Town's area of jurisdiction. The Airport Informal Settlement Precinct and Kosovo are two projects that will be implemented through the Southern Corridor Integrated Human Settlements Project.

The Airport Informal Settlement Precinct consists of ten (10) informal settlements, namely; Barcelona, Gxagxa, Lusaka, Kanana, Vukuzenzele, Europe, Thabo Mbeki, KTC, Tsunami IDA/TRA, and Hlazo Village. These settlements form a strip of between 200 and 500 metres wide along the southern border of the N2. The majority of settlements border Steve Biko Street to the northwest and Borcherds Quarry Road to the southeast, stretching 2.5km in a northwest-southeast direction. Barcelona, Gxagxa, Lusaka, Kanana, Vukuzenzele and Europe were enumerated in the first phase of the contract. Thabo Mbeki, KTC, Tsunami IDA/TRA, and Hlazo Village were enumerated in the second phase. Kosovo was also enumerated in this government contract as a priority project in the Southern Corridor.

It is in this context that the Department commissioned an enumeration study across each of these informal settlement pockets, appointing the Community Organisation Resource Centre (CORC) through a competitive bidding process, to undertake this task.

Overall purpose of the study

The overall purpose of the enumeration study was to gather data and information at household level in order to understand the profile of the households, social networks and the level of services in the informal settlement pockets that form part of the Southern Corridor. The data and information gathered will assist the Department in understanding the status quo of each informal settlement pocket in order to develop credible settlement profiles which will assist with determining human settlement needs per household, informing decision making, and future planning for the informal settlement pockets.

01 Introduction


Residents capture anecdotes of life in Kanana

The project deliverables of the study were to:

- Negotiate, design, implement and manage a stakeholder participatory process
- Conduct a household level enumeration exercise
- Conduct GIS mapping of all households
- Analyse the data collected for each settlement
- Record existing social infrastructure and socio-economic opportunities
- Develop a database which will provide a profile of each household and each informal settlement

Process undertaken in the enumeration of Kanana

The study was conducted by CORC. The Kanana enumeration process unfolded over a period of three months and started with shack numbering and mapping, which was conducted in May 2016. The enumeration training occurred on 3 June 2016. Data collection occurred in two phases, namely before and after local elections. The first phase took place from 4 - 28 June 2016 and lasted for 20 days. The second phase occurred from 6 – 29 September 2016 and lasted for 20 days. Each of the eleven settlements were exposed to the same methodology. The only difference related to the length of time required for gathering data, which was based on the settlements' varying sizes. The use of a common methodology ensured that information and data across the settlements studied could be compared. This particular report is the outcome of a community-led data collection process that will better equip the CoCT and the Province through updated information about Kanana informal settlement pocket.

2. LOCATION AND CONTEXT OF THE SETTLEMENT

02 Location and context of the settlement

Kanana informal settlement pocket is located at the intersection of Airport Approach road and the N2. It is 19km east of the Cape Town Central Business District (CBD). The settlement's entire north eastern edge faces the N2 highway, it is bordered by Steve Biko street to the north west and NY 111 runs the entire length of its south western border.

According to residents, the informal settlement pocket was founded in 1989, and is roughly 27 years old. Backyarders of Gugulethu founded the Kanana settlement to avoid paying backyard rent. Kanana was built on a discontinued landfill/dumping site, and this is listed as a constraint for future development.

COMUNITY VOICES

"It used to be a dumping site. This field was also used for men when they went for circumcision. There were many trees here so we cleaned the field and built our houses here. When we started there were not many people who lived here... So we were just left with a name to call this place and we called it Kanana. The name Kanana is from the bible, a place where people thought they will be able to stay and be happy."

02 Location and context of the settlement

The community has a leadership structure of 11 members:

- Chairperson – Mzingisi Khwetshube
- Deputy chairperson – Loyisi Sityebi
- Treasurer – Lizo Majezi
- Secretary – Thuliswa Bulana
- Additional member – Chwayita Gaqa
- Additional member – Vivian Swaartbooi
- Additional member – Nomfesane Qwane
- Additional member – Monwabisi Mtshakaza
- Additional member – Nombulelo Ketani
- Additional member – Tshilelwa Mfaca
- Additional member – Nosiphiwo Mapuso

Some residents and leaders in Kanana

During the initial engagements with Kanana, before the local elections, Councillor Mzwakhe Nqavashe was the Councillor for Ward 40, which incorporates the area South of the N2, East of the railway line, Hlungulu Walk and Steve Biko Drive, North of Klipfontein road. The area is also part of Sub- Council (SC) 11, where Kayise Nombakuse is the Sub-Council manager. As part of accessing the area, CORC engaged Nqavashe and Nombakuse. Nqavashe served as the critical contact to the area and was instrumental in introducing the CORC engagement team to the leadership committee mentioned above. The leadership committee meets several times a month and discusses various issues related to the pocket. After the August 2016 local elections, Nqavashe was replaced by Councillor Bongani Ngcombolo who was also instrumental in rounding off the enumeration exercise in Kanana.

02 Location and context of the settlement

There are a number of leadership committees in Kanana. Firstly, there is an area committee which consists of 16 members. There are also block-level committees for each of the sections in Kanana namely sections A to J. Any identified settlement conflicts are resolved in the area committee. Secondly, there is a SANCO committee that has 15 members. The SANCO committee deals with more complicated problems associated with crime, service delivery, and public services, this they do in partnership with government agencies.

The growth of Kanana informal settlement pocket is illustrated in the Google Earth satellite images below. Tracing the settlement growth from earliest images available (2001), it is clear that Gugulethu backyarders occupied the open land and grew eastwards toward the N2. From 2002 to 2007, the remaining open land near the northern part of the settlement, was occupied. Internal footpaths have created north-south and east-west access routes. Between 2005 and 2009, the remaining ecologically sensitive land was occupied on the eastern fringe of the settlement. Between 2012 to 2016, the growth of structures in the centre of the settlement has increased the density. Today, the settlement covers 23,14ha at a density of 159 households per hectare, which is significantly higher than the average citywide density of 5.26 dwelling units per hectare.


Kanana 2001


Kanana 2002


Kanana 2003


Kanana 2004


Kanana 2007


Kanana 2009


Kanana 2012


Kanana 2014


Kanana 2016

3. METHODOLOGY

03 Methodology

3.1. STAKEHOLDER PARTICIPATION AND ENGAGEMENT

The first phase of the study involved stakeholder engagement and developing deep participation with regard to community structures[4]. This is summarised in figure 1:

4 A detailed stakeholder participation and engagement plan has been prepared by CORC and contains the details of this phase of the project.

Figure 1: SA SDI Alliance stakeholder participation & engagement strategy

03 Methodology

3.2. PRE-IMPLEMENTATION AND FIELD WORK

This section describes the methodology utilised in the enumeration study[5]. The following diagram connects with the previous process at engagement level. The diagram outlines the process followed once implementation and field work has begun. It must be noted that the collection of data in the field was conducted utilising the CoCT Trimble devices. Along with these devices, GPS devices were utilised for mapping purposes. The data from the Trimble devices was uploaded in the field directly to the CoCT's database. This meant that no post-enumeration data capturing was required and that the CoCT effectively received updated enumeration data after each upload.

5 A detailed pre-implementation and field work plan has been prepared by CORC and contains the details of this phase of the project.

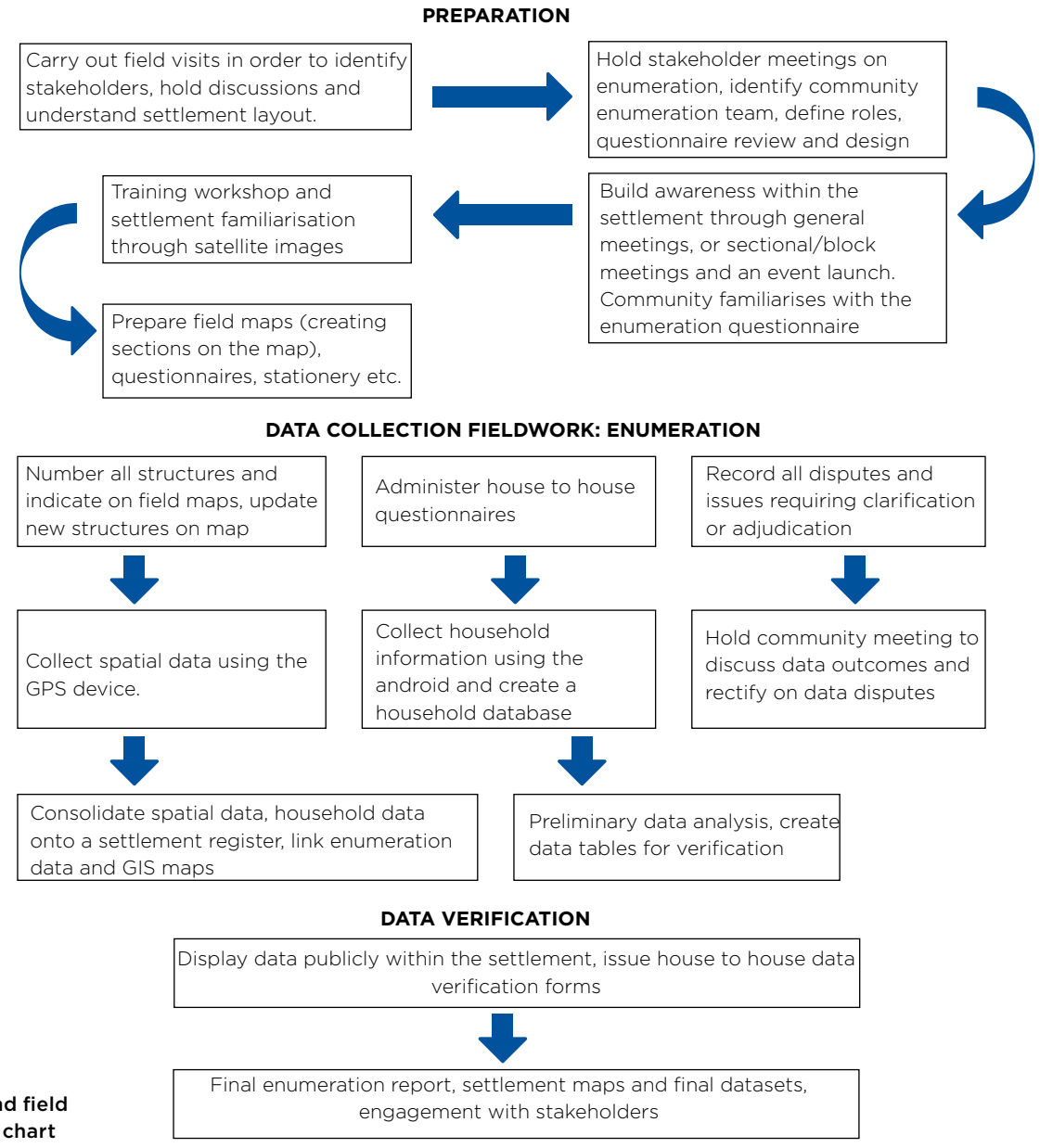


Figure 2: Pre-implementation and field work process flow chart

3.3. VALUE ADD TO THE PROJECT – EMPLOYMENT OPPORTUNITIES

Residents share qualitative anecdotes

COMMUNITY VOICES

"I would change the nature of structures here in Kanana, the streets, the drains and the lights so that people can feel the democracy."

A key approach used by CORC and the SA SDI Alliance is that community members form the main teams for mapping, data collection, shack numbering and verification in their settlement. This approach improves data accuracy and allows for wider coverage as residents are more open to members of their own settlement. In the case of Kanana, the enumeration study created short-term employment opportunities for community members.

A team of 12 residents carried out the critical numbering process over a course of eight days. Each numbered structure was linked to digitised GIS data, which meant that all information collected per structure could be mapped spatially. The data collection exercise was implemented over a period of 40 days by a team of 32 residents who were employed by CORC and a further 32 residents employed by the CoCT through the Expanded Public Works Programme to handle the Trimble devices under the supervision of four CORC employed supervisors. The mapping team comprised of eight residents who mapped the settlement for 10 days. At the end of the exercise, a total of 64 employment opportunities of varying lengths (three days up to 45 days) were created in Kanana.

4. COVERAGE OF THE ENUMERATION AND RESPONSE RATES

04 Coverage of the enumeration and response rates

The following section details the coverage of the enumeration with respect to the estimated structure counts and estimated population from the CoCT, compared to information that was collected in the settlement. The aim of this section is to provide the reader with a picture of the extent of the enumeration as well as deliver response rates on a few key variables. Together, this provides a view of the enumeration as a fair and accurate representation of the settlement at this particular point in time. Response rates will also be reflected again to provide the reader with a sense of how well or poorly people responded to questions during the enumeration.

Enumerators walk through Kanana

04 Coverage of the enumeration and response rates

4.1. COVERAGE OF THE ENUMERATION

The enumeration exercise entailed the linking of data collected inside each structure to the structure's specific GPS coordinates on the ground. This means that different sets of information about the residents of each structure could be spatially mapped. Figure 3 highlights all structures that were enumerated in Kanana.

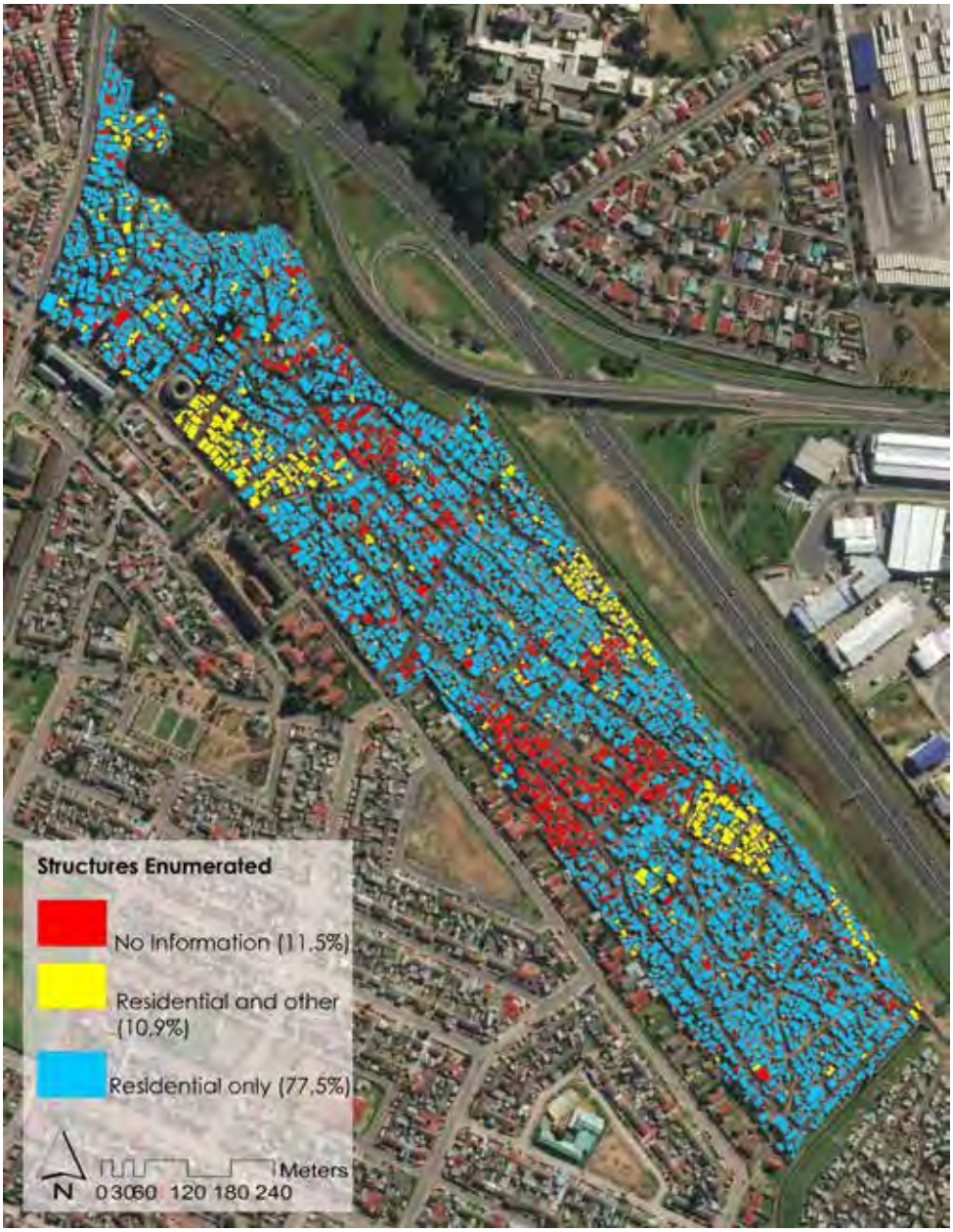


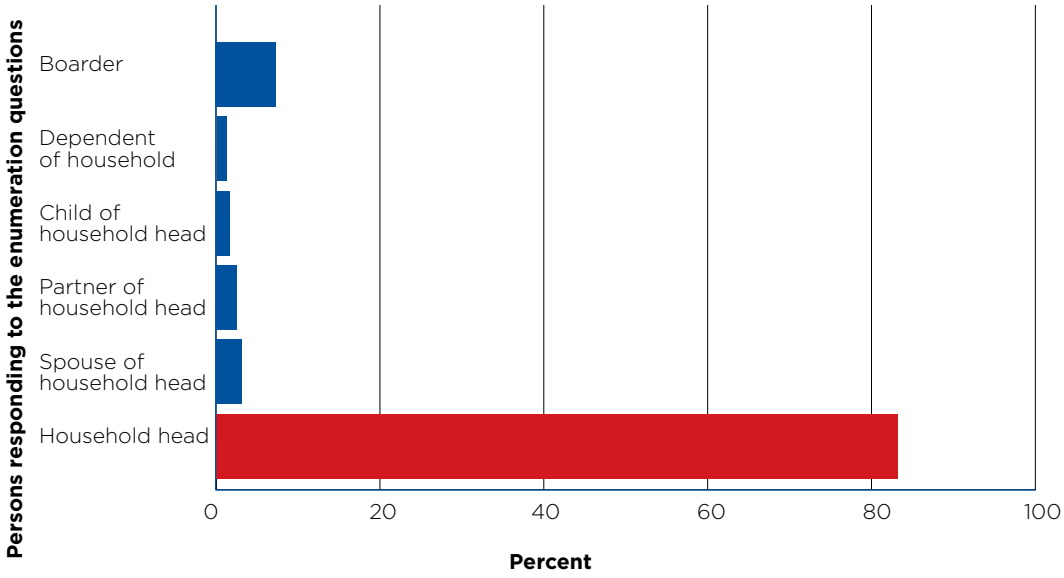
Figure 3: Map of all structures in Kanana, indicating the coverage of the enumeration

04 Coverage of the enumeration and response rates

Figure 3 illustrates the spread of structures enumerated in the Kanana informal settlement pocket. In total, 3036 structures out of the 3415 numbered structures were enumerated; this in percentage terms equates to 91% of the numbered structures. Due to unavailability of the occupants and/or unwillingness of the occupants to participate, 379 structures were not enumerated. . For the rest of this report, wherever structure-level data is presented, it will reference the 3036 structures stated above. Where missing information is encountered, special mention will be made.

Data for each structure was collected through an interviewing process where enumerators tried to speak to the household head in order to ensure the best quality of information about the household could be collected. Figure 4 illustrates the percentage breakdown of respondents.

Figure 4: Percentage breakdown per respondent type for Kanana informal settlement



Household heads were the most frequent respondents (83,2% of all questionnaires), as figure 4 above shows. Boarders (or tenants) accounted for 7,4% of respondents, followed by household spouse (3,2%) and partner of the household head (2,5%). The high frequency of household heads as primary respondents to the enumeration means that the likelihood of information supplied is the most accurate information of conditions related to people living in a particular structure.

04 Coverage of the enumeration and response rates

Table 1 presents the settlement population based on respondents' accounts of how many people live inside each structure. This can be used to help estimate the population size of Kanana based on per structure resident estimates.

Table 1: Total population of Kanana derived from stated number of people living inside each structure

People living in structure stated	Frequency count	Percent	Cumulative percent	People count
1	1458	48,02	48,02	1458
2	552	18,18	66,21	1104
3	422	13,90	80,11	1266
4	309	10,18	90,28	1236
5	179	5,90	96,18	895
6	69	2,27	98,45	414
7	23	0,76	99,21	161
8	16	0,53	99,74	128
9	3	0,10	99,84	27
10	5	0,16	100	50
Total	**3036**	**100**		**6739**

From the tabulation, the occupant count per structure varied from one person up to a maximum of 10 people. By multiplying the number of occupants per structure by the frequency, the resultant "people count", or derived population count, is 6739 people living in Kanana settlement.

Table 2 is derived by counting the actual number of people enumerated per structure. This differs from table 1 and results in an actual population count for the settlement based on the enumeration results.

04 Coverage of the enumeration and response rates

Table 2: Total population of Kanana based on actual number of persons enumerated per structure

People enumerated	Frequency count	Percent	Cumulative percent	People count
1	1452	47,83	47,83	1452
2	579	19,07	66,90	1158
3	413	13,60	80,50	1239
4	312	10,28	90,78	1248
5	165	5,43	96,21	825
6	62	2,04	98,25	372
7	31	1,02	99,28	217
8	15	0,49	99,77	120
9	4	0,13	99,90	36
10	3	0,10	100,00	30
Total	**3036**	**100**		**6697**

Table 2 above illustrates the actual number of people recorded in the enumeration is 6697. A small variance of 0,6% is observed between the number of occupants per structure (6739) and the number of people recorded (6697). This small variance can be attributed to respondents incorrectly indicating the number of occupants per structure. For the purposes of this analysis, the figures and population count reflected in table 2 will be used, which confirms the population of Kanana to be 6697 people.

Each respondent was asked to indicate how many households live inside each structure. This was based on the definition of a household being a group of people living in a structure sharing one common area or eating from the same pot. This method allows for the recording of more than one household per structure. Household count is presented in table 3.

Table 3: Total households for Kanana derived from stated number of households

Households stated	Frequency count	Percent	Cumulative percent	Household count
1	2896	95,39	95,39	2896
2	117	3,85	3,85	234
3	23	0,76	0,76	69
Total	**3036**	**100**		**3199**

According to residents, 3199 households reside in 3036 structures. Single households are most prevalent and constitute 95,4% of households in the pocket. There are 140 structures that indicate the presence of more than one household.

04 Coverage of the enumeration and response rates

4.2. RESPONSE RATES

A majority of respondents were the head of the household. 83% of respondents[6] defined themselves as household heads, and a further 5,8% were closely associated with the household head (spouse or partner). This means that the best possible data was collected at the household level.

Questions around structure ownership, main reasons for moving to the settlement, main use of the structure, electricity supply, sanitation usage, water access, health access and number of people and households had 100% response rates. Other questions were not fully responded to:

80% responded to questions related to reasons why people have moved out of the settlement
96% responded to the question household income
99,4% responded to grants question
99,4% responded to current educational enrolment
99,4% responded to marital status

6 It must be noted that for certain variables the term "respondent" is used. This specifically refers to a person responding to questions. These questions could be individual in nature but where they refer to household-level information, this data shall be referenced as such.

Kanana household enumeration

5. SUMMARY FINDINGS

05 Summary findings

This section presents a high-level summary of the findings and the analysis of the data gathered in the enumeration study.

KANANA SUMMARY FINDINGS	
Age of settlement	27 years (founded in 1989)
Types of structures	Shacks built predominantly from zinc, wood and plastic
Total land occupied	23,14ha
Population density	159 households per hectare
Population	6697
Average household size	2,1
Total structures numbered	3415
Total structures enumerated	3036
Total males	2930
Total females	3723 (44 instances of gender not recorded)
Female household heads	43,9%
Total children under 18 years of age	1929
Number of toilets	824
Toilet to people ratio	1:8
Toilet to household ratio	1:4
Number of taps	56
Tap to people ratio	1:120
Tap to household ratio	1:57
Electricity coverage	47% prepaid meters, 43% connection to neighbours' meters and the balance with no electricity
Unemployment rate	53% (expanded definition)
Main priorities	Access to formal housing, waste collection, access to toilets
Disasters experienced by residents	Flooding every winter, shack fires
South African residents	97%
Non-South African residents	3%

Residents refer to toilets in Kanana as bucket system toilets. These are equivalent to what the City of Cape Town calls container toilets, which are installed by contractors and serviced three times a week. They are used in areas where there is no vehicle access and no scope to install waterborne infrastructure.

Ratios in this table can be read in terms of the national standard for households per toilet (5:1) and households per tap (25:1). National norms for adequate service levels must ensure the health and safety of household users and include: access to a standpipe that supplies 25 litres of potable water per person per day within 200m of a dwelling; VIP or equivalent toilets in rural or low density urban areas; waterborne or equivalent sanitation in dense urban areas; and either pre-paid or metered systems in terms of electricity.[7]

7 COGTA 2005

6. ANALYSIS

06 Analysis

In this section, a more detailed analysis of the enumeration data for Kanana informal settlement pocket is presented. The focus of this section is on data collected at the individual level, priorities and migration. Data on access to various basic services and ranking of priorities is also presented. Finally, the last part of this section presents data on demographics of the population and potential implications for human settlements.

6.1. STRUCTURE ANALYSIS

The study sought to determine structure ownership levels within the settlement. Each respondent was asked to indicate whether they owned the structure, paid rent or lived in it rent-free.

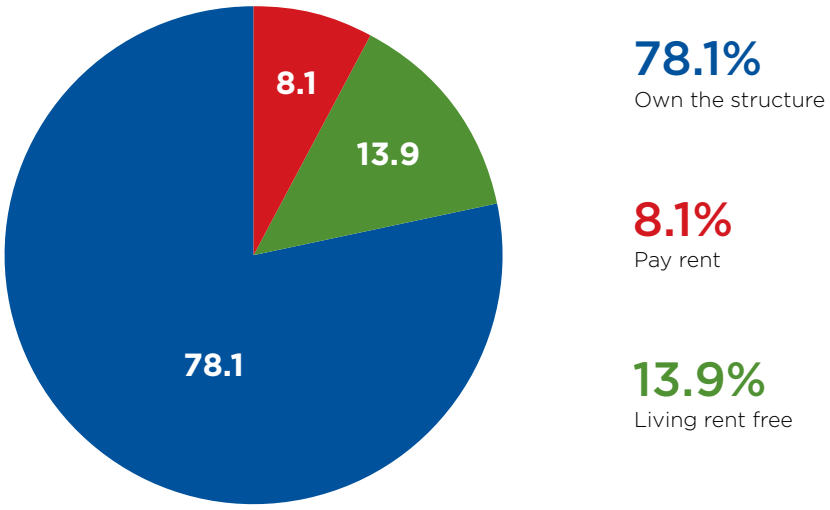


Figure 5: Percentage breakdown of structure ownership

Figure 5 illustrates that 78,1% of respondents reported that current occupants own their structures, that 8,1% pay rent and that 13,9% reported living rent-free. Just over a fifth (21,9%) of Kanana residents, or 666 households, are subordinate to a lessor, which might translate into a precarious security of occupation. It could also mean that those living rent-free are members of the household head's family or a dependent.

To better understand the living arrangements for residents, a question was asked around number of rooms in the structure. Table 4 provides an overview of rooms per structure.

06 Analysis

Table 4: Number of rooms per structure

Number of rooms	Frequency count	Percent	Cumulative percent
1	1274	41,96	41,96
2	890	29,31	71,28
3	528	17,39	88,67
4	275	9,06	97,73
5	45	1,48	99,21
6	16	0,53	99,74
7	4	0,13	99,87
8	4	0,13	100
Total	**3036**	**100**	

A high variability in the composition of living spaces in shacks was reported. Table 4 above reveals that less than half of the structures (42,%) had one room, and that 29% reported having two or three (17,4%) rooms. This variability can be explained by the age of the settlement, which is estimated to be between 27 and 35 years old. Typically, the first occupants claim larger spaces and build larger rooms. Newer arrivals are often left with no choice but to build smaller sized one-room shacks. The quality of open spaces for children to play is also restricted, and they tend to play in the streets and on informal footpaths.

Structures in Kanana

06 Analysis

Table 5 provides a deeper insight into the total number of people living inside each structure in the settlement based on the enumeration results. It also provides the frequency count per incidence of structure population size.

Table 5: Number of people per structure

People enumerated	Frequency count	Percent	Cumulative people	Cumulative percent
1	1452	47,83	1452	47,83
2	579	19,07	2610	66,90
3	413	13,60	3849	80,50
4	312	10,28	5097	90,78
5	165	5,43	5922	96,21
6	62	2,04	6294	98,25
7	31	1,02	6511	99,28
8	15	0,49	6631	99,77
9	4	0,13	6667	99,90
10	3	0,10	6697	100,00
Total	**3036**	**100**		

A close correlation exists between single-person households at 47,8% shown in table 5, and one-room dwellings at 42% in Table 4. Single households in one-room dwellings could be an indication of the growth of the settlement in the last decade. Figure 6 and table 6a confirm that a high proportion of residents live in shacks smaller than 30sqm. The competition for land in a dense informal settlement requires single households to live in smaller one-room shacks. When taking these statistics into account, the implications for settlement upgrading and eventual housing provision are significant.

The floor areas of the dwellings were calculated from GIS data following the mapping of dwellings from an aerial photograph. This is the most accurate data available in the study, but could be an overestimation of actual floor size because the overhangs of the roofs could be larger than the floor area. In order to better understand the average available floorspace per household, the net floor areas were added together and divided by the population. Table 6a below presents this data.

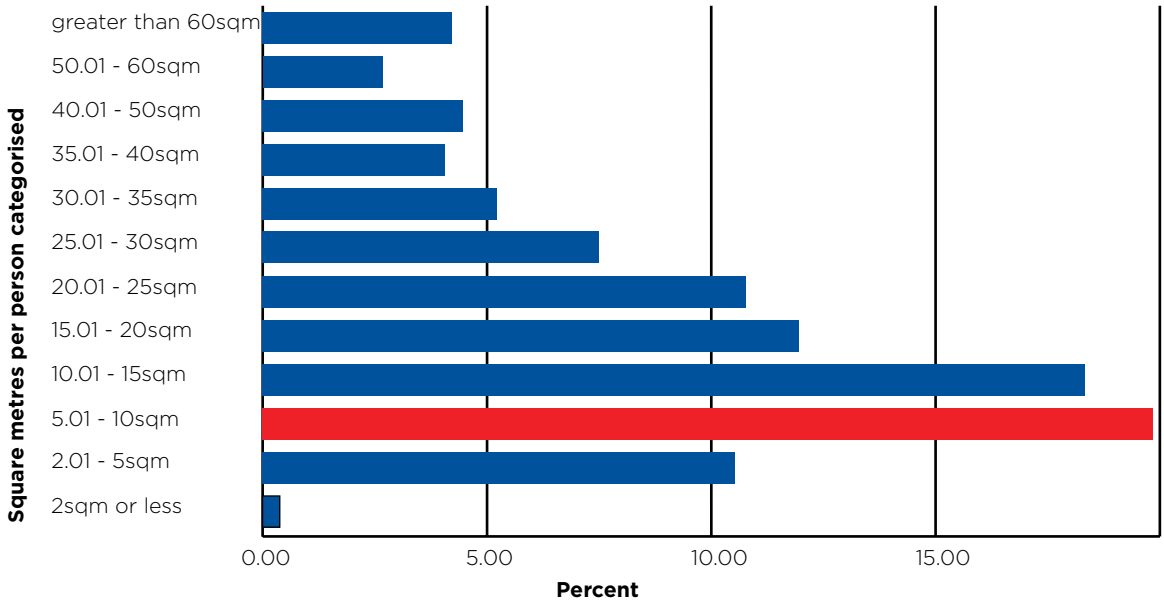
06 Analysis

Table 6a: Square metres of floor space

Square metres of floor space per person categorised	Frequency count	Percent	Cumulative percent
5.01 - 10sqm	65	2,14	2,14
10.01 - 15sqm	460	15,15	17,29
15.01 - 20sqm	442	14,56	31,85
20.01 - 25sqm	452	14,89	46,74
25.01 - 30sqm	382	12,58	59,32
30.01 - 35sqm	268	8,83	68,15
35.01 - 40sqm	222	7,31	75,46
40.01 - 50sqm	313	10,31	85,77
50.01 - 60sqm	170	5,60	91,37
greater than 60sqm	262	8,63	100,00
Total	**3036**	**100**	

In Kanana, 59% of all residents live in structures smaller than 30sqm. Another 23% of households enjoy shelters of 35 to 60sqm. This data however does not take into account the number of occupants per structure, which can be a measure of overcrowding. In Figure 6, total floor space per dwelling was divided by the number of occupants to arrive at a floor space per person ratio.

Figure 6: Percentage breakdown for square metres per person of floor area provided by a structure, categorised



06 Analysis

This analysis indicates that 49% of residents have access to less that 15sqm floorspace, and 20% of residents have access to 5 to 10sqm floorspace. Table 6b excludes structures with only one occupant to better reflect square metres per person in structures with multiple occupants.

Table 6b: Square metres of floor space categorised available per person excluding structures with one occupant

Square metres of floor space per person categorised	Frequency count	Percent	Cumulative percent
2sqm or less	12	0,76	0,76
2.01 - 5sqm	320	20,20	20,96
5.01 - 10sqm	570	35,98	56,94
10.01 - 15sqm	330	20,83	77,78
15.01 - 20sqm	152	9,60	87,37
20.01 - 25sqm	99	6,25	93,62
25.01 - 30sqm	35	2,21	95,83
30.01 - 35sqm	32	2,02	97,85
35.01 - 40sqm	14	0,88	98,74
40.01 - 50sqm	7	0,44	99,18
50.01 - 60sqm	4	0,25	99,43
Greater than 60sqm	9	0,57	100
Total	**1584**	**100**	

When the total floor space of a dwelling is divided by the number of occupants, more than half of all residents excluding single person households have about 5 to 15 sqm to themselves. Further analysis of the floor areas is presented above in table 6b which indicates that 77,7% of all residents have access to less than 15sqm and that 35% of residents have access to 5 to 10sqm. The concentration of small shacks separated by informal roads and footpaths should be considered for any future settlement upgrade and eventual housing.

Respondents were asked about the main use of their structure. Where they indicated uses other than residential, this was recorded in the database but is not reflected in this analysis. Table 7 provides the breakdown of structure use.

06 Analysis

Table 7: Main use of structures

Structure main use	Frequency count	Percent
Residential only	2661	87,65
Residential and Other	375	12,35
Total	**3036**	**100**

The majority of respondents indicated that their dwellings were used for residential purposes only. Secondary use of dwellings ranged from spaza shops, places of worship, crèches, shebeens and hairdressers.

Container used as community hall

Structure used as spaza shop

06 Analysis

Residents were asked to indicate the age of dwellings, and this was transposed in GIS maps. This is reflected in figure 7 below.

Figure 7: Map indicating age of structures categorised

Figure 7 above indicates a high proportion of dwellings between 31 to 35 years old. This reveals that residents were making homes for themselves in Kanana as early as 1986. Moreover, there was a high concentration of newer shacks aged zero years old in the central and southern parts of the settlement. The settlement history, discussed earlier, gives some context to the formation of the settlement in 1989.

Kanana's structures are made up of a collection of various materials, such as wood, plastic and zinc sheets. The structures are not in a good condition and reveal the effects of many years of exposure to adverse weather, flooding and fire (in some cases). Community members reflected constantly on the fact that it gets very cold in winter and many people fall ill.

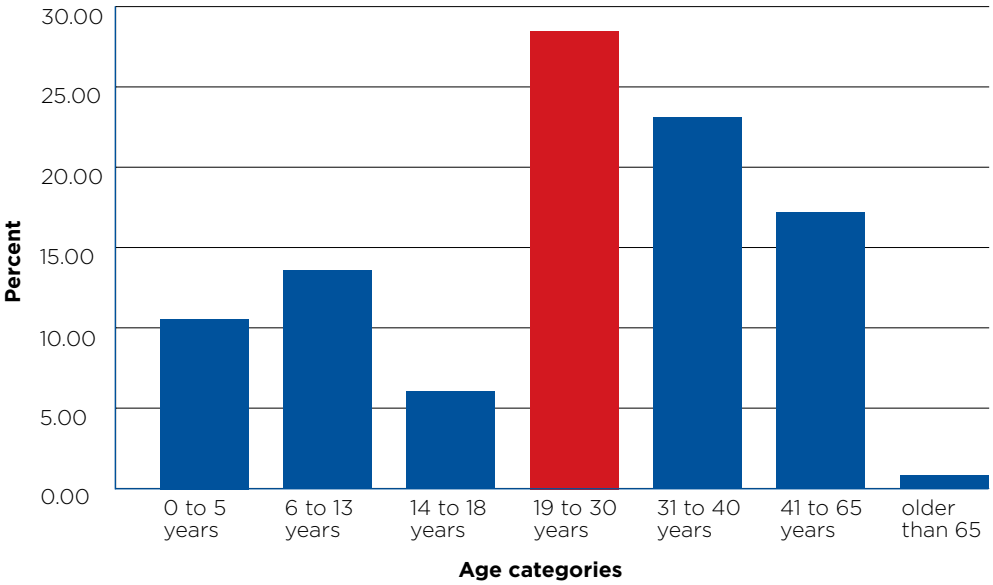
06 Analysis

6.2. DEMOGRAPHICS OF KANANA POPULATION

6.2.1. Age distribution

Enumeration data confirms that the majority of Kanana residents are people younger than 30 years old. This explains how children of the parents who first settled on the land in 1989 are entering adulthood, and since space is limited, they are forced to erect small one-room shacks and are generally single households (see table 8).

Figure 8: Age distribution of Kanana population



60% of residents are younger than 30 years old, and 28,5% are aged between 19 and 30. In figure 8 above, the split of the age groups is presented.

School children in Kanana

06 Analysis

Due to the significant number of single person households, it was necessary to examine the age distribution of this population. Table 8 below provides the age distribution of single person households categorised.

Table 8: Age distribution of single person households

Age Categories	Frequency count	Percent	Cumulative percent
14 to 18 years	14	1,00	1,00
19 to 25 years	326	23,19	24,18
26 to 30 years	305	21,69	45,87
31 to 35 years	287	20,41	66,29
36 to 40 years	190	13,51	79,80
41 to 50 years	168	11,95	91,75
51 to 60 years	83	5,90	97,65
61 to 65 years	18	1,28	98,93
older than 65 years	15	1,07	100
Total	**1406**	**100**	

As mentioned before, young people are entering adulthood and are most likely the builders of more recently-built shacks. Figure 18, Section 6.5 shows that the majority of residents have lived in the dwellings for less than 5 years. In table 8, the age split of single households is presented, which confirms that 65% of single households are younger than 35 years old, and most significantly, 23,2% is aged between 19 and 25 years old.

6.2.1.1 A profile of youth

Since 60% of residents are younger than 30 years old, it becomes necessary to examine youth in the settlement in more detail. Table 9 explores self-assessed employment status of respondents aged 19 to 30 years old.

Table 9: Employment status by gender for Kanana residents aged 19 to 30 years

	Gender		
Employment status	Male	Female	Total
Employed	407	263	670
Self-employed	32	18	50
Unemployed	435	721	1156
Total	**874**	**1002**	**1876**

Table 9 shows that 61% of youth, which makes up 60% of the settlement population, are unemployed. Women are particularly vulnerable since 62% of the unemployed youth are females.

06 Analysis

A young population, high unemployment, and precarious livelihoods create conditions of high vulnerability, especially for women. In other circumstances, this could be an opportunity for entrepreneurial activity, but only 2% of working youth reported being self-employed. This is further explored in table 10 where the income distribution of youth aged 19 to 30 years old is analysed.

Table 10: Income distribution for age cohort 19 to 30 years old

Income categories	Frequency count	Percent	Cumulative percent
No Income	458	36,15	36,15
R1 - R400	61	4,81	40,96
R401 - R800	119	9,39	50,36
R801 - R1500	272	21,47	71,82
R1501 - R3500	291	22,97	94,79
R3501 - R7500	57	4,50	99,29
R7501 - R15000	8	0,63	99,92
above R15000	1	0,08	100
Total	**1267**	**100**	

Table 10 shows that more than 70% of the working youth aged between 19 and 30 years old earn less than R1500 per month, and almost 23% earn between R1501 – and R3500. 36% of youth earn no income.

6.2.2. Gender breakdown

The enumeration covered a broad spectrum of demographic data. Figure 9 provides us with the gender breakdown of the settlement population.

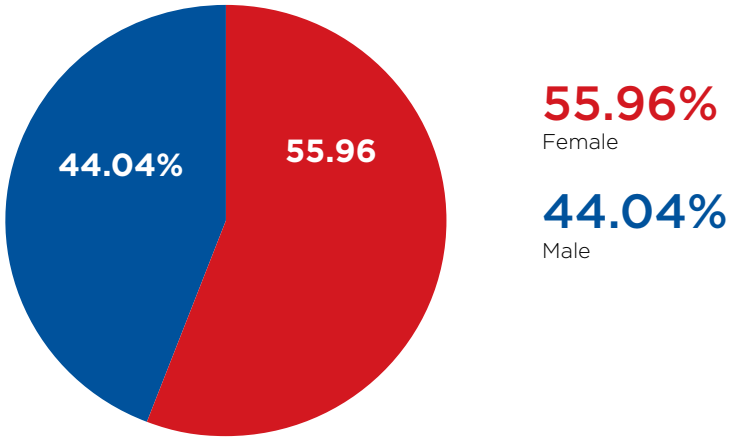


Figure 9: Gender breakdown

56 out of every 100 people are women, as figure 9 illustrates. This is slightly higher than the national average of 52 women per every 100 people (StatsSA, Census 2011).

06 Analysis

Table 11 provides important insight into the demographics associated with the settlement trend of small one-room shacks, which was established in the preceding section. In this table, gender split of the household size for all structures enumerated (3067 structures) is presented.

Table 11: Number of people enumerated per structure by gender of household heads (column percentages)

Number of people enumerated per structure	Gender		
Employment status	Male (%)	Female (%)	Total
1	50,87	34,65	43,75
2	17,62	22,38	19,71
3	11,34	18,36	14,42
4	10,12	12,71	11,26
5	6,16	6,1	6,13
6	2,5	2,75	2,61
7	0,93	1,56	1,21
8	0,35	0,82	0,55
9	0,12	0,3	0,2
10	0	0,37	0,16
Total	**100**	**100**	**100**
	n=3067		

Single households are predominantly male, while females make up the majority of two- and three person households. The proportion of female-headed households is high at 34,7% for single-person households.

In table 9, the employment status of people between 19 and 30 was presented. Table 12 takes a wider look at settlement dynamics related to employment.

Table 12: Employment status by gender for respondents 16 years & older (row percentages)

Employment status 16 years and older	Gender		
	Male	Female	Total
Employed	58,89	41,11	100
Self-employed	57,4	42,6	100
Unemployed	36,31	63,69	100
Total	**46,72**	**53,28**	**100**
	n=4867		

Woman are the least economically active, with a high prevalence of unemployment at 63,7%. Of all respondents who identified their status as “employed”, 59% were males while only 41% were females.

06 Analysis

6.2.3. Education enrolment and school attendance

COMMUNITY VOICES

"The crime and the unemployment are the most difficult things in Kanana and the health hazard. The problem in Kanana is that there are a lot of pre-schools here but they are not from government. If you have one child and you are not working, where can you get the money to feed yourself and that child and to pay the crèche? Sometimes you pay R300 per month for the crèche."

In keeping with the young age profile of Kanana residents, it is not surprising that the majority of children are currently enrolled in primary school. Table 13 provides a cross tabulation of school going age by enrolment.

Table 13: Age categorised by school enrolment for individuals aged 0 to 18 years old

Age categorised	Pre-school	Primary school	Secondary school	College	University	Not in any school	Total
0 to 5 years	364	10	0	0	0	329	703
6 to 13 years	54	805	18	0	0	22	899
14 to 18 years	0	77	285	5	2	35	404
Total	**418**	**892**	**303**	**5**	**2**	**386**	**2006**

Children attending primary school are at 44%, followed by pre-school at 20%. College and university attendance is extremely low.

Of all residents who were recorded as enrolled in school/college or university, 49% (1336) indicated that they were enrolled in the Gugulethu area. There is also a high proportion (22% or 620 children) of children who attend school outside Cape Town. A significant number of children also attend schools in Heideveld and Langa (146 and 135 children respectively).

Creche in Kanana

06 Analysis

6.2.4. Employment

In Kanana there are 4538 individuals who would be classified as working age (19 years old to 64 years old). The majority of residents are unemployed with the remaining 47% of residents either employed or self-employed. Unemployment in Kanana is double the national figure of 26.7%[8].

In table 9, it was established that youth unemployment is extremely worrying as more than 60% of people aged 19 to 30 years old are unemployed. Table 14 provides a cross tabulation of age by self-assessed employment status to better understand unemployment trends within different age cohorts.

8 StatsSA, 2016

Age categories	Employed	Self-employed	Un-employed	Total
14 to 18 years	4	2	245	251
Row %	1.59	0.80	97.61	100.00
19 to 25 years	271	28	734	1033
Row %	26.23	2.71	71.06	100.00
26 to 30 years	399	22	423	844
Row %	47.27	2.61	50.12	100.00
31 to 35 years	452	34	355	841
Row %	53.75	4.04	42.21	100.00
36 to 40 years	395	23	263	681
Row %	58.00	3.38	38.62	100.00
41 to 50 years	416	44	322	782
Row %	53.20	5.63	41.18	100.00
51 to 60 years	137	11	144	292
Row %	46.92	3.77	49.32	100.00
61 to 65 years	7	4	54	65
Row %	10.77	6.15	83.08	100.00
Total	2081	168	2540	4789
Row %	43.45	3.51	53.04	100.00

Table 14: Age by employment status (row frequencies & percentages)

06 Analysis

Table 14 indicates that the youth (19 to 25 years old) make up the age group with the highest number of unemployed people (734 of 4789, or 15%). 31 to 35 year olds are the most economically active, followed by 41 to 50 year olds.

Table 12 above provided a cross tabulation of employment status by gender but looking at row percentages allowing for comparison between different employment statuses. Table 15 provides the same cross tabulation but with column percentages allowing for a deeper comparison between genders with regards to employment status.

Table 15: Employment status by gender for respondents 16 years & older (Column percentages)

Employment status 16 years and older	Gender		
	Male	Female	Total
Employed	54,62	33,62	43,45
Self-employed	4,28	2.83	3,51
Unemployed	41,1	63,55	53,04
Total	**100**	**100**	**100**
n = 4787			

Table 15 shows that the majority of Kanana residents are unemployed (53%) and women are worse affected by low incomes (63% of women are unemployed compared to 41% of males). It was established that youth (younger than 30 years old) unemployment stands at 61%, and there is a very low cohort of secondary and tertiary school pupils.
All residents who indicated that they worked were asked to provide their area of work as well as the main transport type used to get to work. Figure 10 provides the percentage split for different modes of transport used to travel to work.

Self employment through spaza shops

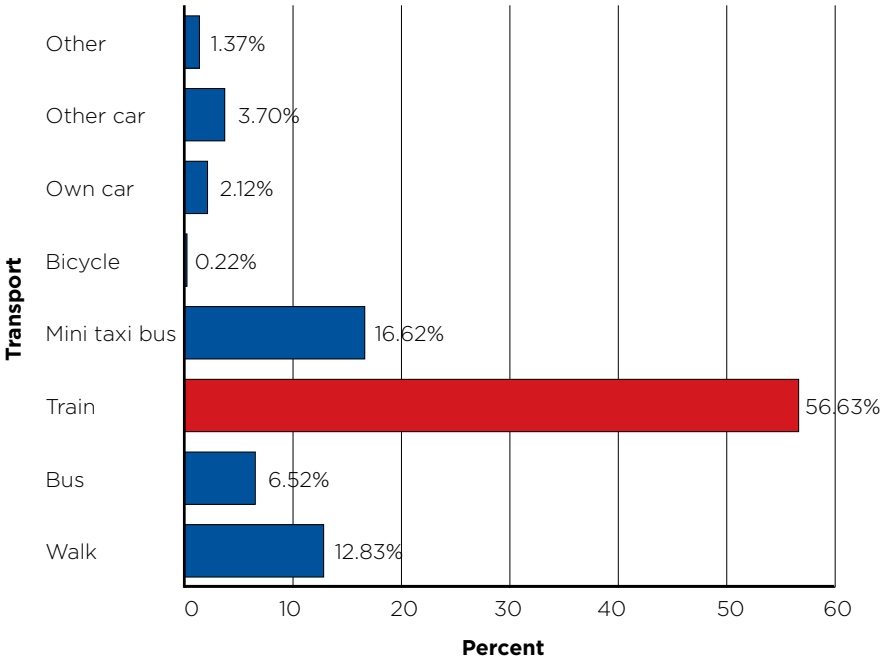
06 Analysis


Temporary work through EPWP

COMMUNITY VOICES

"The advantages to be in Kanana are for work. There is this airport industria where most of the people of Kanana are working. We also have malls where some people are working. The train is not far from Kanana so some people take the train to go to Epping."

Figure 10: Percentage breakdown of main transport type to work



Earlier, it was observed that Kanana enjoys close proximity to the Airport Industria. Other areas of employment include Epping. The majority of commuters travel by train, followed by minibus taxi and walking.

All residents who indicated that they worked were also asked to estimate the travel time to their place of employment. Table 16 provides a breakdown of this estimation.

06 Analysis

Table 16: Travel time to work

Travel time to work	Frequency count	Percent	Cumulative percent
Less than 15 minutes	185	8,16	8,16
15 to 29 minutes (just under half an hour)	791	34,89	43,05
30 to 59 minutes (just under an hour)	968	42,70	85,75
60 to 89 minutes (just under an hour and a half)	239	10,54	96,29
90 minutes and more	72	3,18	99,47
Don't know	12	0,53	100
Total	**2267**	**100**	

Table 16 illustrates that largest number of commuters travel between 30 minutes and an hour, while a large proportion travel less than that.

6.2.5. Household income and expenditure

Questions around household income were aimed primarily at the household head. In the cases where the household head was not the primary respondent, people close to the day-to-day activities, such as the spouse or partner, accounted for the questions related to income and expenditure. Questions related to social grants were directed at all household members.

Table 17: Income distribution

Household income	Frequency count	Percent	Cumulative percent
No income	807	26,31	26,31
R1 - R400	148	4,83	31,14
R401 - R800	260	8,48	39,62
R801 - R1500	783	25,53	65,15
R1501 - R3500	871	28,40	93,54
R3501 - R7500	180	5,87	99,41
R7501 - R15 000	17	0,55	99,97
Above R15 000	1	0,03	100
Total	**3067**	**100**	

Table 17 above provides important information about the income levels of the settlement. 3067 responses are tabulated above. 65% of respondents earn less than R1500 per month, while a very large proportion of 26% earn no income. Table 18 was produced using data on various expense categories for each household. This was then tallied up to produce a total household expenditure amount that was then categorised to match income categories in table 17.

06 Analysis

Table 18: Expenses distribution

Expenses categorised	Frequency count	Percent	Cumulative percent
No expenses	696	22,69	7,82
R1 - R400	192	6,26	14,16
R401 - R800	460	15,00	36,58
R801 - R1500	789	25,73	65,54
R1501 - R3500	814	26,54	92,81
R3501 - R7500	106	3,46	99,58
Greater than R7500	10	0,33	100
Total	**3067**	**100**	

The majority of respondents (65%) reported spending up to R1500 per month. There is a close connection with the previous data set in table 18, and therefore it is likely that Kanana residents break even every month, with no money left over for savings. It should be noted that 696 households reported to have no expenses could be seen as an indicator that such households could be dependent on other households for basic goods.

Figure 11: Percentage distribution of grant type

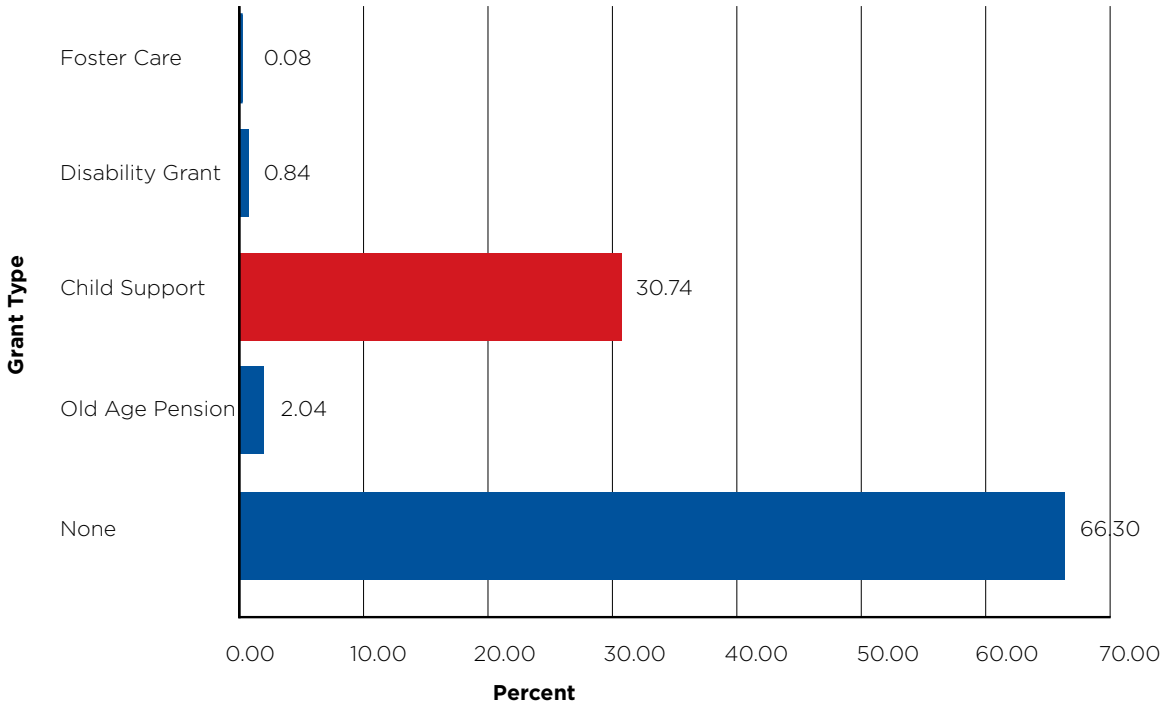


Figure 11 shows that a high proportion of residents receive a child support grant from government. 2049 people reported receiving the monthly grant. There are 1609 children (24% of the total settlement population) in Kanana under the age of 13 years old. The child support grant is R350 per child per month, the foster child grant is R890, the disability grant is up to R1500 and the old age pension grant is R1500. According to the enumeration data, there are only 136 pensioners (2% of population) who receive the old age grant.

06 Analysis

6.3. ACCESS TO SERVICES

Figure 12: Kanana amenities

06 Analysis

6.3.1. Water access

In Kanana settlement, 56 taps have been mapped. This results in a ratio of 57 households per tap. The City of Cape Town has a standard of one water tap for 25 households. Kanana is underserviced in terms of access to clean water. Water points are marked in blue with a 25m radius circle in figure 12 above and figure 13 below. It is clear from the spatial analysis that there is a need for access to clean water in the eastern and south-central parts of the settlement, where very few services are located.

Figure 13: Map of Kanana water points with 25m radius

The spatial analysis and ratios clearly illustrate that access to clean water is a challenge in Kanana.

06 Analysis

COMMUNITY VOICES

"In Kanana people are not allowed to do their washing next to the taps. They can only take water from the tap and do their washing inside their houses because there are no drains."

Fetching water in Kanana

6.3.2. Sanitation

COMMUNITY VOICES

"Sometimes they (the service provider) take the buckets, for example on Sunday and (only) bring them back on Monday. Then you have to walk and look for your bucket and for two days, you can be without a toilet. These buckets are terrible. It is painful. We are really not satisfied with the buckets. We need flush toilets."

Bucket toilet in Kanana

Bucket removed from cubicle

In Kanana, 824 toilets were mapped during the enumeration, which is a ratio of 4 households per toilet. 99% of respondents said their primary toilet was a chemical or temporary toilet. The CoCT aims to provide one toilet between five households. Despite this coverage, there are concerns that chemical/temporary toilets are not well serviced. The typology of the land and soil conditions (that being a discontinued dumpsite) makes it difficult to provide permanent services to all households. This remains a major challenge for long-term settlement upgrading.

Table 19: Percentage distribution of sanitation access

Access to toilets	Frequency count	Percent	Cumulative percent
Communal use	1475	48,58	48,58
Household use only	725	23,88	72,46
Limited to a few families	836	27,54	100
Total	**3036**	**100**	

Table 19 provides interesting perspectives into the usage of toilet facilities. While the majority of residents share toilets, there is a high proportion of households who have secured exclusive use of toilets (24%) and also a high proportion of households who share (27%). The exclusivity of toilet use is positive and negative. On the positive side, households who retain control over the use of the toilets can maintain it better, while on the negative side, conditions might arise where some households are denied access to decent sanitation, which can cause considerable conflict.

06 Analysis

Figure 14: Map showing sanitation access with 25m radius

The location of toilets is presented in figure 14, with the same 25m radius circles. This shows that Kanana residents have better access to sanitation than water services. It could be an option to install standpipes in close proximity to clusters of toilets, and the perimeter can be secured through adequate lighting and other safety measures.

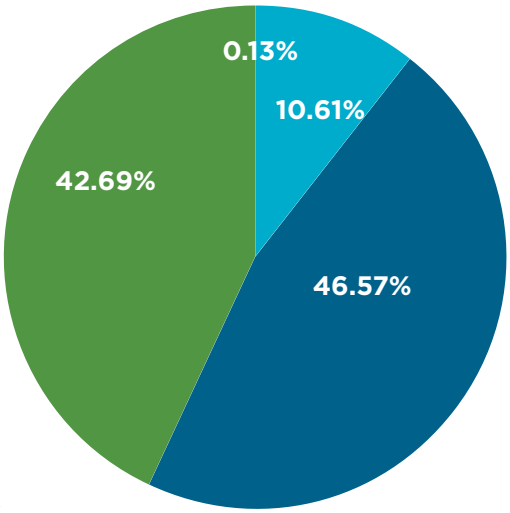
06 Analysis

6.3.3. Electricity

Electrification in Kanana

COMMUNITY VOICES

"Most of our people do have electricity. We have a prepaid meter where we have to go and buy electricity. Those who don't have get from their neighbours."



42.69%
Prepaid electricity meter inside structure

46.57%
No electricity

0.13%
Other

10.61%
Connection to neighbour's meter

Figure 15: Percentage breakdown of electricity access

The data reveals that access to energy is mixed. Roughly the same proportion of people have their own electricity meters compared to those who have connections to their neighbours' electricity. There are also high proportions of households who have no access to electricity (10,6%). Figure 15 provides a split of access to energy.

06 Analysis

Figure 16: Map showing electricity access in Kanana

The electricity grid has been extended deep into Kanana, as the spatial analysis in figure 16 illustrates. Some central areas reported no access to electricity, while the proportion of those with electricity boxes and those with connections are mixed throughout. To summarise, more than 90% of Kanana households have access to v, but only 46,6% have an electricity box.

06 Analysis

6.3.4. Community services and local business

EPWP workers

COMMUNITY VOICES

"Because there are lots of projects in the community like Mawose, the cleaning project, some people work (during the week). But there are also people who sit in the sun because they don't have anything to do. For these projects, the names come from the database but they can only take a certain number, like 15 people, to work for them. But here, we are many more than 15 people."

Small business through spaza shops

COMMUNITY VOICES

"I sell chips, meats, mealies, bread, rice and drinks. I get my products from the wholesaler. Most people who come are young children. When I started my business I was selling hampers. People would come during mid-month and borrow money from me whatever they needed. At the end of the month they repaid me with no extra cost. I wish I could restart a business again.

06 Analysis

The informal economy is a significant economic force in a settlement characterised by such high unemployment. The residents' comments reflect the competition for customers and how residents sometimes sell liquor without licences.

Figure 13, presented earlier, indicated a high proportion of shebeens in the northern and southern parts of the settlement. 16 shebeens were counted during the enumeration. It is also worth noting, from figure 13, that other commercial uses, such as beauty salons, were located on Steve Biko Street, where the greatest catchment of customers is possible. Other community uses, such as crèches and churches, were well distributed across the settlement.

Table 20 below shows that the majority of residents are able to access local services by foot. It is also clear that the density of the settlement does not allow for ease of access to sports/playgrounds.

Table 20: Accessing community facilities inside or within walking distance to settlement

Type of service accessed	Number of structures accessing	Percentage of structures
Structures with occupants accessing community halls	2952	97,2
Structures with occupants accessing creche	2581	85,0
Structures with occupants accessing spaza shops	2963	97,6
Structures with occupants accessing shebeens	2557	84,2
Structures with occupants accessing sport grounds	267	8,8
Structures with occupants accessing playgrounds	205	6,8
Structures with occupants accessing religious structures	1986	65,4
Structures with occupants accessing health facilities	650	21,4

06 Analysis

6.4. HEALTH AND DISASTERS

COMMUNITY VOICES

"Young people keep themselves busy here in the community hall through events and dance. Other ones kick the ball (close to the high way) because we don't have sports fields. Most of the times they (young people) join gangsterism at an early age. So to defend themselves from putting their lives in danger, they decide to play next to the N2 although it is also dangerous."

Kanana is located on environmentally sensitive land in close proximity to the N2 motorway. The quotes above are illustrative of life in Kanana. High youth unemployment, a very dense settlement, and constraints for long-term development make Kanana a challenging settlement to upgrade. The distribution of services (see Figure 13 again) also shows that there are very few health facilities.

Accessing medical services	Frequency count	Percent	Cumulative percent
Clinic in settlement	27	0,89	0,89
Clinic outside settlement	2267	74,74	75,63
Mobile clinic	162	5,34	80,98
Public hospital	524	17,28	98,25
Private doctor	47	1,55	99,80
Sangoma	6	0,20	100
Total	**3033**	**100**	

Table 21: First port of call for medical assistance

Of Kanana's residents, 75% access health services outside the settlement and a further 17% access a public hospital. One community leader thought that a mobile clinic could be a temporary solution to give people better access to services.

View of Kanana

06 Analysis


Conditions affecting quality of health

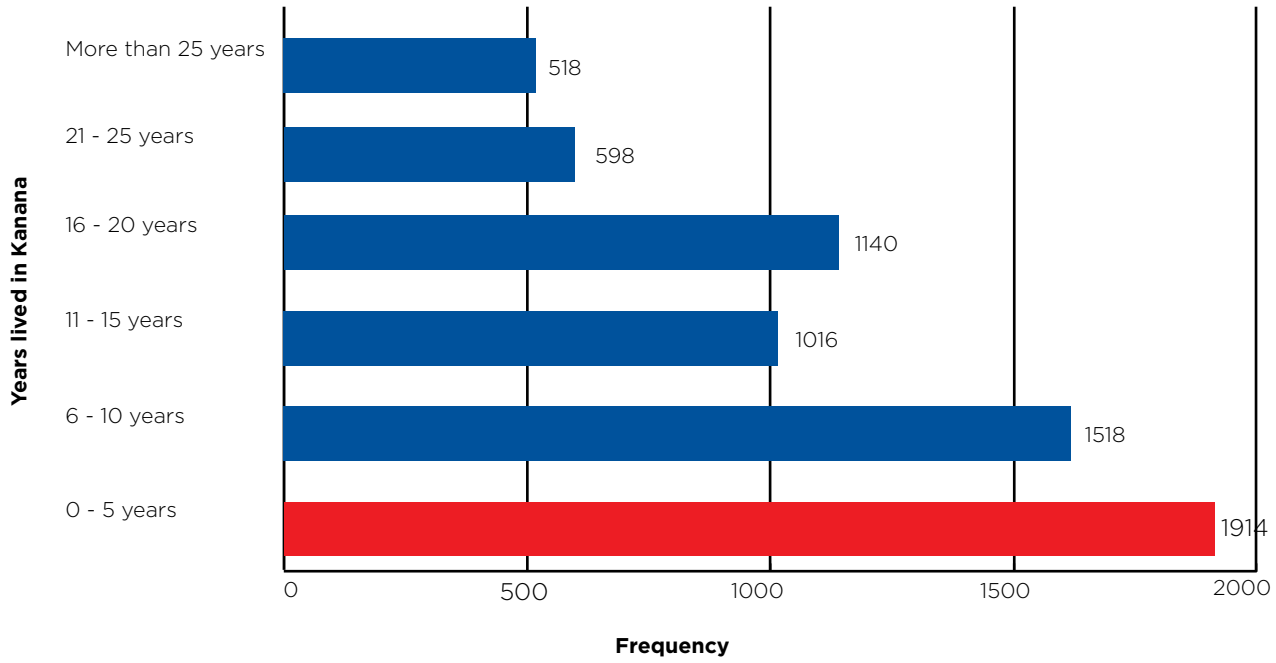
COMMUNITY VOICES

"We need to teach our children at the early stage about hygiene and health. We don't have a clinic and we need a mobile clinic. For example, when some people get TB, they will use a mask at the hospital but when they get home they don't care."

6.5. SETTLEMENT DYNAMICS

An analysis of the number of years people have lived in Kanana confirms a central trend in this report: young people have recently moved away from their parents' dwellings and are forced to live in small one-room shacks. Figure 17 provides an overview of the number of years lived in the settlement. This was asked of every structure occupant.

Figure 17: Number of years lived in Kanana categorised



The majority of residents indicated that they have lived in their shelters for less than five years. After the backyarders of Gugulethu occupied the land in 1989, the children grew up and are now erecting shacks in all the vacant spaces in Kanana. A minority of respondents have lived in their shelter for longer than 20 years. Table 24 below indicates that a high proportion of residents believe that their move into Kanana settlement will provide them with a formal housing opportunity.

6.6. SETTLEMENT PRIORITIES

Respondents in Kanana were asked to identify their current main priorities in the settlement. They were asked to do this by ranking these priorities in order of importance. This was designed to determine which physical factors needed urgent addressing and could point to values that residents had around their needs. Table 22 provides an overview of the priorities of Kanana residents as ranked by the structure level respondents.

Household main priorities	1	2	3	4	5	Total
Waste collection	40,54	18,32	13,78	9,69	17,67	100
Access to toilets	14,33	44,82	17,02	12,49	11,35	100
Access to formal housing	50,13	16,39	25,23	4,77	3,48	100
Access to water	5,74	15,59	27,02	39,29	12,37	100
Access to health care	7,04	12,90	20,78	24,95	34,33	100
Addressing crime	10,49	13,31	19,75	27,98	28,46	100
Access to electricity	5,36	16,09	15,21	27,70	35,63	100
Addressing flooding	6,73	14,79	20,35	25,33	32,80	100
Preventing shack fires	12,16	10,00	14,32	24,05	39,46	100
Addressing evictions	12,90	6,45	12,90	9,68	58,06	100
Total	20,57	20,08	20,13	19,67	19,55	100

Table 22: Main household priorities by ranking (row percentages)

Access to formal housing appears as a major priority having been ranked at number one 50% of the time, trailed closely by waste collection services at 40%. Secondly, access to better sanitation features highly. It was established earlier that the current coverage is 1:8 toilets per household, which is slightly lower than the City's ideal standard of 1:5. Concerns have been raised with regard to the quality of services, the safety of units, and the exclusivity that some households enjoy at the expense of others.

The third-highest priority is access to water. Only 27% of respondents deemed this their third priority, but taking into account that the current ratio for this service is 1:119 taps per person, it is understandable that access to clean water features as the third-highest priority. Crime and shack fires only feature as fourth and fifth priorities. Concerns about evictions also feature as the fifth priority.


Waste pollution


Flooding

06 Analysis

As part of the study design, questions were developed to determine under which conditions people would be willing to move from Kanana. Respondents at the structure level were asked to rank their main reasons for wanting to move out of the settlement. The ranking system employed was from one to five with one as the most important reason.

Table 23: Reasons to move out of settlement by ranking order

Rank reasons to move out of the settlement	1	2	3	4	5	Total
To access work opportunities	1076	633	274	299	415	2697
To access better education facilities	91	834	756	551	312	2544
To access better health facilities	172	827	1130	488	243	2860
To access a formal house	1497	345	300	678	93	2913
Improved transport access	120	242	338	630	1197	2527
Family or relationship reasons	45	79	142	257	554	1077
Total	3001	2960	2940	2903	2814	14618

Table 23 provides the main reasons to move out of the settlement against the ranking scored by respondents. Access to a formal house was ranked as the number one reason to move out of Kanana 1497 times out of a possible 3001. The next highest count was 1076 respondents ranking access to better job opportunities as the secondmost important reason. These data tables confirm a remark made earlier by a community leader:

Table 24: Reasons to move out of settlement by ranking (row percentages)

Rank reasons to move out of the settlement	1	2	3	4	5	Total
To access work opportunities	39,90	23,47	10,16	11,09	15,39	100
To access better education facilities	3,58	32,78	29,72	21,66	12,26	100
To access better health facilities	6,01	28,92	39,51	17,06	8,50	100
To access a formal house	51,39	11,84	10,30	23,27	3,19	100
Improved transport access	4,75	9,58	13,38	24,93	47,37	100
Family or relationship reasons	4,18	7,34	13,18	23,86	51,44	100
Total	20,53	20,25	20,11	19,86	19,25	100

Settlement upgrading and economic development are two of the most important issues that need to be addressed in the medium and longer term, with improved access to services dominating shorter-term priorities. Factors such as improved transport were not ranked very high as often but this could be indicative of the fact that employment is relatively nearby judging by commuting time (table 16).

06 Analysis

6.7. IMPLICATIONS OF FINDINGS FOR HUMAN SETTLEMENTS

One of the ultimate objectives of the enumeration study was to gather data that could inform future planning of human settlements in the area. Respondents were asked a number of questions related to the housing subsidy and other human settlement factors and this section will unpack some of the information collected.

6.7.1. Planning considerations

Single-person households

Of persons living on their own, 90% indicated that they had never been married. There are 1273 single-person households whose occupants are 18 years and older, South African, with household income of R3500 or lower, and some have financial dependents that live outside of the structure.

Marital status	Frequency count	Percent	Cumulative percent
Married	84	5,94	5,94
Cohabiting/partners	2	0,14	6,09
Divorced or separated	31	2,19	8,28
Never married	1,273	90,09	98,37
Traditional/customary	18	1,27	99,65
Widow/widower	5	0,35	100
Total	**1,413**	**100.00**	

Table 25: Marital status of single-person households

Household size

In Kanana informal settlement there are approximately 3199 households living in 3036 shelters. This represents 91% of the total number of structures numbered during the enumeration exercise. By counting the number of people per household, the settlement population is 6697 people, with an average household size of 2,09 persons. If single-person households (1406) are excluded, the household size of the remaining 1630 households has an average household size of three people.

Age categories	Frequency count	Percent	Cumulative percent
14 to 18 years	14	1	1
19 to 25 years	326	23,19	24,18
26 to 30 years	305	21,69	45,87
31 to 35 years	287	20,41	66,29
36 to 40 years	190	13,51	79,8
41 to 50 years	168	11,95	91,75
51 to 60 years	83	5,9	97,65
61 to 65 years	18	1,28	98,93
older than 65	15	1,97	100
Total	1406	100	

Table 26: Age distribution of single-person households

06 Analysis

Age profile

Table 27: Kanana age profile

Age categories	Frequency count	Percent	Cumulative percent
0 to 5 years	704	10.60	10.60
6 to 13 years	905	13.62	24.22
14 to 18 years	404	6.08	30.30
19 to 30 years	1893	28.49	58.79
31 to 40 years	1534	23.09	81.88
41 to 65 years	1145	17.23	99.11
Older than 65	59	0.89	100
Total	**6644**	**100**	

As discussed above, the age profile of Kanana points to a relatively young population of which 82% is younger than 40 years. From a planning perspective, this is quite important as the Department of Human Settlements has indicated that it would prioritise people 40 years and older in terms of allocation of housing.

Social cohesion

The residents of Kanana show a very strong link to the local area as 48% of school- or college-going residents attend institutions in Gugulethu. More than 40% of these residents reported that they commute by walking or minibus for less than 30 minutes. Residents in Kanana also indicated the use of facilities inside or near the settlement. Over 90% of structures were accessing facilities inside or near the settlement such as community halls, crèches, spaza shops, shebeens and religious structures. However, links between gangsterism and a lack of sports and playing fields have been made. Residents reported that between 6 and 8% had access to such facilities, and comments in the focus group session made it clear that children play football very near to the N2 because of a lack of facilities in the area.

Income and expenditure

A high majority of households, 93%, indicated incomes of R3500 or less, with 26% of households indicating no income. 92% of households indicated expenditure of R3500 or less. This data points to the overall income profile of Kanana residents falling within the housing subsidy qualification criteria.

06 Analysis Pathway to Qualification

6.7.2. Pathway to qualification

This section provides information on the process for subsidy qualification and highlights what criteria is considered by the Department of Human Settlements.

Subsidy qualification criteria

You qualify for a housing subsidy if:

- You are a South African citizen or have a permanent residence permit.
- You are 18 years or older.
- You are married or living with a partner.
- You are single or divorced, and have proven financial dependants permanently residing with you (military veterans without any financial dependants can apply).
- Your maximum monthly household income is R3 500 or less before deductions (military veterans earning up to R10 416 per month can apply).
- You or your partner are not current or previous property owners.
- You or your partner have never received a subsidy from the government.

Subsidy programmes

Housing and services are delivered under subsidy programmes. Potential beneficiaries may apply directly to the Department for an individual subsidy or a Finance Linked Individual Subsidy (FLISP).

Subsidy Programme	Gross Monthly Household Income Category	Subsidy Amount
Individual Subsidy		
The subsidy can be used to: • Buy an existing house • Buy a house on a plot-and- • plan basis; or • To finish an incomplete house You must have been on the municipal housing demand database for a minimum period of 10 years.	R0 - R3 500 Aged, disabled or medical condition: R0 - R3 500	R160 573 Purchase price up to R160 573 plus disability variance
Finance Linked Individual Subsidy (FLISP)		
• Assists you by providing a subsidy to reduce your home loan and therefore makes your monthly instalment lower. • Please refer to the table at the end of the document for the FLISP scales.	R3 501 - R15 000	R20 000 - R87 000 on a fixed scale, depending on your income.

Potential beneficiaries cannot apply directly to the Department for subsidies for the programmes below. These programmes are used by a developer (who may either be the Municipality or the Province) to deliver houses and services. Grant funding is made available to the developer for each project. The developer will apply for a subsidy on behalf of the beneficiaries.

UPGRADING OF INFORMAL SETTLEMENTS PROGRAMME (UISP)
This programme seeks to upgrade the living conditions of poor families living in informal settlements by providing secure tenure and access to basic services and housing.

Subsidy Programme	Gross Monthly Household Income Category	Subsidy Amount
Individual Subsidy		
• It provides funding for the construction of houses on those serviced sites that were received before 1994. • You can apply for this subsidy if you already own a serviced site and wish to construct a house, or upgrade/complete a non-subsidised house. • An application must be done on a project basis via your municipality.	R0 - R3 500	R109 947
Enhanced Peoples Housing Process (EPHP)		
• Assists households who want to participate in building their own home. • The consolidation subsidy (see above) can be accessed through EPHP. • Community contribution before and during the project includes, but is not limited to sweat equity. • Technical assistance to build the house is available as facilitation and establishment grants.	R0 - R3 500	R110 947
Integrated Residential Development Programme (IRDP)		
• Provides for the acquisition of land, servicing of stands and construction of houses.	R0 – R3 500 (abled persons)	R160 573 – qualify for a serviced site and a 40 m2 house.
	R0 – R3 500 (disabled persons)	R160 573 plus disability variance– qualify for a serviced site and a 45 m2 house.
	R3 501 – R7 000	Persons who are unable to qualify for a home loan may receive a free serviced site.

Subsidy Programme	Gross Monthly Household Income Category	Subsidy Amount
Military Veterans Subsidy		
• This programme is a joint venture between the Departments of Human Settlements and Military Veterans. • You must be on the Department of Military Veterans' (DMV) database.	R0 - R10 416	R188 884 (R110 947 + DMV contribution)
Enhanced Extended Discount Benefit Scheme (EEDBS)		
Supports the transfer of pre-1994 housing stock to qualifying occupants that: • have a direct housing arrangement with the provincial department or municipality; • have not benefited from any other housing subsidy or programme; or • have an outstanding debt with the municipality or the provincial department.	R0 - R3 500 R3 501 - R7 000 R 7001 - R15 000	The entire debt is written off. R7 500 + 50% of the debit is written off. A maximum of R7 500 is written off.
Social, Institutional and Community Residential Unit Programmes		
• These programmes cater for persons opting to rent. • Institutional programme makes provision for a rent-to-buy option.	R1 501 - R7 500	Rental amount varies in terms of programme and income.

FLISP scale:	
Upper limit	R 87 000
Lower limit	R 20 000
Subsidy increment	R 1 175

Step	Increment band		
	Lower	Higher	Amount
1	3 501	3 700	87 000
2	3 701	3 900	85 825
3	3 901	4 100	84 650
4	4 101	4 300	83 475
5	4 301	4 500	82 300
6	4 501	4 700	81 125
7	4 701	4 900	79 950
8	4 901	5 100	78 775
9	5 101	5 300	77 600
10	5 301	5 500	76 425
11	5 501	5 700	75 250
12	5 701	5 900	74 075
13	5 901	6 100	72 900
14	6 101	6 300	71 725
15	6 301	6 500	70 550
16	6 501	6 700	69 375
17	6 701	6 900	68 200
18	6 901	7 100	67 025
19	7 101	7 300	65 850
20	7 301	7 500	64 675
21	7 501	7 700	63 500
22	7 701	7 900	62 325
23	7 901	8 100	61 150
24	8 101	8 300	59 975
25	8 301	8 500	58 800
26	8 501	8 700	57 625
27	8 701	8 900	56 450

Step	Increment band		
	Lower	Higher	Amount
28	8 901	9 100	55 275
29	9 101	9 300	54 100
30	9 301	9 500	52 925
31	9 501	9 700	51 750
32	9 701	9 900	50 575
33	9 901	10 00	49 400
34	10 101	10 300	48 225
35	10 301	10 500	47 050
36	10 501	10 700	45 875
37	10 701	10 900	44 700
38	10 901	11 100	43 525
39	11 101	11 300	42 350
40	11 301	11 500	41 175
41	11 501	11 700	40 000
42	11 701	11 900	38 825
43	11 901	12 100	37 650
44	12 101	12 300	36 475
45	12 301	12 500	35 300
46	12 501	12 700	34 125
47	12 701	12 900	32 950
48	12 901	13 100	31 775
49	13 101	13 300	30 600
50	13 301	13 500	29 425
51	13 501	13 700	28 250
52	13 701	13 900	27 075
53	13 901	14 100	25 900
54	14 101	14 300	24 725
55	14 301	14 500	23 550
56	14 501	14 700	22 375
57	14 701	14 900	21 200
58	14 901	15 000	20 000

7. CONCLUSION

07 Conclusion

The enumeration of Kanana informal settlement pocket, which covered 91% of all 3415 structures numbered, has revealed some surprising statistics about the settlement. There are a number of trends that should centrally inform future planning and decision-making:

- 48% of households are single, of which 66% are male, 75% are younger than 35 years old and 90% has never been married
- 41% of dwellings are single rooms
- 30,8% of single-household dwellings and 59% of all dwellings of other households are less than 30sqm
- 33% of residents reported to have lived in their dwellings for less than five years
- 78% of residents claim to own their dwellings
- 61% of youth are unemployed
- 97% of residents are South Africans, and 181 foreigners were recorded

The history of the settlement relates to backyarders from Gugulethu who occupied the land in 1989, and satellite photos confirm that the settlement expanded eastwards towards the N2. The settlement was founded on a discontinued landfill/ dumping site, which makes prospects for long-term development difficult without significant land rehabilitation.

Taking the history of the settlement into account, the enumeration data gives an accurate portrayal of a young and single population entering adulthood and leaving their parents' homes, but challenged by high levels of unemployment, small living spaces, and low level of educational attainment. The average household size of Kanana is 2.09 persons per household.

The implications for settlement planning and upgrade are tremendous. To attain the high densities of 159 dwelling units per hectare over 23.14 hectares and cause minimal disruption, a sensitive upgrading strategy needs to cater for a highly-mobile population. The high density of the settlement will require innovative tenure types, and consolidation housing might need to consider smaller apartments in higher density housing typologies. However, addressing the needs through the conventional housing package will clearly be unrealistic given the current beneficiary criteria. Economic growth is a top priority, as are quality open spaces. The established road network could be an important lever for the design of settlement consolidation.

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09 List of core team members

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