# Limpopo: Informal settlements Status (2013)







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Acknowledgements

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# List of abbreviations

EA	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

# PART 1 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 the Limpopo province.

# PART 2 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

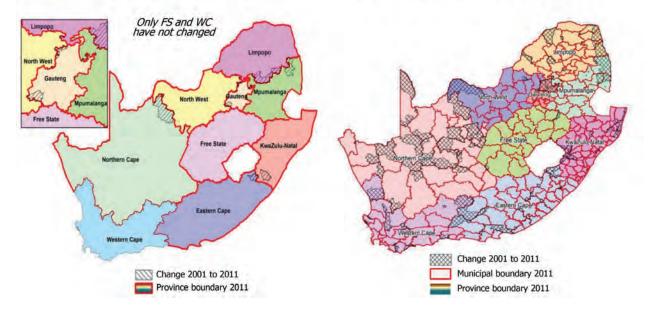
Currently the 2011 Census data is available for analysis using Statistics South Africa's SuperWEB or SuperCROSS software. This system is not fully interactive; not all variables can be cross tabulated. By way of example, education and employment data cannot be analysed by type of main dwelling people 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 assistance from Statistics South Africa<sup>2</sup>.



PROVINCIAL BOUNDARY CHANGES SINCE 2001





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

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	<ul> <li>The 2009 National Housing Code's Informal Settlement Upgrading Programme identifies informal settlements on the basis of the following characteristics:</li> <li>Illegality and informality;</li> <li>Inappropriate locations;</li> <li>Restricted public and private sector investment;</li> <li>Poverty and vulnerability; and</li> <li>Social stress</li> </ul>				
Polokwane Local Municipality *	"Dense proliferation of small, make-shift shelters built from diverse material and informally located on land that is not proclaimed, often characterised by high crime, degradation of the local ecosystem and severe social and health problems."				
Mookgophong Local Municipality **	"Dense settlements comprising communities housed in self constructed shelters under conditions of informal tenure."				
Thabazimbi Local Municipality ***	"Unplanned settlements where informal housing (i.e. structures not in compliance with building regulations) is constructed on land that occupants have no legal claim to (at least initially), and on which few, if any, services exist."				
Modimolle Local Municipality ****	"Informal settlements are 100% tin houses."				

Source:\* IDP Source: \*\* IDP 2011/12 Source: \*\*\* Housing Strategy 2010 Source: \*\*\*\* IDP 2011/12

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.

TABLE 2         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.

## PART 3

# A context for the findings: Broad housing trends 2001 to 2011 in Limpopo

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 Limpopo has increased from 1,117,818 in 2001 to 1,418,102 in 2011. At the same time the total population has increased from 4,995,462 in 2001 to 5,404,868 in 2011. Households have grown faster than the individual population (2.4% CAGR<sup>3</sup> for households compared to 0.8% for individuals) and household sizes have continued to decline from 5.0 in 1996, to 4.5 in 2001, and 3.8 in 2011<sup>4</sup>. Driving the growth in the trend towards smaller average household sizes is the noticeable increase in the proportion of one-person households. In 2001 16% of all households were comprised of one person living alone while in 2011 24% of all households were comprised of one person.

One-person households are more common in farms than in urban or tribal or traditional areas. In 2011 in Limpopo 56% of households living in areas demarcated as farms<sup>5</sup> were one-person households whereas in urban areas 32% of households and in tribal or traditional areas 19% of households were one-person households. These one-person households are in many cases attached to other households living elsewhere. According to the IES 29% of one person households in Limpopo either send or receive remittances indicating financial interdependency across dwelling-based households<sup>6</sup>. 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 Statistics South Africa's 2011 mid-year population estimates, Limpopo has seen significant out-migration between 2006 and 2011. The majority of out-migrants (70%) have moved to Gauteng.

 <sup>&</sup>lt;sup>3</sup> Compound annual growth rate
 <sup>4</sup> Census 2011 Statistical release – P0301.4 (revised)

Farms account for a very low proportion of households in Limpopo (6%) This is significantly lower than for one person households in the country as a whole (40%)

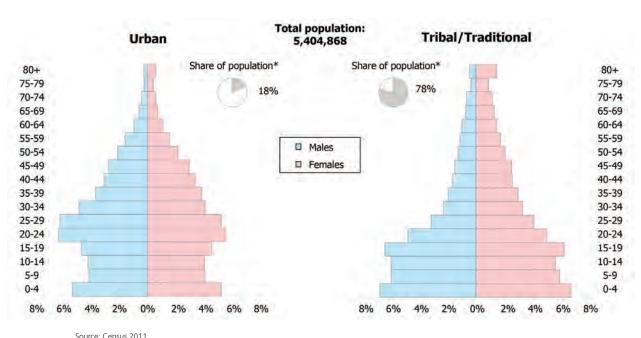
TABLE 3       ESTIMATED PROVINCIAL MIGRATION STREAMS OF PEOPLE IN LIMPOPO:         2006 – 2011								
	Out-migration In-migration							
	Province in 2011	Percentage	Province in 2006	Percentage				
Gauteng	166 621	70%	34 742	36%				
Mpumalanga	26 462	11%	16 938	18%				
North West	25 596	11%	12 306	13%				
KwaZulu-Natal	5 512	2%	6 364	7%				
Free State	5 295	2%	9 230	10%				
Western Cape	4 776	2%	4 490	5%				
Eastern Cape	3 462	1%	9 221	10%				
Northern Cape	821	0%	2 826	3%				
Total	238 545	100%	96 117	100%				

#### Net migration: -142 428 Ratio of in-migration to out-migration 0.4

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 Limpopo 6% of the population have moved from a different province since 2001 (4% moved from outside of South Africa) and 18% relocated within the province. In tribal or traditional areas in Limpopo only 1% of the population have moved from a different province since 2001 (1% moved from outside of South Africa) with 4% moving within the province. There is a noticeable difference in the population pyramids in urban compared to tribal or traditional areas as a result of migration.

#### CHART 2 POPULATION PYRAMID: LIMPOPO



Note: \*The remaining 4% of the population live on farms

The total number of households living in formal housing including houses, flats and townhouses has increased by 462 000 over the ten years between 2001 and 2011. The number of households living in shacks not in backyards has declined by 16,276 since 2001. The most significant decline has been in traditional dwellings with the total number of households living in such dwellings declining by 161,335 during the same period.

Measured in terms of the proportion of households, the trend is similar. The proportion of households living in formal housing increased from 70% of all households in 2001 to 88% in 2011 while the proportion of households living in shacks not in backyards has declined from 5% to 3% over the same period. The proportion living in traditional dwellings has declined dramatically from 20% to 5%.

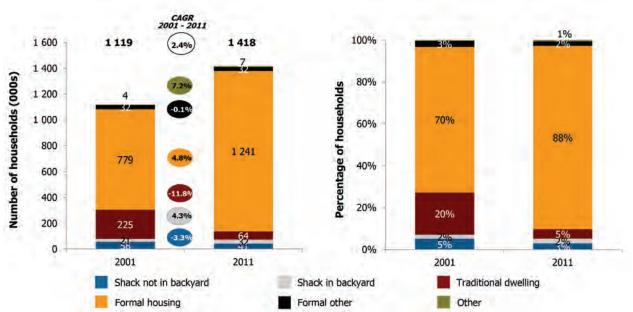


CHART 3 TYPE OF MAIN DWELLING IN LIMPOPO

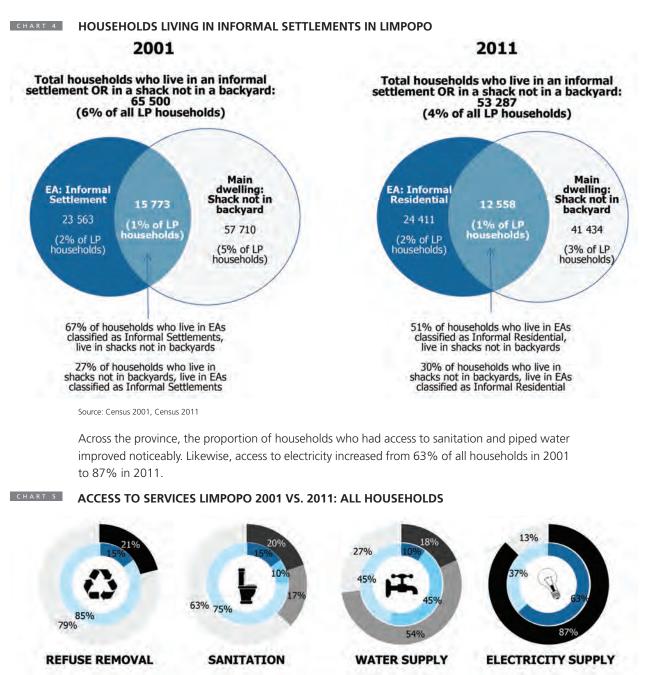
Source: Census 2001, Census 2011

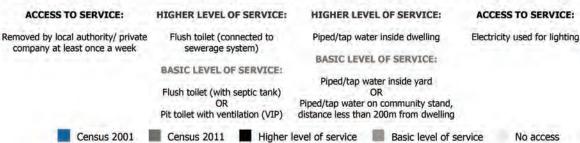
Note: Formal housing contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment. Formal other contains: House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat Note: Shack not in backyard is defined as "Informal dwelling / shack not in backyard e.g. in an informal/squatter settlement or on a farm"; Shack in backyard is defined as "Informal dwelling / shack in backyard"

The additional number of households living in formal housing is a useful proxy for the growth in the housing stock. Over that period Stats SA reports that formal private sector residential new build amounted to approximately 10 000 housing units. The balance, namely 452 000 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 proxied by dwelling type (shack not in backyard) has declined while the number of households living in informal settlements proxied by EA type (informal residential) has increased in Limpopo. In 2001 there were 57,710 households living in shacks not in backyards compared to 41,434 in 2011. With regard to EAs, 23,563 households lived in areas demarcated by Stats SA as informal settlements in 2001 compared to 24,411 in 2011 in areas demarcated as informal residential<sup>7</sup>.

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





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 noticeable shift towards rental accommodation. In 2001 roughly 6% of households in Limpopo rented their primary dwellings. This had increased to 13% in 2011.

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TABLE 4 HOUSEHOLDS LIVING IN LIMPOPO: TENURE STATUS BY TYPE OF MAIN DWELLING								
	Census 2001 Census 2011							
	Owned	Rented	Occupied rent-free	Owned	Rented	Occupied rent-free	Other	
Formal dwelling	62%	7%	32%	58%	12%	27%	2%	
Traditional dwelling	57%	1%	41%	58%	5%	36%	2%	
Shack in backyard	48%	15%	37%	45%	27%	24%	4%	
Shack not in backyard	38%	7%	55%	47%	19%	31%	4%	
Other	42%	11%	47%	36%	28%	29%	7%	
Total	59%	6%	35%	58%	13%	27%	2%	

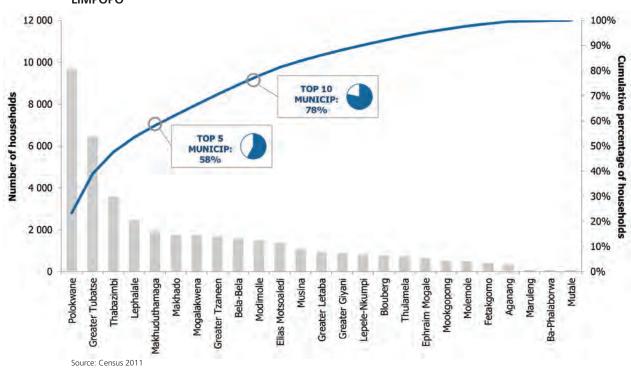
Source: Census 2001, Census 2011

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.

# PART 4 Number of households living in informal settlements in Limpopo

The data indicates that there are a total of 41,434 households, containing 110,532 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 Limpopo.

Provincial statistics mask very different housing conditions, and significant shifts at a district and local municipality level. Polokwane and Greater Tubatse account for 39% of all households who live in shacks not in backyards. This is not in line with the provincial population distribution as a whole; these same local municipalities are home to 18% of households across the province.



CHARTE HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS BY LOCAL MUNICIPALITY IN LIMPOPO

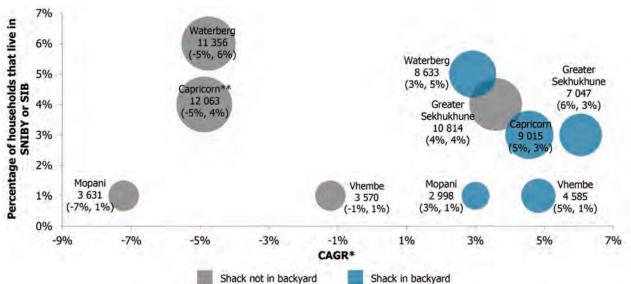
The number and proportion of households living in shacks not in backyards by district municipality is summarised below. Together, shacks in backyards and shacks not in backyards accommodate just 5% of all households in Limpopo. The Waterberg district municipality has the highest proportion of households living in shacks not in backyards at 6%, a further 5% of households in that municipality live in shacks in backyards.

TABLE 5 HOUSEHOLDS LIVING IN SHACKS IN LIMPOPO BY DISTRICT MUNICIPALITY							
Municipality	Shack not in a backyard Shack in a backyard						
	Number of HH	Percentage of HH that live in SNIBY	Number of HH	Percentage of HH that live in SIB			
Capricorn	12 063	4%	9 015	3%			
Waterberg	11 356	6%	8 633	5%			
Greater Sekhukhune	10 814	4%	7 047	3%			
Mopani	3 631	1%	2 998	1%			
Vhembe	3 570	1%	4 585	1%			
Limpopo	41 434	3%	32 278	2%			

Source: Census 2011

CHART 7

In general, the total number of households living in shacks not in backyards in Limpopo decreased from 2001 to 2011, whilst those living in shacks in backyards grew over the same timeframe. The fastest growing municipality with regard to the total number of households living in shacks not in backyards has been in Greater Sekhukhune, albeit off a low 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

Note: \*Compound Annual Growth Rate

Note: \*\* Read as: Capricorn district municipality had 12 063 households living in shacks not in backyards in 2011. This has declined by a rate of 5% compounded annually between 2001 and 2011. 4% of households in Capricorn live in shacks not in backyards

According to the 2011 Census<sup>8</sup>, roughly 47% of households living in shacks not in backyards in Limpopo regard themselves as owners, with 31% 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. Nineteen per cent of households say they rent their dwellings<sup>9</sup>.

<sup>&</sup>lt;sup>3</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> Four per cent responded 'other' - there is no indication as to what this entails

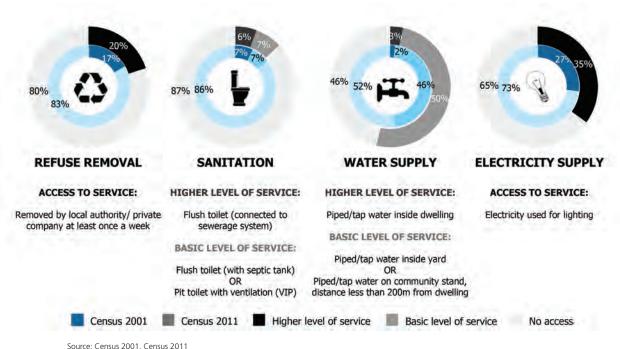
# PART 5 **Profiling informal** settlements in Limpopo

### 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 Limpopo. These households have the lowest levels of access to refuse removal, sanitation and water compared to all other provinces.

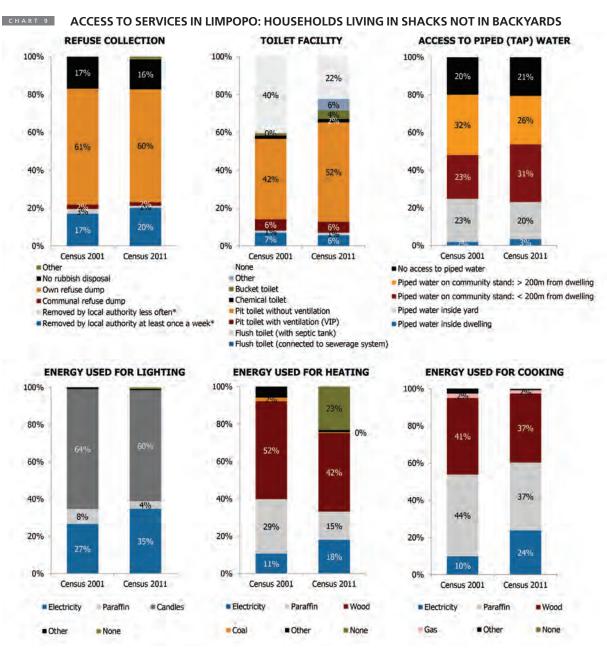


### ACCESS TO SERVICES IN LIMPOPO 2001 VS. 2011: HOUSEHOLDS LIVING IN SHACKS NOT **IN BACKYARDS**



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

On average households living in shacks not in backyards in Limpopo appear to live under better conditions than in 2001. By far the most significant improvements have been in access to piped water within 200 metres of the dwelling, and access to electricity. More detailed data on the nature of services is summarised in the charts below.



Source: Census 2001, Census 2011 \* In the Census 2011 these include refuse removed by private company

There are noticeable differences across the province in terms of levels of access and rates of change with regard to individual services. Measured in terms of the proportion of households, access to refuse removal differs within the province but is generally low, with the exception of Capricorn.

# CHART 10 ACCESS TO REFUSE REMOVAL IN LIMPOPO: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS

	Census	2001	Census 2011		
District municipality	Total households	Access (%)	Total households	Access (%)	
Capricorn	163 310 24	4 76	138 099	44 56	
Waterberg	133 976 18	82	125 748	19 81	
Greater Sekhukhune	114 178 4	96	112 167	98	
Vhembe	42 078 16	84	38 629	1 <mark>2</mark> 88	
Mopani	21 955 8	92	19 431	8 92	
Limpopo	475 497 17	83	434 075	20 80	

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 for those living in shacks not in backyards, and has even declined in some areas.

# CHART 11 ACCESS TO SANITATION IN LIMPOPO: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS

	Cens	us 2001	Census 2011		
District municipality	Total households	Access (%)	Total households	Access (%)	
Capricorn	163 310 7	7 86	138 099	58 87	
Waterberg	133 976	6 86	125 748	<mark>9</mark> 6 85	
Greater Sekhukhune	114 178	11 86	112 167	2 <mark>6</mark> 92	
Vhembe	42 078	<mark>16</mark> 8 76	38 629	13 8 79	
Mopani	21 955	91	19 431	5 <mark>8</mark> 87	
Limpopo	475 497	7 86	434 075	6 <mark>7</mark> 87	

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 basic levels of water services has declined in some district municipalities since 2001.

	Censu	ıs 2001	Census 2011			
District municipality	Total households	Access (%)	Total households	Access (%)		
Capricorn	163 310	47 51	138 099	4 62 34		
Waterberg	133 976	44 54	125 748	4 49 47		
Greater Sekhukhune	114 178	29 70	112 167	38 60		
Vhembe	42 078	53 43	38 629	6 51 44		
Mopani	21 955	63 35	19 431	51 46		
Limpopo	475 497	46 52	434 075	50 46		

#### CHART 12 ACCESS TO WATER IN LIMPOPO: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS

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

Although access to electricity has improved in all but one district municipality since 2001 (Greater Sekhukhune), a high proportion of shacks not in backyards across the province did not have access to electricity in 2011.

### CHART 13 ACCESS TO ELECTRICITY IN LIMPOPO: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS

	Census 2001			Census 2011		
District municipality	Total households	1	Access (%)	Total households	Ac	cess (%)
Capricorn	163 310	20	80	138 099	25	75
Waterberg	133 976	20	80	125 748	31	69
Greater Sekhukhune	114 178	43	57	112 167	42	58
Vhembe	42 078	43	57	38 629	46	54
Mopani	21 955	36	64	19 431	42	58
Limpopo	475 497	27	73	434 075	35	65

Source: Census 2001, Census 2011

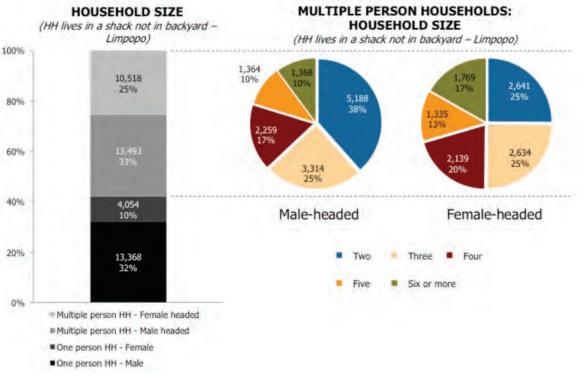
Note: Access to electricity: Use electricity for lighting

### 5.2 Household characteristics

The average household size for households who live in shacks not in backyards at 2.5 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 roughly 42% of households who live in shacks not in backyards in Limpopo are one-person households; for households in the province as a whole this proportion is 24%.

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. Just under two thirds of households (65%) are male-headed. Of those households comprising more than one person, female-headed households are noticeably larger.

#### CHART 14 HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS IN LIMPOPO: SIZE OF HOUSEHOLD, BY GENDER OF HOUSEHOLD HEAD



Source: Census 2011

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, over one third (34%) of all multi-person households who live in shacks not in backyards in Limpopo live in over-crowded conditions. Using this definition, Limpopo has the highest proportion of households living in shacks not in backyards that live in over-crowded conditions relative to all other provinces. Female-headed multi-person households are more likely to be over-crowded than their male counterparts (36% versus 31%).

## 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 22,156 children under the age of 18 who live in informal residential EAs accounting for 1% of all children in Limpopo. There is a skew towards very young children in informal residential areas; 39% of all children are under the age of five, compared to 31% for the province as a whole.

TABLE 6         NUMBER AND PERCENTAGE OF CHILDREN BY AGE GROUP IN LIMPOPO								
Age group of children	Children in Informal residential EAs	Percentage	All children	Percentage				
0 - 4	8 748	39%	680 163	31%				
5 - 6	2 557	12%	256 170	12%				
7 - 10	4 036	18%	438 623	20%				
11 - 14	3 858	17%	460 056	21%				
15 - 17	2 957	13%	381 445	17%				
Total	22 156	100%	2 216 457	100%				

Source: Census 2011

According to the census, 85% of children under the age of 15 in informal residential EAs in Limpopo have both parents still living<sup>10</sup> (the corresponding proportion for the province as a whole is  $80\%^{11}$ ).

Ninety per cent of children aged 7 to 17 living in informal residential EAs in Limpopo currently attend an educational institution. This is not significantly different than for the province as a whole with the exception of children aged 15 to 17.

CHILDREN AGED 7 - 17 YEARS IN LIMPOPO: ATTENDANCE OF CHILDREN AT AN EDUCATIONAL INSTITUTION					
Children 7 - 17	Informal residential EA	All children			
7 - 10	93%	96%			
11 - 14	94%	96%			
15 - 17	81%	92%			
Total*	90%	95%			

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 36% of all individuals who live in informal residential EAs moved between 2001 and 2011. This is the highest proportion across all provinces. Of those who have moved, 20% corresponding to 5,225 individuals have moved from outside South Africa. The table below summarises findings in this regard.

MIGRATION IN LIMPOPO			
Total number of people who moved between 2001 and 2011	643 208		
Number of people who moved between 2001 and 2011 who live in informal EAs	26 262		
Proportion of those who live in informal EAs who moved between 2001 and 2011	36%		
Proportion of total who moved between 2001 and 2011 who live in informal EAs	4%		
Provinces most moved from (informal EAs)	Limpopo (55%) Outside of SA (20%)		

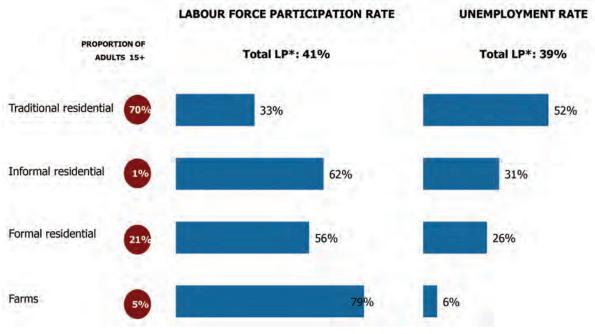
Source: Census 2011

### 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 higher in informal residential EAs than in formal residential EAs as is the case for unemployment rates. This is consistent with informal settlements acting as 'arrival cities' accommodating those seeking an entry point into the labour market. Unemployment rates are particularly high in traditional residential EAs.

# CHART 15 ADULTS AGED 15+ IN LIMPOPO: LABOUR FORCE PARTICIPATION RATES AND UNEMPLOYMENT RATES BY TYPE OF ENUMERATION AREA



Source: Census 2011

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

On the whole, the sector of employment for those who live in informal residential EAs is almost exactly the same as for the province as a whole. In other provinces formal sector employment accounts for a lower proportion of employment in informal residential EAs.

SECTOR OF WORK IN LIMPOPO: PERCENTAGE OF EMPLOYED ADULTS 15+					
	Formal	Informal	Private	Don't know	
	Sector	Sector	household		
Informal residential EA	66%	19%	13%	1%	
All employed adults in province	66%	18%	14%	2%	

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. Seventy one per cent of employed adults living in informal EAs in Limpopo do not have a matric, compared to 52% of employed adults for the province as a whole.

ADULTS 15+ IN LIMPOPO: EDUCATION LEVEL BY EMPLOYMENT STATUS										
	Informal residential EA				All adults					
	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	7%	64%	22%	6%	0%	7%	45%	26%	21%	1%
Unemployed	8%	68%	19%	5%	0%	6%	59%	28%	6%	0%
Discouraged work-seeker	8%	68%	20%	4%	0%	8%	63%	25%	4%	0%
Other not economically active	12%	67%	14%	5%	2%	11%	66%	15%	4%	4%
Total adults 15+	10%	65%	18%	5%	1%	14%	56%	19%	8%	2%

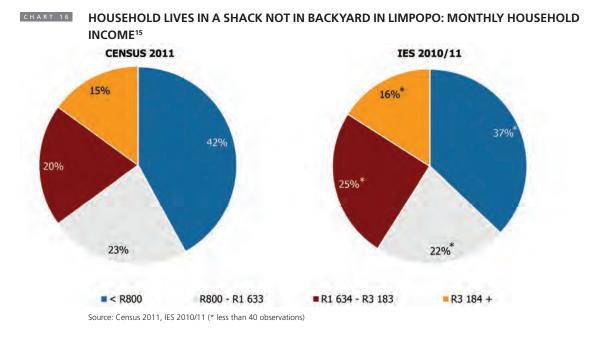
Source: Census 2011

#### 5.5.2 Income

According to the 2011 Census 42% 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>12</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>13</sup>. A far more detailed source of data on incomes is the IES14. That data source indicates that 37% 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. A further limitation of the IES is the small sample size; for that survey there are a total of 72 households who live in shacks not in backyards in Limpopo.

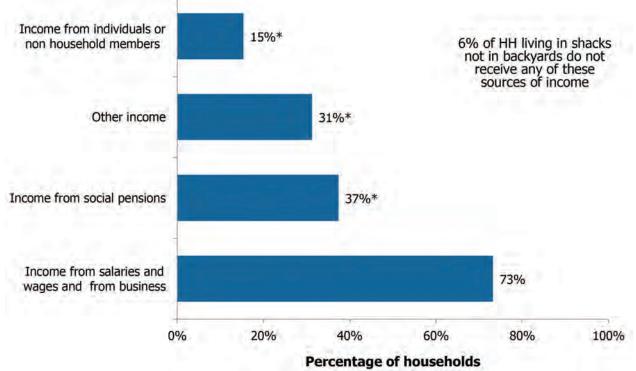
<sup>&</sup>lt;sup>12</sup> "What is the income category that best describes the gross monthly or annual income of (name) before deductions and including all sources of income? (e.g. Social grants, ÚlF, remittances, rentals, investments, sales or products, services, etc.)" <sup>13</sup> As individual 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>14</sup> Analysis of income in the IES excludes imputed rentals for housing



According to the IES, 87% 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 37% receive government grants.



#### CHART 17 HOUSEHOLD LIVES IN A SHACK NOT IN BACKYARD IN LIMPOPO: SOURCES OF INCOME

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

<sup>15</sup> In the IES 2010/11 for the province as a whole, these proportions are: < R800 (23%), R800 - R1 633 (25%), R1 634 - R3 183 (24%), R3 184 - R6 366 (13%), R6 367 + (15%). In the Census 2011 they are: < R800 (32%), R800 - R1 633 (23%), R1 634 - R3 183 (21%), R3 184 - R6 366 (10%), R6 367 + (14%)

### 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 GHS, 18% of households in shacks not in backyards in Limpopo 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 23% of households living in shacks not in backyards in the province appear to qualify for subsidy housing.

# PART 6 Other non-survey data sources

Other non-survey data sources have been explored, including the Housing Development Agency and Eskom.

# 6.1 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>16</sup>. The informal settlements layer was last updated in November 2011. The data indicates there are 151 informal settlements in Limpopo; none of these have a household or shack count.

# 6.2 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 13 polygons categorised as Dense Informal in Limpopo, covering a total area of 0.8 square kilometres.

### 6.3 Summary of estimates

According to LaPsis 2011 estimates there are 151 informal settlements in Limpopo province; there are no provincial estimates available for comparison.

TABLE 11         NUMBER OF INFORMAL SETTLEMENTS				
	Number of informal settlements			
	LaPsis 2011: Informal settlements atlas			
Capricorn	12			
Greater Sekhukhune	4			
Mopani	20			
Vhembe	9			
Waterberg	106			
Limpopo	151			

Note: According to Eskom's Spot Building Count last updated in November 2011, there are 13 polygons in Limpopo classified as "Dense Informal"

# PART 7

# Appendix: Statistics South Africa Surveys

### 7.1 Censuses 2011 and 2001

#### Census 2011

- Demarcation  $\rightarrow$  Classification  $\rightarrow$  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
  - Institution + Hostel
- 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 listed
- Extra dwellings found not on the list were to be added and enumerated

### 7.2 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:

TABLE 12 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			

### 7.3 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

## 7.4 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 Free State, the sample for all households is 2,172 while the sample size for households in shacks not in backyards is 172
- 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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