# KwaZulu-Natal: Informal settlements Status (2013)







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#### Acknowledgements

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## List of abbreviations

**CORC** Community Organisation Resource Centre

EΑ **Enumeration Area** 

**GHS** General Household Survey

HDA Housing Development Agency

**IES** Income and Expenditure Survey

**LaPsis** Land and Property Spatial Information System

**NDHS** National Department of Human Settlements

**PSU** Primary Sampling Unit

Stats SA Statistics South Africa

## Introduction

In terms of the HDA Act No. 23, 2008<sup>1</sup>, the Housing Development Agency ("HDA"), is mandated to assist organs of State with the upgrading of informal settlements. As part of the informal settlements upgrading programme, the HDA commissioned this report to update existing analysis on the profile of informal settlements in South Africa, nationally and provincially as well as for some of the larger municipalities. The analysis draws heavily on newly released Census 2011 data and also explores other data sources available at a national, provincial and municipal level to characterise conditions in informal settlements and to identify key trends. This report summarises available data for KwaZulu-Natal province.

<sup>1</sup> The HDA Act No.23, 2008, Section 7 (1) k

# Overview of census and survey data

This chapter describes the key data sources used in this study and outlines relevant limitations of the data as a precursor to exploring the data in more detail. As noted in the introduction, a primary objective of the study is to explore findings of the recently released 2011 Census with respect to informal settlements in South Africa, and to use that data to assess trends in terms of the number of households that live in informal settlements, their characteristics and access to basic services. The 2011 Census is thus the core data set explored in this review.

Aside from census data, the analysis is supplemented by other survey data sources including the 2010/11 Income and Expenditure Survey as well as the 2011 General Household Survey.

#### 2.1 Limitations of the Statistics South Africa data

Currently the 2011 Census data is available for analysis using Statistics South Africa's SuperWEB or SuperCROSS software. This system is not fully interactive; not all variables can be cross tabulated. By way of example, education and employment data cannot be analysed by type of main dwelling people live in. There are also variables that appear in the questionnaire that are not available at all for analysis. Most pertinent to this analysis, these include construction material of main dwelling, age of the dwelling and relationship to the head of the household. The 2011 Census 10% sample which will allow for a full interactive analysis will only be available towards the end of 2013.

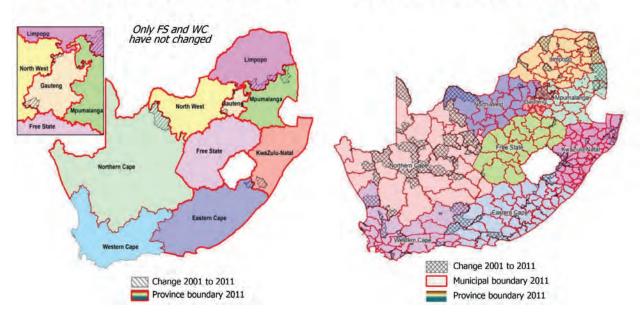
As noted a key objective is to identify trends. Because of provincial and municipal boundary changes since 2001 the comparison of the Census 2011 with previous censuses requires alignment of that data to 2011 municipal boundaries. Statistics South Africa has not yet publicly re-released Census 2001 data in line with these adjusted boundaries. Tables were produced with the assistance of Statistics South Africa<sup>2</sup>.

 $<sup>^{\</sup>rm 2}~$  Angela Ngyende of Statistics South Africa provided on-going assistance in this regard

#### PROVINCIAL AND MUNICIPAL BOUNDARY CHANGES SINCE 2001

#### **PROVINCIAL BOUNDARY CHANGES SINCE 2001**

#### **MUNICIPAL BOUNDARY CHANGES SINCE 2001**



Source: Map sourced from Stats SA's "Census 2011 Methodology and highlights of key results"; Data sourced from MDB (Municipal

Aside from census data, as mentioned previously the analysis is supplemented by other survey data sources including the 2010/11 Income and Expenditure Survey as well as the 2011 General Household Survey. These data sources may contain a bias, with older, better established informal settlements over-represented as the underlying sample frames may not include newer settlements.

#### 2.2 Definition of informal settlements

As a starting point it is critical to have a working definition of "informal settlements" that can be used to identify an appropriate proxy variable across the census and survey data sets. There are a number of definitions, some of which are summarised in the table below. While there is some variance across definitions, in most cases definitions emphasise the dwelling type; with temporary structures or dwellings that are built out of rudimentary materials as a dominant feature of informal settlements. In addition, several definitions refer to ownership of the land, the nature of land tenure and formal demarcation.

DEFINITIONS OF INFORMAL SETTLEMENTS						
Data source Definition of an informal settlement						
Statistics South Africa	"An unplanned settlement on land which has not been surveyed or proclaimed as residential, consisting mainly of informal dwellings (shacks)."  Definition of an informal dwelling: "A makeshift structure not approved by a local authority and not intended as a permanent dwelling"					
National Department of Human Settlements	The 2009 National Housing Code's Informal Settlement Upgrading Programme identifies informal settlements on the basis of the following characteristics:  • Illegality and informality;  • Inappropriate locations;  • Restricted public and private sector investment;  • Poverty and vulnerability; and  • Social stress					
KwaZulu-Natal Province	KwaZulu-Natal defines an informal settlement in accordance with the 2009 National Housing Code's Informal Settlement Upgrading Programme					
eThekwini Metropolitan Municipality*	"Structures which are made of rudimentary materials (wood, cardboard, metal sheets, mud, etc.) without any building plans approved, often on land that has been illegally occupied. Services are very basic or not available at all."					

Source: \*Faizal Seedat, Senior Manager: Housing Unit (Durban)

A further challenge relates to the boundaries of the settlement itself. Unlike suburbs which are formally proclaimed and demarcated, the boundaries of an informal settlement can be fluid particularly as the settlement grows. In some cases large areas are divided into a number of settlements, although it is not always clear on what basis the boundaries between settlements have been determined.

Census and survey data is not typically gathered and reported for settlements as such. Rather the data is collected from households that are located within a given Enumeration Area ("EA"). An EA is specific area allocated to one fieldworker to gather survey or census data in an allotted period of time. EAs typically contain between 100 and 250 households. EAs form the basis of sub-places which can be aggregated into larger areas known as main places, then into local municipalities, districts and provinces.

In some cases an informal settlement will coincide with a sub-place while in others a settlement might coincide with an EA. More commonly, however, there is no direct match between a settlement as defined by a community or municipality and a sub-place or an EA. Stats SA survey and census data therefore cannot enable us to explore individual informal settlements as a defined unit of analysis.

An analysis of informal settlements based on Stats SA survey and census data requires researchers to use a proxy variable. In the census there are two candidates. The first is based on the enumeration area while the second is based on the nature of the dwelling.

With regard to EAs Stats SA classifies each of the 103,576 EAs into one of ten EA Types in line with the status of the majority of visible dwellings at the time of demarcation. These are summarised in the table below.

2011 ENUMERATION AREA TYPES					
2011 EA types	EA land-use/zoning				
Formal residential	Single house; Town house; High rise buildings				
Informal residential	Unplanned squatting				
Traditional residential	Homesteads				
Farms					
Parks and recreation	Forest; Military training ground; Holiday resort; Nature reserves; National parks				
Collective living quarters	School hostels; Tertiary education hostel; Workers' hostel; Military barrack; Prison; Hospital; Hotel; Old age home; Orphanage; Monastery				
Industrial	Factories; Large warehouses; Mining; Saw Mill; Railway station and shunting area				
Smallholdings	Smallholdings/Agricultural holdings				
Vacant	Open space/ stand				
Commercial	Mixed shops; Offices; Office park; Shopping mall; CBD				

Source: Statistics South Africa

While some informal settlements are located in areas demarcated as urban informal areas, many are not. A further disadvantage of this proxy is that it is not available in other Stats SA surveys.

The second option is to use shacks not in a backyard as a proxy variable. This too is an imprecise proxy; some dwellings located in informal settlements are formal dwellings, or backyard shacks.

There are clearly weaknesses in both proxies. In the interests of aligning with other analysis and the common practice within municipalities, we will predominantly, although not exclusively, rely on shacks not in a backyard as a proxy for households living in informal settlements. As noted in the introductory comments, not all analysis can be undertaken by dwelling type given the limitations relating to the format of available Census 2011 data.

# A context for the findings: Broad housing trends 2001 to 2011 in KwaZulu-Natal

Before reviewing data for informal settlement specifically it is useful to explore key trends with regard to the growth in the number of households, as well as the primary dwellings they occupy for the province as a whole.

As noted by many researchers, any analysis of households must be prefaced by a comment on the nature of households and the interdependency between housing opportunities and household formation. A household is not an exogenous variable. In forming households, individuals respond to various factors, including economic and housing opportunities.

According to census data the number of households in KwaZulu-Natal has increased from 2,117,274 in 2001 to 2,539,429 in 2011. At the same time the total population has increased from 9,584,129 in 2001 to 10,267,300 in 2011. Households have grown faster than the individual population (1.8% CAGR³ for households compared to 0.7% for individuals) and household sizes have continued to decline from 5.1 in 1996, to 4.5 in 2001, and 4.0 in 2011⁴. Driving the growth in the trend towards smaller average household sizes is the noticeable increase in the proportion of one-person households. In 2001 19% of all households were comprised of one person living alone while in 2011 28% of all households were comprised of one person.

One-person households are more common in urban areas than in tribal or traditional areas. In 2011 in KwaZulu-Natal 31% of households living in areas demarcated as urban areas were one-person households whereas in areas demarcated as tribal or traditional 21% of households were one-person households. These one-person households are in many cases attached to other households living elsewhere. According to the IES 44% of one-person households in KwaZulu-Natal either send or receive remittances indicating financial interdependency across dwelling-based households. How many of these households would reconstitute as multiple member households (including families) if suitable accommodation became available is a matter of conjecture.

Migration, presumably for economic reasons, has played a significant part in shaping the population distribution across the province. According to Stats SA's 2011 mid-year population estimates, KwaZulu-Natal will have seen almost no net migration between 2006 and 2011. However this net figure hides significant churn with 197,000 individuals migrating out of the Province and 198,000 individuals migrating into the Province. The majority of out-migrants (60%) have gone to Gauteng.

<sup>3</sup> Compound annual growth rate

<sup>&</sup>lt;sup>4</sup> Census 2011 Statistical release – P0301.4 (revised)

Seven percent of households in KwaZulu-Natal live in areas demarcated as farms; 39% of these households are one-person households

ESTIMATED PROVINCIAL MIGRATION STREAMS OF PEOPLE IN KWAZULU- NATAL: 2006 – 2011							
	Out-migration In-migration						
	Province in 2011	Percentage	Province in 2006	Percentage			
Gauteng	118 568	60%	58 943	30%			
Eastern Cape	18 791	10%	76 056	38%			
Western Cape	17 416	9%	13 196	7%			
Mpumalanga	17 340	9%	15 327	8%			
Free State	8 678	4%	5 574	3%			
North West	7 941	4%	21 830	11%			
Limpopo	6 364	3%	5 512	3%			
Northern Cape	1 835	1%	1 917	1%			
Total	196 933	100%	198 355	100%			

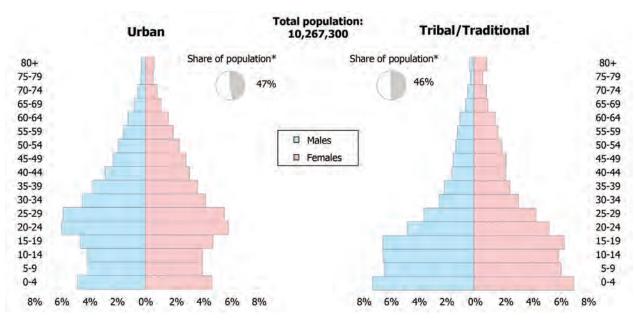
Net migration: 1 422

Ratio of in-migration to out-migration 1.0

Source: Stats SA mid-year population estimates 2011 Note: These estimates do not incorporate foreign migrants

According to the 2011 Census, in urban areas in KwaZulu-Natal 3% of the population have moved from a different province since 2001 (1% moved from outside of South Africa) while 15% moved within the province. In tribal or traditional areas in KwaZulu-Natal 0.4% of the population have moved from a different province since 2001 (0.2% moved from outside of South Africa) while 3% moved within the province. There is a noticeable difference in the population pyramids in urban compared to tribal or traditional areas as a result.

#### CHART 2 POPULATION PYRAMID: KWAZULU-NATAL



Source: Census 2011

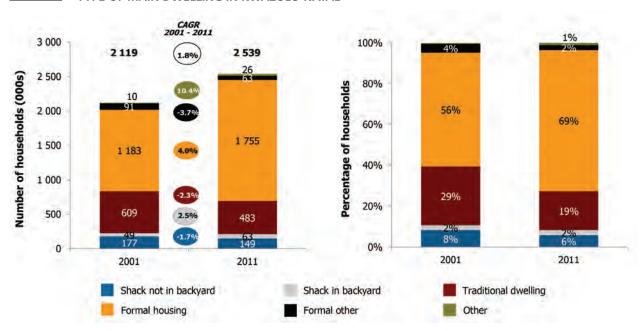
Note: \*The remaining 7% of the population live on farms

CHART 3

The total number of households living in formal dwellings in the province has increased by 543,385 over the ten years between 2001 and 2011. The number of households living in shacks not in backyards and traditional dwellings has decreased over the same period.

The proportion of households living in formal dwellings<sup>6</sup> has increased from 60% in 2001 to 71% by 2011. The proportion of households living traditional dwellings declined from 29% in 2001 to 19% in 2011 while the proportion living in shacks not in backyards has declined less dramatically from 8% to 6%.

#### TYPE OF MAIN DWELLING IN KWAZULU-NATAL



Source: Census 2001, Census 2011

Note: Formal housing contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment. Formal other contains: House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat

The additional number of households living in formal housing is a useful proxy for the growth in the housing stock. Between 2001 and 2011 Stats SA reports that formal private sector residential new build amounted to approximately 68 000 housing units. The balance, namely 504 000 units, are either units that are not registered with Stats SA or are units that have been built by the State as part of its extensive RDP housing delivery programme.

It appears that the number of households living in informal settlements, as proxied either by dwelling type (shack not in backyard) or EA (informal residential) has decreased in KwaZulu-Natal. In 2001 there were 177,294 households living in shacks not in backyards compared to 148,889 in 2011. With regard to EAs, 267,231 households lived in areas demarcated by Stats SA as informal settlements in 2001 compared to 240,578 in 2011 in areas demarcated as informal residential<sup>7</sup>.

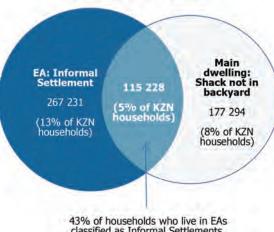
<sup>&</sup>lt;sup>6</sup> Formal dwelling contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment, House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat

<sup>7</sup> The name changes in some EA types (including 'Informal settlement EA' changing to 'Informal residential EA') are due to a change in terminology and not a change in methodology

#### HOUSEHOLDS LIVING IN INFORMAL SETTLEMENTS IN KWAZULU-NATAL

#### 2001

Total households who live in an informal settlement OR in a shack not in a backyard: 329 297 (16% of all KZN households)



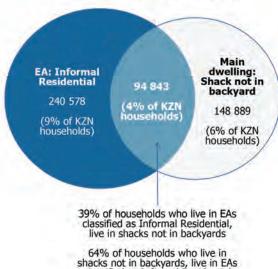
43% of households who live in EAs classified as Informal Settlements, live in shacks not in backyards

65% of households who live in shacks not in backyards, live in EAs classified as Informal Settlements

Source: Census 2001, Census 2011

#### 2011

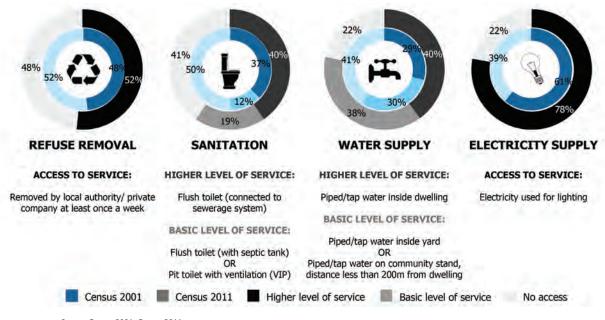
Total households who live in an informal settlement OR in a shack not in a backyard: 294 624 (12% of all KZN households)



shacks not in backyards, live in EAs classified as Informal Residential

Across the province, the proportion of households who had access to sanitation and piped water improved noticeably. Likewise, access to electricity increased from 61% of all households in 2001 to 78% in 2011.

#### CHART 5 ACCESS TO SERVICES IN KWAZULU-NATAL 2001 VS. 2011: ALL HOUSEHOLDS



Source: Census 2001, Census 2011

Note: There is no indication as to the location of the toilet (in the dwelling, in the yard, and so on)

Census data also indicates a shift towards rental accommodation. In 2001 roughly 18% of households in KwaZulu-Natal rented their primary dwellings. This had increased to 22% in 2011.

HOUSEHOLDS LIVING IN KWAZULU-NATAL: TENURE STATUS BY TYPE OF MAIN DWELLING							
	Census 2001			Census 2011			
	Owned	Rented	Occupied rent-free	Owned	Rented	Occupied rent-free	Other
Formal dwelling	60%	23%	17%	55%	25%	17%	3%
Traditional dwelling	55%	6%	39%	63%	6%	27%	4%
Shack in backyard	39%	36%	25%	36%	40%	20%	4%
Shack not in backyard	41%	22%	37%	39%	30%	26%	5%
Other	47%	21%	32%	38%	29%	25%	8%
Total	57%	18%	25%	55%	22%	19%	3%

Source: Census 2001, Census 2011

The balance of the document will explore some of the key trends highlighted in this overview in more detail specifically with regard to informal settlements.

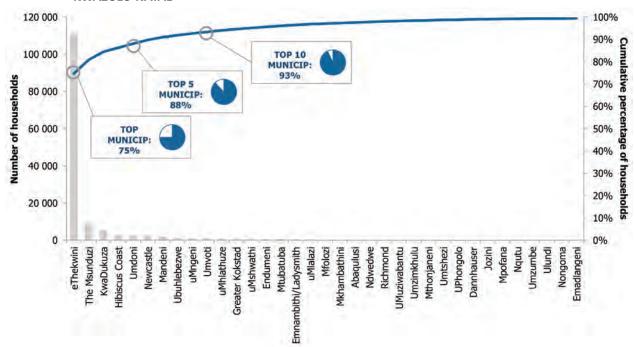
CHART6

# Number of households living in informal settlements in KwaZulu-Natal

The data indicates that there are a total of 148,889 households, containing 378,988 individuals who live in shacks not in backyards. As noted in the previous chapter, census data indicates that the number of households living in shacks not in backyards has decreased in KwaZulu-Natal.

Provincial statistics mask very different housing conditions, and significant shifts at a district and local municipality level. The data indicates that shacks not in backyards tend to be concentrated in one key municipality. An estimated 75% of households living in shacks not in backyards in KwaZulu-Natal can be found in the province's metropolitan area of eThekwini. This is noticeably higher than the proportion of all households in the province who live in the metro; according to the Census, 38% of all households in the province live in eThekwini.

### HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS BY LOCAL MUNICIPALITY IN KWAZULU-NATAL



Source: Census 2011

Note that the following municipalities accounted for less than 1% of the total number of households living in shacks not in backyards in KwaZulu-Natal and are not shown in the chart above: Kwa Sani, Ingwe, Maphumulo, Msinga, Okhahlamba, eDumbe, Vulamehlo, Nkandla, The Big 5 False Bay, Hlabisa, Ntambanana, Ezingoleni, Imbabazane, Umhlabuyalingana, Indaka and Impendle

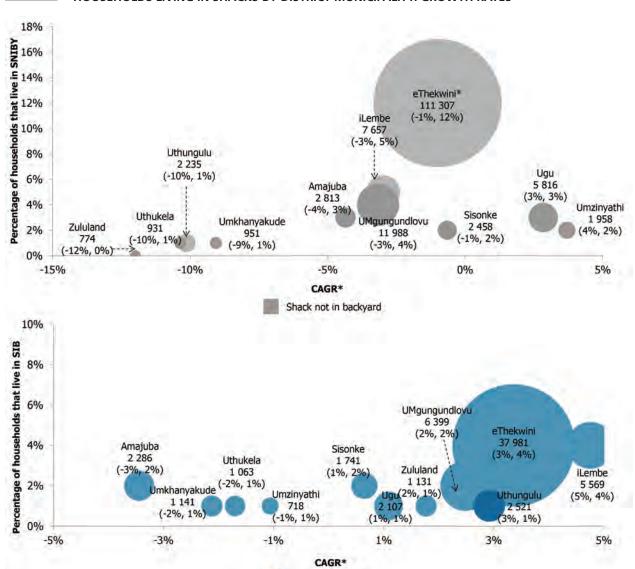
eThekwini metro also has the highest proportion of households who live in shacks not in backyards (12%) across the municipalities in the province. The number and proportion of households living in shacks not in backyards by district municipality is summarised below. Together, shacks in backyards and shacks not in backyards accommodate less than 10% of all households in the province.

HOUSEHOLDS LIVING IN SHACKS IN KWAZULU-NATAL BY DISTRICT MUNICIPALITY						
Municipality	Number of HH Number of HH		Shack in a backyard			
			Percentage of HH that live in SIB			
eThekwini	111 307	12%	37 981	4%		
UMgungundlovu	11 988	4%	6 399	2%		
iLembe	7 657	5%	5 569	4%		
Ugu	5 816	3%	2 107	1%		
Amajuba	2 813	3%	2 286	2%		
Sisonke	2 458	2%	1 741	2%		
Uthungulu	2 235	1%	2 521	1%		
Umzinyathi	1 958	2%	718	1%		
Umkhanyakude	951	1%	1 141	1%		
Uthukela	931	1%	1 063	1%		
Zululand	774	0%	1 131	1%		
KwaZulu-Natal	148 889	6%	62 658	2%		

Source: Census 2011

Ugu and Umzinyathi were the only district municipalities that experienced growth in the number of households living in shacks not in backyards in KwaZulu-Natal, with compound annual growth from 2001 to 2011 of 3% and 4% respectively. iLembe experienced the largest growth in the number of households living in shacks in backyards in the province, with a compound annual growth from 2001 to 2011 of 5%, albeit of a lower base.

#### HOUSEHOLDS LIVING IN SHACKS BY DISTRICT MUNICIPALITY: GROWTH RATES



Source: Census 2001 & 2011

Note: Bubble size represents total households 2011 in SNIBY or SIB. Labels in brackets (x%, y%): x% refers to CAGR\*, y% refers to households in SNIBY or SIB as a proportion of total households

Shack in backyard

Note: \*Compound Annual Growth Rate

Note: \*\* Read as: eThekwini district municipality had 111 307 households living in shacks not in backyards in 2011. This has declined by a rate of 1% compounded annually between 2001 and 2011. 12% of households in eThekwini live in shacks not in backyards

According to the 2011 Census<sup>8</sup>, roughly 39% of households living in shacks not in backyards in KwaZulu-Natal regard themselves as owners, with 26% who say they occupy the dwelling for free. There is no data to determine whether self-assessed ownership reflects formal status and if not, through what mechanisms the household has come to own the dwelling. Thirty per cent of households say they rent their dwellings<sup>9</sup>.

<sup>8</sup> In the questionnaire, the following statement is included with the question: "Refers to the main dwelling structure only and not to the land that it is situated on."

<sup>&</sup>lt;sup>9</sup> Five per cent responded 'other' – there is no indication as to what this entails

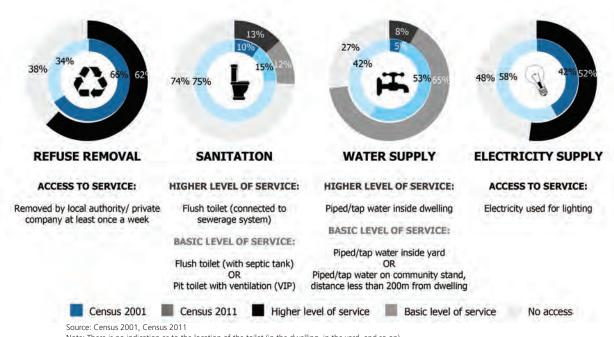
# **Profiling informal** settlements in KwaZulu-**Natal**

#### 5.1 Access to services

Access to water and sanitation services have been categorised into higher and basic levels of service. Current and historic levels of access are summarised below for households living in shacks not in backyards in KwaZulu-Natal.

CHART 8

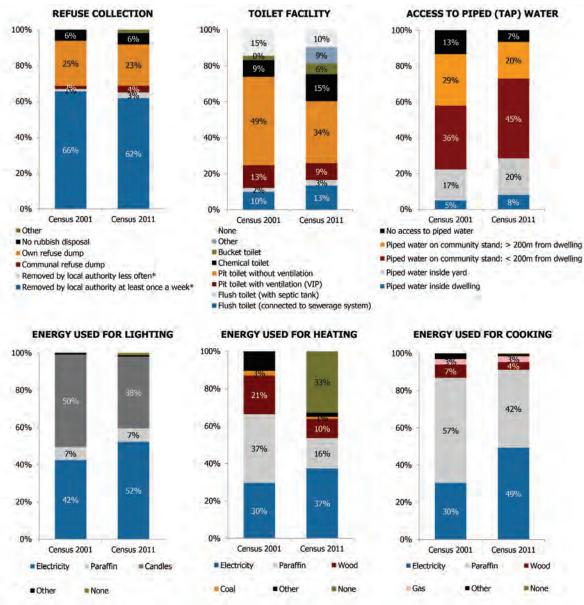
ACCESS TO SERVICES IN KWAZULU-NATAL 2001 VS. 2011: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



Note: There is no indication as to the location of the toilet (in the dwelling, in the yard, and so on)

Access to some services for households living in shacks not in backyards in KwaZulu-Natal has improved between 2001 and 2011. By far the most significant improvements have been in access to piped water and access to electricity. More detailed data on the nature of services is summarised in the charts below.

#### CHART 9 ACCESS TO SERVICES IN KWAZULU-NATAL: HOUSEHOLDS LIVING IN SHACKS NOT IN **BACKYARDS**



Source: Census 2001, Census 2011

There are noticeable differences across the province in terms of levels of access and rates of change with regard to municipal services. Measured in terms of the proportion of households, access to refuse removal differs considerably within the province with eThekwini metro having the highest level of access.

<sup>\*</sup> In the Census 2011 these include refuse removed by private company

ACCESS TO REFUSE REMOVAL IN KWAZULU-NATAL: HOUSEHOLDS LIVING IN SHACKS **NOT IN BACKYARDS** 

	Census	2001	Census 2011		
District municipality	Total households	Access (%)	Total households	Access (%)	
eThekwini	123 098	85 15	111 307	75 25	
Umgungundlovu	16 540	68	11 988	18 82	
Lembe	10 361	85	7 657	19 81	
Ugu	4 396	95	5 816	45 55	
Amajuba	4 389	37 63	2 813	17 83	
Sisonke	2 625	36 64	2 458	23 77	
Uthungulu	6 508	93	2 235	21 79	
Umzinyathi	1 362	79	1 958	18 82	
Umkhanyakude	2 460	94	951	93	
Uthukela	2 780	42 58	931	36 64	
Zululand	2 776	85	774	13 87	
KwaZulu-Natal	177 294	66 34	148 889	62 38	

Source: Census 2001, Census 2011

Note: Access to refuse removal: Removed by local authority/private company at least once a week

Access to sanitation remains low in the province and has even declined in some areas.

ACCESS TO SANITATION IN KWAZULU-NATAL: HOUSEHOLDS LIVING IN SHACKS NOT IN **BACKYARDS** 

	Ce	nsus 200	)1	Ce	nsus 2011	
District municipality	Total households		Access (%)	Total households	Acc	ess (%)
eThekwini	123 098	10 16	75	111 307	15 12	72
Umgungundlovu	16 540	15 14	71	11 988	11 13	76
iLembe	10 361	7 10	83	7 657	14	81
Ugu	4 396	78	85	5 816	11	86
Amajuba	4 389	14 19	67	2 813	4 13	82
Sisonke	2 625	6	89	2 458	6 12	83
Uthungulu	6 508	6 19	74	2 235	9 11	79
Umzinyathi	1 362	14 11	75	1 958	9 13	79
Umkhanyakude	2 460	10 15	75	951	6 16	78
Uthukela	2 780	16 13	71	931	25 22	53
Zululand	2 776	11 11	78	774	710	83
KwaZulu-Natal	177 294	10 15	75	148 889	13 12	74

Source: Census 2001, Census 2011

Note: Higher levels of service: Flush toilet (connected to sewerage system); Basic levels of service: Flush toilet (with septic tank) / Pit latrine with ventilation (VIP)

Access to piped water has improved in the majority of district municipalities since 2001.

ACCESS TO WATER IN KWAZULU-NATAL: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS

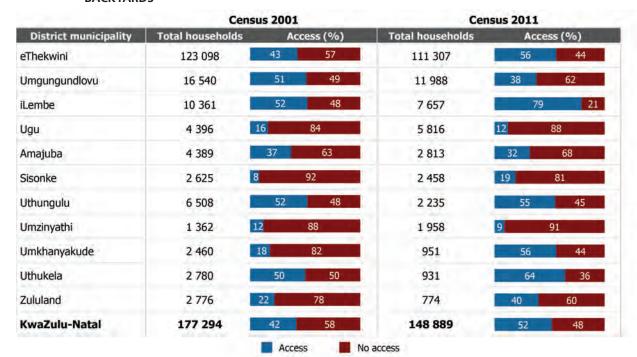
Census 2001			nsus 2001 Census 2011		
District municipality	Total households	Access (%)	Total households	Access (	%)
eThekwini	123 098	6 57 37	111 307	8 68	24
Umgungundlovu	16 540	4 54 42	11 988	7 46	47
Lembe	10 361	4 38 58	7 657	8 59	32
Ugu	4 396	4 22 75	5 816	5 58	37
Amajuba	4 389	4 46 50	2 813	7 58	35
Sisonke	2 625	55 42	2 458	66	30
Uthungulu	6 508	4 47 49	2 235	9 71	20
Umzinyathi	1 362	4 33 63	1 958	70	26
Umkhanyakude	2 460	31 68	951	11 45	44
Uthukela	2 780	51 46	931	23 52	25
Zululand	2 776	3 20 77	774	9 47	44
KwaZulu-Natal	177 294	5 53 42	148 889	8 65	27

Source: Census 2001, Census 2011

Note: Higher levels of service: Piped (tap) water inside dwelling; Basic levels of service: Piped (tap) water inside yard / Piped (tap) water on community stand: distance less than 200m from dwelling

Access to electricity varies considerably within the province.

ACCESS TO ELECTRICITY IN KWAZULU-NATAL: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



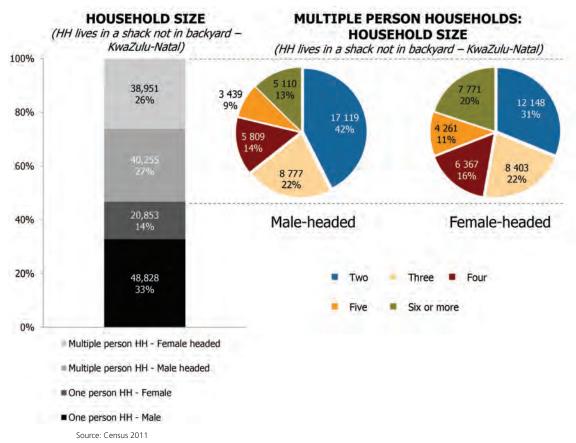
Source: Census 2001, Census 2011 Note: Access to electricity: Use electricity for lighting

#### 5.2 Household characteristics

The average household size for households who live in shacks not in backyards at 2.4 is lower than the provincial average of 3.6. This reflects the high proportion of one-person households who live in shacks not in backyards. Census 2011 indicates that a very high 47% of households who live in shacks not in backyards in KwaZulu-Natal are one-person households<sup>10</sup>; for households in the province as a whole this proportion is 28%.

The size distribution of households living in shacks not in backyards from the census together with data on the gender of the head of the household is summarised below. Sixty per cent are maleheaded. Of those households comprising more than one person, female-headed households are noticeably larger.

HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS IN KWAZULU-NATAL: SIZE OF HOUSEHOLD, BY GENDER OF HOUSEHOLD HEAD



<sup>&</sup>lt;sup>10</sup> The highest proportion across all provinces

Data on number of rooms in the dwelling together with data on the number of people who live in the household can be used to assess over-crowding. Assuming that dwellings that contain more than two individuals per room are over-crowded, 25% of all multi-person households who live in shacks not in backyards in KwaZulu-Natal live in over-crowded conditions. Female-headed multi-person households are more likely to be over-crowded than their male counterparts (28% versus 22%).

#### 5.3 Children in informal settlements

Census 2011 data on children has only been released for EAs, and not by dwelling type. The analysis of children therefore focuses on informal residential EAs. Census data indicates that there are 254,940 children under the age of 18 who live in informal residential EAs accounting for 6% of all children in KwaZulu-Natal. There is a slight skew towards very young children in informal residential areas; 35% of all children are under the age of five, compared to 30% for the province as a whole.

NUMBER AND PERCENTAGE OF CHILDREN BY AGE GROUP IN KWAZULU-NATAL							
Age group of children	Children in Informal residential EAs	Percentage	All children	Percentage			
0 - 4	88 239	35%	1 198 134	30%			
5 - 6	29 276	11%	451 176	11%			
7 - 10	48 656	19%	795 643	20%			
11 - 14	48 872	19%	834 567	21%			
15 - 17	39 896	16%	677 209	17%			
Total	254 940	100%	3 956 728	100%			

Source: Census 2011

According to the census, 74% of children under the age of 15 in informal residential EAs in KwaZulu-Natal have both parents still living<sup>11</sup> (the corresponding proportion for the province as a whole is also 74% 12).

Eighty five per cent of children aged 7 to 17 living in informal residential EAs in KwaZulu-Natal currently attend an educational institution. This is slightly lower than for the province as a whole.

 $<sup>^{11}</sup>$  For children in the country as whole living in informal residential EAs this proportion is 81%  $^{12}$  For children in the country as a whole this proportion is 80%

CHILDREN AGED 7 - 17 YEARS IN KWAZULU-NATAL: ATTENDANCE OF CHILDREN AT AN EDUCATIONAL INSTITUTION						
Children 7 - 17	Informal residential EA	All children				
7 - 10	87%	91%				
11 - 14	88%	91%				
15 - 17 79% 86%						
Total*	85%	89%				

Source: Census 2011

Note: \* Total school attendance aged 7 - 17. Census reports this for children aged 5 and up

#### 5.4 Migration

Census 2011 contains data on how long individuals have lived in their current dwellings but analysis using the current variables available make this difficult to interpret. Nevertheless we can look at those individuals who moved into their current dwelling after 2001 and who currently reside in informal residential EAs (data on migration by type of dwelling is not available). Roughly 14% of all individuals who live in informal residential EAs moved between 2001 and 2011. Of these, 11% corresponding to 10,971 individuals have moved from outside South Africa. The table below summarises findings in this regard.

MIGRATION IN KWAZULU-NATAL	
Total number of people who moved between 2001 and 2011	1 239 410
Number of people who moved between 2001 and 2011 who live in informal EAs	104 201
Proportion of those who live in informal EAs who moved between 2001 and 2011	14%
Proportion of total who moved between 2001 and 2011 who live in informal EAs	8%
Provinces most moved from (informal EAs)	KwaZulu-Natal (65%) Eastern Cape (17%)

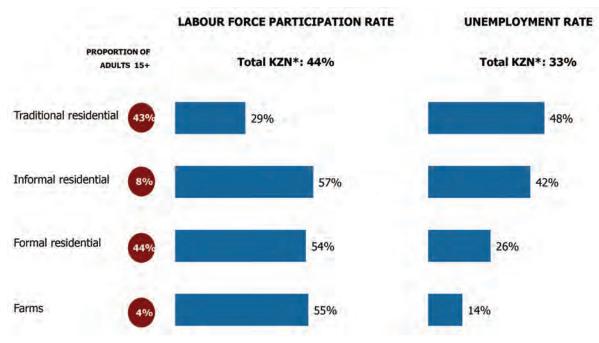
Source: Census 2011

#### 5.5 Employment and income

#### 5.5.1 Employment

Census 2011 data on employment has only been released for EAs, and not by dwelling type. The analysis of employment therefore focuses on informal residential EAs. According to Census 2011, labour force participation rates are slightly higher in informal residential EAs than in formal residential EAs and unemployment rates are noticeably higher. This is consistent with informal settlements acting as 'arrival cities' accommodating those seeking an entry point into the labour market.

### ADULTS AGED 15+ IN KWAZULU-NATAL: LABOUR FORCE PARTICIPATION RATES AND UNEMPLOYMENT RATES BY TYPE OF ENUMERATION AREA



Source: Census 2011

<sup>\*</sup> Total KZN also includes: Collective living quarters (1%), Commercial (1%), Vacant (0%), Industrial (0%), Small holdings (0%), Parks and recreation (0%). Brackets show proportion of adults 15+ living in EA type

On the whole, a lower proportion of employed adults living in informal residential EAs are employed in the formal sector compared to all employed adults.

SECTOR OF WORK ADULTS 15+	IN KWAZULU	-NATAL: PERC	ENTAGE OF	EMPLOYED
	Formal Sector	Informal Sector	Private household	Don't know
Informal residential EA	69%	16%	12%	3%
All employed adults in province	76%	13%	9%	3%

Source: Census 2011

There is no data on the specific industries of employment.

Education levels are noticeably lower for adults aged 15 or older who live in informal residential EAs than for adults in the province as a whole. Sixty four per cent of employed adults living in informal EAs in KwaZulu-Natal do not have a matric.

ADULTS 15+ IN KWAZULU-NATAL: EDUCATION LEVEL BY EMPLOYMENT STATUS										
		Inform	al resider	ntial EA				All adults	5	
	No schooling	Less than Matric	Matric	Technikon, University or other post matric	Other	No schooling	Less than Matric	Matric	Technikon, University or other post matric	Other
Employed	5%	59%	32%	4%	0%	4%	40%	37%	18%	1%
Unemployed	4%	64%	30%	2%	0%	5%	55%	35%	5%	0%
Discouraged work-seeker	5%	64%	28%	2%	0%	9%	58%	30%	3%	0%
Other not economically active	7%	68%	21%	3%	1%	10%	62%	21%	4%	3%
Total adults 15+	6%	64%	27%	3%	1%	9%	53%	28%	8%	2%

Source: Census 2011

#### **5.5.2 Income**

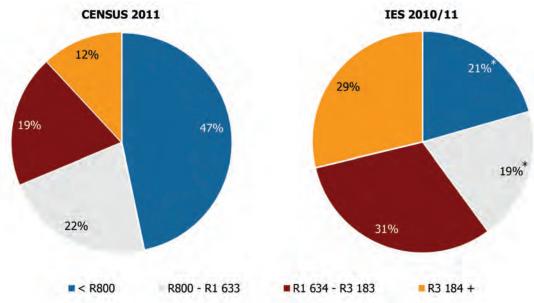
According to the 2011 Census 47% of households living in shacks not in backyards earn less than R800 per month. However the quality of census data on household income is relatively poor. Each respondent is asked to report their individual income in one of twelve fairly wide bands<sup>13</sup>. Household income as reported by the Census is a derived variable, calculated by adding together the individual incomes of all members of the household<sup>14</sup>. A far more detailed source of data on incomes is the IES15. That data source indicates that 21% of households living in shacks not in backyards earned less than R800 in 2011. However, a limitation of the IES is its sample frame, which is drawn from the Census 2001. The data source may well contain a bias towards older more established informal settlements, which may contain a higher earning sample of households.

<sup>13 &</sup>quot;What is the income category that best describes the gross monthly or annual income of (name) before deductions and including all sources of income? (e.g. Social grants, ÚIF, remittances, rentals, investments, sales or products, services, etc.)"

<sup>14</sup> As individual incomes were recorded in intervals rather than exact amounts, a fixed amount was allocated to each range in order to calculate

household income. This is summarised in the appendix <sup>15</sup> Analysis of income in the IES excludes imputed rentals for housing

### CHART 16 HOUSEHOLD LIVES IN A SHACK NOT IN BACKYARD IN KWAZULU-NATAL: MONTHLY HOUSEHOLD INCOME<sup>16</sup>



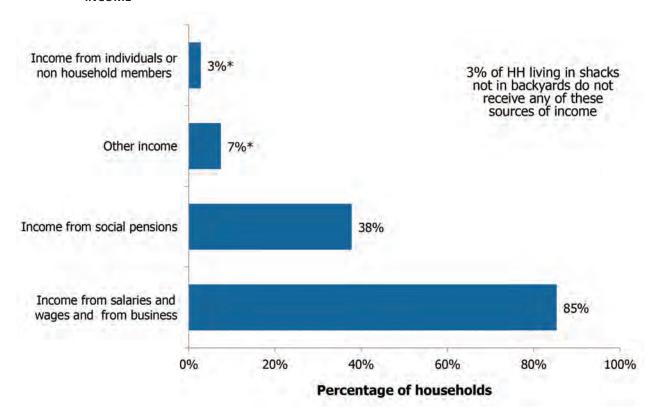
Source: Census 2011, IES 2010/11

According to the IES, 77% of households in shacks not in backyards in the province have a household income of less than R3 500 per month.

The IES indicates that the primary income source for households living in shacks not in backyards in the province is salaries/wages. Around 38% receive government grants.

<sup>&</sup>lt;sup>16</sup> In the IES 2010/11 for the province as a whole, these proportions are: < R800 (15%), R800 - R1 633 (18%), R1 634 - R3 183 (23%), R3 184 - R6 366 (16%), R6 367 + (28%). In the Census 2011 they are: < R800 (29%), R800 - R1 633 (19%), R1 634 - R3 183 (20%), R3 184 - R6 366 (12%), R6 367 + (20%)

### HOUSEHOLD LIVES IN A SHACK NOT IN BACKYARD IN KWAZULU-NATAL: SOURCES OF INCOME



Source: IES 2010/11 (\* less than 40 observations)

#### 5.6 Housing waiting lists and subsidy housing

There is no data available in the census on housing waiting lists and subsidy housing. According to the 2011 GHS, 23% of households in shacks not in backyards in KwaZulu-Natal have at least one member on the waiting list for an RDP or state subsidised house. Data from the same survey can be used to quantify the number of households who live in shacks not in backyards that might be eligible to obtain a subsidised house. Criteria include a household income of less than R3 500 per month, a household size of more than one individual, not having another dwelling, and no previous housing subsidy received. Using these criteria, around 36% of households living in shacks not in backyards in the province appear to qualify for subsidy housing.

# Profiling informal settlements in eThekwini

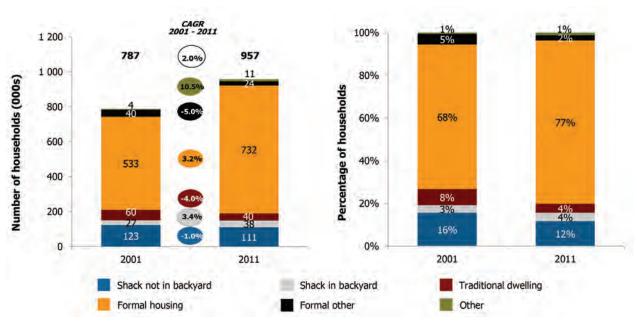
Data summarised for eThekwini focuses mainly on household level data. Data for individuals in the municipality has been included in the appendix.

#### 6.1 Number of households

According to the Census there has been a significant increase in the number of households living in formal dwellings in eThekwini since 2001<sup>17</sup>. The number living in shacks in backyards has increased at a slightly faster rate, albeit off a lower base. The number of households living in shacks not in backyards has declined.

In 2001 73% of households lived in formal dwellings; by 2011 this had increased to 79%. The proportion of households living in shacks not in backyards declined from 16% in 2001 to 12% in 2011.

#### CHART 18 TYPE OF MAIN DWELLING IN ETHEKWINI



Source: Census 2001, Census 2011

Note: Formal housing contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment. Formal other contains: House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat

<sup>&</sup>lt;sup>17</sup> Formal dwelling contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment, House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat

According to the 2011 Census, roughly 40% of households living in shacks not in backyards in eThekwini regard themselves as owners, with 27% who say they occupy the dwelling for free. Twenty nine per cent of households say they rent their dwellings<sup>18</sup>.

#### 6.2 Access to services

Access to water and sanitation services have been categorised into higher and basic levels of service. Current levels of access are summarised below for households living in shacks not in backyards in eThekwini.

## ACCESS TO SERVICES IN ETHEKWINI IN 2011: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



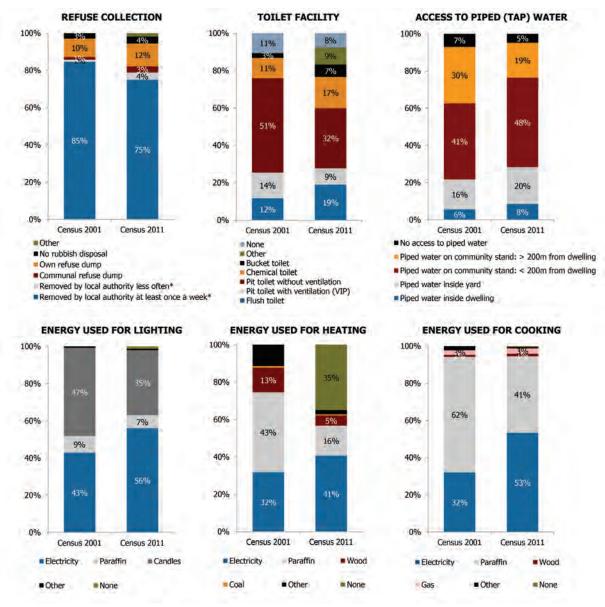
Source: Census 2011

Note: There is no indication as to the location of the toilet (in the dwelling, in the yard, and so on)

On average households living in shacks not in backyards in eThekwini appear to live under better conditions than in 2001. There have been noticeable improvements in services for those who live in shacks not in backyards, particularly access to flush toilets and piped water. Use of electricity for lighting by these households increased from 43% in 2001 to 56% in 2011. More detailed data on the nature of services is summarised in the charts below.

<sup>18</sup> Five per cent responded 'other'

CHART 20 ACCESS TO SERVICES IN ETHEKWINI: HOUSEHOLDS LIVING IN SHACKS NOT IN **BACKYARDS** 



Source: Census 2001, Census 2011

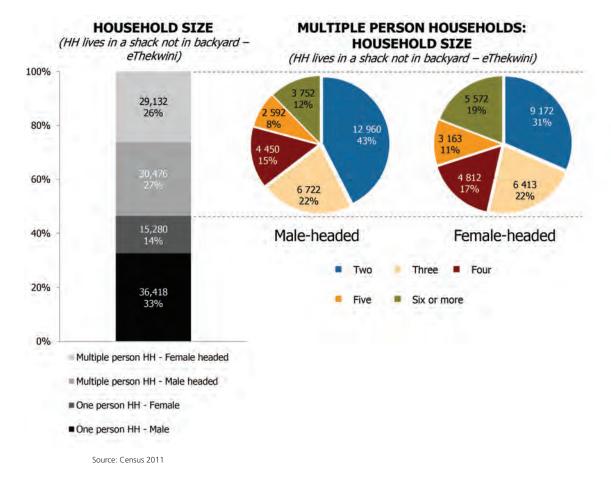
\* In the Census 2011 these include refuse removed by private company

#### 6.3 Household characteristics

The average household size for households who live in shacks not in backyards in eThekwini at 2.4 is lower than the metropolitan average of 3.2. This reflects the high proportion of oneperson households who live in shacks not in backyards. Census 2011 indicates that roughly 46% of households who live in shacks not in backyards in eThekwini are one-person households; for households in the metro as a whole this proportion is 29%.

The size distribution of households living in shacks not in backyards from the census together with data on the gender of the head of the household is summarised below. Sixty per cent are maleheaded. Of those households comprising more than one person, female-headed households are noticeably larger.

CHART 21 HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS IN ETHEKWINI: SIZE OF HOUSEHOLD, BY GENDER OF HOUSEHOLD HEAD



# Profiling informal settlements in Msunduzi

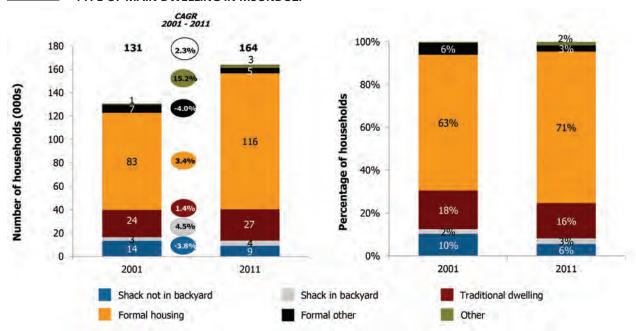
Data summarised for Msunduzi focuses mainly on household level data. Data for individuals in the municipality has been included in the appendix.

#### 7.1 Number of households

According to the Census there has been a significant increase in the number of households living in formal dwellings in the Msunduzi local municipality since 2001, with a corresponding increase in the proportion of households living in such dwellings<sup>19</sup>.

The number of households living in shacks not in backyards has decreased by 4,364 over the ten year period with a corresponding decline in the proportion of households living in shacks not in backyards, from 10% in 2001 to 6% in 2011.

#### CHART 22 TYPE OF MAIN DWELLING IN MSUNDUZI



Source: Census 2001, Census 2011

Note: Formal housing contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment. Formal other contains: House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat

According to the 2011 Census, roughly 43% of households living in shacks not in backyards in Msunduzi regard themselves as owners, with a low 13% who say they occupy the dwelling for free<sup>20</sup>. Thirty eight per cent of households say they rent their dwellings<sup>21</sup>.

<sup>&</sup>lt;sup>19</sup> Formal dwelling contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment, House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat

<sup>&</sup>lt;sup>20</sup> Five per cent responded 'other'

<sup>21</sup> This is the highest reported proportion of households living in shacks not in backyards who rent across the municipalities explored in detail in each province

#### 7.2 Access to services

Access to water and sanitation services has been categorised into higher and basic levels of service. Current levels of access are summarised below for households living in shacks not in backyards in the Msunduzi local municipality.

#### CHART 23

#### ACCESS TO SERVICES IN MSUNDUZI IN 2011: HOUSEHOLDS LIVING IN SHACKS NOT IN **BACKYARDS**

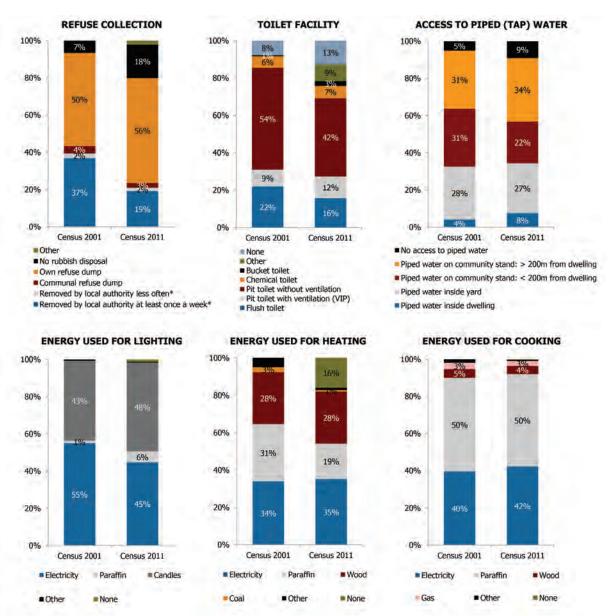


Source: Census 2011

Note: There is no indication as to the location of the toilet (in the dwelling, in the yard, and so on)

On average access to services for households living in shacks not in backyards in Msunduzi declined between 2001 and 2011. There have been noticeable declines in access to services for those who live in shacks not in backyards, particularly access to refuse removal and piped water within 200 metres from the dwelling. Use of electricity for lighting by these households declined from 55% in 2001 to 45% in 2011. More detailed data on the nature of services is summarised in the charts below.

#### CHART 24 ACCESS TO SERVICES IN MSUNDUZI: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



Source: Census 2001 (10% sample), Census 2011

<sup>\*</sup> In the Census 2011 these include refuse removed by private company

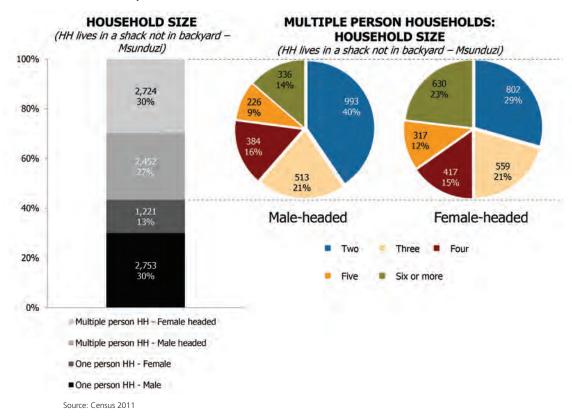
CHART 25

#### 7.3 Household characteristics

The average household size for households who live in shacks not in backyards in Msunduzi at 2.6 is lower than the municipal average of 3.4. This reflects the high proportion of one-person households who live in shacks not in backyards. Census 2011 indicates that roughly 43% of households who live in shacks not in backyards in Msunduzi are one-person households; for households in the municipality as a whole this proportion is 28%.

The size distribution of households living in shacks not in backyards from the census together with data on the gender of the head of the household is summarised below. Fifty seven per cent are male-headed. Of those households comprising more than one person, female-headed households are noticeably larger.

HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS IN MSUNDUZI: SIZE OF HOUSEHOLD, BY GENDER OF HOUSEHOLD HEAD



# Other non-survey data sources

Other non-survey data sources have been explored, including the Housing Development Agency, Eskom and other providers of data. Additionally, data is available from the eThekwini metro as well as from KwaZulu-Natal province.

#### 8.1 Land and Property Spatial Information System (LaPsis)

LaPsis, an online system developed by the HDA, builds on data gathered by the NDHS and overlays onto it land and property data including cadastre, ownership, title documents and deeds (from the Deeds Office), administrative boundaries (from the Demarcation Board) and points of interest from service providers such as AfriGIS<sup>22</sup>. The informal settlements layer was last updated in November 2011. The data indicates there are 664 informal settlements in KwaZulu-Natal; 1% of these have a shack or population count.

#### 8.2 Eskom's Spot Building Count (also known as the Eskom Dwelling Layer)

Eskom has mapped and classified structures in South Africa using image interpretation and manual digitisation of high resolution satellite imagery. Where settlements are too dense to determine the number of structures given the resolution of the satellite imagery the area is categorised as a 'Dense Informal' area. These areas are often informal settlements although Eskom does not have a specific definition in that regard. Identifiable dwellings and building structures are mapped by points while dense informal settlements are mapped by polygons. The dataset was last updated in November 2011.

Data provided by Eskom revealed 30 polygons categorised as Dense Informal in KwaZulu-Natal, covering a total area of 1.8 square kilometres.

#### 8.3 Community Organisation Resource Centre (CORC)

CORC is an NGO that operates in all provinces across the country, with the aim of providing support to "networks of communities to mobilise themselves around their own resources and capacities" 23. In order to provide a fact base to enable communities to develop a strategy and negotiate with the State with regard to service provision and upgrading, CORC profiles informal settlements and undertakes household surveys. These surveys have been conducted in areas across the country by community members in these settlements. Community members are trained by CORC and are provided with a basic stipend to enable them to do their work. Improvements are made to questionnaires using community consultation and professional verification. This ensures that comprehensive and relevant

<sup>&</sup>lt;sup>22</sup> AfriGIS was given informal settlements data by the provincial departments of housing to create the map layers <sup>23</sup> See http://www.sasdialliance.org.za/about-corc/

data is collected. CORC also gathers other settlement level data on service provision including the number and type of toilets and taps. A list of settlements that have been enumerated recently in KwaZulu-Natal is summarised below, together with household and population estimates.

ENUMERATION OF INFORMAL SETTLEMENTS BY CORC IN KWAZULU-NATAL				
Name of settlement	Date of enumeration	Number of households	Population	
Ntuzuma G	2009	1 052	4 039	
Dunbar	2010	551	1 817	
Umlazi	2010	1 908	1 098	
Quarry Road	2011	550	1 650	
Havelock	2012	196	389	
Mathambo	2012	279	527	

#### 8.4 Provincial data: KwaZulu-Natal

Note: Provincial estimates from KwaZulu-Natal have not changed since the previous informal settlements study in 2011 by Eighty20. Data coverage and methodologies summarised below are taken directly out of that study.

KwaZulu-Natal defines an informal settlement in accordance with the 2009 National Housing Code's Informal Settlement Upgrading Programme<sup>24</sup>. An additional criterion in defining an informal settlement stipulates that informal settlements must be located in urban and peri-urban areas. The KZN Department of Human Settlements thus excludes informal settlements in rural areas. There is no criteria defined to distinguish between peri-urban and rural settlements and they recommend using "common sense" to do so.

Provincial and municipal maps have been developed to reflect the size and location of all informal settlements in the municipality and preliminary prioritisation for their development. These were developed using GIS data (e.g. transport routes, social amenities), data from the municipalities, and other external data sources such as Eskom's Spot Building Count data from 2008 and Department of Land Affairs Urban Edge data from 2008<sup>25</sup>. Where possible, specific sites were identified and overlaid against the latest available aerial photography<sup>26</sup>.

The recent Informal Settlement Eradication Strategy for KZN<sup>27</sup> estimates 306,076 households in KZN reside in informal settlements located within the 51 municipalities in the province<sup>28</sup>. 95% of these households are located within 11 municipalities<sup>29</sup>, with 78% located within eThekwini Municipality alone (494 settlements comprising 239,436 households). In some cases informal settlements may have been reclassified as rural settlements (e.g. Ndwedwe). The scale of informal settlements has generally grown since 2001.

<sup>&</sup>lt;sup>24</sup> 2009 National Housing Code, Incremental Interventions: Upgrading Informal Settlements (Part 3)

<sup>25</sup> An urban edge is a demarcated line to manage, direct and control the outer limits of development around an urban area 26 There is no indication as to which areas these were or what year the photography was from

<sup>&</sup>lt;sup>27</sup> KZN Human Settlements (February 2011), Informal Settlement Eradication Strategy for KwaZulu-Natal, Project Preparation Trust of KZN

<sup>28</sup> KwaZulu-Natal is divided into one metropolitan municipality (eThekwini) and ten district municipalities. The ten district municipalities are in turn

divided into a total of fifty local municipalities.

<sup>29</sup> eThekwini, Msunduzi, Newcastle, UMhlathuze, Abaqulusi, KwaDukuza, Hibiscus Coast, Mandeni, Umdoni, Emnambithi and Greater Kokstad

#### 8.5 Municipal data: eThekwini

eThekwini defines shacks in an informal settlement as<sup>30</sup>: "Structures which are made of rudimentary materials (wood, cardboard, metal sheets, mud, etc.) without any building plans approved, often on land that has been illegally occupied. Services are very basic or not available at all."

An Informal Settlement Programme (ISP) database has been developed, which is a spreadsheet containing GIS data and data on the informal settlements (e.g. location, services, nature of land occupied) as well as proposed interventions and time frames for these interventions. Data for the ISP was collected from the year 2000 and is being continually updated.

The most recent dwelling count is based on 2011 aerial photography. The Dwelling Count Survey was published in March 2012, incorporating "MrSid Imagery" and other sources from the Engineering Unit. Land monitoring data is also included, undertaken by eThekwini's Housing Support Section tasked with dwelling counts and verifying ownership. Site visits are undertaken on a needs basis, where there is no land monitoring data or dwelling count survey data available. The municipal area was last flown in April/May 2012. These photos were processed and subsequently published in November 2012. This source is used where there are gaps not covered by the other data sets. Other data is used to estimate the number of households (as opposed to dwellings) such as physical household counts conducted annually or bi-annually. Other surveys include the Quality of Life surveys undertaken by eThekwini's Corporate Policy Unit incorporating a number of communities.

Current estimates indicate that there are approximately 226,000 households residing in an estimated 476 informal settlements which are not currently being upgraded or recently approved by the Provincial Department of Human Settlements for upgrading. A further 162 informal settlements are being upgraded or have been approved for upgrading, accommodating 89,000 households.

 $<sup>^{\</sup>rm 30}$  Faizal Seedat, Senior Manager: Housing Unit (Durban)

#### 8.6 Summary of estimates

There is a significant difference in the estimate of the number of informal settlements between LaPsis, provincial and municipal data for eThekwini metro.

NUMBER OF INFORMAL SETTLEMENTS					
	Numb	er of informal settler	nents		
	LaPsis 2011: Informal	Provincial estimates	Municipal estimates		
	settlements atlas	2011	2011		
Amajuba	17				
eThekwini	545	494	638		
iLembe	-				
Sisonke	10				
Ugu	14				
UMgungundlovu	31				
Umkhanyakude	-				
Umzinyathi	-				
Uthukela	-				
Uthungulu	21				
Zululand	26				
KwaZulu-Natal	664				

Note: According to Eskom's Spot Building Count last updated in November 2011, there are 30 polygons in Kwazulu-Natal classified as "Dense Informal"

Estimates of the number of households living in informal settlements in the eThekwini metro differ greatly. The KwaZulu-Natal provincial estimate of 239,000 households living in informal settlements in eThekwini far exceeds the Census estimate of 111,000 households in shacks not in backyards. The discrepancy may arise because of differences in definitions.

NUMBER OF HOUSEHOLDS IN INFORMAL SETTLEMENTS					
	Number of households in informal settlements				
	Census 2011: HH in shacks not in backyards	Census 2011: HH in informal residential EAs	Provincial estimates 2011	Municipal estimates 2011	
Amajuba	2 813	1 805			
eThekwini	111 307	175 608	239 436	262 000	
iLembe	7 657	17 756			
Sisonke	2 458	1 936			
Ugu	5 816	4 656			
UMgungundlovu	11 988	32 570			
Umkhanyakude	951	4			
Umzinyathi	1 958	2 265			
Uthukela	931	1 056			
Uthungulu	2 235	1 901			
Zululand	774	1 022			
KwaZulu-Natal	148 889	240 578	306 076		

Note: According to Eskom's Spot Building Count last updated in November 2011, there are 30 polygons in Kwazulu-Natal classified as "Dense Informal"

# Appendix: Municipal data on children and employment

#### 9.1 eThekwini

#### **Children in informal settlements:**

NUMBER AND PERCENTAGE OF CHILDREN BY AGE GROUP IN ETHEKWINI					
Age group of children	Children in Informal residential EAs	Percentage	All children	Percentage	
0 - 4	63 066	35%	327 972	31%	
5 - 6	20 596	11%	116 236	11%	
7 - 10	34 059	19%	204 904	20%	
11 - 14	34 299	19%	217 168	21%	
15 - 17	28 046	16%	181 699	17%	
Total	180 067	100%	1 047 979	100%	

Source: Census 2011

CHILDREN AGED 7 - 17 INSTITUTION	CHILDREN AGED 7 - 17 YEARS IN ETHEKWINI: ATTENDANCE OF CHILDREN AT AN EDUCATIONAL INSTITUTION					
Children 7 - 17	Informal residential EA	All children				
7 - 10	86%	89%				
11 - 14	87%	89%				
15 - 17	79%	83%				
Total*	84%	87%				

Source: Census 2011

Note: \* Total school attendance aged 7 - 17. Census reports this for children aged 5 and up

#### **Employment:**

EMPLOYMENT STATISTICS IN ETHEKWINI: LABOUR FORCE PARTICIPATION RATE AND UNEMPLOYMENT RATE FOR ADULTS AGED 15+					
Labour force participation rate Unemployment rate					
Informal residential EA	59%	43%			
All adults in province	dults in province 55% 30%				

Source: Census 2011

SECTOR OF WORK IN ETHEKWINI: PERCENTAGE OF EMPLOYED ADULTS 15+					
Formal Sector   Informal Sector   Private household   Don't know					
Informal residential EA	71%	14%	12%	3%	
All employed adults in province	80%	9%	9%	3%	

Source: Census 2011

#### 9.2 Msunduzi

#### **Children in informal settlements:**

NUMBER AND PERCENTAGE OF CHILDREN BY AGE GROUP IN MSUNDUZI					
Age group of children	Children in Informal residential EAs	Percentage	All children	Percentage	
0 - 4	11 638	32%	59 178	29%	
5 - 6	4 160	12%	22 601	11%	
7 - 10	6 949	19%	39 701	20%	
11 - 14	7 281	20%	43 134	21%	
15 - 17	6 105	17%	36 558	18%	
Total	36 133	100%	201 172	100%	

Source: Census 2011

CHILDREN AGED INSTITUTION	CHILDREN AGED 7 - 17 YEARS IN MISUNDUZI: ATTENDANCE OF CHILDREN AT AN EDUCATIONAL					
Children 7 - 17	Informal residential EA	All children				
7 - 10	90%	91%				
11 - 14	90%	90%				
15 - 17	83%	85%				
Total*	88%	89%				

Source: Census 2011 Note: \* Total school attendance aged 7 - 17. Census reports this for children aged 5 and up

#### **Employment:**

EMPLOYMENT STATISTICS IN MSUNDUZI: LABOUR FORCE PARTICIPATION RATE AND UNEMPLOYMENT RATE FOR ADULTS AGED 15+					
Labour force participation rate Unemployment rate					
Informal residential EA 51% 47%					
All adults in province	51%	33%			

Source: Census 2011

SECTOR OF WORK IN MSUNDUZI: PERCENTAGE OF EMPLOYED ADULTS 15+					
	Formal Sector	Informal Sector	Private household	Don't know	
Informal residential EA	62%	18%	17%	4%	
All employed adults in province	76%	11%	10%	3%	

Source: Census 2011

# **Appendix: Statistics South** Africa Surveys

#### 10.1 Censuses 2011 and 2001

#### Census 2011

- Demarcation → Classification → Listing (Dwelling Unit, Business, Park, and so on)
- Demarcation for the 2011 Census involved subdividing the country into Place Names and Enumeration Areas based on specifications of administrative boundaries, size and population density
- Data used in the demarcation process included Dwelling Frame data from Stats SA and various external data sources, including:
  - Aerial photography, satellite imagery
  - Addresses (Place Names)
  - Cadastral data
  - Administrative boundaries
- Demarcation produced a total of 103,576 EAs which were classified into ten EA Types in line with the status of the majority of visible dwellings at the time of demarcation:
  - Formal residential
  - Informal residential
  - Traditional residential
  - Farms
  - Smallholdings
  - Industrial
  - Parks and Recreation
  - Vacant
  - Collective living quarters
  - Commercial
- The EAs were demarcated according to specific rules and guidelines per EA Type. Where the data was incomplete or missing, Spot 5 satellite images were used resulting in some larger EAs being split further during the verification and listing fieldwork

#### Census 2001

- Demarcation for the Census in 2001 resulted in ten EA Types based on its geographic location as well as the land use and type of dominant dwellings within each EA
- Ten EA Types were categorised in 2001:
  - Urban settlement
  - Informal settlement
  - Tribal settlement
  - Farms
  - Smallholdings
  - Industrial
  - Recreational
  - Vacant
- The name changes in some EA Types is due to a change in terminology and not a change in methodology

#### Censuses 2001 & 2011

- Enumerator Area Summary Books were printed, containing a map and/or aerial photographs of each EA, an orientation map for each EA (route from the nearest town), a list of all dwellings in the EA with their addresses where applicable, or some type of identifying description
- · The EA Summary Book is used during the listing phase to record each residential and nonresidential structure found in the EA as well as vacant stands
- In the instance of collective living quarters, each room / ward / cell / dormitory / section was
- Extra dwellings found not on the list were to be added and enumerated

#### 10.2 Census 2011: Derived household income

Household income in the Census is a derived variable, calculated by adding together the individual incomes of all members of the household. The result for each household is then reallocated into the relevant income category. A fixed amount had to be allocated to each income range in order to derive household income. These amounts were as follows:

HOUSEHOLDS INCOME: ALLOCATED VALUES FOR EACH INCOME RANGE			
Range	Proxy values calculated		
No Income	0		
R1 - R 4 800	3 200		
R 4 801 – R 9 600	7 200		
R 9 601 – R 19 200	13 576		
R 19 201 – R 38 400	27 153		
R 38 401 – R 76 800	54 306		
R 76 801 – R 153 600	108 612		
R 153 601 – R 307 200	217 223		
R 307 201 – R 614 400	434 446		
R 614 401 – R1 228 800	868 893		
R1 228 801 – R2 457 600	1 737 786		
R2 457 601 or more	4 915 200		

#### 10.3 General Household Survey 2011

- The 2011 GHS is a survey covering a broad array of topics including housing conditions, tenure and access to services, household composition, grants, disability, education and schooling, health and access to health facilities, general indicators of well-being and employment
- In some instances, small sample sizes limit the extent to which data can be interrogated
- In the case of the Western Cape, the sample for all households is 2,898 while the sample size for households in shacks not in backyards is 161
- The sample frame is based on Census 2001 EA level data
- This has been augmented throughout the past decade through additional listings, including work done for the 2007 Community Survey
- There are continuous changes across Primary Sampling Units (PSUs)
- PSUs comprise several EAs grouped according to geotype
- Three different sample designs were used over the years: 2002-2004, 2005-2007, 2008-present
- Sample may be biased toward older, more established settlements if the sample design does not explicitly incorporate newer informal settlements
- The target population of the GHS is private households in all provinces of South Africa as well

as residents in workers' hostels. The survey does not cover other collective living quarters such as students' hostels, old age homes, hospitals, prisons and military barracks

#### 10.4 Income and Expenditure Survey 2010/11

- The 2010/11 IES is a survey of income and expenditure patterns
- It is based on a combination of the diary and recall methods of capture
- In some instances, small sample sizes limit the extent to which data can be interrogated
- In the case of the Western Cape, the sample for all households is 2,970 while the sample size for households in shacks not in backyards is 136
- This survey was conducted between September 2010 and August 2011
- The sampling frame for the IES 2010/11 was obtained from Stats SA's Master Sample based on the 2001 Census Enumeration Areas (EAs). The Master Sample is designed to cover all households living in private dwelling units and workers living in workers' quarters in South Africa
- The IES 2010/11 sample is based on an extended sample of 3,254 PSUs which consist of the 3,080 PSUs in the Master Sample and an additional 174 urban PSUs selected from the PSU frame
- The estimates in the IES have not been weighted to Census 2011; rather the survey has been weighted to mid-March 2011 population estimates
- The IES uses an integrated weighting system not tailored to estimate households; therefore it is advisable to use proportions and averages rather than actual population numbers
- Stats SA is confident that estimates are representative of the sample on the ground and that shacks are covered well in the IES (as well as the Census)

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