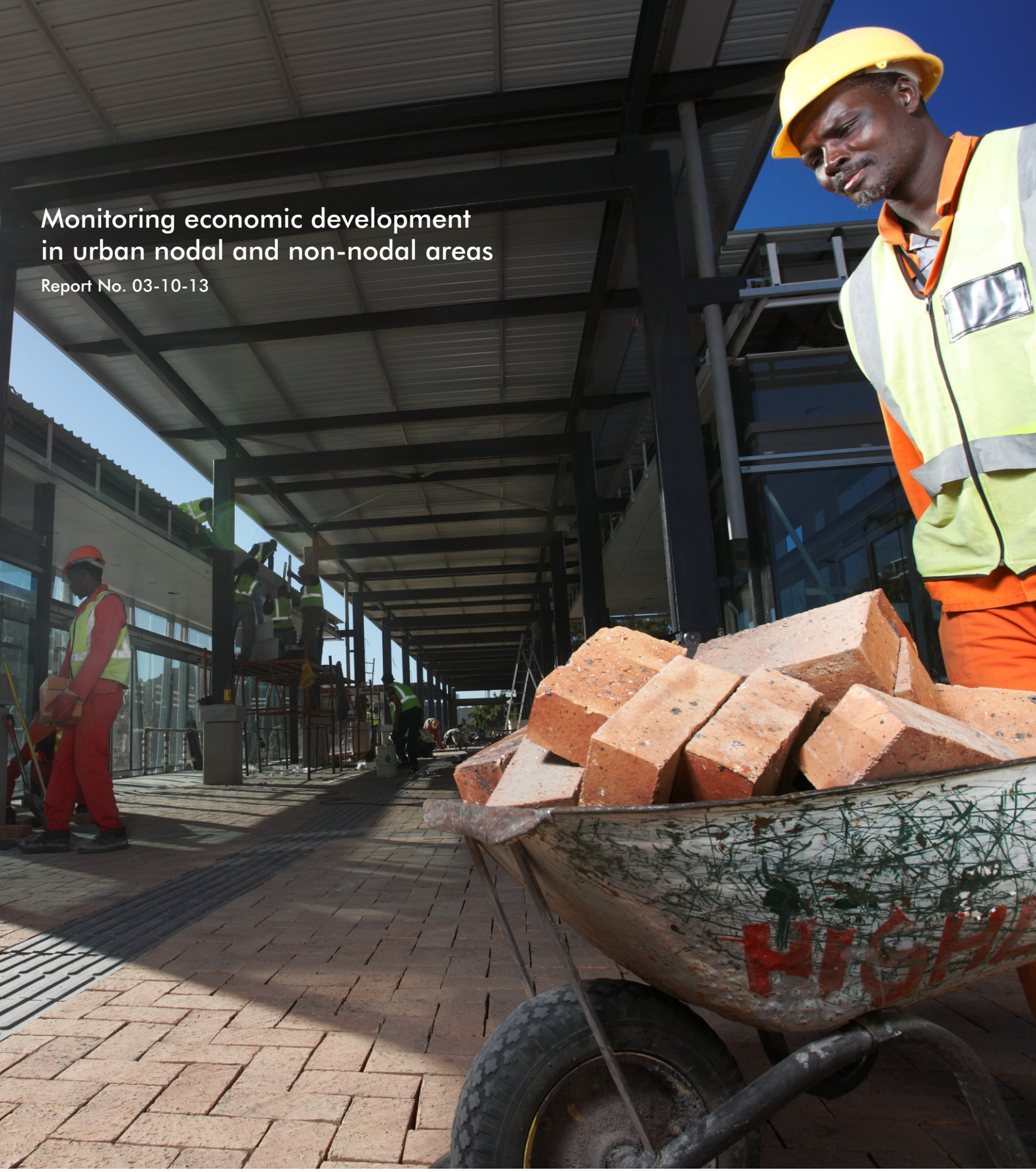

Monitoring economic development in urban nodal and non-nodal areas

Report No. 03-10-13

Statistics South Africa

The South Africa I know, the home I understand

Monitoring economic development in urban nodal and urban non-nodal areas using data from Censuses 2001 and 2011

Statistics South Africa

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Report No. 03-10-13

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Definition of terms

Employment - An activity in which a person performs work for pay, profit or family gain. Such a person can be self-employed, an employer, an employee or a working family member.

Labour absorption rate - Employed persons as a percentage of the working age population.

Multidimensional poverty – it is deprivation, that is made up of several factors which include poor health, lack of education, inadequate living standards, lack of income, disempowerment, lack of decent work and threat from violence.

Non-nodal areas - areas which are not part of the urban renewal programme which were selected in this report for comparison to the Urban Nodal areas.

Poverty headcount ratio - it is the proportion of a population that exists or lives below the poverty line.

Township – A township is usually a town or part of a town. Historically, 'township' in South Africa referred to an urban residential area created for black migrant labour, usually beyond the town or city limits. Reference is sometimes made to 'black township', 'Coloured Township' and 'Indian township', meaning that these settlements were created for these population groups. By contrast, the white population resided in suburbs. Informal synonyms for township are 'location', 'lokasie', 'ilogishi'/ ilokishi. Generally, every town/city has one or several townships associated with it.

Unemployment - People within the economically active population, who:

- did not work during the seven days prior to the interview;
- want to work and are available to start work within two weeks of the interview; or
- have taken active steps to look for work or to start some form of self-employment in the four weeks prior to the interview.

Urban Nodal areas - areas which were selected in 2001 to be part of the Urban Renewal Programme.

1. Introduction

South Africa has launched various programmes and strategies aimed at reducing poverty. The Urban Renewal Programme (URP) is one of the sustained campaigns against poverty and underdevelopment which are implemented in 8 nodes in urban areas. The Urban Renewal Programme (URP) was launched in 2001 by former President Thabo Mbeki in his State of the nation address. These nodes were selected on account of their poverty and lack of infrastructure and capacity. The URP was conceived as a 10-year initiative. According to the Urban Renewal Implementation Framework, the URP was founded on the principal concept of nodal development in specified municipalities. Two principal structuring mechanisms are used to drive the programme: spatial focus and targeting funding, and resource allocation from the three spheres of government and strategic partners in response to the indicators of poverty and economic opportunity (Molapo, Silimela et al. 2001). However, there was no dedicated funding source allocated to the URP at inception (Everratt, Dube et al. 2004). The funding philosophy was to better co-ordinate financial and technical resources from all three spheres of government to be channelled to nodes for development (Everratt, Dube et al. 2004, Donaldson, Du Plessis et al. 2013).
The broad objectives of the urban renewal programme were:

- To promote local economic development (LED) to relieve poverty and unemployment;
- To provide a safe and secure environment by fighting crime;
- To support education as well as training and skills development; and
- To create a quality urban environment where people can live with dignity and pride and develop efficient and user-friendly support systems (Wolfgang 2008)

According to the National Urban Renewal Implementation Framework (2001) the aim for selecting these urban nodes was to alleviate urban poverty and the focus was given to the six metropolitan areas that produced 56% of the Gross Domestic Product in 2001. Taking into account the fact that there were 58% of people living in urban areas in 2001, Cape Town, Durban and Johannesburg accounted for around 30% of the national population. The selected urban nodal areas displayed a set of common features that established a relatively comparable developmental agenda such as:

- Apartheid townships
- Poverty and high levels of crime
- Depleted formal engineering infrastructure that needed rehabilitation
- Shortage of housing
- Inadequate operational and maintenance budgets

- Low internal economic opportunities
- Low education and skills levels of resident population
- Areas that were poorly connected to surrounding neighbourhoods (Molapo, Silimela et al. 2001).

The 8 urban townships were pilots to pave way for an urban development strategy to be developed and implemented once the 10 year pilot period has elapsed (Donaldson, DuPlessis et al. 2013). These townships were then referred to as Presidential urban nodes. The urban nodes were selected in five provinces; KwaZulu-Natal, Eastern Cape, Gauteng, Northern Cape and Western Cape (Table 1). Western Cape, Eastern Cape and in KwaZulu-Natal each had two urban nodes whilst Gauteng and Northern Cape had urban node each. Table 1 indicates the selected urban nodes for the Urban Renewal Programme (URP) in 2001.

Table 1: Urban nodes per province

Province	Municipality	Urban nodal area
Western Cape	City of Cape Town	Khayelitsha Mitchell's Plain
Eastern Cape	Nelson Mandela Metro (Port Elizabeth) Buffalo City (East London)	Motherwell Mdantsane
Northern Cape	Sol Plaatjie (Kimberley)	Galeshewe
KwaZulu-Natal	eThekwini Metro	Inanda Kwa-Mashu
Gauteng	City of Johannesburg	Alexandra

The purpose of this report therefore is to examine the state of economic development in the selected urban nodes in 10 years since the start of the urban renewal programme in 2001 until 2011. This report seeks to answer the following questions:

Firstly, was there significant economic development in the urban nodes during 2001 and 2011? Secondly, did the selected urban nodes benefit much more from the programme compared to other urban areas that were not part of the programme? To answer this last question, we selected other townships (non-nodal areas) for comparison to urban nodes, which are within the same municipalities as the urban nodal areas and are closer to urban nodes, and had relatively the same multidimensional poverty in 2001.

1.1 Outline of the report

This report is divided into eight main sections. Section one provides background information about the report and the URP itself. Section two presents data sources and the analysis methodology adopted. Section three discusses the key findings whilst Section four describes the geographical location and historical background of the establishment of urban nodes. Section five provides detailed descriptive analysis on various aspects such as the demographic characteristics, education profile, economic activity, living conditions and poverty levels in the urban nodes compared with the selected urban non-nodes. The report is then concluded by a discussion in Section 6, while Section 7 is devoted to identifying areas for further research; and the final conclusion is discussed in Section 8.

2. Methodology and data sources

This section describes data sources used in this report. The section also highlights data collection methodology, data processing methodology as well as the analysis methodology adopted in the report the selection method for those urban non-nodes chosen for comparison purposes.

2.1 Data sources

This report is based on the results of the two censuses conducted in 2001 and 2011. Census 2001 was the second census conducted in the post-democratic South Africa and Census 2011 was the third. Both of these censuses were conducted as the de facto censuses, meaning that people were counted where they were found on the census night. Data collection took place from 9th to the 31st of October of each year (2001 and 2011). Face-to-face interviews were conducted with respondents. Self-administration was permitted as per respondents' preferences. The completed questionnaires were then scanned and transferred into a database for editing and analysis. Analysis of data was done using the Statistical Analyses System (SAS) and SuperCross. Maps were generated using ArcGIS.

2.1.1 Methodology

This report seeks to answer two questions as highlighted in Section 1. To respond to the first question - was there any economic development in the urban nodes between 2001 and 2011. Selected development indicators such as education, employment, living conditions and poverty levels, living conditions etc. are analysed using frequency tables and cross tabulations to measure economic development between 2001 and 2011.

Poverty levels are measured based on the South African Multidimensional Poverty Index (SAMPI) of each node and non-node. The SAMPI is created using the global Multidimensional Poverty Index (MPI) which captures the severe deprivations that each person or household faces with respect to education, health and living standards. Statistics South Africa customised the MPI to improve poverty measurement for the country and to align the measurement of poverty with international poverty measures. To create the SAMPI, common variables (Table 2) that seek to profile poverty were generated at household level from Census 2001 and Census 2011 (Statistics South Africa 2014). Because the SAMPI used the same data used in this report, it is therefore the important source of information in determining the state of poverty in the urban nodes.

Table 2: Deprivation dimensions and indicators used to derive the SAMPI

Dimension	Indicator
Health	Child mortality
Education	Years of schooling
	School attendance
Standard of living	Lighting
	Heating
	Cooking
	Water
	Sanitation
	Dwelling
	Assets
Economic activity	Unemployment (all adults)

Source: Statistics South Africa, 2014

To answer the second question - did the urban nodes benefit more than other townships not selected as nodes? – Firstly, we selected townships that were not part of the URP for comparison purposes. In this report, the townships selected for comparison to the urban nodes are referred to as urban non-nodes. Secondly, analysis on the rate of development between 2001 and 2011 was done for urban nodes and selected urban non-nodes (see Table 3).

2.1.2 The selection of urban non-nodes for comparison to urban nodes

The urban non-nodes used for comparisons with urban nodes in this report are selected based on their proximity to urban nodes and their poverty levels. The selected urban non-nodes had to be in the same municipality as the urban node, and have just about the same poverty levels as the urban node in 2001. Table 3 shows the poverty levels in urban nodes as they compare to urban non-nodes in 2001.

Table 3: The multidimensional poverty headcount rates for urban nodes and urban non-nodes in 2001

Province	Municipality	Nodal areas	2001	Non-nodal areas	2001
Western Cape	City of Cape Town	Khayelitsha	20,5	Gugulethu	18,9
		Mitchell's Plain	11,5	Kraaifonten	12,3
				Brankenfell	11,6
				Fisantkraal	13,3
Eastern Cape	Buffalo City	Mdantsane	17,8	Phakamisa	19,1
				Berlin	26,4
	Nelson Mandela Bay	Motherwell	21,8	KwaNobuhle	16,2
				iBhayi	18,9
Northern Cape	Sol Plaatjie	Galeshewe	12,3	Ritchie	17,5
				Motswedimosa	30,9
KwaZulu-Natal	eThekwini	Inanda	30,9	Ximba	30,5
		Kwa-Mashu	17,3	Mpumalanga	18,9
				iQadi	18,8
				Umlazi	18,3
Gauteng	City of Johannesburg	Alexandra	13,2	Orange Farm	16,9
				Diepsloot	30,7

Source: Nathaniel (author)

Khayelitsha and Mitchell's Plain are both townships found in the City of Cape Town, Western Cape. In 2001 Khayelitsha had a multidimensional poverty headcount of 20,5% and Mitchells' Plain 11,5%. They are compared with townships in the City of Cape Town with the multidimensional poverty headcount ranging from 11,6% to 18,9%, i.e. Gugulethu (18,9%), Kraaifontein (12,3%), Brankenfell (11,6%) and Fisantkraal (13,3%).

Mdantsane and Motherwell are townships situated in the Eastern Cape. Mdantsane is found in Buffalo City municipality whilst Motherwell is found in Nelson Mandela Bay municipality. In 2001 the multidimensional poverty for Mdantsane was 17,8%. In this report, Mdantsane is compared

with two townships, namely, Phakamisa and Berlin which had the multidimensional poverty headcount of 19,1% and 26,4 respectively.

Galeshewe is found in Sol Plaatjie municipality in Northern Cape. In 2001 Galeshewe had a multidimensional poverty headcount of 12,3%. It is compared with Ritchie (17,5%) and Motswedimosa (30,9%).

Inanda and Kwa-Mashu are found in the eThekwini municipality in KwaZulu-Natal. They had a multidimensional poverty headcount of 30,9% and 17,3% respectively in 2001. They are compared with four townships with multidimensional poverty headcount ranging between 18,3% and 30,5%, namely Ximba (30,5%), Mpumalanga (18,9%), iQadi (18,8%) and Umlazi (18,3%).

Alexander, Orange Farm and Diepsloot are under the City of Johannesburg. Alexander (13,2%) is compared with Orange Farm (16,9%) and Diepsloot (30,7%).

3. Key findings

The results suggest that multidimensional poverty headcount rates had declined in the whole country and more importantly in the urban nodal areas – in some cases it dropped very rapidly – while in other areas the decline was at a more steady rate. However, the results of a paired t-test show that the differences in poverty headcount rates in the selected urban non-nodal townships are not statistically significant while the differences in headcount rates in nodal areas are statistically significant. This means that poverty reduction in urban nodes is statistically significant than in the selected non-nodes. The main contributor to multidimensional poverty in all urban nodes and non-nodes has been unemployment, followed by lack of or low levels of education.

There has been a general increase in the employment on average from 47,0% to 62,9% which led to a decrease in unemployment, on average from 53,0% to 37,1% in 2011 in all the urban nodal areas; although it should be noted that some urban nodal areas still had the lowest unemployment rates than others even in 2001. The increase in employment in urban nodes is not statistically significant in both urban nodes and urban non-nodes. The decrease in unemployment rates in the urban nodes and urban non-nodes is not statistically significant as well. This may indicate that there is lack of evidence to suggest that urban nodes created more jobs than other townships or non-nodes. The labour absorption rate increased for both males and females; from 27,7% to 34,6% for females; and for males the absorption rate increased from 40,2% to 43% in the urban nodes and non-nodes; respectively. The general view when labour absorption rate is considered is that the growth in the number of jobs has been outstripped by the expanding labour force and the majority of females were not absorbed by the labour markets as much as their male counterparts.

As we know that poverty in South Africa has a racial dimension, black Africans (who form more than 80% of the total population) dominated the urban nodal population followed by coloured people (who are about 18% proportion of the total population) and Indians/Asians and whites making up the remainder. This is in line with the demographics of the country which also means that the Urban Renewal Programme (URP) targeted largely the previously disenfranchised populations.

School attendance has increased in South Africa and in all the urban nodal areas. The females' population in the whole country constituted a high proportion of 17,5% of those who had no education in 2001. This proportion declined to 8,7% in 2011.
Urban nodes had on average 3,4% of the smallest population without formal education compared to the national average of 8,6% in 2011. The differences between males and females with no

formal schooling were negligible in the urban nodes. The proportions of those who had some secondary education and matric had increased in urban nodal areas. Also, there was a slight increase in the proportion of those with higher education but the numbers are still drastically low (less than 15%). There were slightly more females attending higher educational institutions than males in urban nodal areas. However, there is also insufficient information about the quality of education that children are currently receiving which can be one way of helping them out of poverty as quality education can provide pathways to different careers. The results of paired sample t-test indicate that only statistical significant increases in education for the population older than 20 years in both urban nodes and selected non-nodes are at higher education levels.

All urban nodal and non-nodal areas showed great improvements in terms of access to piped water, flush toilets connected to a sewerage system, mains electricity, and formal dwellings between 2001 and 2011.

The overall increase in the use of electricity for lighting, heating and cooking in urban nodal areas reached on average more than 85% of households in 2011. On the other hand, almost a third of the population used paraffin for heating in 2001, which declined to less than 10% in 2011. The increases in access to electricity, flush toilets, piped water and formal dwellings are all statistically significant in urban nodes, whereas the only statistically significant increases in the urban non-nodes is access to piped water.

Urban nodal areas did not surpass their municipalities nor did they do better than all non-nodal areas in terms of employment and education. However, they were better than some townships within the municipalities, more especially in terms of access to services e.g. electricity, flush toilets etc. It is difficult to detect whether or not the URP are having a specific programmatic effect on municipalities. It is also important to note that the urban nodes were designated poverty nodes; however, they were not the only developmental priority for the municipalities.

One should note that there are other developments taking place in the urban nodal areas, which this report did not cover adequately, for instance, ‘hard’ and ‘soft’ infrastructural and facility upgrades. This may include building of roads, bridges, transport, rail extensions, hospitals, and high quality urban design. However, statistics on the proportion of the employed persons in nodes and non-nodes were provided and discussed.

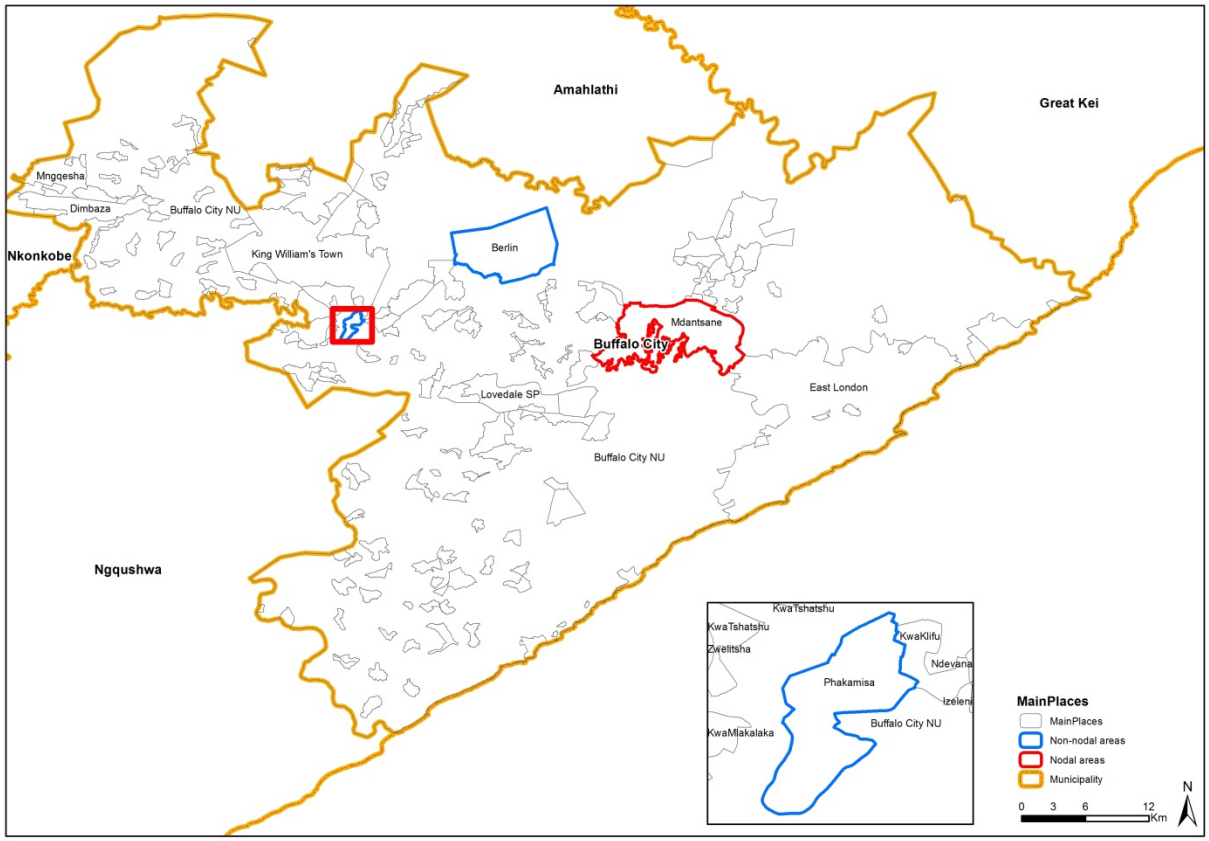
4. Geographical locations of urban nodes and non-nodal areas within municipalities

In this section, geographical locations of urban nodal and non-nodal are shown within municipalities. Historical background for establishment of these townships is discussed.

4.1 Buffalo City and Nelson Mandela Bay municipalities

The Nelson Mandela Bay and Buffalo City municipalities are some of the municipalities found in the Eastern Cape. The Nelson Mandela Bay had a population of 1 152 115 and it was ranked sixth as the most populous municipality in the country in 2011, followed by the Buffalo City which was ranked 7th with a population of 755 200 (Annexure: Table II). Eastern Cape was the highest sender of migrants to Kwa-Mashu, Inanda, Mitchell's Plain and Khayelitsha in 2001 (Annexure: Table V). Mdantsane and Motherwell are both townships situated in the Eastern Cape. Map 1 shows that Mdantsane is situated between East London and King William's Town under the Buffalo City municipality.

Map 1: Urban nodal and non-nodal areas in Buffalo City municipality in 2011

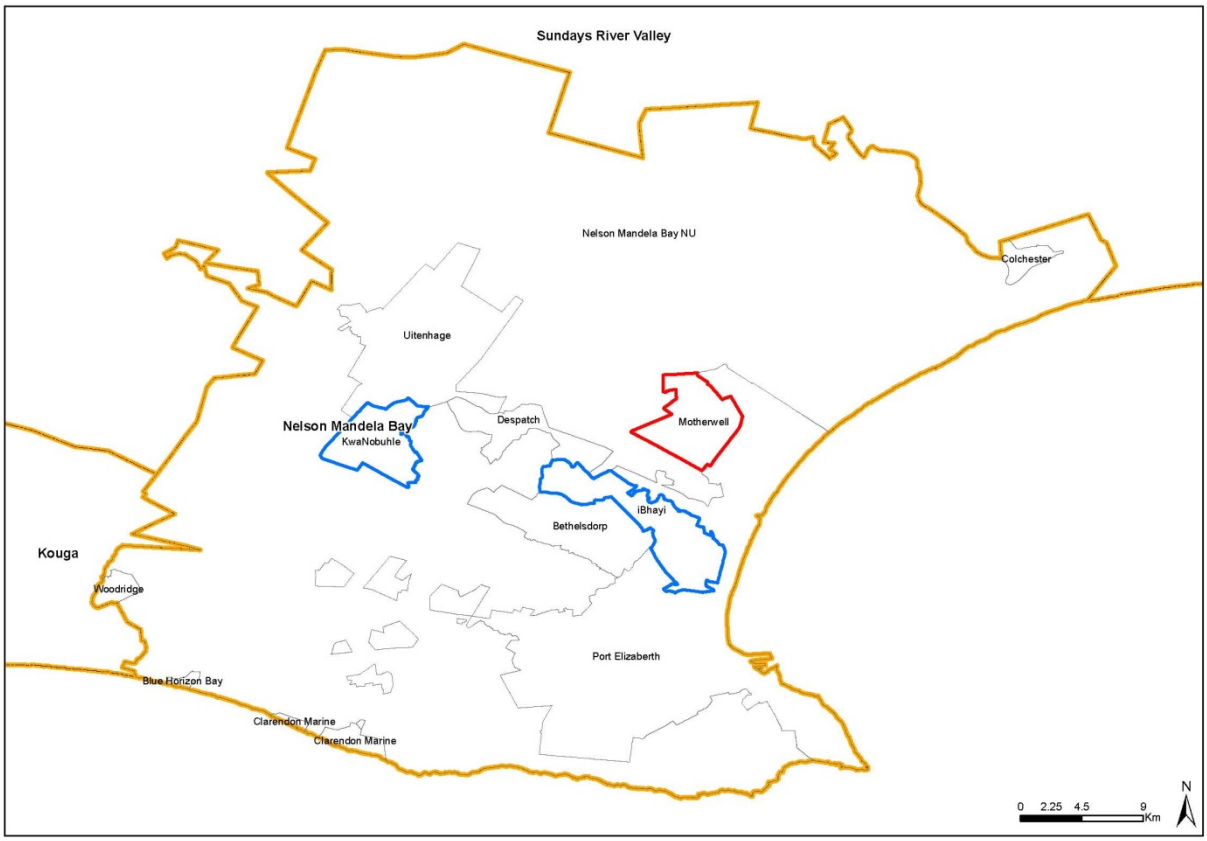


Mdantsane was established in the early 1960's by the apartheid government to house labour for industries in the neighbouring East London (COGTA 2009). The original inhabitants of Mdantsane

were people who were forcibly removed from what was known as East Bank in East London. Historically the East Bank was a multiracial area. Mdantsane was located within an apartheid structure then known by the name Ciskei. The Berlin and Phakamisa are in close proximity with each other but the level of poverty is slightly different in those townships. Mdantsane and Phakamisa have relatively the same level of poverty although they are separated by more than 36 kms. The node (Mdantsane) is a residential area with limited local employment opportunities and is characterised by high crime rates and high levels of unemployment, inadequate social and economic infrastructure and difficult access to East London. Getting to and from work and commercial centres and educational institutions is time consuming and expensive. Mdantsane is poorly integrated with its surround (COGTA 2009).

Motherwell is a township in Nelson Mandela Bay municipality. Motherwell is situated closer to IBhayi than KwaNobuhle (Map 2).

Map 2: Urban nodal and non-nodal areas in Nelson Mandela Bay municipality in 2011



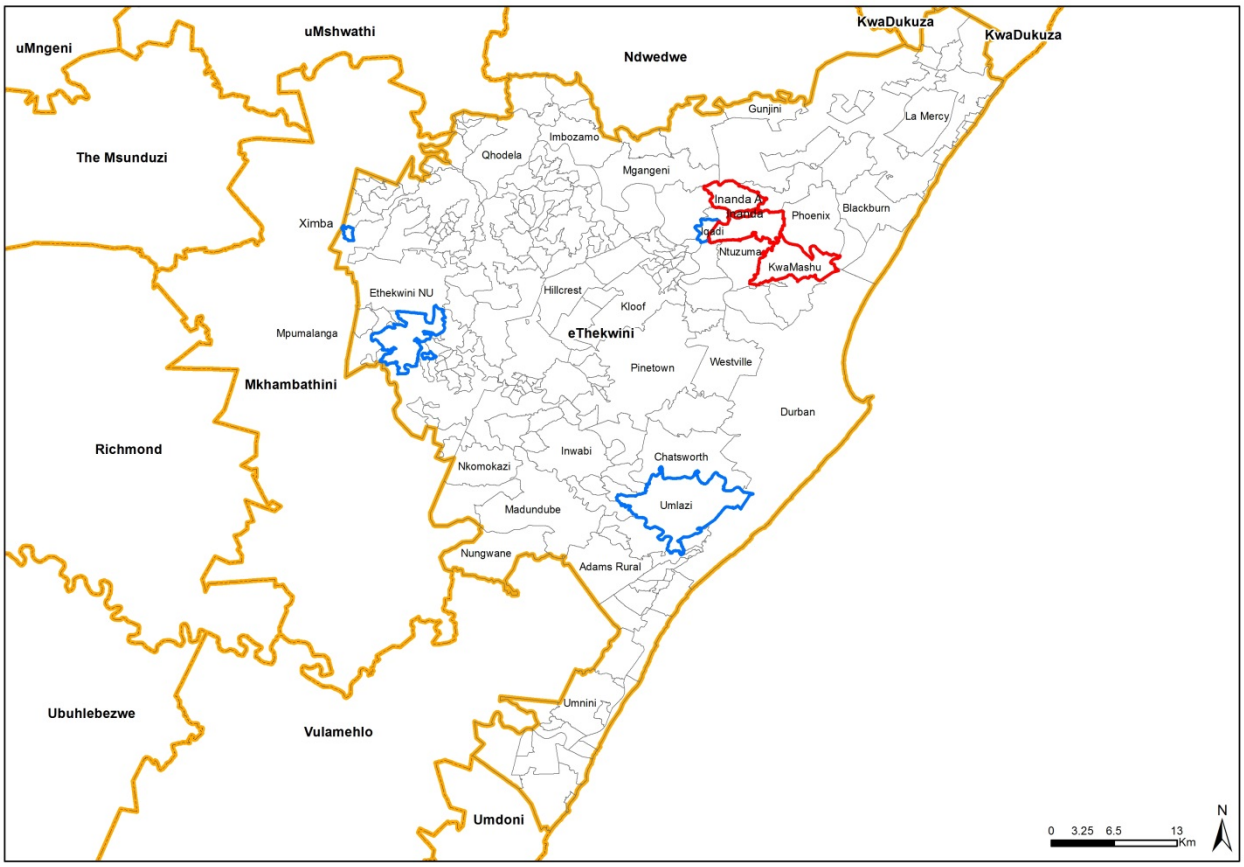
Motherwell is almost residential in nature. Motherwell was planned to accommodate the black squatters who were relocated from Zwide and Veeplaas and construction began in 1984. Mdantsane, Motherwell, iBhayi, Berlin and Phakamisa are areas dominated by black African

people. Motherwell is not integrated to the surrounding urban centres and has no direct linkages to these. The Metrorail network doesn't at present include a direct link to the node (Motherwell). Residents of Motherwell are poor and have limited access to economic opportunities due to poor linkages and long distances to Port Elizabeth and Uitenhage(COGTA 2009).

4.2 eThekwini municipality

eThekwini municipality is located in KwaZulu-Natal province, the second most populous province in South Africa according to the 2011 Census. In 2001, the eThekwini municipality's population was 3 090 122 which was the second most populous municipality in the country. However, in 2011, the eThekwini municipality's population grew to 3 442 361 and it had been overtaken by the City of Cape Town municipality as it was ranked the third most populous municipality in South Africa. Inanda and Kwa-Mashu are both townships in KwaZulu-Natal. They lie in close proximity to each other. Inanda is the oldest township among the two and is situated in eastern KwaZulu-Natal. It is situated 24 km inland from Durban. Inanda was established in the 1800s and Kwa-Mashu in the 1950s (COGTA 2009).

Map 3: Urban nodal and non-nodal areas in eThekwini municipality in 2011

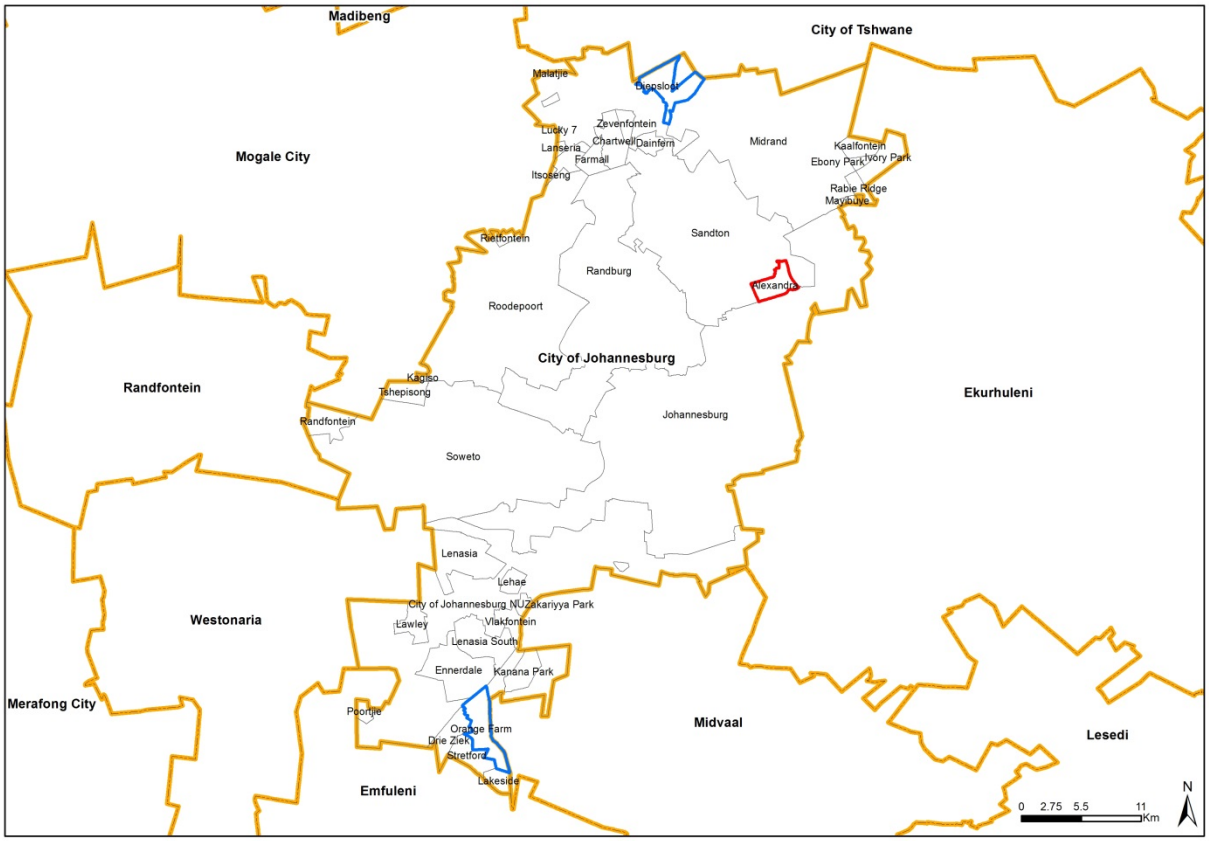


Kwa-Mashu is 32 kilometres north of Durban. The distance between Inanda and Kwa-Mashu is 15 km. Inanda and Kwa-Mashu share a common set of challenges, namely high levels of unemployment and poverty. Umlazi, Ximba and Mpumalanga are furthest townships from iQadi, Kwa-Mashu and Inanda townships. All these areas are mainly dominated by black African people, including the non-nodal areas Ximba, Mpumalanga and iQadi. Inanda and Kwa-Mashu were established as 'reserves' for African people. Inanda was the poorer of the two, Kwa-Mashu which accommodates people from other locales, notable Cato Manor is the economic hub, and the transport hub has attracted the most investment. Housing in the area is largely formal.

4.3 City of Johannesburg

Alexandra, Diepsloot and Orange Farm are townships under the City of Johannesburg municipality, which is in the Gauteng province, the economic hub of South Africa. It is the wealthiest province in South Africa. The City of Johannesburg is the most populous municipality in the whole country with a population of 3 226 055 in 2001 and 4 434 827 in 2011.

Map 4: Urban nodal and non-nodal areas in the City of Johannesburg municipality in 2011



Diepsloot is closer to Sandton and Midrand as well as Alexandra. Orange Farm is 60 km south of Alexandra and 42 km from Johannesburg metropolitan city. Diepsloot and Alexandra are separated by 35 km from each other. All these areas are dominated by black people (Annexure: Table IV).

Alexandra has an interesting history behind her establishment; it is an historic former black freehold township. According to the information from an article prepared by Merridy Wilson (2002) on the history of Alexandra Township, Alexandra was established in 1912. The land was originally owned by a farmer. Mr Papenfus, the farmer, tried to establish a white residential township there, naming it after his wife, Alexandra. However, at that time Alexandra was far away from the centre of Johannesburg, which made the attempt not to succeed. In 1912, Alexandra was proclaimed as a so-called “native township”. Alexandra was one of the few urban areas in the country where black people could own land under freehold title. By 1916, the population of Alexandra was 30 000. Alexandra Health committee was established to manage the township but the committee was not allowed to collect taxes. The township also fell outside the jurisdiction of the Johannesburg City, which led to lack resources and proper management. Alexandra was put under the control of the then Department of Native Affairs. In the early 1960s the government decided to demolish all family accommodation in Alexandra and replace them with single sex hostels, which led to widespread resistance and protest. The township can be described as established township. Its social and economic fabric has developed in response to both the neglect and apartheid era repression. Cut off from the main transport corridors the area was allowed to deteriorate into an overcrowded slum. However, the government has introduced several ‘Urban Renewal Plans’ which include the one that was shelved in 1990 to assist in renewing and uplifting the community. The latest Alexandra Renewal Project was launched in 2000 although it’s not without problems the project has built 3 000 houses for relocation up to date.

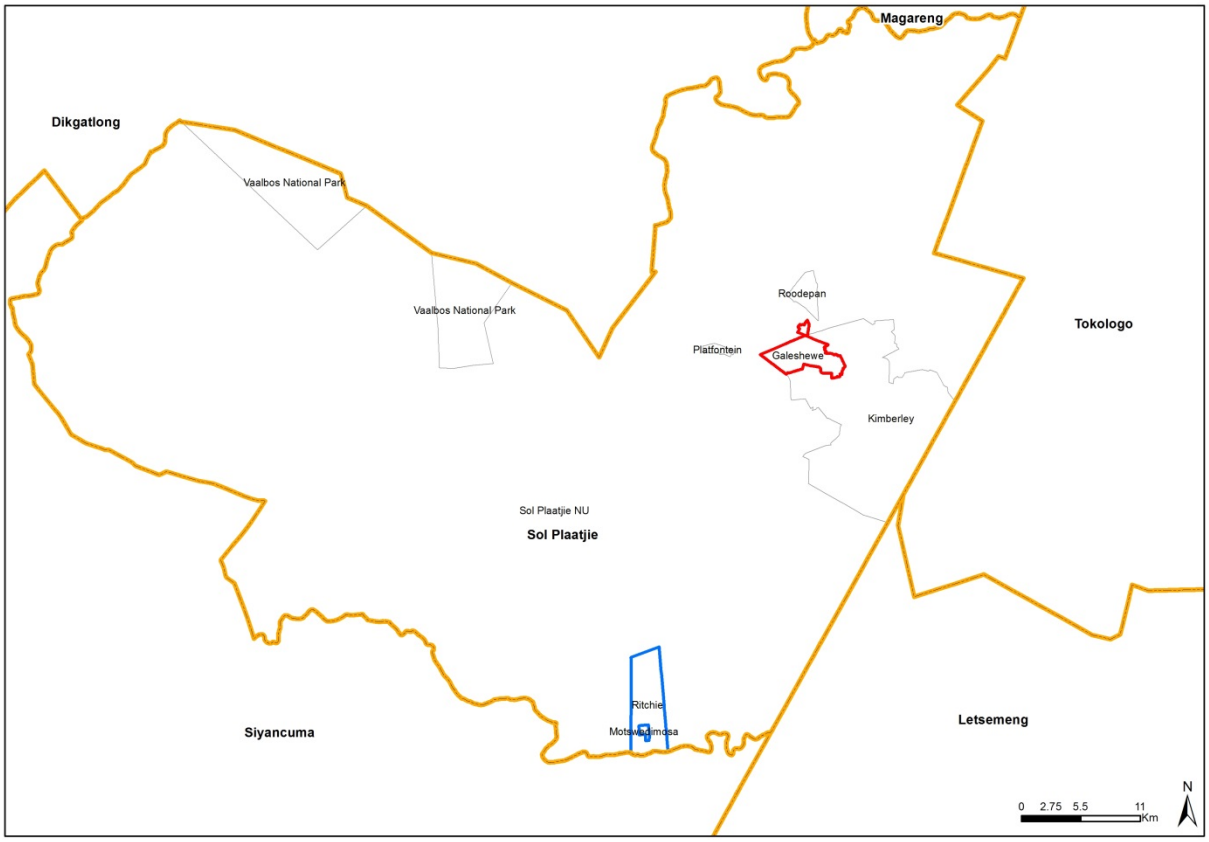
Alexandra today is one the fastest growing townships in Gauteng. It received 71,9% of migrants from other provinces, and Limpopo was the highest sender of migrants in 2001. It is a township located near the upper-class suburb of Sandton. Alexandra is predominantly residential and accommodates people working in Johannesburg, Sandton and Wynberg. It is one of the poorest urban areas in the country, in addition to its well-built houses it also has a large number (estimated at more 20 000) of informal dwellings or “shacks”.

4.4 Northern Cape

Galeshewe is a township in Kimberley within the Sol Plaatjie Local municipality. It was named after Kgosi (Chief) Galeshewe who led a rebellion against the repressive laws of the colonialist government and protected the interests of his people against British colonisers (Presidency, 2015). It is one of the oldest townships in South Africa, having been developed during the Kimberley

diamond rush in the 1880s. The township has a population of about 103 228 people; half of the population of the Sol Plaatjie municipality lives in Galeshewe. The township housing is largely formal, with some new RDP housing and 20% informal housing (COGTA 2009). Galeshewe's population is predominately black African, while a third of Sol Plaatjie's population is coloured. Galeshewe received most migrants from North West province in 2011. The non-nodes (Ritchie and Motswedimosa) are situated further from Galeshewe. Motswedimosa is a township closer to Ritchie.

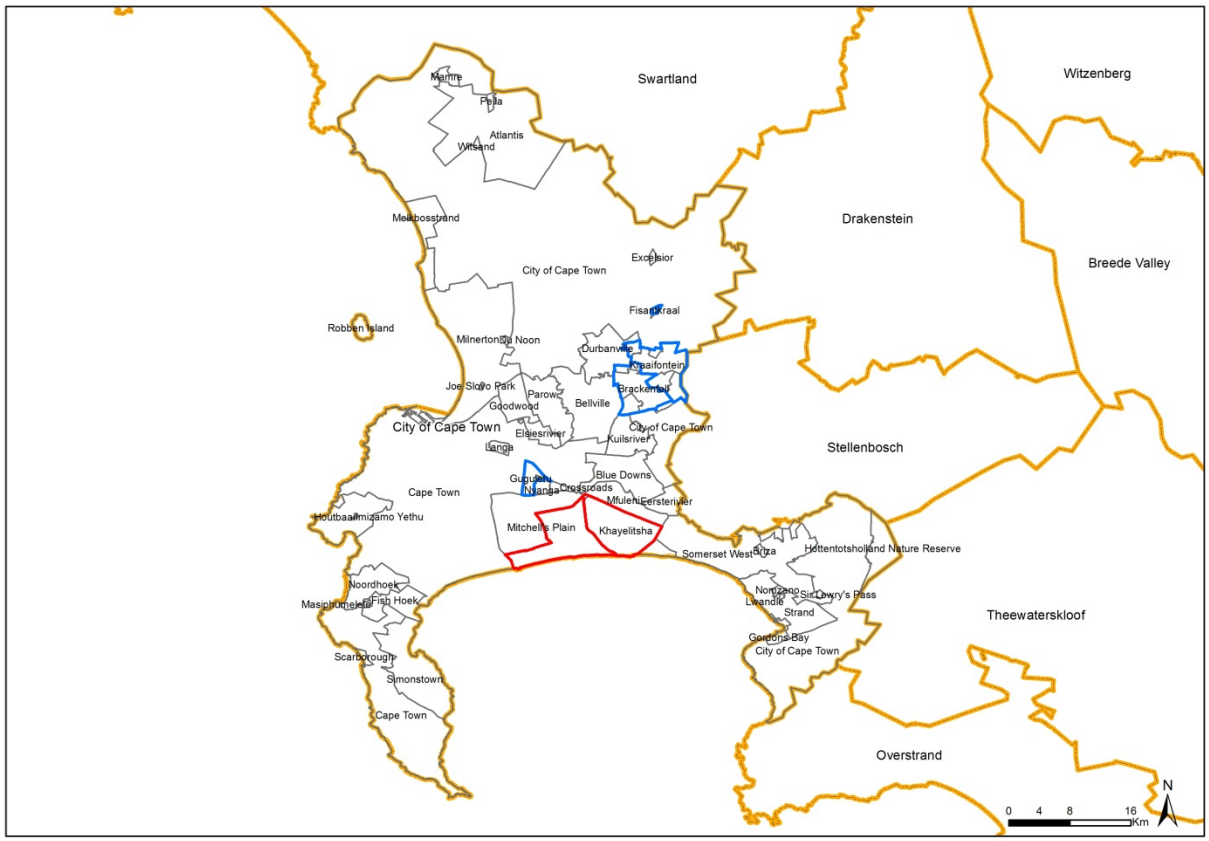
Map 5: Urban nodal and non-nodal areas in Sol Plaatjie municipality in 2011



4.5 City of Cape Town

The Western Cape's population was estimated to be 5,22 million in 2011. More than two-thirds of that population was residing in the City of Cape Town municipality, the second largest municipality in the country in 2011. Khayelitsha and Mitchell's Plain are both townships on the Cape Flats in the City of Cape Town. Two-fifths of the people in the City of Cape Town reside in Khayelitsha and Mitchell's Plain. The population of the non-nodal areas contribute almost 9,3%, which constitute in total one-third of the total population of the City of Cape Town municipality.

Map 6: Urban nodal and non-nodal areas in the City of Cape Town municipality in 2011



Khayelitsha and Mitchell's Plain are about 32 km from Cape Town city. Khayelitsha is reputed to be the largest and the fastest growing township in Cape Town. It is not integrated with Mitchells plain but separated by large tracts of land which form buffer areas between the two historical African and coloured communities. The plan to build Khayelitsha was one of the apartheid regime's final attempts to enforce the Group Areas Act. It was established as the dormitory town and its residents are essentially commuters making use of public transport to travel into the city. Khayelitsha was seen as a solution to the rapidly growing number of migrants from the Eastern Cape, and overcrowding in the Cape Town townships. Khayelitsha and Gugulethu (non-node) are

dominated by black African residents, mainly of the Xhosa nation. Unlike Mitchell's Plain, which is largely inhabited by coloured people. Mitchell's Plain was built during 1970s to provide housing for coloured victims of forced removal to the implementation of Group Areas Act.

In Brankenfell (non-node) there were 30,5% of white people residing there in 2001 and that number grew to 80,1% in 2011. Fisantkraal (non-node) is well balanced with almost half of the residents being black and half coloured, while only both Indian/ Asian and white people constitute less than half a percent each. In Kraaifonten (non-node) in 2001, both white and black residents constituted one-third of the population each but in 2011 the number of black residents grew to 42,9% while the proportion of white residents dropped by almost half.

The entire urban nodal and non-nodal areas are dominated by black African and coloured people. This may suggest that the urban renewal programme targeted the previously disenfranchised populations.

5. Detailed findings

Section 5 is divided into five sub-sections. Section 5.1 covers demographic characteristics of the population in the urban nodes; Section 5.2 presents the education profile of the urban nodal population whilst Section 5.3 discusses employment, unemployment and labour force absorption in the urban nodal population. Section 5.4 focuses on living conditions, mainly on service delivery indicators, and Section 5.5 compares living conditions between urban nodes and non-nodes. Section 5.6 provides information about the state of multidimensional poverty levels in the urban nodes.

5.1 Demographic characteristics of the population in the urban nodes

Demographic characteristics of the population in the urban nodes are presented in this section. Information on the size, composition and the structure of the population in these areas in 2001 and 2011 are discussed.

5.1.1 Population size

Table 4 shows the proportion of the South African population living in the urban nodes during 2001 and 2011 by broad age categories: children (0–17 years), Youth (18–34 years), Adults (35–64 years) and the elderly (65+ years). In 2011, the total urban nodal population was 1 611 735, which represented 3,11% of the total South African population (51 770 561) (Table 4). The urban nodal population had a negative growth between 2001 and 2011. The negative population growth in the urban nodes is also evident in age groups 0–17 and 18–34 years. The only noticeable population increases among the urban nodal areas were in age groups 35–64 years and 65 years or older (Table 4).

Table 4: Distribution of South African and Urban nodal areas' population in 2001 and 2011 by broad age groups

Age groups	South Africa			Urban Nodal Areas		
	Total population 2001	Total population 2011	% increase	Total population 2001	Total population 2011	% increase
0–17	17 382 879 (38,8%)	18 067 972 (34,9%)	3,9	563 460 (34,8%)	520 752 (32,3%)	-7,6
18–34	13 534 492 (30,2%)	16 498 464 (31,9%)	21,9	580 636 (35,8%)	578 515 (35,9%)	-0,4
35–64	11 687 195 (26,1%)	14 438 134 (27,9%)	23,5	435 808 (26,9%)	460 030 (28,5%)	5,6
65+	2 215 211 (4,9%)	2 765 991 (5,3%)	24,9	40 565 (2,5%)	52 437 (3,25%)	29,3
Total	44 819 777 (100%)	51 770 561 (100%)	15,5	1 620 470 (100)	1 611 735 (100%)	-0,5

The population of children (0–17 years) increased in the whole country between 2001 and 2011, whereas there was negative growth in the population in the same age group in the urban nodes. Table 4 shows that the South African population is young, as more than a third of its population is aged between 0–17 years of age. However, this is different in urban nodes as the most populous age group is 18–34 years of age.

Figure 1 shows the distribution of the urban nodal population by sex during 2001 and 2011. As expected, the female population was slightly more than that of males in the urban nodal areas in 2001 and 2011.

Figure 1: Distribution of the urban nodal population by sex in 2001 and 2011

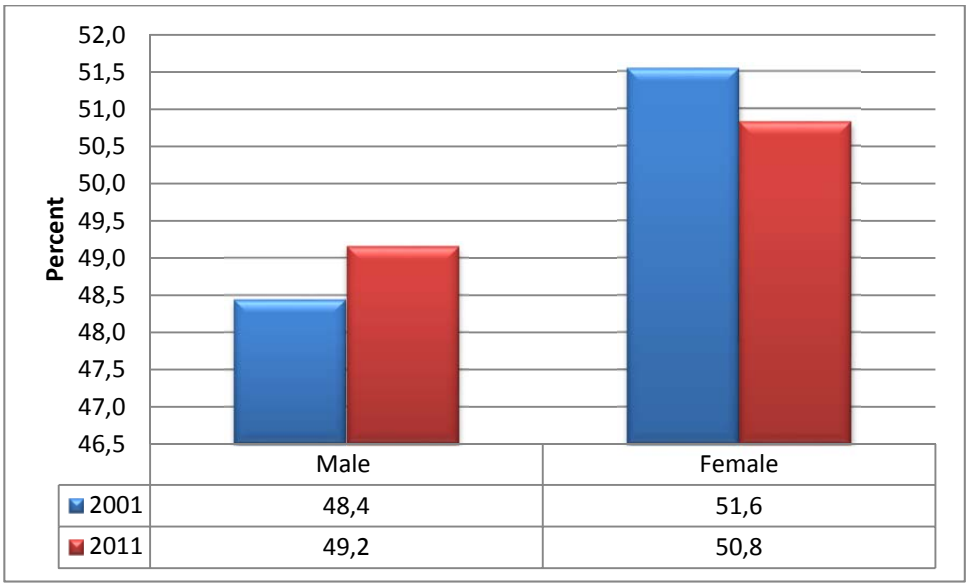


Figure 2 shows the distribution by sex of the head of the household in urban nodes. In the urban nodes there are still more male-headed households than female-headed households, although female-headed households have shown an increase while male-headed households have declined in 2011.

Figure 2: Distribution of urban nodal areas households by sex of the household head in 2001 and 2011

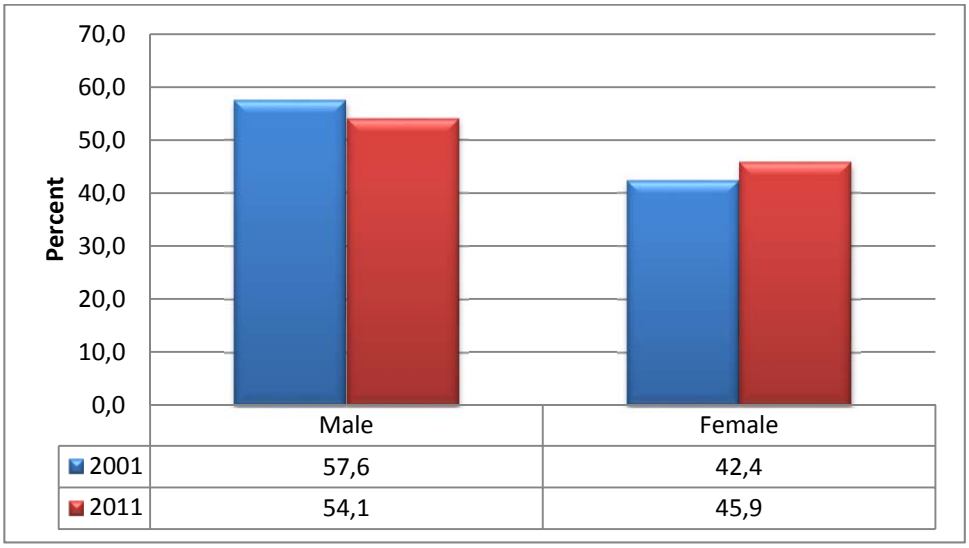
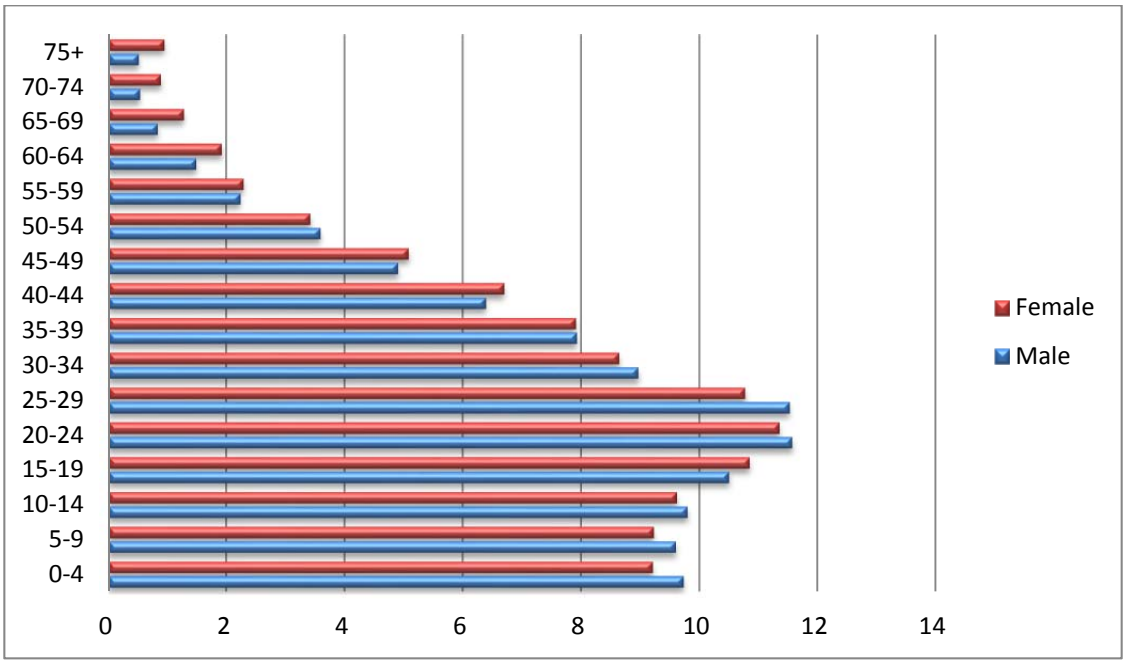


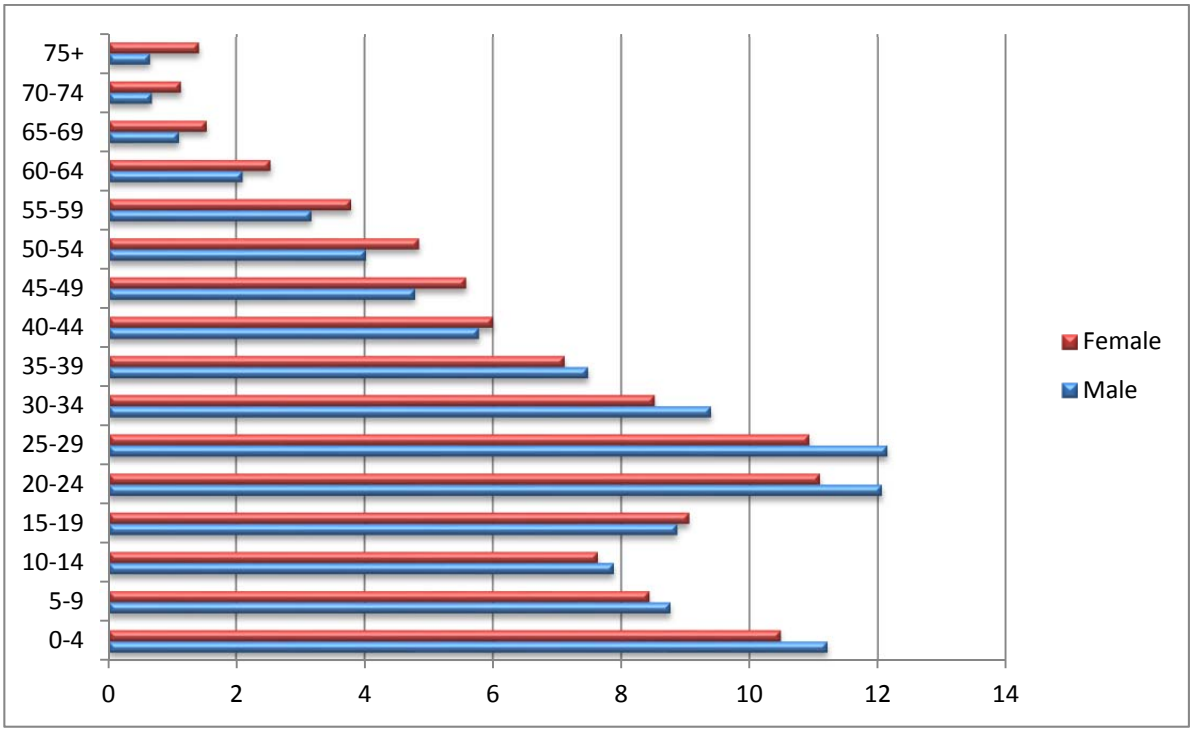
Figure 3 indicates the population distribution of the urban nodes by age group in 2001. There were more male children than female children aged between 0 and 14 years. The female population was more than the male population at ages between 15 and 19 years and above 40 years.

Figure 3: Distribution of the urban nodal areas population by age group in 2001



The population structure of the urban nodal areas didn't change much in 2011, where males dominated all of the age groups below age 40 years except for age group 15–19 years (Figure 4). There may be many explanations for this: there is a high chance that male children are more likely to be working somewhere if they are older than 15 years, and if they are not at school. However, there is need for further research into this phenomenon. Above age 40 years there were more females in the urban nodal population than males.

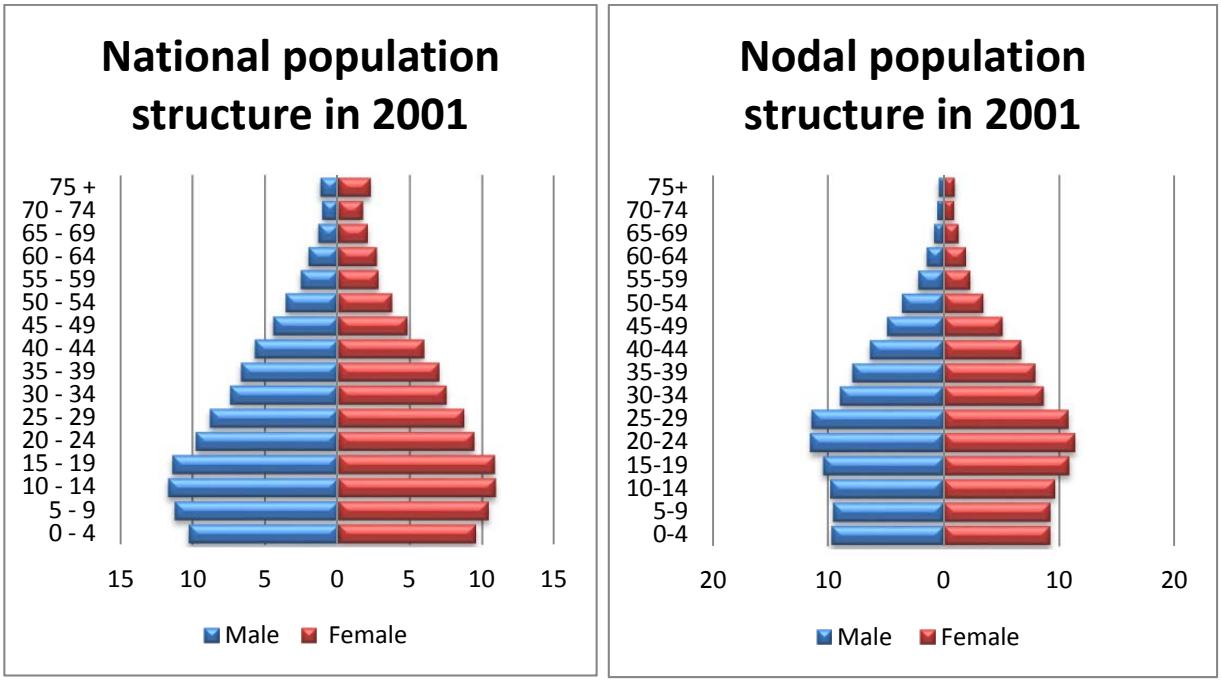
Figure 4: Distribution of the nodal area population by age group in 2011



It is worth noting that there were far more males between ages 20 and 29 years than females in 2011 in the urban nodes.

Figure 5 shows that the 2001 age structure of the urban nodal population had slightly more males than females in the age group 15–34 years. The 2001 age structure for the national population was much broader in age groups 0 to 19 years than the urban nodal population structure in the same year. The nodal population structure broadened between ages 20 and 29 years compared to the national population structure. This shows that there is a higher proportion of the population aged between 20 and 29 years in the urban nodes.

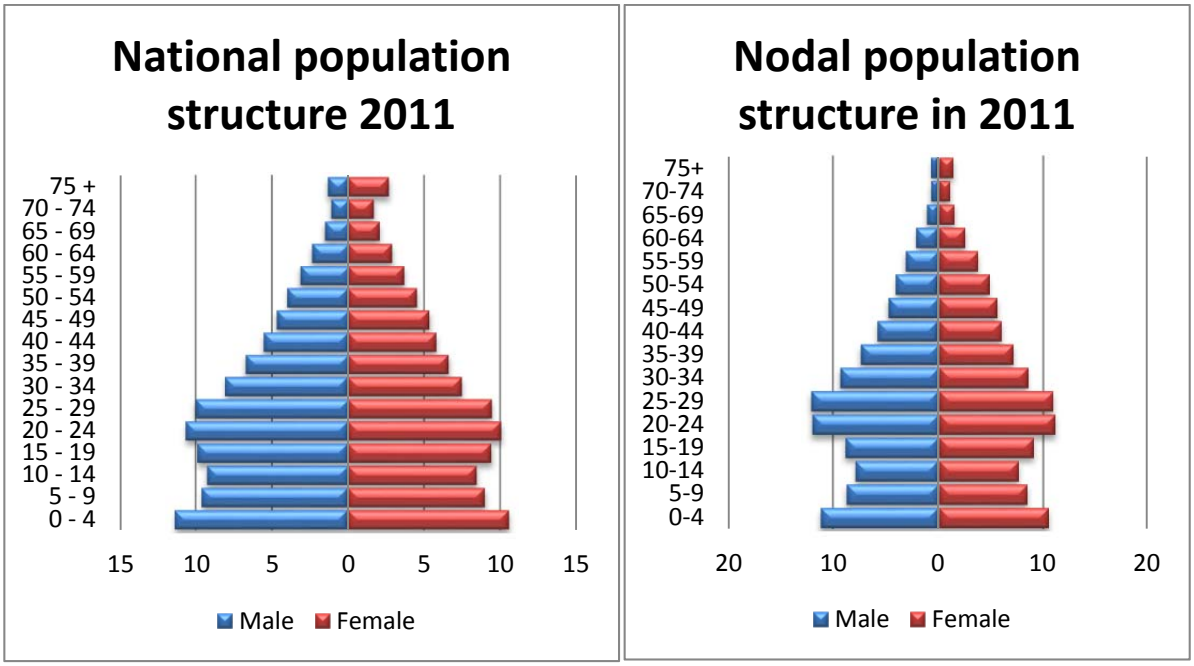
Figure 5: Urban nodal and national population structures in 2001



Contrary to the national population structure where there are more females than males, in the urban nodes there are generally more males than females in middle ages.

Figure 6 shows a different population structure than the one observed for 2001. In 2011, there were more children aged between 0 and 4 years than those aged between 10 and 19 years, both nationally and in urban nodal areas. This is noticeable by the jagged edges on the sides of the pyramids from age 0 to age 20 years. This can be partly attributed to mortality and fertility in those ages. However, at national level, the proportion of the women population was higher at ages older than 75 years than the male population.

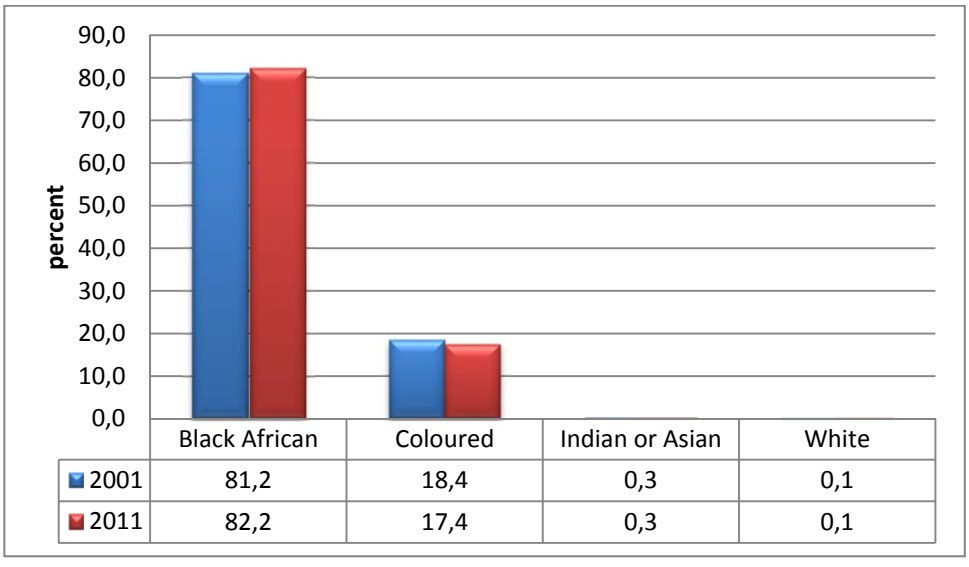
Figure 6: Urban nodal and national population structures in 2011



Overall, the urban nodal population structure resembles that of the national population. Furthermore, even in 2011 the urban nodal population, contrary to the national population structure, had the highest proportion of the population between ages 20 and 29 years, as observed in the 2001 population structure.

Figure 7 indicates that four out of five persons residing in urban nodal areas were black African. Coloured people constituted less than 20 per cent of the total population and there were very few white and Indian or Asian people (less than 1% combined) in both years.

Figure 7: Proportion of the South African population living in the nodal areas by population group in 2001 and 2011



	Black African	Coloured	Indian or Asian	White
2001	81,2	18,4	0,3	0,1
2011	82,2	17,4	0,3	0,1

5.2. Education

According to the United Nations Children's Fund (UNICEF) report published in 2013 on education and adolescent development, South Africa spends a bigger share of its gross domestic product on education as compared to other African countries, yet performance levels are lower compared to other countries in the region (UNICEF, 2013). This section aims to provide insights into how the South African population is doing at schools in urban nodal areas, although this report does not assess the quality of education received by children in these nodes.

As indicated in the introductory chapter, one of the aims for selecting these urban nodes was to support education as well as training and skills development. Following the changes in school attendance and completed grades (especially from the low geographical levels) will be of aid to the National Department of Education to ensure that its policies are implemented effectively.

Early Childhood Development (ECD) is one of the important themes to be considered when profiling issues around education. Unfortunately it is difficult to measure the direct contribution of the ECD activities as most emphasis is put on children attending formal schooling. Access to ECD activities is therefore measured by asking respondents whether the child is exposed to ECD activities at home, or at a Centre or elsewhere. This question was only asked in the 2011 census questionnaire but not in Census 2001. Therefore it is not possible to make comparisons between the two censuses. In this section the information provided pertains to formal school attendance, completed levels of education and educational institutions they attend.

5.2.1 Education profile of the urban nodal population

Table 5 shows that in 2011, persons aged 7–15 years nationally were 8 246 239, which shows a decrease of 7,8% from the total population of 8 936 959 in 2001. This is evident in the national and urban nodal population structures discussed earlier in this report. However, despite the decline in the population aged 7–15 years, the proportion of the national population attending an educational institution slightly increased from 93,4% to

93,9% in 2011. In the urban nodal areas the percentage of the population attending educational institutions was 94,6% in 2001, which declined slightly to 92,3%. The highest proportions of school attendance in the urban nodal areas are observed at Mdantsane (95,2%) and Motherwell (95,6%) in 2011.

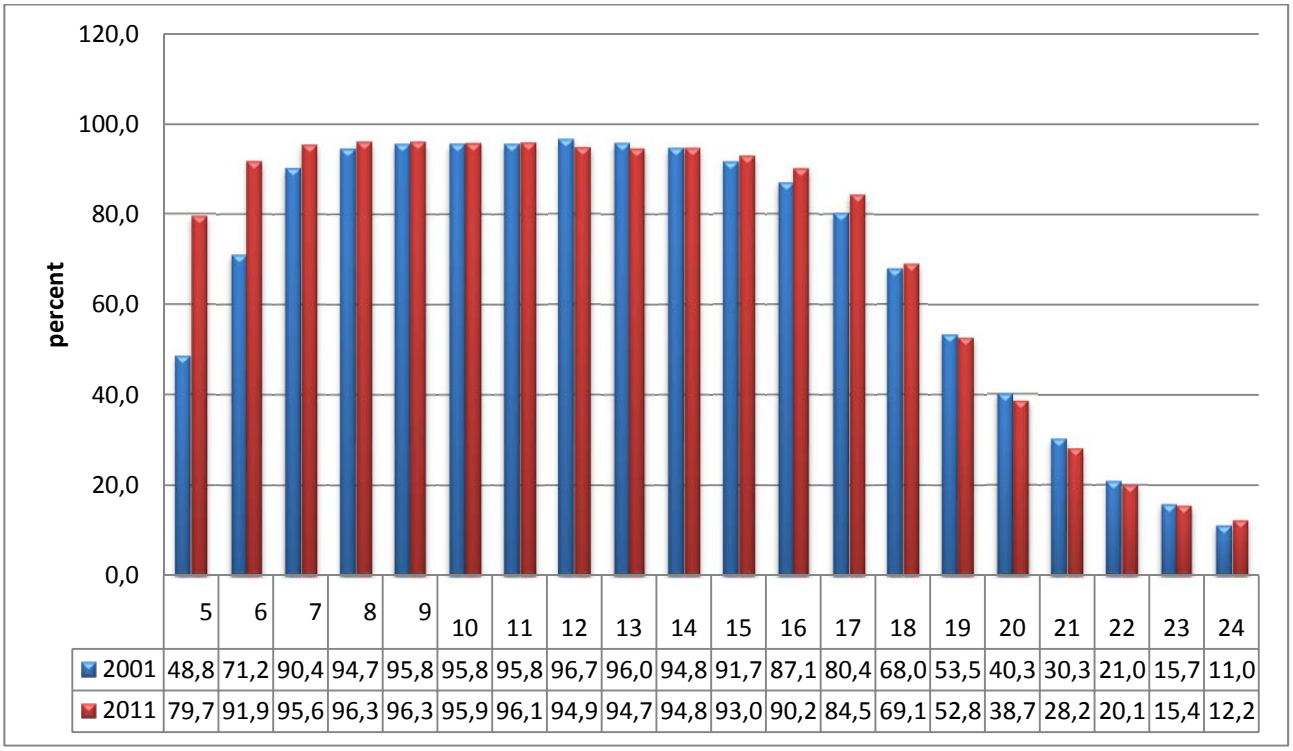
Table 5: Proportion of children aged 7–15 years in the urban nodes who were attending an educational institution in 2001 and 2011

Urban nodes	2001	2011
	Population aged 7–15 years Percentage attending (%)	Population aged 7–15 years Percentage attending (%)
National	93,4	93,9
Urban nodes	94,6	92,3
Inanda	91,7	88,2
Kwa-Mashu	94,5	84,7
Motherwell	94,8	95,6
Mdantsane	96,5	95,2
Galeshewe	95,6	94,5
Khayelitsha	94,3	94,5
Mitchell's Plain	95,4	94,0
Alexandra	92,7	89,1

Kwa-Mashu (84,7%) had the lowest school attendance proportion among the urban nodal areas in 2011. On average, the proportions of children attending an educational institution are high and they have remained stable in the 10 years under consideration. Figure 8 reflects notable increases in school attendance in all ages between age 5 and 24 between 2001 and 2011. This is not surprising as lack of school fees may not keep children out of school in South Africa. In 2007, 40% of schools were declared no-fee schools in South Africa. This was aimed at promoting equity and redress in education (CREATE 2009). In other schools, parents are able to apply for fee exemptions (CREATE 2009).

School attendance among persons aged between 5 and 24 years have generally increased in 2011 and the notable increases are observed among children who were aged 5 years, where it was reported that their school attendance increased by 30,9% in 2011.

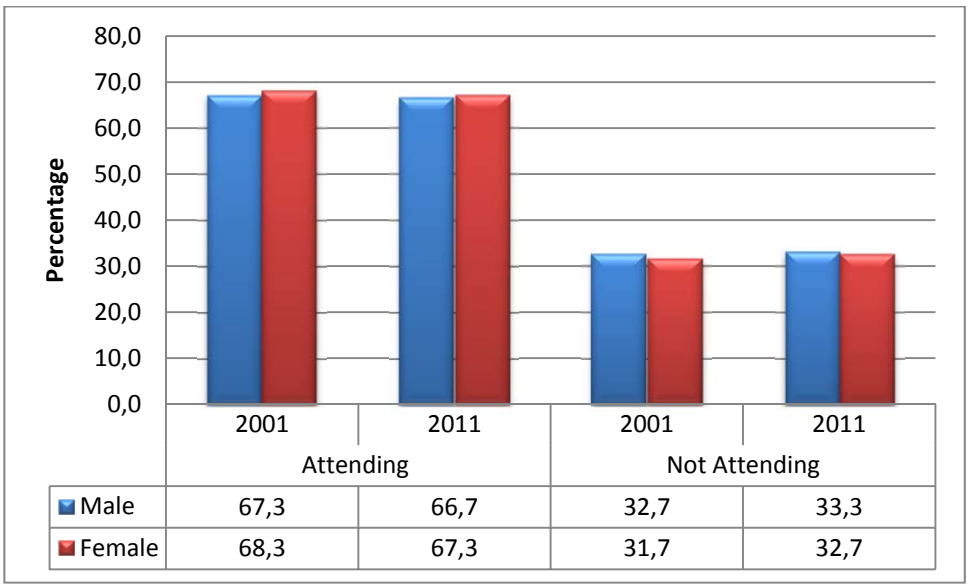
Figure 8: Percentage distribution of population aged 5 to 24 years in the urban nodes attending school in 2001 and 2011



	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2001	48,8	71,2	90,4	94,7	95,8	95,8	95,8	96,7	96,0	94,8	91,7	87,1	80,4	68,0	53,5	40,3	30,3	21,0	15,7	11,0
2011	79,7	91,9	95,6	96,3	96,3	95,9	96,1	94,9	94,7	94,8	93,0	90,2	84,5	69,1	52,8	38,7	28,2	20,1	15,4	12,2

Above the age 19 years there has been a slight decline in the population that attends school, although there is a slight increase at age 24 years.

Figure 9: Attendance at an educational institution of persons aged 5–24 years in the urban nodes by sex in 2001 and 2011

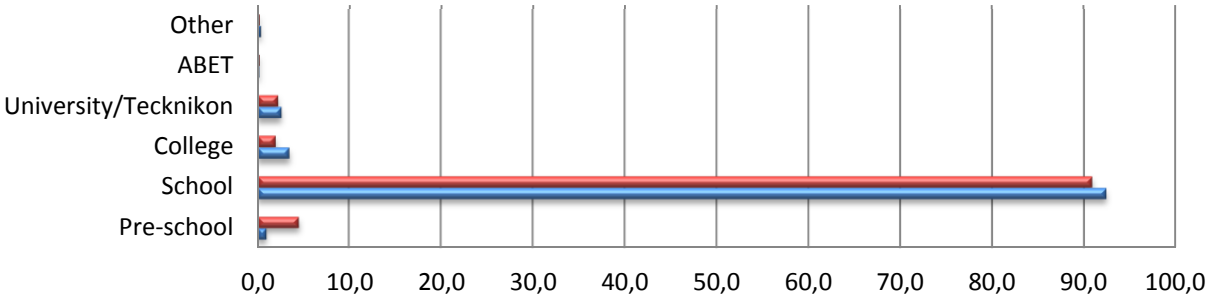


	2001	2011	2001	2011
	Attending		Not Attending	
Male	67,3	66,7	32,7	33,3
Female	68,3	67,3	31,7	32,7

According to Figure 9, at least two-thirds of the population aged 5 to 24 years is attending an educational institution. The proportions of females attending an educational institution were slightly higher than those of their male counterparts. However, there was a slight decrease for both males and females attending at an educational institution from 67,3% in 2001 to 66,7% in 2011 for males, and from 68,3% in 2001 to 67,3% in 2011 for females.

At least 9 out of 10 persons aged 5–24 attended schools as compared to other educational institutions in 2001 and 2011 as reflected in Figure 10. There were steady increases in the percentage of persons aged 5–24 years who attended an educational institution except for those attending pre-school and ABET.

Figure 10: Percentage distribution of persons aged 5–24 years in the urban nodes attending an educational institution by type of institution in 2001 and 2011

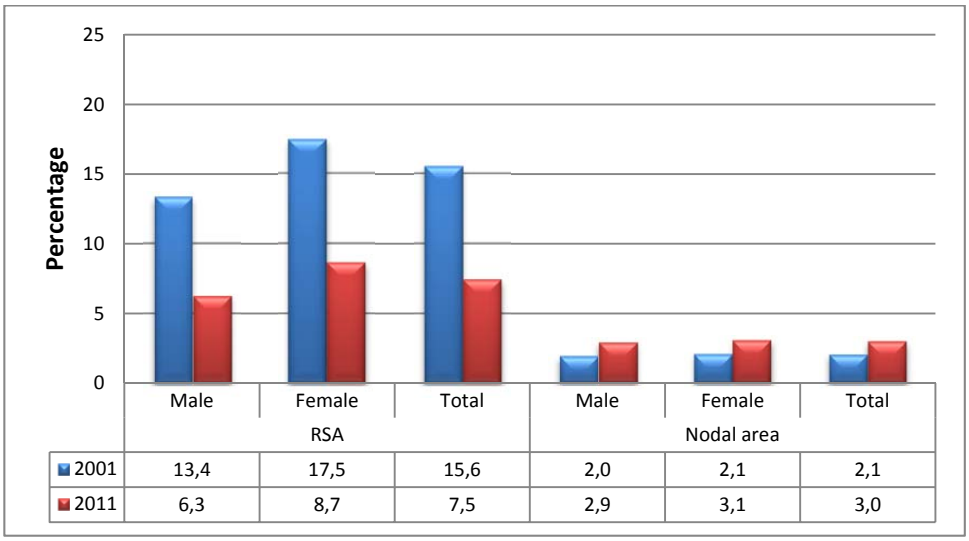


	Pre-school	School	College	University/Tecknikon	ABET	Other
2001	4,5	90,9	2,0	2,2	0,2	0,2
2011	1,0	92,4	3,5	2,6	0,2	0,4

There was a decline of 3,5% of persons attending preschool from 4,5% in 2001 to 1,0% in 2011 among those who are aged between 5 and 24 years. This might be due to the introduction of Grade R/00 in primary school for children aged 5 years old, since the gross enrolment rates of five-year-olds in Grade R/00 was about 79% in 2011.

Figure 11 shows that there was a decrease in the proportion of the population aged 15 years and older in South Africa that had no education between 2001 and 2011. In fact the percentage of the population that had no education was halved in 2011 (Figure 11).

Figure 11: Proportion of South African and urban nodal area population aged 15 years and older with no schooling by sex in 2001 and 2011

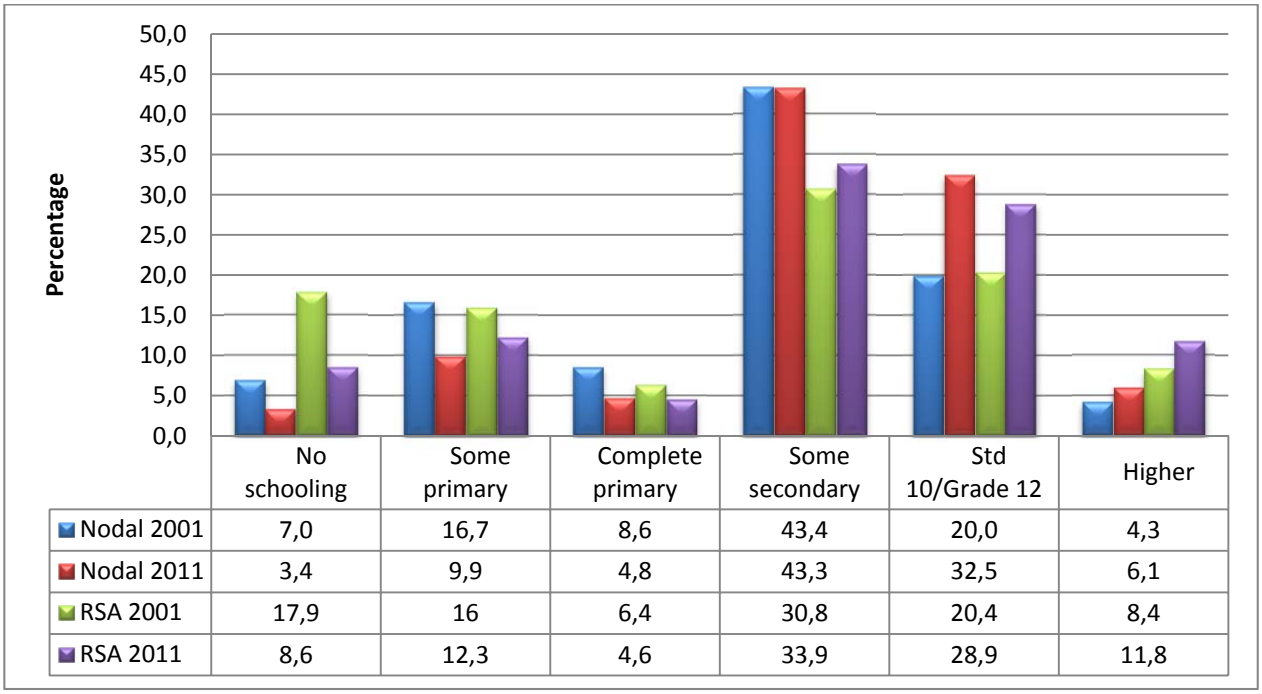


	RSA			Nodal area		
	Male	Female	Total	Male	Female	Total
2001	13,4	17,5	15,6	2,0	2,1	2,1
2011	6,3	8,7	7,5	2,9	3,1	3,0

In the nodal areas the population without education in absolute numbers also decreased from 84 000 to 36 000 between 2001 and 2011 (Annexure: Table XIII). However, the proportions in Figure 11 show a slight increase in the population with no education, this is because of the total population that decreased in 2011 (smaller denominator). Females constituted the highest proportion of those who had no education in both years; 2001 and 2011, in the whole country. In urban nodal areas the differences between males and females with no formal schooling is negligible.

Figure 12 shows that the percentage of people with no schooling has declined significantly over time. This is also true for those who have primary education as their highest qualification. This trend is observed both at national and at nodal areas levels. As expected, high proportions of persons aged 20 years and older have attained some secondary education, followed by those who have completed matric in the two periods. The urban nodal areas have higher proportions of persons who have completed some secondary education and matric than the national average. Only 3,4% of persons aged 20 years and older had no schooling in nodal areas as compared to the national average of 8,6%, in 2011. The percentage of persons in nodal areas who completed higher education increased from 4,3% in 2001 to 6,1% in 2011.

Figure 12: Highest level of education attained amongst persons aged 20 years and older in South Africa and in the urban nodal areas in 2001 and 2011



	No schooling	Some primary	Complete primary	Some secondary	Std 10/Grade 12	Higher
Nodal 2001	7,0	16,7	8,6	43,4	20,0	4,3
Nodal 2011	3,4	9,9	4,8	43,3	32,5	6,1
RSA 2001	17,9	16	6,4	30,8	20,4	8,4
RSA 2011	8,6	12,3	4,6	33,9	28,9	11,8

The South African education system seems to be on track of fulfilling the National Development (NDP) Goal of ensuring that all children can access and benefit from education. However, access to higher education still lags behind as very small percentages have qualifications in higher education.

5.2.2. Comparing education outcomes of the population in urban nodal and non-nodal areas

In this section, the education outcomes of the urban nodal areas are compared to that of non-nodal townships. This discussion seeks to answer the second question whether the urban nodal areas did better than other townships.

5.2.2.1 Khayelitsha and Mitchell's Plain

The importance and purpose of education cannot be over-emphasised. It is one of the objectives of the Urban Renewal Programme to support education as well as training and skills development. The City of Cape Town municipality had 4,3% of people who were 20 years and older who had no education in 2001 (Annexure: Table VI). This number decreased to 1,8% in 2011. In the City of Cape Town, 12,8% of the population older than 20 years had higher education in 2001, the proportion slightly increased to 16,6% in 2011.

On average the proportion of people who had no education declined in both the urban nodes and urban non-nodes in 2011 (Table 6). Another decline is evident among individuals who had completed primary education. The noticeable increases are among individuals with Matric and Higher education. Whilst these improvements are observed in both the urban nodes and urban non-nodes, the results suggest that generally there are higher increases among the selected urban non-nodes compared to the urban nodes in the City of Cape Town.

Table 6: Education attainment for the population aged 20 years and older in urban nodal and non-nodal areas in 2001 and 2011 in the City of Cape Town

Nodal areas	No schooling		% increase	Complete primary		% increase	Matric		% increase	Higher		% increase
	2001	2011		2001	2011		2001	2011		2001	2011	
Khayelitsha	7,0	2,6	-4,4	8,6	4,4	-4,2	20,0	30,6	10,6	4,3	4,9	0,6
Mitchell's Plain	4,3	1,1	-3,2	9,4	6,6	-2,8	20,1	28,6	8,5	3,7	5,9	2,2
Average	**5,65**	**1,85**	**-3,8**	**9**	**5,5**	**-3,5**	**20,05**	**29,6**	**9,55**	**4**	**5,4**	**1,4**
Non-nodal areas												
Gugulethu	8,5	2,5	-6	7,1	4,7	-2,4	22,0	31,7	9,7	6,1	10,5	4,4
Fisantkraal	24,9	16,5	-8,4	11,7	4,4	-7,3	7,7	24,6	16,9	0,3	4,3	4
Brackenfell	5,6	0,2	-5,4	6,0	0,5	-5,5	30,3	43,8	13,5	12,5	38,4	25,9
Kraaifontein	5,3	2,5	-2,8	5,7	4,7	-1	29,7	31,7	2,0	7,3	10,5	3,2
Average	**11,1**	**5,4**	**-5,7**	**7,6**	**3,6**	**-4,1**	**22,4**	**33,0**	**10,5**	**6,6**	**15,9**	**9,4**

Gugulethu (10,5%), Kraaifontein (10,5%) and Brackenfell (38,4%) which are non-nodal areas had the highest proportion of persons with higher education in 2011 compared to urban nodes of Mitchell's Plain (5,9%) and Khayelitsha (4,9%). The non-nodal area Brackenfell almost achieved a zero percentage of the population without formal schooling in 2011. Mitchells Plain (1,1%) which is part of the URP had the second lowest proportion of the population with no education. Brackenfell (43,8%), Gugulethu (31,7%) and Kraaifontein (31,7%) had the highest proportions of the population with matriculants compared to the urban nodes.

5.2.2.2 Alexandra

In the City of Johannesburg municipality 7,3% of people who were aged 20 years and older had no education in 2001, this number fell by more than half to 2,9% in 2011. The City of Johannesburg municipality (12,8%) had the highest proportion of people older than 20 years with higher education in the country in 2001 and the number increased to 19,6% in 2011 (Annexure: Table VI). Alexandra (4,2%) and Diepsloot (8,6%) had the lowest proportions of the population with no schooling in 2011 than Orange Farm (Table 7). However, the percentage decrease in the proportion of the population with no education is the same for Diepsloot and Orange Farm.

Table 7: Education attainment of the population 20 years and older in urban nodal and non-nodal areas in the City of Johannesburg in 2001 and 2011

	No schooling		% increase	Completed primary		% increase	Matric		% increase	Higher		% increase
Nodal areas	**2001**	**2011**		**2001**	**2011**		**2001**	**2011**		**2001**	**2011**	
Alexandra	9,5	4,2	-5,3	6,9	3,7	-3,2	26,4	38,4	12,0	4,1	6,2	2,1
Non-nodal areas												
Diepsloot	8,6	4,3	-4,3	8,6	6,5	-2,1	23,3	30,6	7,3	2,7	2,8	0,1
Orange Farm	11,5	7,1	-4,4	8,2	4,9	-3,3	18,8	30,6	11,8	2,6	3,8	1,2
Average	**10,05**	**5,7**	**-4,35**	**8,4**	**5,7**	**-2,7**	**21,05**	**30,6**	**9,55**	**2,65**	**3,3**	**0,65**

The proportions of the population with no formal education decreased in Alexandra, Orange Farm, and Diepsloot. The same trend is observed with people who had completed primary education. However, there has been an increase in the number of people who have completed matric and those that have higher education. When comparing Alexandra (an urban node) to Diepsloot and Orange Farm (selected urban non-nodes) the results indicate that Alexandra had the higher rate of increase compared to selected urban non-nodes with regards to people who had completed matric and those that had higher education qualifications in the City of Johannesburg.

5.2.2.3 Inanda and Kwa-Mashu

Inanda and Kwa-Mashu townships fall under the eThekwini municipality. In eThekwini municipality the population aged 20 years and older with no education was 10,1% in 2001 and this number decreased to 4,2% in 2011. The eThekwini municipality had the highest percentage of people with no education compared to the City of Johannesburg, City of Cape Town and Nelson Mandela Bay. The percentage of the population older than 20 years that had higher education was 9,7% in 2001, which increased to 12,3% in 2011, this percentage was lower than the proportions for the City of Johannesburg (19,2%) and Cape Town (16,6%) in 2011.

Table 8: Education attainment of the population aged 20 years and older in urban nodal and non-nodal areas in eThekwini municipality in 2001 and 2011

	No schooling		% increase	Complete primary		% increase	Matric		% increase	Higher		% increase
Nodal areas	**2001**	**2011**		**2001**	**2011**		**2001**	**2011**		**2001**	**2011**	
Inanda	13,7	5,9	-7,8	7,9	6,6	-1,3	18,8	28,6	9,8	2,7	5,9	3,2
Kwa-Mashu	11,4	3,7	-7,7	6,6	3,5	-3,1	25,2	40,6	15,4	4,7	5,5	0,8
Average	**12,6**	**4,8**	**-7,8**	**7,3**	**5,1**	**-2,2**	**22,0**	**34,6**	**12,6**	**3,7**	**5,7**	**2,0**
Non-nodal areas												
IQadi	17,9	6,9	-11,0	6,7	8,5	1,8	19,4	29,1	9,7	4,1	5,5	1,4
Ximba	28,6	16,5	-12,1	7,7	4,4	-3,3	11,8	24,6	12,8	2,0	4,3	2,3
Umlazi	9,9	3,4	-6,5	6,3	3,2	-3,1	26,5	39,9	13,4	7,0	9,5	2,5
Mpumalanga	12,4	4,9	-7,5	7,7	4,2	-3,5	20,4	37,0	16,6	4,5	7,7	3,2
Average	**17,2**	**7,9**	**-9,3**	**7,1**	**5,1**	**-2,0**	**19,5**	**32,7**	**13,1**	**4,4**	**6,8**	**2,4**

Table 8 indicates that among the two urban nodal areas, Inanda seemed to have been worse off in terms of education compared to Kwa-Mashu. However, both these urban nodes experienced declines in proportion of persons with no education and those with primary education. On the other hand, Inanda increases are observed among matriculants and people with higher education qualification between 2001 and 2011. When comparing these nodes to selected urban non-nodes, the trend is the same.

According to Table 8, Ximba (28,6%) had the highest proportion of the population with no education in 2001, followed by iQadi (17,9%), Inanda (13,7%) and Mpumalanga (12,4%). It is unsurprising that Ximba had the highest number of people with no education as it is one of the poorest non-

nodal areas in the eThekwini municipality. The poverty level at Ximba (30,5%) was comparable to that of Inanda (30,9%) in 2001. In 2011, Kwa-Mashu (3,5%) and Umlazi (3,2%) had the lowest percentages of the population with no education. In 2011, there was an increase in the population with matric education as compared to 2001. Kwa-Mashu (40,6%) had the highest percentage of matriculants followed by Umlazi (39,9%) and Mpumalanga (37%) in 2011. There was also an increase in the percentage of the population with higher education in 2011 in all the townships. Umlazi (9,5%), followed by Mpumalanga (7,7%) had the highest proportion of the population that had higher education and Ximba (2,6%) had the lowest. However, it is worth noting that Kwa-Mashu (node) had the lowest percentage increase of persons with higher education among the townships discussed. As mentioned earlier Inanda (node) was poorer than Kwa-Mashu (node) but it was able to produce a higher proportion of people with higher education than Kwa-Mashu. In addition, Inanda had the highest percentage increase of persons with higher education, as observed in the table.

5.2.2.4 Motherwell and Mdantsane

Motherwell and Mdantsane are townships selected for the Urban Renewal Programme under the Nelson Mandela Bay and Buffalo City municipalities, respectively. Phakamisa (15,6%), a non-node, had the highest percentage of the population older than 20 years that had no education in 2001. The proportion of the population that had no education decreased by 11,9% in 2011. Other non-nodes like KwaNobuhle and Berlin had the highest percentage increases among matriculants and Phakamisa had the highest percentage increases among those with higher education.

Table 9: Education attainment for the population aged 20 years and older in urban nodal and non-nodal areas in Nelson Mandela Bay and Buffalo City municipalities in 2001 and 2011

	No schooling		% increase	Completed primary education		% increase	Matric		% increase	Higher education		% increase
Nodal areas	**2001**	**2011**		**2001**	**2011**		**2001**	**2011**		**2001**	**2011**	
Mdantsane	7,9	3,4	-4,5	8,3	4,8	-3,5	23,0	30,6	7,6	8,1	10,0	1,9
Motherwell	9,1	4,0	-5,1	8,8	4,7	-4,1	20,2	30,5	10,3	4,9	6,4	1,5
Average	**8,5**	**3,7**	**-4,8**	**8,6**	**4,8**	**-3,8**	**21,6**	**30,6**	**9,0**	**6,5**	**8,2**	**1,7**
Non-nodal areas												
Phakamisa	15,6	3,7	-11,9	8,8	4,8	-4	17,4	28,5	11,1	3,8	20,0	16,2
Berlin	9,7	5,8	-3,9	5,8	4,3	-1,5	16,1	30,2	14,1	7,6	13,9	6,3
KwaNobuhle	9,3	5,9	-3,4	9,0	5,9	-3,1	10,8	27,9	17,1	2,4	5,5	3,1
IBhayi	8,6	3,1	-5,5	9,0	4,5	-4,5	20,0	29,2	9,2	4,6	7,3	2,7
Average	**10,8**	**4,6**	**-6,2**	**8,2**	**4,9**	**-3,3**	**16,1**	**29,0**	**12,9**	**4,6**	**11,7**	**7,1**

The results indicate that the two urban nodes (Mdantsane and Motherwell) showed improvements in reducing the proportions of people with no education while also increasing the percentages of those with matric and higher education. They however did not outperform selected urban non-nodes (i.e. Phakamisa, Berlin, KwaNobuhle and IBhayi) in education.

IBhayi had the lowest proportion of the population with no education in 2011. Table 9 shows that on average the proportion of the population with no education decreased while the number of people with matric and higher education increased in non-nodal areas as observed among the nodes. KwaNobuhle had the biggest percentage increase in the proportion of matriculants in 2011. Phakamisa was one of the townships with the highest percentage of the population with no education in 2001, however, in 2011 Phakamisa had the highest percentage of the population with higher

education followed by Berlin and Mdantsane. Motherwell, on the other hand, had the lowest proportion of the population with higher education in 2011.

5.2.2.5 Galeshewe

Galeshewe is a township in the Sol Plaatjie municipality. In 2001, Sol Plaatjie municipality had 12,7% of people older than 20 years who had no education; although this number decreased to 6,2%, the municipality still had the second lowest percentage of persons who are aged 20 years or older who had higher education among all the municipalities discussed in this report.

Table 10: Education attainment of the population older than 20 years in urban nodal and non-nodal areas in Sol Plaatjie municipality in 2001 and 2011

	No schooling		% increase	Completed primary		% increase	Matric		% increase	Higher		% increase
Nodal areas	**2001**	**2011**		**2001**	**2011**		**2001**	**2011**		**2001**	**2011**	
Galeshewe	12,7	6,2	-6,5	8,8	4,9	-3,9	17,4	30,6	13,2	4,9	6,4	1,5
Non-nodal areas												
Ritchie	18,7	16,4	-2,3	8,6	6,3	-2,3	6,4	15,7	9,3	1,0	1,7	0,7
Motswedimosa	20,6	16,6	-4,0	7,4	7,0	-0,4	3,2	17,0	13,8	0,6	1,2	0,6
Average	**19,7**	**16,5**	**-3,2**	**8,0**	**6,7**	**-1,4**	**4,8**	**16,4**	**11,6**	**0,8**	**1,5**	**0,7**

The non-node Motswedimosa was one of the poorest townships in Sol Plaatjie in 2001 with a Multidimensional poverty headcount of 30,9%. Motswedimosa (20,6%) had the highest proportion of people with no schooling in 2001, this figure further decreased to 16,6% in 2011. However,

Motswedimosa had the highest percentage increase of the proportion of persons with matric compared to the other townships. Furthermore, all the townships experienced an increase in the number of matriculants in 2011. On the other hand, Galeshewe (the node) had the highest percentage of the population with higher education compared to non-nodal areas of Ritchie and Motswedimosa.

In summary, as the proportion of the population that had no education and primary education declined in 2011, the percentage of matriculants and those with higher education increased. Galeshewe had the highest percentage of the population that had Matric and higher education and the lowest proportions of people with no education and primary education in both 2001 and 2011, clearly outperforming the non-nodes (Ritchie and Motswedimosa). A paired sample's test conducted to compare the mean population with higher education in urban nodes and non-nodes showed statistical significant differences in 2001 and 2011 ($t(23)=-3.295$ $p<0$). Which means the increase in the proportion of the population who had higher education is statistically significant in both urban nodes and non-nodes.

It is worth noting that although we are comparing the proportions of the populations in these townships, as mentioned earlier we are not assessing the quality of education they receive in these townships, which in the long run may provide pathways to careers that may take them out of poverty.

Further research needs to be conducted to assess the quality of education in the nodes.

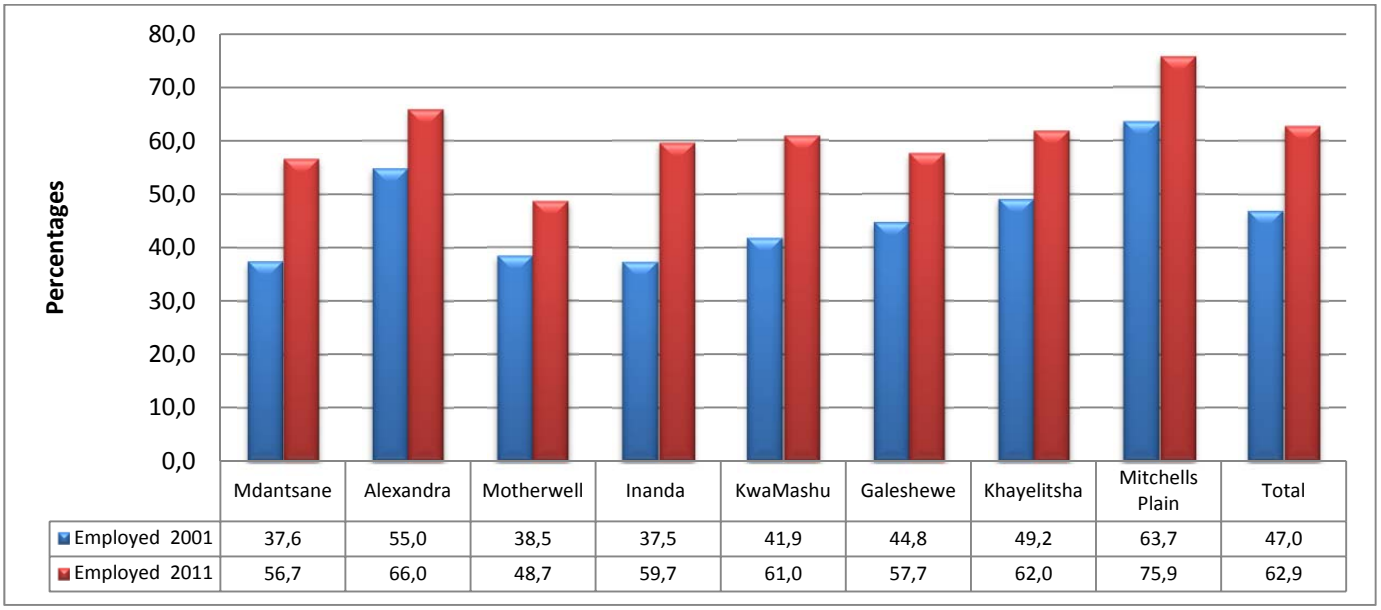
5.3. Economic activity

Creating enough employment opportunities for wage earners has been a challenge for the South African labour force. According to the National Development Plan 2030, South Africa aims at reducing unemployment from 25% to 14% in 2020 and to 6% by 2030 (Commission 2011). In this section we discuss employment, unemployment and labour absorption rate in urban nodal areas and later make a comparison to urban non-nodes. The analysis only focuses on persons aged 15 to 64 years old and other related tables are attached in the Annexure.

5.3.1 Economic activity in the urban nodes

Figure 13 shows that employment has increased on average from 47,0% to 62,9% in all urban nodal areas between 2001 and 2011. As employment increased, unemployment decreased proportionally.

Figure 13: Percentage employed in the urban nodes for the population aged 15–64 years in 2001 and 2011

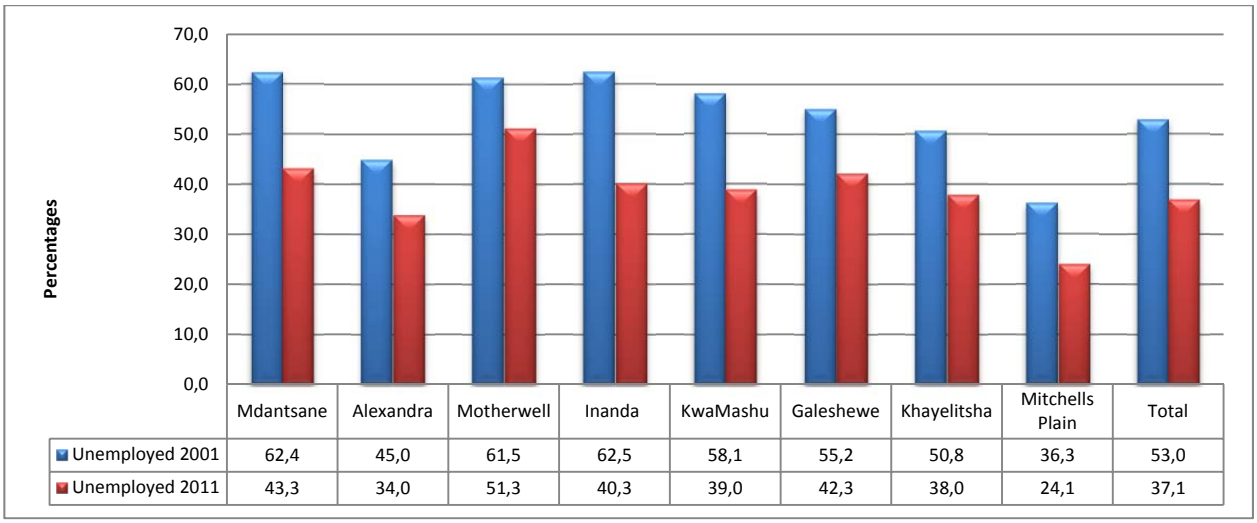


	Mdantsane	Alexandra	Motherwell	Inanda	KwaMashu	Galeshewe	Khayelitsha	Mitchells Plain	Total
Employed 2001	37,6	55,0	38,5	37,5	41,9	44,8	49,2	63,7	47,0
Employed 2011	56,7	66,0	48,7	59,7	61,0	57,7	62,0	75,9	62,9

Alexandra and Mitchell's Plain had the highest percentage of the population employed in both years compared to all the other urban nodal areas. On the other hand, Inanda, Motherwell and Mdantsane had the lowest proportions of persons employed in 2001. Mdantsane and Motherwell had the lowest employment percentages even in 2011. Inanda's employment rate in 2011 was higher than that of Galeshewe, Motherwell and Mdantsane whereas they had almost similar employment rates in 2001.

Figure 14 shows unemployment rates in all urban nodes in 2001 and 2011. There has been a drop in unemployment across all urban nodes, from 53,0% in 2001 to 37,1% in 2011. Mitchell's Plain had the lowest unemployment rates (36,3%) in 2001 and remained in the lowest levels even in 2011. Alexandra, on the other hand, had the second lowest unemployment rate at 45,0% in 2011. Motherwell and Mdantsane showed the highest levels of unemployment rates in 2011 with 51,3% and 43,3%; respectively.

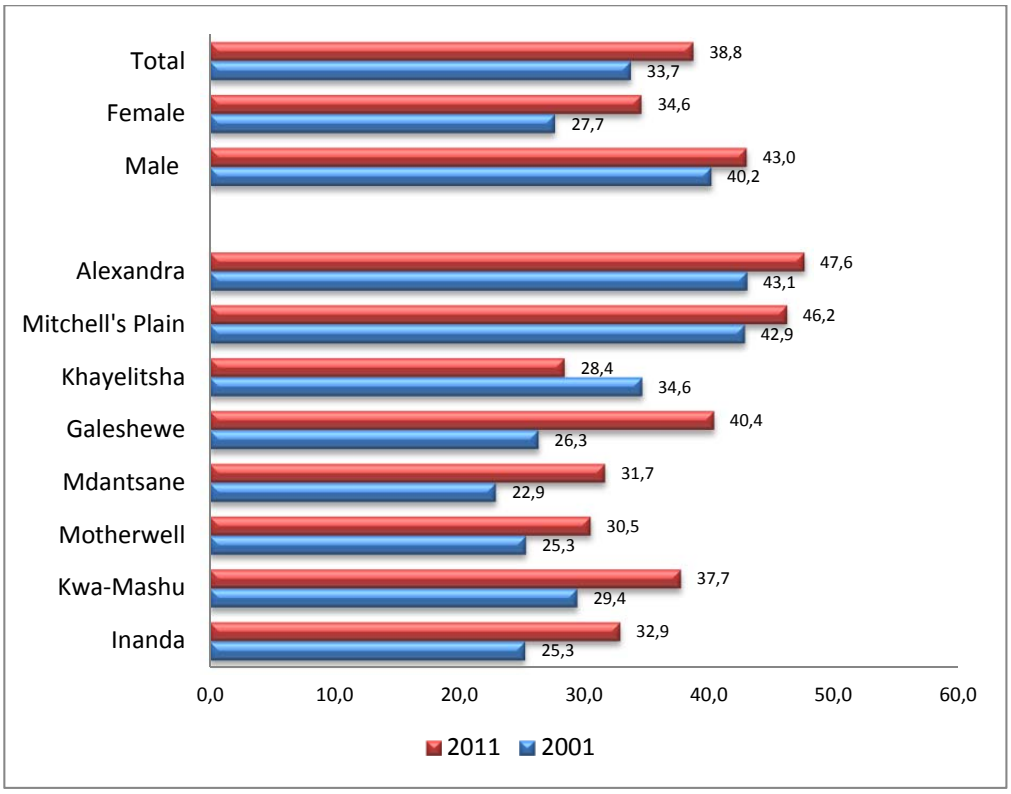
Figure 14: Unemployment rates in the urban nodes for the population aged 15–64 years in 2001 and 2011



	Mdantsane	Alexandra	Motherwell	Inanda	KwaMashu	Galeshewe	Khayelitsha	Mitchells Plain	Total
Unemployed 2001	62,4	45,0	61,5	62,5	58,1	55,2	50,8	36,3	53,0
Unemployed 2011	43,3	34,0	51,3	40,3	39,0	42,3	38,0	24,1	37,1

Unemployment levels are still very high in South Africa. If more job opportunities are created, unemployment levels will be closer to the National Development Plan's goal of 6% by 2030. The closer the labour absorption rate is to 100, the better the actual relative desired employment performance. The labour absorption rates shown in Figure 15 reflect an increase across all urban nodal areas, except at Khayelitsha where the labour force absorption rate dropped from 34,6% in 2001 to 28,4% (lowest) in 2011. Alexandra and Mitchell's Plain consistently had the highest absorption rates at 47,6% and 46,2% respectively in 2011.

Figure 15: Labour absorption rates in the urban nodes in 2001 and 2011



The male population had higher employment absorption rate (with 40,2% in 2001 and 43,0% in 2011) as compared to their female counterparts who only reported 27,7% and 34,6% in 2001 and 2011 respectively (Figure 15). Mitchells Plain (46,2%) and Alexandra (47,6%) had the highest employment absorption rates than all the other urban nodal areas, which means these two townships were able to give employment to almost half of its employable population. From this analysis it is clear that the employment absorption is still far from 100% which indicates that despite investments in the urban nodes growth in the creation of the number of jobs, that has been far outstripped by the expanding labour force.

5.3.2. Comparing employment status in urban nodal and non-nodal areas

5.3.2.1 Mdantsane and Motherwell

The unemployment rates in Nelson Mandela Bay (46,4%) and Buffalo City (53,7%) municipalities were the highest among the municipalities discussed in this report (Annexure: Table X). The unemployment rate in Nelson Mandela Bay municipality further increased to 47,3% in 2011 whereas in Buffalo City municipality it decreased to 35,1%. Table 11 shows the employment status of the urban nodes and the selected urban non-nodes population in both Buffalo City and Nelson Mandela Bay municipalities.

When comparing employment and unemployment in the urban nodes and the selected non-nodes, the results show that the urban nodes and non-nodes had managed to reduce unemployment significantly, with the exception of Berlin (non-nodes) where unemployment increased by 7,2 per cent and employment decreased within the same margin. The percentage of employed people increased on average in all the urban nodes and urban non-nodes. At Phakamisa the employment rate almost doubled in 2011. KwaNobuhle was second after Phakamisa to create more jobs (Table 11). IBhayi and KwaNobuhle created very fewer jobs between 2001 and 2011 compared to the other non-nodes as the percentage employed increased slightly between those years.

Table 11: Employment status of the population in urban nodal and non-nodal areas in Buffalo city and Nelson Mandela Bay municipalities in 2001 and 2011

Nodal areas	Employed		% increase	Unemployed		% increase
	2001	2011		2001	2011	
Mdantsane	37,5	56,7	19,2	62,4	43,3	-19,2
Motherwell	38,1	48,7	10,2	61,49	51,3	-22,3
Average	**37,8**	**52,7**	**14,7**	**62,0**	**43,3**	**-20,8**
Non-nodal areas						
Phakamisa	38,9	69,3	30,5	61,1	30,7	-30,5
Berlin	66,6	59,5	-7,2	33,4	40,5	7,2
KwaNobuhle	31,7	47,8	16,2	68,3	52,2	-16,2
IBhayi	34,0	48,6	14,6	66,0	51,4	-14,6
Average	**42,8**	**56,3**	**13,5**	**57,2**	**43,7**	**-13,5**

As employment increased, unemployment declined in Phakamisa, Mdantsane, Motherwell, IBhayi and KwaNobuhle. On the other hand, employment decreased in 2001 and 2011 in Berlin when unemployment increased. It is worth noting that Mdantsane and Motherwell are part of the Urban Renewal Programme and in both townships employment increased on average by 14,7 per cent and unemployment declined by more than 20 per cent in Mdantsane and Motherwell. Phakamisa experienced the biggest drop in unemployment than all the townships.

5.3.2.2 Galeshewe

Sol Plaatjie municipality (41,3%) had the third highest unemployment after Buffalo City (53,7%) and Nelson Mandela Bay (46,5%) in 2001 (Annexure: Table X). In 2011, unemployment in Sol Plaatjie municipality declined by almost 10 per cent to 31,9% but the municipality still had the third highest unemployment rate. Table 12 indicates the employment status in urban nodes and selected urban non-nodes within Sol Plaatjie municipality.

Table 12: Employment status of the population in urban nodal and non-nodal areas in Sol Plaatjie municipality in 2001 and 2011

Nodal areas	Employed		% increase	Unemployed		% increase
	2001	2011		2001	2011	
Galeshewe	44,8	57,7	12,9	55,2	42,3	-12,9
Non-nodal areas						
Motswedimosa	41,0	75,8	34,8	59,0	24,2	-34,8
Ritchie	52,2	68,0	15,8	47,8	32,0	-15,8
Average	**46,6**	**71,9**	**25,3**	**53,4**	**28,1**	**-25,3**

Employment rate increased in the nodal area Galeshewe by 12,9% and the non-nodes seem to have created more jobs on average than Galeshewe. In terms of unemployment the selected urban non-nodes in Sol Plaatjie did better than Galeshewe (a nodal area) between 2001 and 2011. Unemployment in Galeshewe declined by less than 12% while in Motswedimosa and Ritchie unemployment declined by 34,8% and 15,8% respectively.

5.3.2.3 Inanda and Kwa-Mashu

In 2001, unemployment was very high in eThekwini municipality (43%) although it decreased to 30,2% in 2011, it was still very high (Annexure: Table X). On average, the employment increased in 2011 in both urban nodal and non-nodal areas within eThekwini municipality (Table 13). The results indicate that in eThekwini municipality the urban nodes (i.e. Inanda and Kwa-Mashu) experienced an increase in employment, so were the selected urban non-nodes. However, it must be noted that at iQadi township employment was the second lowest after Ximba in 2001 but it increased by almost half (45,6%) in 2011, the highest employment increase in all the townships.

Table 13: Employment status of the population in urban nodal and non-nodal areas in eThekwini municipality in 2001 and 2011

Nodal areas	Employed		% increase	Unemployed		% increase
	2001	2011		2001	2011	
Inanda	37,5	59,7	22,3	62,5	40,3	-22,3
Kwa-Mashu	41,9	61,0	19,1	58,1	39,0	-19,1
Average	**39,7**	**60,4**	**20,7**	**60,3**	**39,7**	**-20,7**
Non-nodal areas						
IQadi	36,1	81,7	45,6	63,9	18,3	-45,6
Ximba	31,7	76,3	44,6	68,3	23,7	-44,6
Umlazi	42,6	58,5	15,9	57,4	41,5	-15,9
Mpumalanga	37,5	54,5	17,0	62,5	45,5	-17,0
Average	**37,0**	**67,8**	**30,8**	**63,0**	**32,3**	**-30,8**

The nodal townships (Inanda and Kwa-Mashu) managed to reduce their high unemployment in eThekwini in 2011 but the greatest decreases were observed in the non-nodes of IQadi and Ximba. However, unemployment decreased in all the townships over the ten-year period.

5.3.2.4 Khayelitsha and Mitchell's Plain

The City of Cape Town (29,2%) had the lowest unemployment rate compared to the other municipalities in 2001 and it further declined to 23,9% in 2011 (Annexure: Table X). Employment and unemployment increased in the urban nodes and non-nodes. Townships under the City of Cape Town experienced an uneven increase in employment. The urban non-node Brackenfell had the highest employment rate in 2011. Brankenfell had the highest percentage increase among the townships, while Kraaifonten (non-node) had the lowest. However, it must be noted that townships that had a low to moderate percentage increase in employment had relatively high employment rates in 2001 e.g. Mitchells Plain and Brankenfell.

Table 14: Employment status of the population in urban nodal and non-nodal areas in City of Cape Town municipality in 2001 and 2011

Nodal areas	Employed		% increase	Unemployed		% increase
	2001	2011		2001	2011	
Khayelitsha	49,2	62,0	12,8	50,8	38,0	-12,8
Mitchell's Plain	63,7	75,9	12,1	36,3	24,1	-12,1
Average	**56,5**	**69,0**	**12,5**	**43,6**	**31,1**	**-12,5**
Non-nodal areas						
Gugulethu	48,8	59,8	11,0	51,2	40,2	-11,0
Fisantkraal	59,6	72,7	13,2	40,4	27,3	-13,2
Brackenfell	75,2	95,4	20,2	24,6	4,6	-20,2
Kraaifontein	69,1	79,0	9,9	30,9	21,0	-9,9
Average	**63,2**	**76,7**	**13,6**	**36,8**	**23,3**	**-13,6**

Although overall, unemployment decreased in all the areas in 2011, in Khayelitsha and Mitchell's Plain there were no significant declines like those observed in Brankenfell. On average, the selected urban non-nodes did better than the urban nodes in the City of Cape Town municipality. The urban nodes, (Khayelitsha and Mitchell's Plain) increased their employment by 12,5% on average whilst the selected non-nodes increased employment by 13,6%. On the other hand, the urban nodes decreased their unemployment by 12,5% whilst the selected non-nodes decreased it by 13,6%.

5.3.2.5 Alexandra

The City of Johannesburg municipality (37,4%) had the second lowest unemployment after the City of Cape Town municipality (29,2%) in 2001. In the City of Johannesburg unemployment declined to 25% in 2011.

Table 15: Employment status of the population in urban nodal and non-nodal areas in City of Johannesburg municipality in 2001 and 2011

	Employed		% increase	Unemployed		% increase
Nodal area	**2001**	**2011**		**2001**	**2011**	
Alexandra	55,0	66,0	11,0	45,0	34,0	-11,0
Non-nodal areas						
Diepsloot	50,1	70,7	20,6	49,9	29,3	-20,6
Orange Farm	42,3	60,5	18,2	57,7	39,5	-18,2
Average	**46,2**	**65,6**	**19,4**	**53,8**	**34,4**	**-19,4**

Employment was high in the urban nodal area Alexandra in 2001 and it further increased by 11,0% in 2011. On the other hand, unemployment was highest in Orange Farm in 2001 but it declined from 57,7% to 39,5 % in 2011. This decline was noteworthy, as it was bigger than the decline in Galeshewe (urban node). On average the urban non-nodes reduced unemployment by almost twice as the urban node did.

The common finding is that employment had increased and unemployment had declined in both urban nodal and non-nodal areas. However, the employment levels are still very low although the increases in the employment rates and declines in unemployment in 2001 and 2011 are not statistically significant for the both urban nodes and urban nodes. However, there is no further evidence that supports the fact that the urban nodal areas created more jobs than the selected urban non-nodal areas.

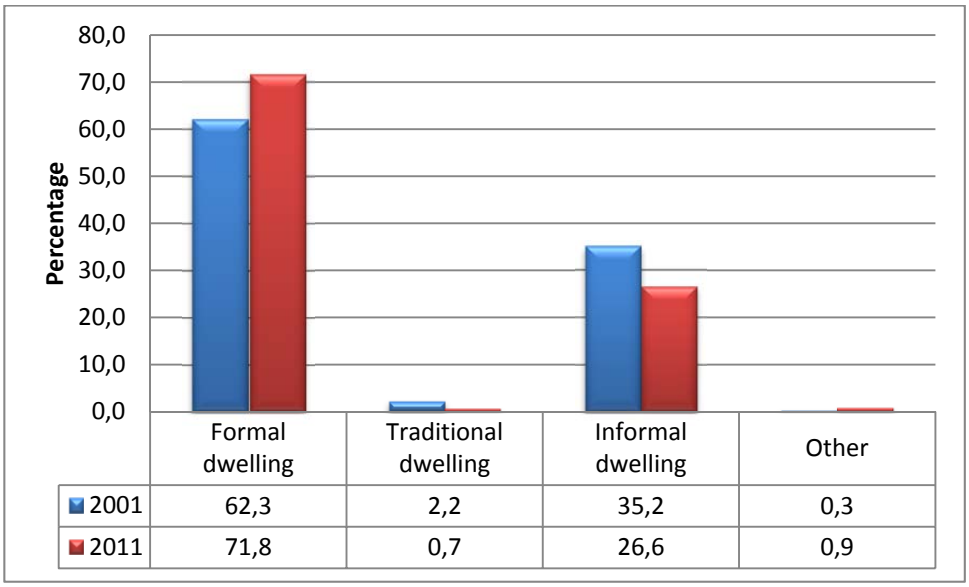
5.4. Living conditions

This section of the report discusses the living circumstances of households in the urban nodes. It covers information regarding the type of dwellings that urban households in urban nodes occupy and the tenure status as well as their access to a range of basic services. The services include access to piped water, electricity, sanitation and refuse removal. The living circumstances of households in urban nodal areas are then compared with those households in non-urban nodes. The National Development Plan aims at enabling most South Africans to have access to affordable services and quality environments by 2030.

5.4.1 Type of main dwelling

Census results show that in 2011 the proportion of houses in the urban nodal areas with formal dwelling structures increased from 62,3% in 2001 to 71,8% in 2011. On the other hand, informal dwelling structures decreased from 35,2% to 26,6% (Figure 16).

Figure 16: Distribution of households by type of main dwelling in urban nodal areas in 2001 and 2011

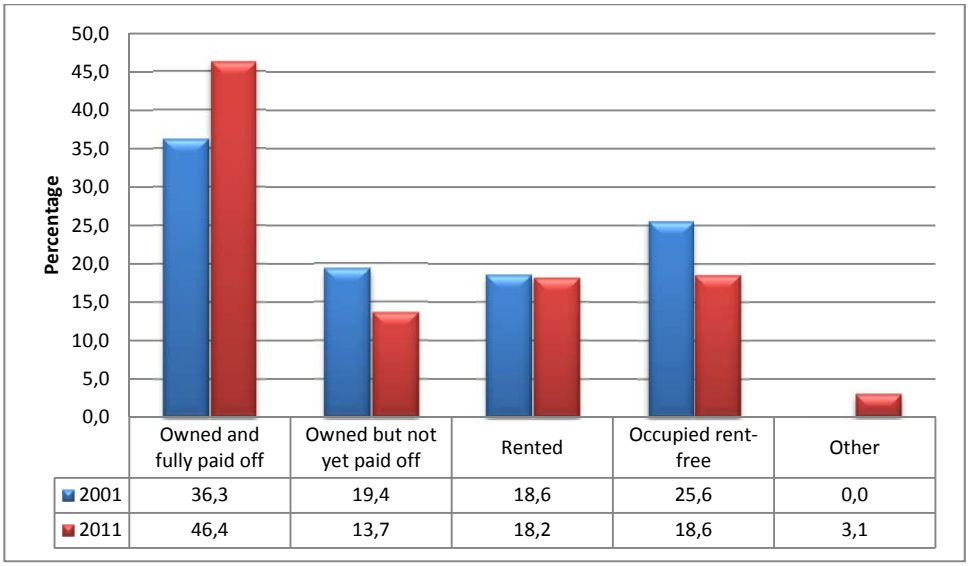


	Formal dwelling	Traditional dwelling	Informal dwelling	Other
2001	62,3	2,2	35,2	0,3
2011	71,8	0,7	26,6	0,9

5.4.2 Tenure of households

There has been an increase in the proportion of houses in the urban nodal townships that are owned and fully paid-off from 36,3% to 46,4% between 2001 and 2011. There has been a decline in the proportion of households that are owned but not yet paid-off and those that are occupied rent-free (Figure 17). The proportion of rented households has stayed stable for the 10 years.

Figure 17: Distribution of nodal area households by tenure status in 2001 and 2011

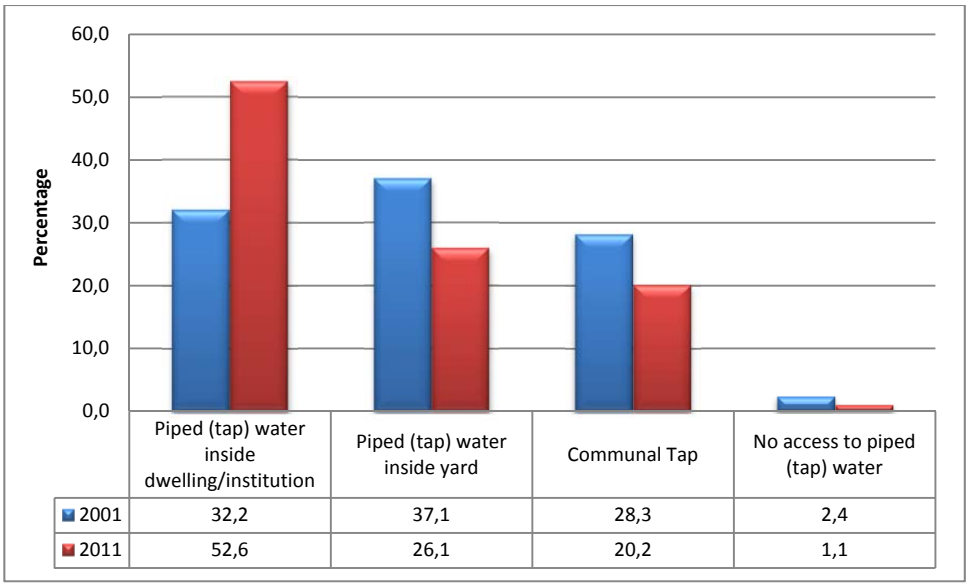


	Owned and fully paid off	Owned but not yet paid off	Rented	Occupied rent-free	Other
2001	36,3	19,4	18,6	25,6	0,0
2011	46,4	13,7	18,2	18,6	3,1

5.4.3 Access to water

In 2011, there were more than half (52,6%) of the households in urban nodal areas that had access to piped (tap) water inside their dwellings. The proportion of households that had piped (tap) water inside their yards decreased from 37,1% to 26,1% in 2011. Households with no access to piped (tap) water and those that used a communal tap declined in 2011 (Figure 18).

Figure 18: Percentage distribution of urban nodal area households with access to piped water in 2001 and 2011



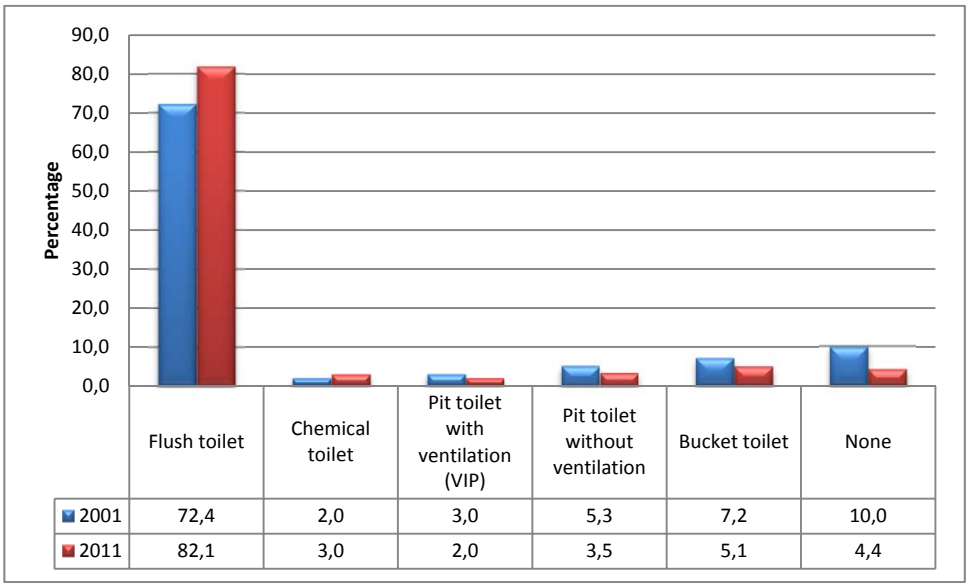
	Piped (tap) water inside dwelling/institution	Piped (tap) water inside yard	Communal Tap	No access to piped (tap) water
2001	32,2	37,1	28,3	2,4
2011	52,6	26,1	20,2	1,1

Households with access to piped water, whether in the dwelling or inside the yard were more than two-thirds in 2001, this number further increased to 78,7% in 2011.

5.4.4 Type of toilet facility

Households in the urban nodal areas that had flush toilets increased from 72,4% in 2001 to 82,1% in 2011. There has been a decline in the number of households that used pit toilets with or without ventilation, bucket toilets and those that don't have a toilet at all.

Figure 19: Distribution of urban nodal area households by type of toilet facility in 2001 and 2011

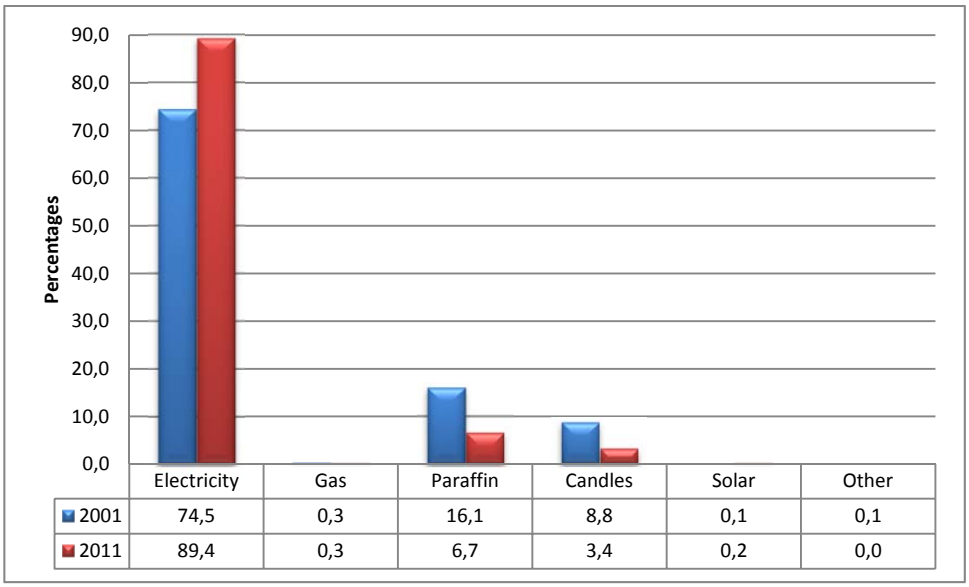


	Flush toilet	Chemical toilet	Pit toilet with ventilation (VIP)	Pit toilet without ventilation	Bucket toilet	None
2001	72,4	2,0	3,0	5,3	7,2	10,0
2011	82,1	3,0	2,0	3,5	5,1	4,4

5.4.5 Type of energy used for lighting

In 2011, nine out of ten households in urban nodal townships used electricity for lighting. The use of paraffin and candles declined although there was a slight increase in the use of solar power (Figure 20). The proportion of households that used gas has remained stable during the 10 years.

Figure 20: Distribution of households in urban nodal area by type of energy used for lighting in 2001 and 2011

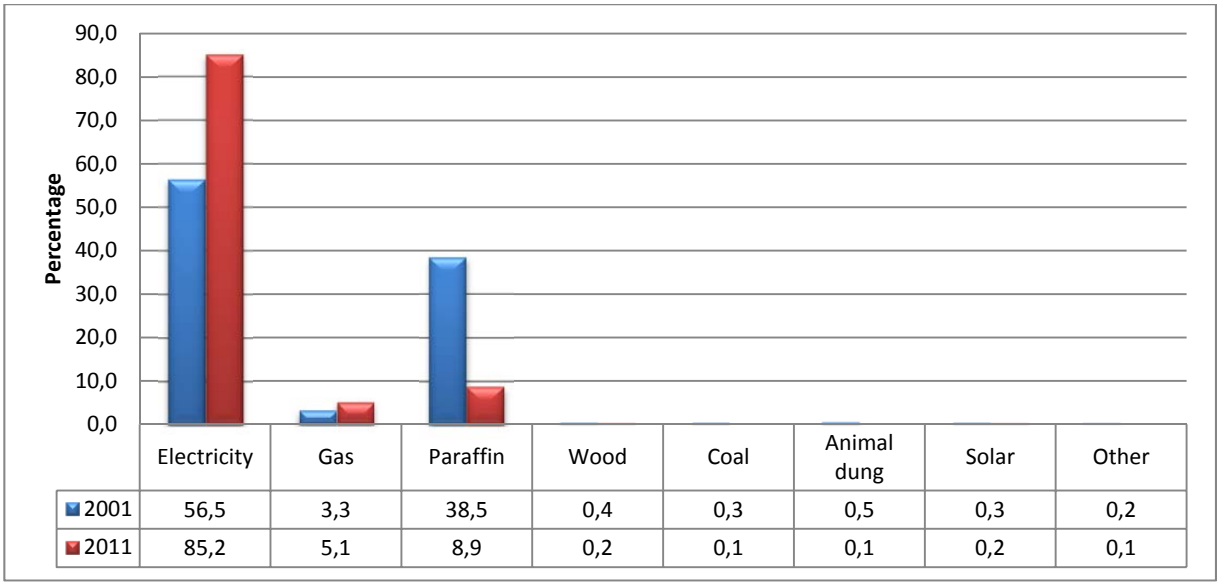


	Electricity	Gas	Paraffin	Candles	Solar	Other
2001	74,5	0,3	16,1	8,8	0,1	0,1
2011	89,4	0,3	6,7	3,4	0,2	0,0

5.4.6 Type of energy used for cooking

More than half (56,5%) of households in urban nodal areas used electricity for cooking in 2001, this number increased to 85,2% in 2011.

Figure 21: Distribution of households in urban nodal areas by type of energy used for cooking in 2001 and 2011



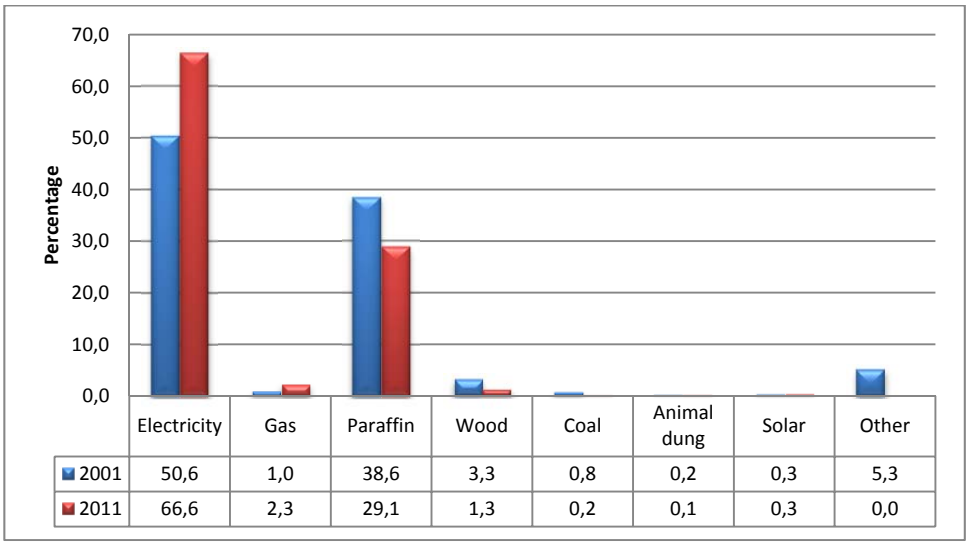
	Electricity	Gas	Paraffin	Wood	Coal	Animal dung	Solar	Other
2001	56,5	3,3	38,5	0,4	0,3	0,5	0,3	0,2
2011	85,2	5,1	8,9	0,2	0,1	0,1	0,2	0,1

Paraffin has been largely used for cooking in more than one third of the households in 2001, although it declined to 8,9% in 2011. There has been an increase in the proportion of households that used gas for cooking and there has been a decline in the percentage of households that use gas for lighting (Figure 20 and 21).

5.4.7 Type of energy used for heating

The percentage of households that used electricity for heating in the urban nodal townships increased by 16% in 2011 (Figure 22). The use of gas also increased in 2011.

Figure 22: Distribution of households in urban nodal areas by type of energy used for heating in 2001 and 2011



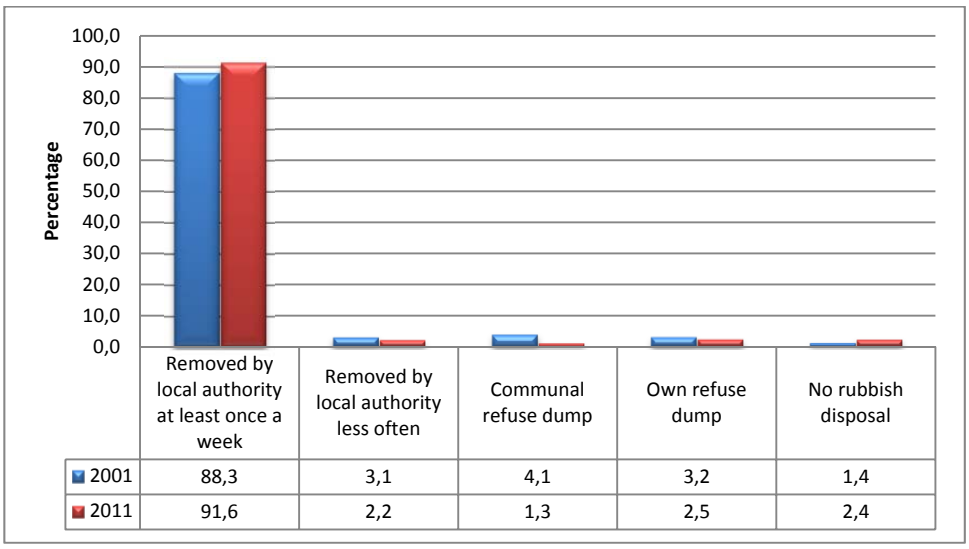
	Electricity	Gas	Paraffin	Wood	Coal	Animal dung	Solar	Other
2001	50,6	1,0	38,6	3,3	0,8	0,2	0,3	5,3
2011	66,6	2,3	29,1	1,3	0,2	0,1	0,3	0,0

The proportion of households that used paraffin for cooking and heating was much higher than those households that use it for lighting. This might indicate the preferences in different households on which energy to use for cooking or heating or lighting. For instance, more households use wood and coal for heating than cooking.

5.4.8 Type of refuse removal

Figure 23 shows that the proportion of households that had their refuse removed by the local authority slightly increased from 91,4% to 93,8% in 2011. Households with their own refuse dumps or communal refuse dumps decreased in 2011.

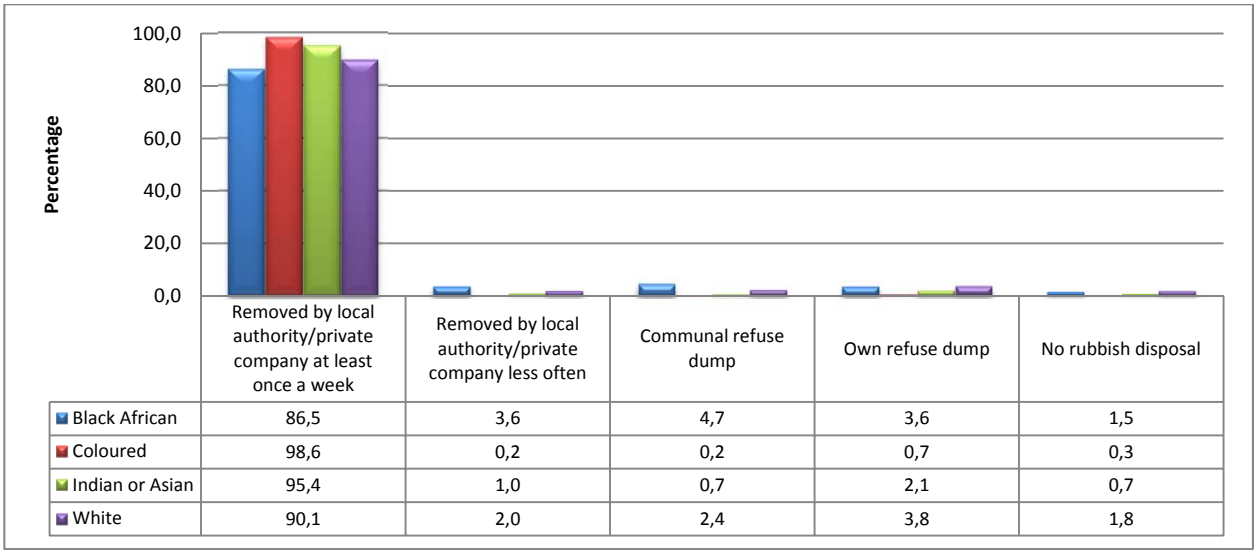
Figure 23: Distribution of nodal area households by type of refuse removal in 2001 and 2011



	Removed by local authority at least once a week	Removed by local authority less often	Communal refuse dump	Own refuse dump	No rubbish disposal
2001	88,3	3,1	4,1	3,2	1,4
2011	91,6	2,2	1,3	2,5	2,4

In 98,6% of households where the head of household is coloured, the households had their refuse removed by local authority at least once a week (Figure 24).

Figure 24: Distribution of households in urban nodal areas by type of refuse removal and population group of household head in 2011



	Removed by local authority/private company at least once a week	Removed by local authority/private company less often	Communal refuse dump	Own refuse dump	No rubbish disposal
Black African	86,5	3,6	4,7	3,6	1,5
Coloured	98,6	0,2	0,2	0,7	0,3
Indian or Asian	95,4	1,0	0,7	2,1	0,7
White	90,1	2,0	2,4	3,8	1,8

Households headed by whites (1,8%) and those headed by black Africans (1,5%) constituted the highest proportion of household that had no rubbish disposal in 2011.

5.5. Comparing living conditions in urban nodal areas to non-nodal areas

There have been major advances in service delivery in major municipalities. Access to electricity, flush toilet, piped water and formal dwelling had increased between 2001 and 2011 (Annexure: Table VII).

5.5.1 Mdantsane and Motherwell

Buffalo City and Nelson Mandela Bay municipalities have experienced an increase in access to piped water, access to flush toilets connected to a sewerage system, access to electricity and the number of formal dwellings between 2001 and 2011 (Annexure: Table VII). Table 16 indicates that on average there has been an increase in access to electricity, piped water, and flush toilets and formal dwellings between 2001 and 2011.

Table 16: Access to electricity, flush toilet, piped water and formal dwelling in urban nodal and non-nodal areas in 2001 and 2011 in Buffalo City and Nelson Mandela Bay municipalities

odal areas	Electricity		% increase	Flush toilet (connected to sewerage system)		% increase	Formal dwelling		% increase	Piped water inside the dwelling or in the yard		% increase
Year	2001	2011		2001	2011		2001	2011		2001	2011	
Mdantsane	58,2	78,2	20	79,7	83,3	3,6	74,0	78,3	4,3	76,8	84,3	7,5
Motherwell	63,4	95	31,6	72,5	96,2	23,7	67,4	93,9	26,5	71,0	96,4	25,4
Average	**60,8**	**86,6**	**25,8**	**76,1**	**89,8**	**13,7**	**70,7**	**86,1**	**15,4**	**73,9**	**90,4**	**16,5**
Non-nodal areas												
KwaNobuhle	87,6	96,1	8,5	82,4	90,9	8,5	62,4	86,4	24	85,2	94,0	8,8
IBhayi	57,2	86,0	28,8	69,5	84,7	15,2	66,1	83,7	17,6	69,1	85,2	16,1
Phakamisa	64,8	82,9	18,1	93,2	80,2	-13	87,3	84,7	-2,6	88,8	78,2	-10,6
Berlin	53,1	84,6	31,5	23,2	64,6	41,1	64,4	85,2	20,8	54,2	84,9	30,7
Average	**65,7**	**87,4**	**21,7**	**67,1**	**80,1**	**13,0**	**70,1**	**85,0**	**15,0**	**74,3**	**85,6**	**11,3**

Urban nodes like Motherwell and Mdantsane showed increases in all services so did the non-nodes Berlin and KwaNobuhle. There has been a slight increase in the access to piped water in the dwelling or in the yard, flush toilets connected to sewerage and number of formal dwellings in Mdantsane as compared to Motherwell. Phakamisa is the only area that had experienced a decline in access to piped water, flush toilets and no increase in number of formal dwellings in 2011. The only increase observed in Phakamisa was in access to electricity. IBhayi, on the other hand had experienced an increase in all the services as well as Motherwell, KwaNobuhle and Berlin. Motherwell is part of the urban renewal programme, yet the other areas are not. It becomes difficult therefore to infer that urban nodes performed better than other townships.

5.5.2 Galeshewe

In Sol Plaatjie municipality service delivery has been high but it stagnated to a decline between 2001 and 2011 (Annexure: Table VII). In 2001, Sol Plaatjie municipality (81,7%) has been one of the municipalities with the highest percentage of households with formal dwellings in 2001 but this number remained stable at 81,6% in 2011 (Annexure: Table VII). This is also evident in Galeshewe township where access to formal dwellings was high but decreased from 78% to 72,1% in 2011. This is also evident in Motswedimosa. However, in Ritchie there was a 5% increase in access to formal dwellings.

Table 17: Access to electricity, flush toilet, piped water and formal dwelling in nodal and non-nodal areas in 2001 and 2011 in Sol Plaatjie municipality

Nodal area	Electricity		% increase	Flush toilet (connected to sewerage system)		% increase	Formal dwelling		% increase	Piped water inside the dwelling or in the yard		% increase
Year	2001	2011		2001	2011		2001	2011		2001	2011	
Galeshewe	79,1	80,9	1,8	84,2	79,6	-4,2	78,0	72,1	-5,9	86,8	83,6	-3,2
Non-nodal areas												
Motswedimosa	53,9	97,5	43,7	56,7	50,4	-6,3	59,9	54,7	-5,2	57,5	60,8	3,3
Ritchie	77,7	90,5	12,8	83,2	56,8	-26,4	47,2	52,2	5	80,2	60,5	-19,7
Average	**65,8**	**94,0**	**28,3**	**70,0**	**53,6**	**-16,4**	**53,6**	**53,5**	**-0,1**	**68,9**	**60,7**	**-8,2**

In Motswedimosa, a township close Ritchie, there was a significant increase of 43,7% in the proportion of households that had access to electricity and 3,3% increase of households that had piped water inside the dwelling or inside the yard. In Ritchie there was an increase in access to electricity and formal dwellings. In Galeshewe the only increase that is noticeable is the increase in access to electricity. Other services have shown a drastic decline more especially in access to formal dwellings and piped water inside the dwelling or in the yard. Sol Plaatjie municipality had been

experiencing a steady increase in service delivery, except for access in formal dwellings and flush toilets (Annexure: Table VII). This might be a result of the fast growing population in the townships, which might indicate that infrastructure development is slower than the rate at which the population is growing.

5.5.3 Inanda and Kwa-Mashu

eThekwini municipality has seen a steady increase in service delivery in the 10 years. Less than 13% of households don't have access to electricity in both urban nodal and in non-nodal areas.

Table 18: Access to electricity, flush toilet, piped water and formal dwelling in nodal and non-nodal areas in 2001 and 2011 in eThekwini municipality

	Electricity		% increase	Flush toilet (connected to sewerage system)		% increase	Formal dwelling		% increase	Piped water inside the dwelling or in the yard		% increase
Nodal areas	**2001**	**2011**		**2001**	**2011**		**2001**	**2011**		**2001**	**2011**	
Inanda	70,5	92,8	22,3	12,7	39,4	26,7	48,5	73,8	25,3	31,7	78,3	46,6
Kwa-Mashu	84,2	97,5	13,3	83,4	83,2	-0,2	73,4	74,6	1,2	69,8	70,1	0,3
Average	**77,4**	**95,2**	**17,8**	**48,1**	**61,3**	**13,3**	**61,0**	**74,2**	**13,3**	**50,8**	**74,2**	**23,5**
Non-nodal areas												
IQadi	75,4	87,2	11,8	6,3	12,0	5,7	51,0	41,5	-9,5	31,8	85,5	53,7
Ximba	66,1	96,8	30,7	6,8	13,8	7	29,0	60,5	31,5	60,1	95,5	35,4
Umlazi	81,0	90,7	9,7	60,5	58,6	-1,9	59,3	65,1	5,8	66,9	73,5	6,6
Mpumalanga	68,5	92,3	23,8	47,7	81,8	34,1	81,2	94,9	13,7	61,1	90,7	29,6
Average	**72,8**	**91,8**	**19,0**	**30,3**	**41,6**	**11,2**	**55,1**	**65,5**	**10,4**	**55,0**	**86,3**	**31,3**

Inanda, IQadi, and Ximba had the lowest percentages of households with flush toilets in 2001. However, it is only Umlazi and Kwa-Mashu that had a negative increase in access to flush toilets connected to a sewerage system although in Kwa-Mashu 8 out of 10 households had a flush toilet connected to sewerage system compared to 6 out of 10 households at Umlazi. The two urban nodal areas have made significant progress in the 10 years in terms of service delivery although Inanda was worse off than Kwa-Mashu in 2001. Inanda showed a significant increase in all basic services than other townships because it started at a lower base. Despite that it didn't do better than Mpumalanga which is a non-nodal township in access to electricity and flush toilets. Given this evidence, it is not easy to conclude that urban nodes did better than non-nodal areas.

5.5.4 Khayelitsha and Mitchell's Plain

In 2001, the City of Cape Town municipality had the highest percentage of households that had access to electricity, piped water and flush toilets. This is also evident in the urban nodal and non-nodal areas under this municipality.

Table 19: Access to electricity, flush toilet, piped water and formal dwelling in nodal and non-nodal areas in 2001 and 2011 in City of Cape Town municipality

	Electricity		% increase	Flush toilet (connected to sewerage system)		% increase	Formal dwelling		% increase	Piped water inside the dwelling and in the yard		% increase
Nodal areas	**2001**	**2011**		**2001**	**2011**		**2001**	**2011**		**2001**	**2011**	
Khayelitsha	76	79,2	3,2	65,0	87,3	22,3	32,6	45,2	12,6	61,6	80,4	18,8
Mitchell's Plain	81,7	99,5	17,8	81,7	96,6	14,9	76,4	94,9	18,5	80,3	98,5	18,2
Average	**78,9**	**89,4**	**10,5**	**73,4**	**92,0**	**18,6**	**54,5**	**70,1**	**15,6**	**71,0**	**89,5**	**18,5**
Non-nodal areas												
Gugulethu	72,2	96,4	24,2	65,2	68,8	3,6	56,1	54,7	-1,4	44,9	49,1	4,2
Fisantkraal	49,4	68,6	19,2	93,9	90,6	-3,3	89,7	42,6	-47,1	95,8	68,3	-27,5
Brackenfell	81,1	99,1	18	87,7	99,7	12	65,4	99,1	33,7	79,4	99,2	19,8
Kraaifontein	79,2	94,4	15,2	96,1	97,1	1	93,8	81,0	-12,8	93,1	93,7	0,6
Average	**70,5**	**89,6**	**19,2**	**85,7**	**89,1**	**3,3**	**76,3**	**69,4**	**-6,9**	**78,3**	**77,6**	**-0,7**

All the townships in Table 19 have had a steady increase in the provision of basic services in the ten years, except for Fisantkraal that has experienced a decline in access to flush toilets, formal dwellings and piped water. The City of Cape Town in comparison to other municipalities has lagged behind in terms of the percentage of households with formal dwelling units. In 2011, out of the six municipalities discussed in this report the City of Cape Town was ranked second from the bottom in terms of the number of households with formal dwellings (Annexure: Table VII), The worst municipality than the City of Cape Town (78,4%) was Buffalo City (72,5%). The Sol Plaatjie (81,6%) municipality, followed by the City of

Johannesburg (81,4%) were the municipalities with the highest proportions of households with formal dwelling units in 2011. Gugulethu, Fisantkraal and Kraaifontein experienced a decline in the number of households with access to formal dwellings. An increase in the number of households with access to formal dwellings is observed in Khayelitsha and Mitchell's Plain, although Khayelitsha was one of the areas that had the lowest percentage of households with formal structures in 2001. The urban nodal areas showed an increase in the proportion of households with access to formal dwelling structures, flush toilets, electricity and piped water in the dwelling or in the yard compared to the selected non-nodes.

5.5.5 Alexandra

In terms of service delivery, the City of Johannesburg, City of Cape Town and Sol Plaatjie were the top three municipalities in 2001 (Annexure: Table VII). Yet the City of Johannesburg had some of its townships still lagging behind in terms of delivery of services, for example Diepsloot. Table 20 indicates that Diepsloot had the lowest percentage of households with access to electricity, formal dwellings and piped water in 2001. However, there has been a steady increase in access to services and facilities in all townships.

Table 20: Access to electricity, flush toilet, piped water and formal dwelling in nodal and non-nodal areas in 2001 and 2011 in City of Johannesburg municipality

Nodal area	Electricity		% increase	Flush toilet (connected to sewerage system)		% increase	Formal dwelling		% increase	Piped water inside the dwelling and in the yard		% increase
Year	2001	2011		2001	2011		2001	2011		2001	2011	
Alexandra	72,1	93,4	21,3	86,7	88,4	1,7	65,0	70,0	5,0	72,7	82,9	10,2
Non-nodal areas												
Diepsloot	43,1	60,3	17,2	49,5	78,6	29,1	26,8	34,5	7,7	48,3	62,6	14,3
Orange Farm	87,2	99,0	11,8	39,6	76,3	36,7	60,8	80,5	19,7	77,0	98,7	21,7
Average	**65,2**	**79,7**	**14,5**	**44,6**	**77,5**	**32,9**	**43,8**	**57,5**	**13,7**	**62,7**	**80,7**	**18,0**

In Orange Farm, almost every household had access to electricity in 2011. If we concentrate on the percentage increases, it seems Orange Farm and Diepsloot have done better than Alexandra concerning access to piped water in 2011, although it must be noted that these townships started at a lower base than Alexandra. The increases in service delivery in 2001 and 2011 are statistically significant for all the urban nodes. However, the statistically significant increases in the urban non-nodes are only in access to piped water.

5.6. Multidimensional poverty headcount rates in urban nodal and non-nodal areas

Using the SAMPI (South African Multidimensional Index) to profile poverty in urban nodes and non-urban nodes we found that poverty had fallen in the whole country and particularly in urban areas and all the selected townships for the URP (Figure 25).

Figure 25: Multidimensional poverty headcount in urban areas, urban nodal areas and in the whole country in 2001 and 2011

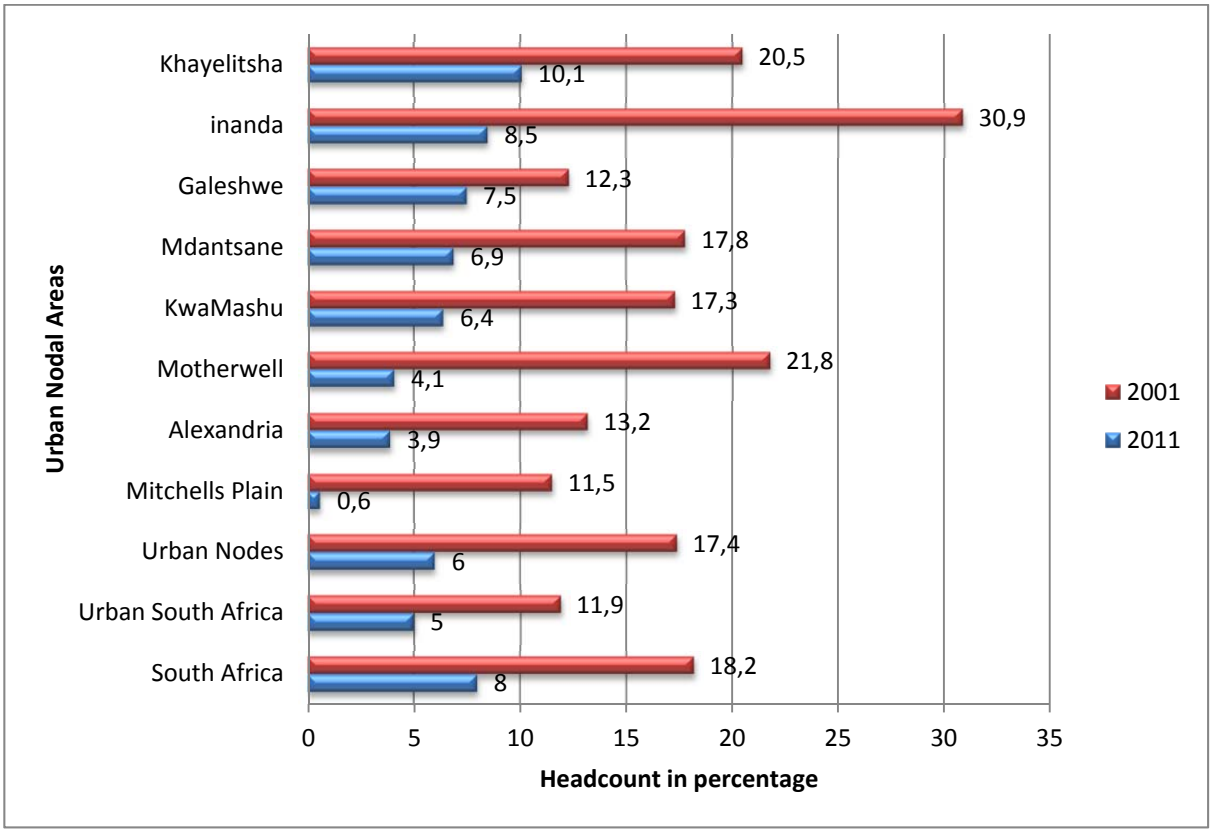


Figure 25 shows that multidimensional poverty headcount rates have declined in the whole country from 18,2% in 2001 to 8% in 2011 and in urban areas from 11,9% to 5% and in all the urban nodes from 17,4 % to 6%.

Inanda (30,9%), followed by Motherwell (21,8%) and Khayelitsha (20,5%) were among the most deprived townships in 2001 and the poverty decreased considerably in these townships in 2011. Some notable reductions in poverty have taken place in Mdantsane, Mitchell's Plain and Kwa-Mashu. In Mitchell's Plain poverty headcount fell drastically to less than one per cent, the lowest headcount rate among the urban nodal areas in 2011.

5.6.1 City of Johannesburg

Although the multidimensional poverty headcount rates show that the City of Cape Town (7,4%) was the least deprived municipality in 2001, however, in 2011 the City of Johannesburg (3,7%) was the least deprived municipality, although the City of Cape Town (3,9%) was not far behind (Annexure: Table I).

Figure 26: Poverty headcount rates for urban nodal and non-nodal areas in City of Johannesburg in 2001

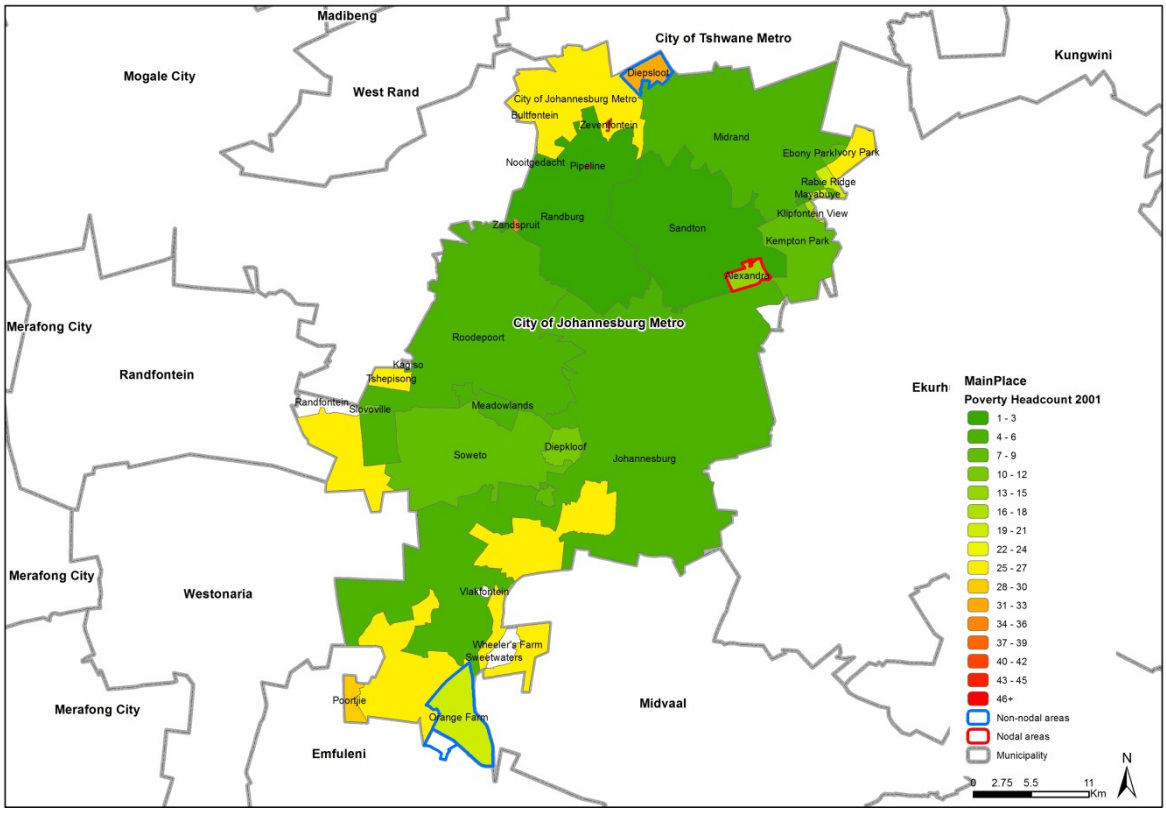
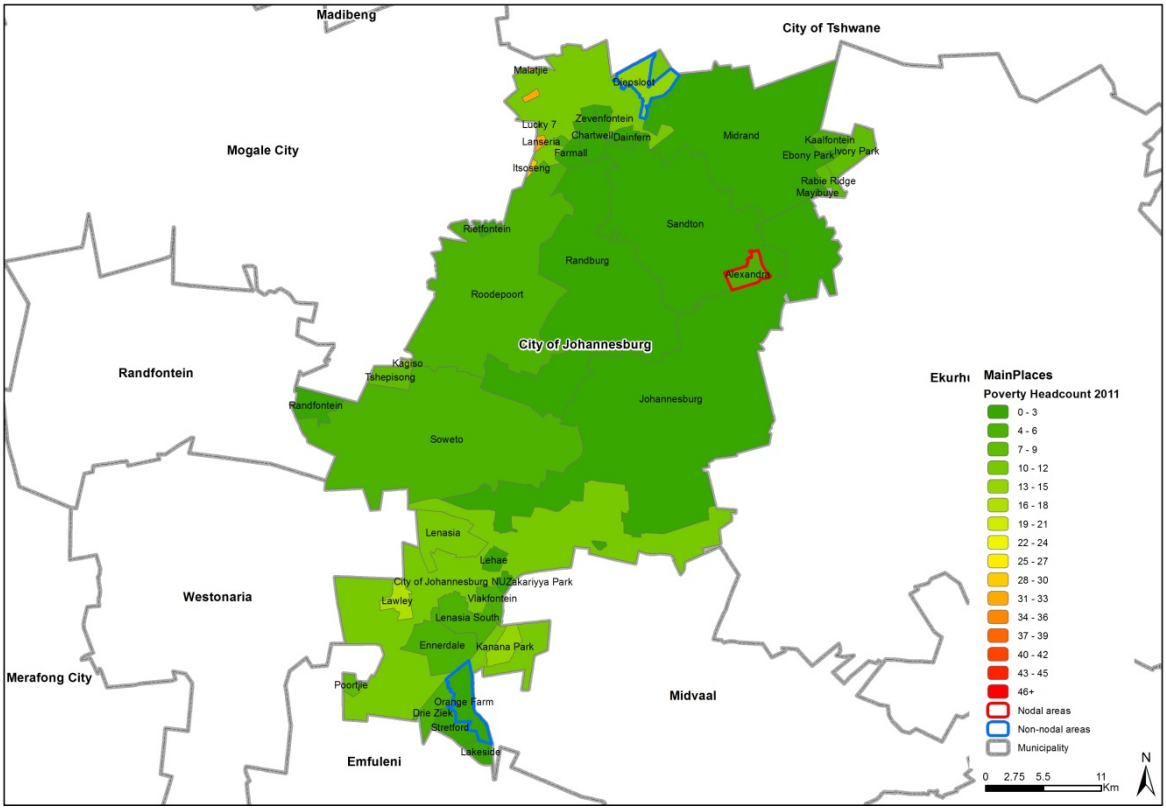


Figure 26 emphasises that Diepsloot (30,7%) was the most deprived township when compared to Alexandra (13,2%) in 2001, yet these townships are flanked by the rich suburbs of Sandton, Midrand, and Randburg that had poverty headcount rates that ranged from 3,79% to 0,76%. Alexandra received the priority to be part of the urban renewal programme than other townships.

Figure 27: Poverty headcount rates for urban nodal and non-nodal areas in City of Johannesburg in 2011



In 2011, all townships showed a reduction in multidimensional poverty even those that were not part of the URP. Orange Farm seems to have done better than Alexandra and the other townships because its poverty headcount in 2011 was 2,2% – the lowest headcount rate in these discussed townships. The main contributor to poverty in Alexandra, Orange Farm and Diepsloot was unemployment in 2001 and 2011.

5.6.2 eThekwini Municipality

Among the municipalities with urban nodes the eThekwini municipality (14,8%) was the second poorest municipality after Buffalo City (20,9%) in 2001. In 2011, the poverty had decreased to 6,6% in the eThekwini municipality (Annexure: Table I).

Figure 28: Poverty headcount rates for urban nodal and non-nodal areas in eThekwini in 2001

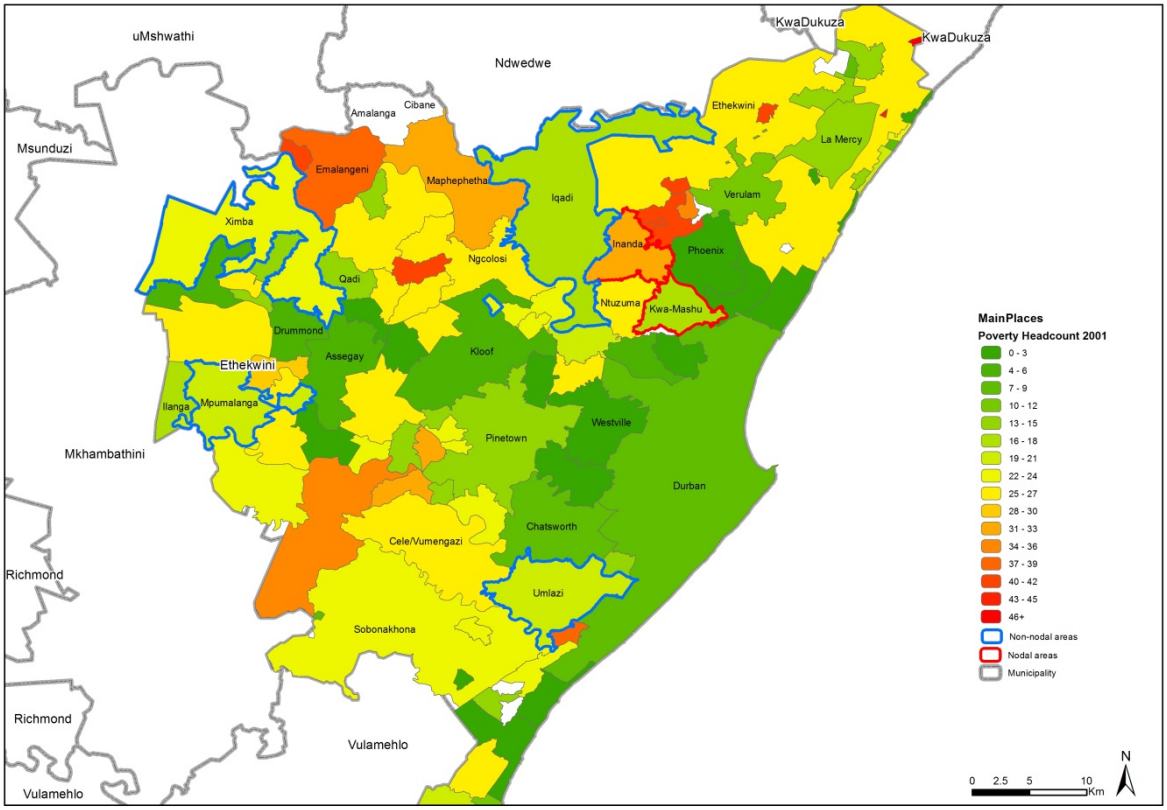
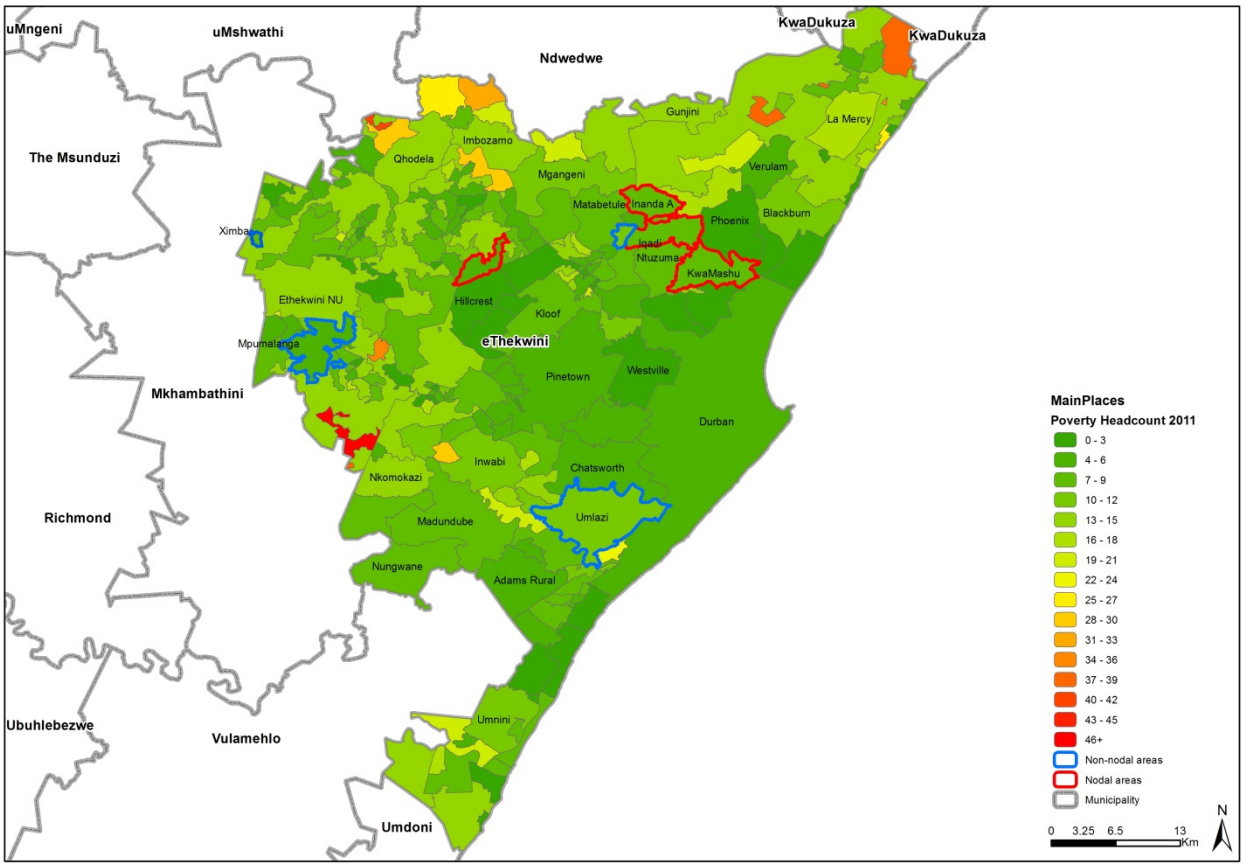


Figure 28 shows that iQadi is bordering Inanda but its poverty headcount rate is comparable to that of Kwa-Mashu. It is also surprising to note that Inanda and Kwa-Mashu are very close to each other and moreover they share boundaries but their multidimensional poverty headcount rates were far apart, showing that Inanda was far more deprived than Kwa-Mashu. Ximba (30,5%) and Inanda (30,9%) shared almost the same poverty headcount rates despite their further distance apart and they were among the most deprived townships in 2001. In fact the poverty in these areas was more than double that of the municipality (14,8%) (Annexure: Table I).

Figure 29: Poverty headcount rates for urban nodal and non-nodal areas in eThekwini in 2011

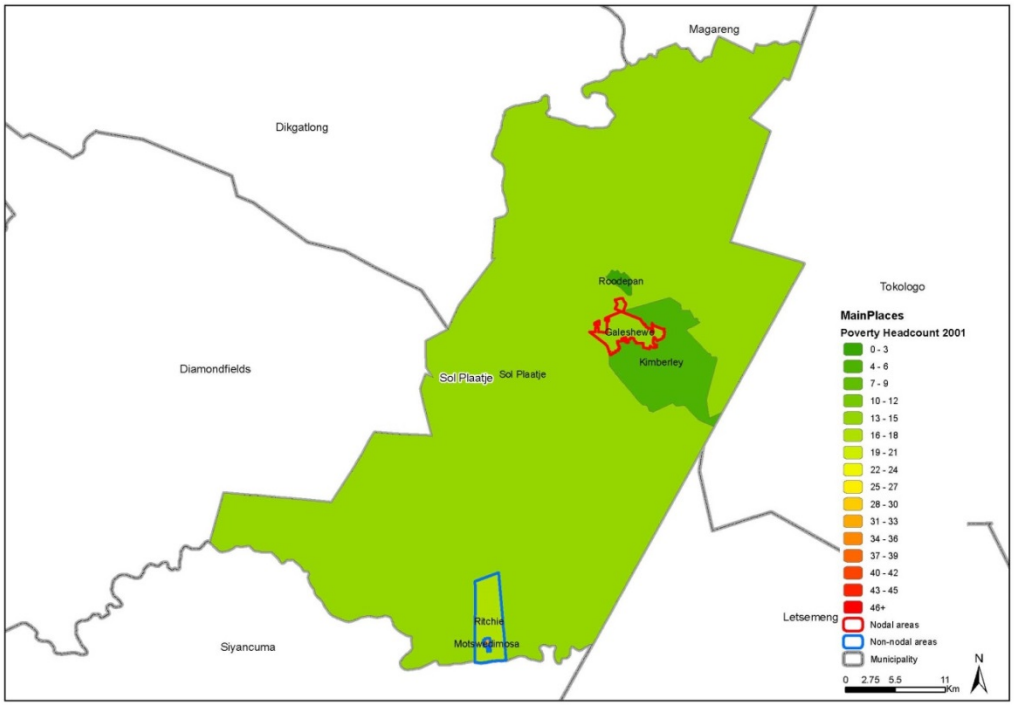


Inanda and Kwa-Mashu were poor townships yet are surrounded by rich suburbs like Umhlanga (0,01%), Phoenix (0,085%) and Mt Edgecombe (1,68%) with deprivation close to zero. This is a similar scenario to Alexandra and Diepsloot in the City of Johannesburg. This shows that these townships were not integrated to their surroundings, hence they were selected for the Urban Renewal Programme. Kwa-Mashu managed to reduce poverty to the same level as Ximba, which means there was a lot done at Ximba as it was one of the poorest non-nodal areas in 2001. However, Mpumalanga which is a non-node managed area that has the lowest headcount rate of 3,9% in 2001. Even in eThekwini municipality it is not conclusive that urban nodes did better than the non-nodes.

5.6.3 Sol Plaatjie municipality

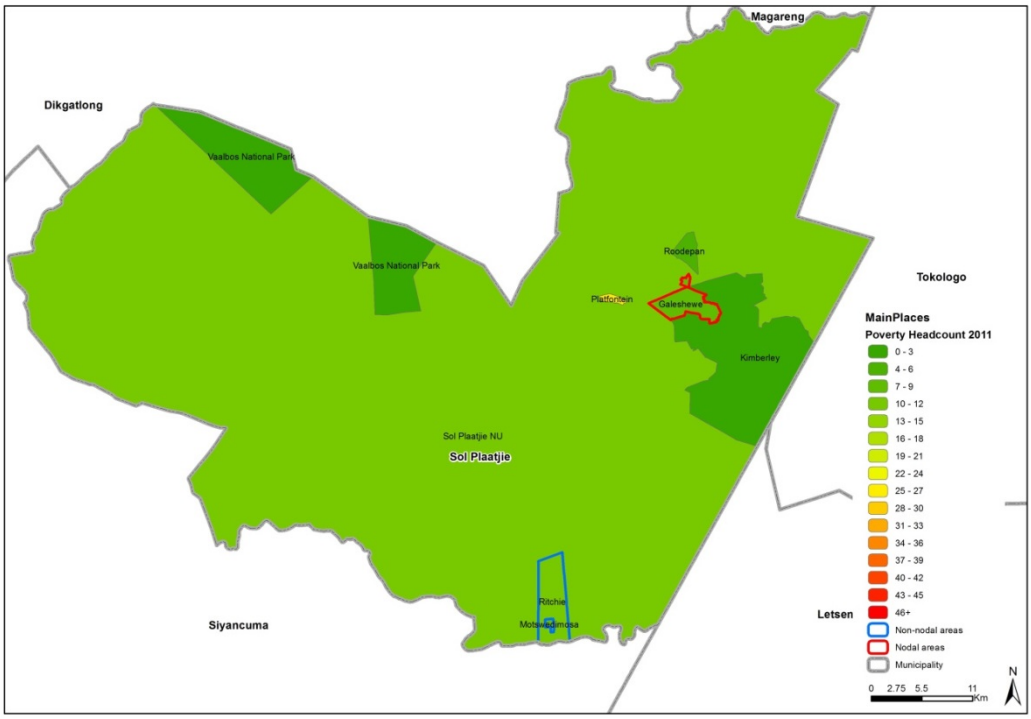
The poverty headcount rate for Sol Plaatjie municipality was 10% in 2001, which was one of the lowest after the City of Johannesburg and the City of Cape Town. In 2011 the poverty headcount rate slightly dropped to 5,6% which was the fourth lowest poverty headcount rate. Nelson Mandela Bay's poverty headcount rate fell from 13% to 4,6% between 2001 and 2011, making Nelson Mandela Bay the third lowest after the City of Johannesburg and the City of Cape Town (Annexure: Table I).

Figure 30: Poverty headcount rates for urban nodal and non-nodal areas in Sol Plaatjie in 2001



Galeshewe (12,3%) was less deprived compared to Ritchie (17,5%) although these figures are slightly above those of the Sol Plaatjie municipality (10%) in 2001. Motswedimosa (30,9%) was the most deprived area than Galeshewe in 2001.

Figure 31: Poverty headcount rates for urban nodal and non-nodal areas in Sol Plaatjie in 2011

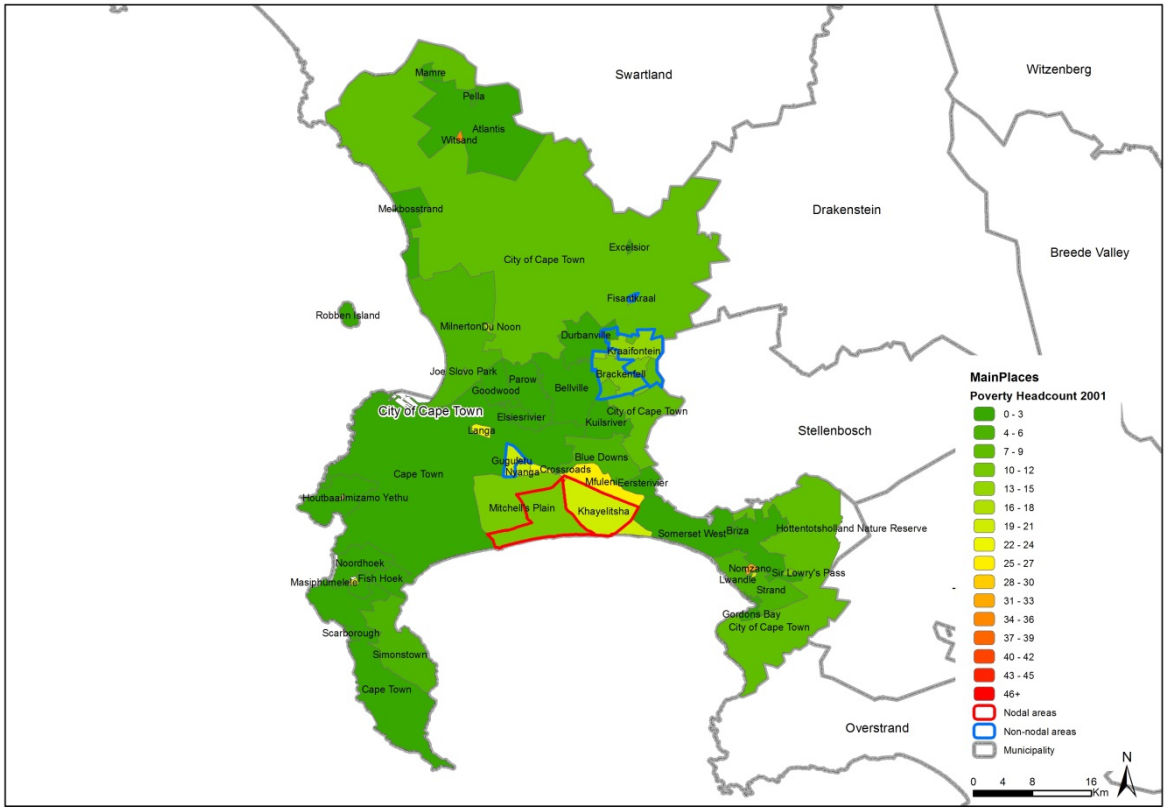


Multidimensional poverty headcount rates dropped for Galeshewe, Ritchie and Motswedimosa in 2011. Motswedimosa, the urban non-node had the lowest poverty than Galeshewe. Unemployment contributed 47,2% to poverty in 2001 in Galeshewe but that figure dropped slightly in 2011 to 42,7%. In Motswedimosa and Ritchie the main contributor to poverty was unemployment in both years (2001 and 2011).

5.6.4 The City of Cape Town

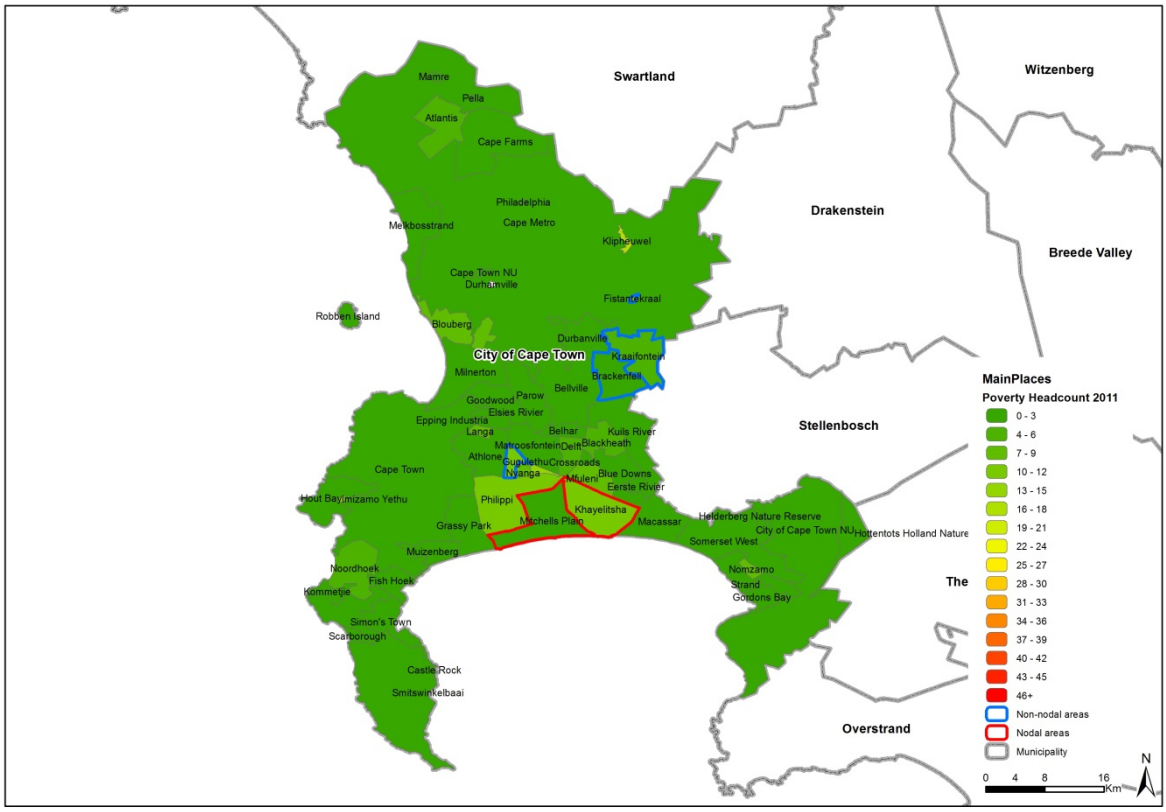
The City of Cape Town was the least deprived municipality in 2001. Figure 32 indicates that Khayelitsha was the most deprived township compared to Mitchell's Plain in 2001 (Annexure: Table I).

Figure 32: Poverty headcount rates for urban nodal and non-nodal areas in City of Cape Town in 2001



Philippi, Nyanga, Gugulethu and Mfuleni were some of the surrounding townships that were on the same level of poverty as Khayelitsha in 2001.

Figure 33: Poverty headcount rates for urban nodal and non-nodal areas in City of Cape Town in 2011

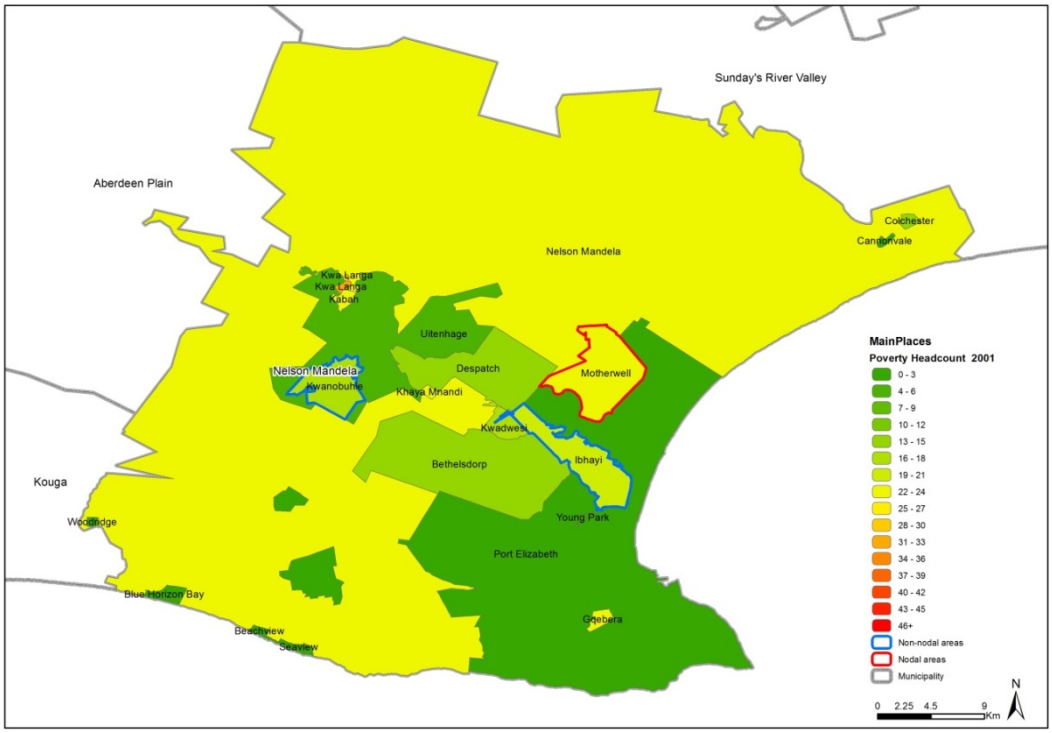


In 2011, Phillipi, Khayelitsha, Gugulethu, Nyanga, and Mfuleni still had more than twice the poverty headcount rates compared to the municipality as a whole. Mitchell's Plain (0,6%) was one of the townships that were part of the urban renewal programme and that had one of the lowest headcount rates in the City of Cape Town; so are other townships which were not part of the URP like Brankenfell (0,0%) and Kraaifontein (3,5%). Mitchell's Plain is one urban node that stood out from the rest in terms of improvements in living standards of the people but Khayelitsha didn't do that well.

5.6.5 Nelson Mandela Bay

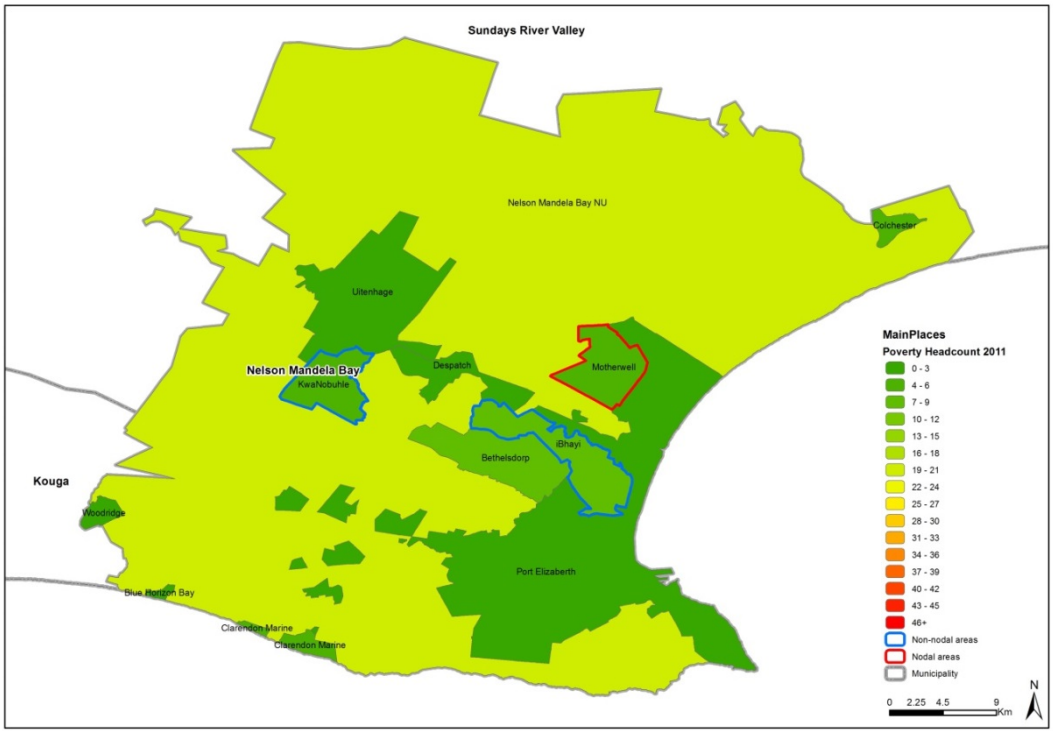
The poverty headcount rate for Nelson Mandela Bay Municipality was 13% in 2001 and it dropped to 4,6% in 2011. However, Motherwell's poverty headcount rate of 21,8% was almost double the poverty of the municipality in 2001.

Figure 34: Poverty headcount rates for urban nodal and non-nodal areas in Nelson Mandela Bay in 2001



It is important to note that Motherwell's poverty headcount for 2011 was 4,1% slightly lower than that of the Nelson Mandela Bay municipality.

Figure 35: Poverty headcount rates for urban nodal and non-nodal areas in Nelson Mandela Bay in 2011

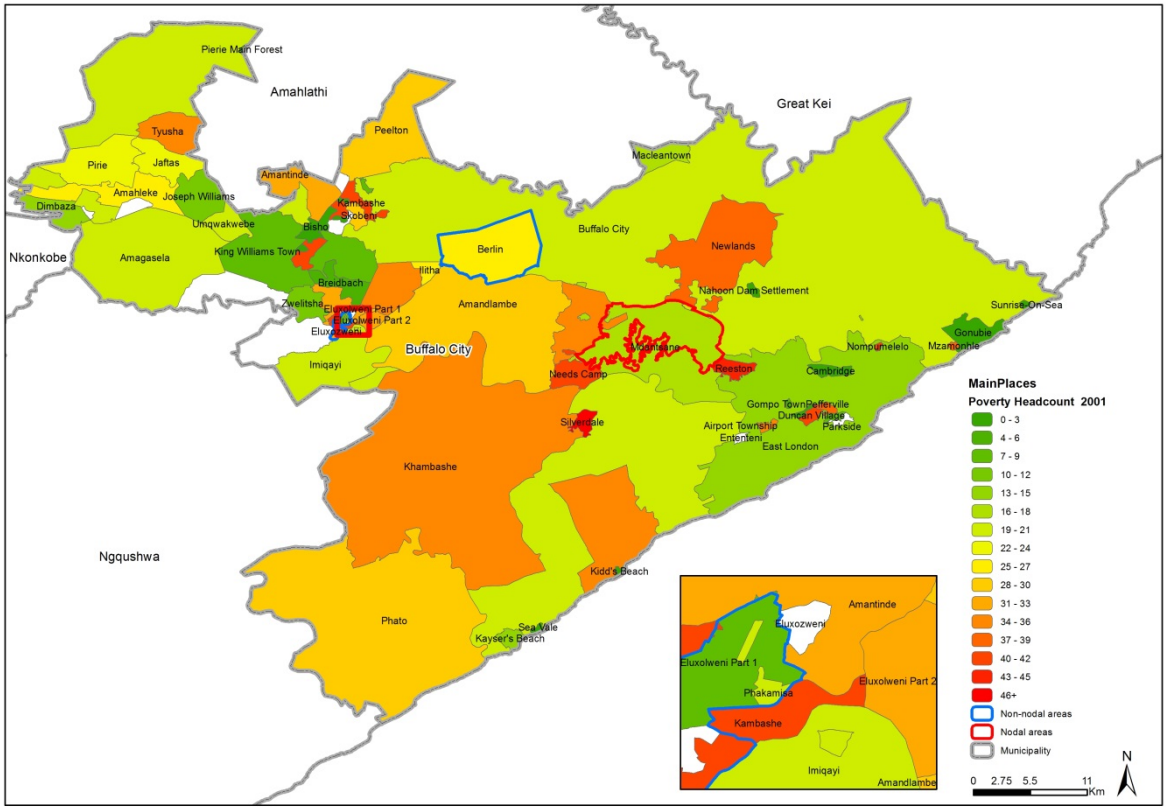


In 2011, poverty declined in all urban nodal and non-nodal areas in Nelson Mandela Bay municipality. In Nelson Mandela Bay municipality poverty decreased by less 2,7% as compared to IBhayi where poverty decreased by 12,8% and 17,7% in Motherwell. Port Elizabeth was the least deprived area as the poverty was 2,08% in 2001 and dropped to 1,9% in 2011. Motherwell, which is an urban node, had the lowest poverty headcount in 2011 than the other non-nodes.

5.6.6 Buffalo City

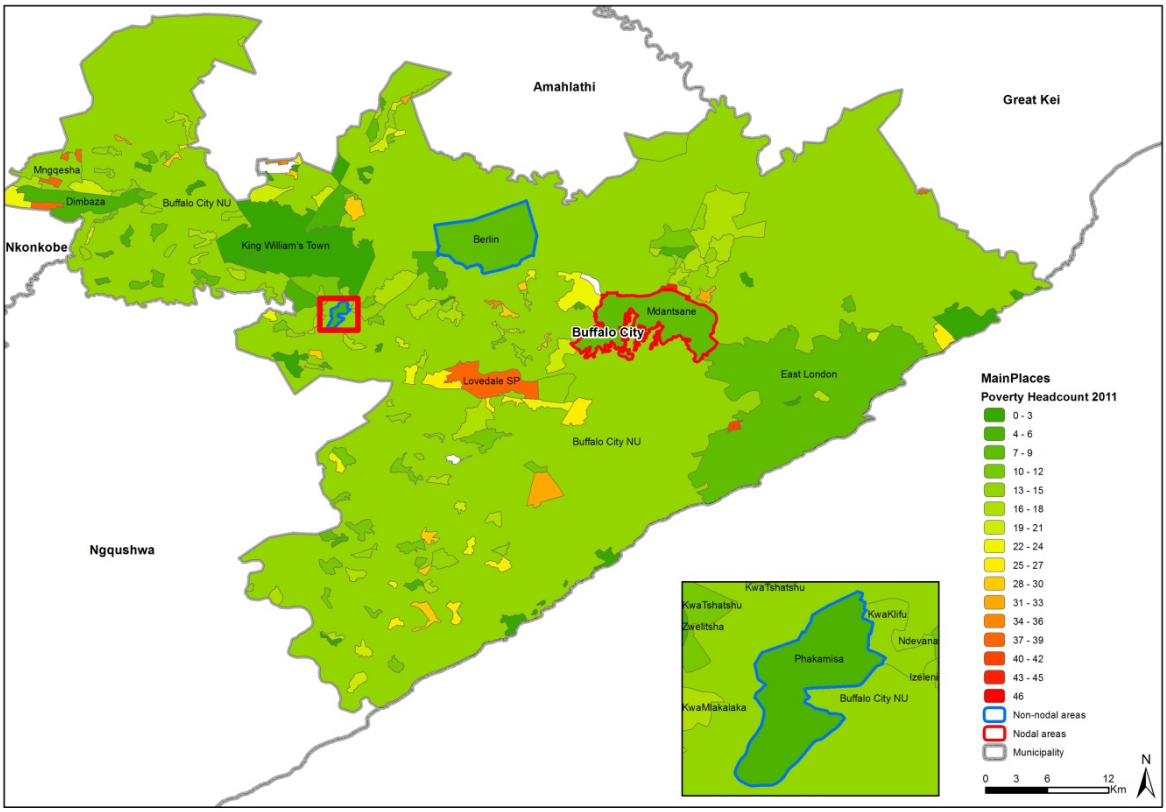
Buffalo City municipality (20,9%) was the most deprived municipality than all the municipalities discussed in this report in 2001 (Annexure: Table I). Mdantsane was the only township selected for the Urban renewal initiative in this municipality, had a poverty headcount of 17,8% in 2001.

Figure 36: Poverty headcount rates for urban nodal and non-nodal areas in Buffalo City in 2001



The poverty head count for Phakamisa and Berlin were 19,1% and 26,4% respectively in 2001.

Figure 37: Poverty headcount rates for urban nodal and non-nodal areas in Buffalo City in 2011



Poverty dropped by 18,2% in Berlin and by 13,8% in Phakamisa, then followed by Mdantsane (11%). It seemed that townships in Buffalo City municipality were less deprived than those in Nelson Mandela Bay, despite that the Nelson Mandela Bay municipality had the lowest poverty headcount compared to Buffalo City municipality. Phakamisa, a non-nodal area, did better than Mdantsane.

Townships that were not part of the URP that seem to have done well in reducing poverty in 2011 were Orange Farm, Mpumalanga, Brankenfell, Ximba and Phakamisa. They had lower poverty headcount rates than some of the nodal areas. Motherwell, Alexandra and Mitchell's Plain had the lowest poverty headcount rates in 2011 compared to the other urban nodal areas. The results of a paired samples t-test indicate that the difference in poverty headcount rates for non-nodes is not statistically significant, whereas for the urban nodes it is statistically significant. This may imply that efforts made to improve the living conditions of people and alleviate poverty were more effective in urban nodes than in the selected non-nodes.

6. Discussion

6.1 Mdantsane and Motherwell

The Eastern Cape has been one of the provinces that have been sending migrants to other provinces mainly to the Western Cape and KwaZulu-Natal. Buffalo City municipality had the highest unemployment (53,7%) in all the other municipalities in 2001, followed by the Nelson Mandela Bay. Youth unemployment was also very high in these municipalities in 2001 and 2011. More than two-thirds of the youth in Buffalo City was unemployed in 2001 and more than half of the youth in Nelson Mandela Bay was unemployed in 2011. Despite efforts done to provide employment in urban nodal areas, at Mdantsane the proportion of the population that were employed in 2001 increased from 22,8% to 28,4% between 2001 and 2011 and in Motherwell the proportion of employed people also increased from 25,3% to 30,5% during the same years. However, these figures are still lower than the average urban nodal areas which increased from 33,7% to 38,6% in these years. In Motherwell, unemployment which was above average, decreased from 61,5% to 51,3%. In Mdantsane, unemployment decreased from 62,5% to 42,4%. The main contributor to poverty in Mdantsane has been unemployment with a contribution of 48,9% in 2001 and 44,0% in 2011 (Annexure: Table III). In Motherwell unemployment is also the main contributor to poverty, its contribution to poverty levels increased from 44,8% to 55% in 2011. However, in Mdantsane unemployment's contribution share to poverty declined from 48,9% to 44,0%. In all the other non-nodal areas unemployment has been the main contributor to poverty. In terms of education, Mdantsane and Motherwell showed a steady increase in the number of people with some secondary school, matric and those with higher education. There was also a decrease in the number of people with no schooling in both townships. There is still some work needed to improve the level of education in all urban nodal areas particularly at higher education levels.

There was significant progress in Nelson Mandela Bay municipalities in providing piped water to households. The number of households with piped water in 2011 was almost double the number households that had access to piped water in 2001. In Motherwell there are 3,6% of households that didn't have piped water in the yard or inside the dwelling in 2011. Buffalo City showed greater declines in multidimensional poverty than all the municipalities. There had been improvements in these two nodes (Motherwell and Mdantsane) in terms of access to basic services, increasing the number of school attendance and proportion of people with higher education and creating job opportunities. But we can't say that these improvements were centred only in the urban nodes. Other townships (non-nodes) also experienced these developments where some did better than urban nodes.

6.2 Alexandra

The City of Johannesburg is the most populous and the fastest growing municipality in the country. It grew by 37% between 2001 and 2011. The population of those aged 0 to 14 years also grew from 22,7% to 23,2% while the young population in other municipalities decreased (Figure IX Annexure). Alexandra's population was 3,4% of that of the City of Johannesburg in 2011. In 2001, almost three-quarters of people who resided in Alexandra came from other provinces mainly from Limpopo. This picture didn't change in 2011 except that the number of people from other provinces decreased to two-thirds and the main supplier of migrants was still Limpopo. The City of Johannesburg has the second highest percentage of households that are electrified in the country after the City of Cape Town. In Alexandra the number of households with electricity grew from 72,1% in 2001 to 93,4% in 2011. In Orange Farm almost every household (99%) had electricity in 2011. On the other hand, Diepsloot had the highest percent of employed persons and lowest percentage of unemployment compared to Alexandra and Orange Farm in 2011. The main contributing factor to poverty in Alexandra is unemployment, its contributing effect increased from 49,2% to 53,3% in 2011. In Orange Farm and Diepsloot the picture is the same except that in Diepsloot the share of contribution to poverty level by unemployment did not rise in 2011, it remained stable. There was an improvement in living conditions of South Africans living in Alexandra, Diepsloot and Orange Farm, between 2001 and 2011. However, Alexandra didn't stand out in those developments as compared to the other two townships when observing the descriptive statistics.

6.3 Kwa-Mashu and Inanda

eThekwini municipality has the third largest population in the country. In 2001, it was the second largest municipality after the City of Johannesburg. According to the multidimensional poverty headcount, eThekwini municipality had the second highest poverty headcount rate (14,8%) after Buffalo City (20,9%) in 2001. Poverty declined to 6,6% in 2011. Inanda and Kwa-Mashu combined constitute 10,7% of the population of eThekwini municipality. A third of Inanda's population was below the age of 14 years whereas the population in this age group for Kwa-Mashu was 27% in 2001 (Annexure: Table XII). Inanda had the highest proportion of young people in 2001 and in 2011 than all the other urban nodal areas. The two townships received most migrants from the Eastern Cape, which account for 12,9% of the 21,1% migrants from other provinces in 2001. In 2011, there was a slight increase in the population of migrants from other provinces from 21,1% to 26% and the highest number of about 11% of migrants came from the Eastern Cape. Almost 90% of people in both townships are from within the province.

Using the multidimensional headcount rates, Inanda (30,9%) was the most deprived township in all the selected nodal areas. Kwa-Mashu was better off with poverty headcount of 17,3% which was the average poverty headcount for all the selected urban nodal areas. In 2001, Inanda (28,4%) had the second highest proportion of households that didn't have any income, the second lowest number (48,5%) of formal dwelling, the lowest number (12,6%) of houses with flush toilets connected to a sewerage system, a highest proportion (87,4%) of houses with other toilet facilities, and the lowest number (31,7%) of houses with piped water inside the dwelling or in the yard compared to Kwa-Mashu and other urban nodal areas. However, a lot of improvements had happened at Inanda by 2011, as the number of formal dwellings increased to 70,1%, the number of flush toilets connected to sewerage increased to 39,4% and other toilet facilities decreased from 87,4% to 60,6%, the number of houses with piped water inside the dwellings or in the yard increased to 78,3%. Kwa-Mashu was better off than Inanda in most of these indicators and always above average than all the urban nodal areas. As much as we observed that there were developments that had taken place in the two urban nodes, Inanda made gigantic strides in development as it had been more deprived than Kwa-Mashu in 2001. However, Inanda and Kwa-Mashu didn't do better than the non-nodes when examining the descriptive statistics. In all the nodal and non-nodal areas unemployment has been major cause of poverty. The major challenge is that unemployment increased its share of contribution to poverty in 2011 in all the townships.

6.4 Galeshewe

Galeshewe had more than half of the Sol Plaatjie's population residing in the township in 2001, the population proportion reduced to 42,5% in 2011. In Galeshewe what is most noticeable is that the number of formal dwellings decreased by 33,4% in 2011. On the other hand the number of informal dwellings increased from 22% in 2001 to 55,4% in 2011. It is the only urban nodal area that this had happened. This is also evident in the number of households with flush toilets connected to sewerage system which declined by 6,3% in 2011. On the other hand, other toilet facilities increased from 9,9% to 11,9%. The households with access to piped water inside the dwellings or in the yard also declined by 25,2% and the proportion of households without piped water either within the dwelling or in the yard increased. Further research is needed to establish what caused this reversal in development in Galeshewe. The townships in Sol Plaatjie municipality showed a decrease in access to basic services. In Galeshewe unemployment was cited as the main reason why the population was poor, resulting in almost half of the contribution to poverty level in the area. It is evident that there was negative growth in terms of access to basic services in Galeshewe, Ritchie and Motswedimosa it is therefore difficult to say Galeshewe out-performed the other areas using the descriptive statistics.

6.5 Khayelitsha and Mitchell's Plain

Almost a fifth of people in the City of Cape Town reside in Khayelitsha and Mitchell's Plain. In 2001, almost two-thirds of people who resided in Khayelitsha came from the Eastern Cape; but this number was almost halved (28,8%) in 2011. In Mitchell's Plain a third of the residents came from Eastern Cape in 2001 and in 2011, most of the migrants came from outside South Africa. Both Khayelitsha and Mitchell's Plain had the least number of people who had no education in 2001 and the least number of households with no income (Annexure: Table XI). Both had the highest proportion of people with some secondary education. Gugulethu (10,5%) and Brankenfell (38,5%) had the highest percentages of the population with higher education and both townships were not part of the urban renewal programme. In 2001, Khayelitsha had the lowest proportion of formal dwellings (32,6%) and the highest percentage of informal dwellings. Although Khayelitsha had the lowest proportion of households who lived in formal dwellings in 2001, there were great improvements in 2011, as the proportion of households with formal structures grew to 80,5%. Mitchell's Plain had 76,4% of households living in formal dwellings in 2001, which increased to 94,9% in 2011. Although developments have happened in these urban nodes, there are huge differences in terms of progress between Khayelitsha and Mitchell's Plain. These differences may be partly because of the fact that the Khayelitsha population is growing more rapidly than that of Mitchell's Plain because of the inflows of migrants from the Eastern Cape and other areas. The effect of unemployment had on poverty was unrelenting in the City of Cape Town Municipality. Unemployment increased its contribution to the share of poverty in all townships discussed in this report, except for Fisantkraal where it declined and in Kraaifontein it remained stable.

7. Further research

There is need for further research as this report doesn't cover hard and soft infrastructural and facility upgrades in urban nodal areas. For instance, major infrastructure like; Alexandra's housing project that built 3 000 houses for relocation; Khayelitsha business district and Mitchell's Plain town centre; transport rail extension, roads bridges, pedestrian routes, public transport interchanges etc.; district hospitals and other clinics; housing projects – both private and public. Soft infrastructures include high quality urban design and public spaces necessary to create distinctive, attractive places which facilitate social integration and attract investment (Donaldson, Plessis et al. 2013).

8. Conclusion

To answer the first question whether there was economic development or improvements in access to basic services in urban nodal areas between 2001 and 2011. The answer would be: yes, there was an increase in access to electricity, flush toilets, formal dwellings, and piped water. These increases are statistically significant for all services delivered and facilities rendered except for increases in access to electricity which are not statistically significant. Employment and school attendance increased in all urban nodal areas and multidimensional poverty headcount rates decreased. However, this economic development was happening in all townships, it was not only centred around urban nodal areas. Results from paired t-test show that the increases in employment rates between 2001 and 2011 are not statistically significant. The decline in unemployment rates is also not statistically significant.

To answer the second question whether urban nodal areas outperformed other areas because they were selected for the Urban Renewal Programme. The answer would be it is not conclusive that they did better than other townships given the indicators used in this report when observing descriptive statistics, although there is evidence that in terms of infrastructure and service delivery they were better off than most townships. Some urban townships (non-nodes) have shown great improvements in socio-economic indicators (education and employment) and had relatively high proportions of the population that had access to basic services than the urban nodal areas even though they were not part of the urban renewal programme. Education and unemployment remained a persistent challenge in economic development of urban nodal areas and the country at large. Statistical tests (paired t-test) indicate a statistically significant decline in multidimensional poverty in urban nodes and the decline in multi-dimensional poverty in the selected urban non-nodes is not statistically significant. The increase in the proportion of the population older than 20 years that possess a higher educational qualification is statistically significant in both urban nodes and the selected non-nodes. The increased access to basic services is statistically significant in all the townships under discussion, except for the increase in the access to electricity for lighting which is not statistically significant.

Annexures

Annexure I: Multidimensional poverty headcount by municipality of urban nodal areas in 2001 and 2011

Municipalities	Poverty headcount in 2001 (%)	Poverty headcount in 2011 (%)	Percentage change in poverty headcount
City of Johannesburg	9,1	3,7	-5,4
City of Cape Town	7,4	3,9	-3,5
eThekwini	14,8	6,6	-8,2
Nelson Mandela Bay	13	4,6	-8,4
Buffalo City	20,9	9,3	-11,6
Sol Plaatjie	10	5,6	-4,4

Annexure II: Population growth in Municipalities of Urban Nodal Areas in 2001 and 20112

Municipalities	Population in 2001	Rank in 2001	Population in 2011	Rank in 2011	Percentage increase
City of Johannesburg	3 226 055	1	4 434 827	1	37,5
City of Cape Town	2 892 243	3	3 740 026	2	29,3
eThekwini	3 090 122	2	3 442 361	3	11,4
Nelson Mandela Bay	1 005 779	6	1 152 115	6	14,5
Buffalo city	704 855	7	755 200	7	7,1
Sol Plaatjie	202 246	51	248 041	43	22,6

Annexure III: Population by race and as a percentage of population in municipalities in 2001

Urban Nodes	Black African	Coloured	Indian or Asian	White	Total	Total population in Municipalities	% of total population of nodal areas to municipalities
Galeshewe (Sol Plaatjie)	89 162 (86,0)	14 402 (13,9)	90 (0,1)	74 (0,1)	**103 727 (100,0)**	202 245	51,3
Khayelitsha (City of Cape Town)	327 419 (99,5)	1 488 (0,5)	33 (0,0)	66 (0,0)	**329 006 (100,0)**	2 892 243	11,4
Mitchell's Plain (City of Cape Town)	131 663 (33,0)	264 022 (66,2)	1745 (0,4)	1 220 (0,3)	**398 650 (100,0)**	2 892 243	13,8
Motherwell (Nelson Mandela Bay)	116 909 (99,6)	379 (0,3)	2 (0,0)	31 (0,0)	**117 322 (100,0)**	1 005 779	11,7
Mdantsane (Buffalo City)	175 553 (99,9)	75 (0,0)	19 (0,0)	135 (0,1)	**175 783 (100,0)**	704 855	24,9
Inanda (eThekwini)	152 704 (99,7)	277 (0,2)	99 (0,1)	23 (0,0)	**153 102 (100,0)**	3 090 122	5,0
Kwa-Mashu (eThekwini)	173 398 (98,6)	225 (0,1)	2251 (1,3)	38 (0,0)	**175 912 (100,0)**	3 090 122	5,7
Alexandra (City of Johannesburg)	165 697 (99,2)	1078 (0,6)	38 (0,0)	155 (0,1)	**166 968 (100,0)**	3 226 055	5,2
Total	**1 332 506 (82,2)**	**281 947 (17,4)**	**4 275 (0,3)**	**1 742 (0,1)**	**1 620 470 (100,0)**	**6 889 465**	**(23,5%)**

Annexure IV: Population by race and as a percentage of population in municipalities in 2011

Urban nodal areas	Black African	Coloured	Indian or Asian	White	Grand total	Total population in Municipalities	% of total population of nodal areas to municipalities
Inanda A - Inanda B	167 352 (99,6)	378 (0,2)	267 (0,2)	105 (0,1)	**168 103 (100,0)**	3 442 361	4,9
Kwa-Mashu	173 568 (98,9)	303 (0,2)	1 457 (0,8)	145 (0,1)	**175 474 (100,0)**	3 442 361	5,1
Mdantsane	156 020 (99,7)	271 (0,2)	141 (0,1)	121 (0,1)	**156 553 (100,0)**	755 200	20,7
Motherwell	139 229 (99,6)	420 (0,3)	107 (0,1)	81 (0,1)	**139 837 (100,0)**	1 152 115	12,1
Alexandra	150 956 (99,4)	689 (0,5)	106 (0,1)	185 (0,1)	**151 936 (100,0)**	4 434 827	3,4
Galeshewe	97 290 (92,3)	7 806 (7,4)	235 (0,2)	77 (0,1)	**105 407 (100,0)**	248 041	42,5
Khayelitsha	386 359 (99,3)	2 315 (0,6)	272 (0,1)	327 (0,1)	**389 272 (100,0)**	3 740 026	10,4
Mitchell's Plain	22 723 (7,4)	281 829 (91,8)	1 926 (0,6)	581 (0,2)	**307 059 (100,0)**	3 740 026	8,2
Grand total	**1 293 497 (81,2)**	**294 012 (18,4)**	**4 511 (0,3)**	**1 622 (0,1)**	**1 593 641 (100,0)**		

Note: 26 829 was unspecified.

Annexure V: The movement of people to and from the nodal areas between 2001 and 2011

Urban Nodal areas	Outside province %	Within Province %	Highest sending province	% from highest sending province	Outside province %	Within province %	Highest sending province	% from highest sending province
	2001				2011			
Galeshewe	25,9	74,1	North West	10,0	24,6	75,4	North West	6,9
Khayelitsha	67,7	32,3	Eastern Cape	60,2	38,2	61,8	Eastern Cape	28,8
Mitchell's Plain	32,3	67,7	Eastern Cape	25,8	7,0	93,0	Outside SA	3,2
Motherwell	5,7	94,3	Western Cape	1,9	10,2	89,8	Outside SA	5,5
Inanda	12,1	87,9	Eastern Cape	8,6	20,3	79,7	Eastern Cape	8,8
Kwa-Mashu	9,1	90,9	Eastern Cape	4,3	5,7	94,3	Eastern Cape	2,1
Alexandra	71,9	28,1	Limpopo	34,5	61,7	38,3	Limpopo	21,0
Mdantsane	11,3	88,7	Western Cape	4,1	9,9	90,1	Outside SA	3,1

Annexure VI: Proportion of individuals aged above 20 years of age with no schooling and those with higher education

	Education			
	No schooling aged 20+		Higher education aged 20+	
Municipalities	2001	2011	2001	2011
City of Cape Town	4,3	1,8	12,8	16,6
City of Johannesburg	7,3	2,9	13,9	19,2
Buffalo City	11,2	4,9	6,8	3
Sol Plaatjie	11,3	7,1	8,7	10,4
eThekwini	10,1	4,2	9,7	12,3
Nelson Mandela Bay	6,8	3	8,9	12

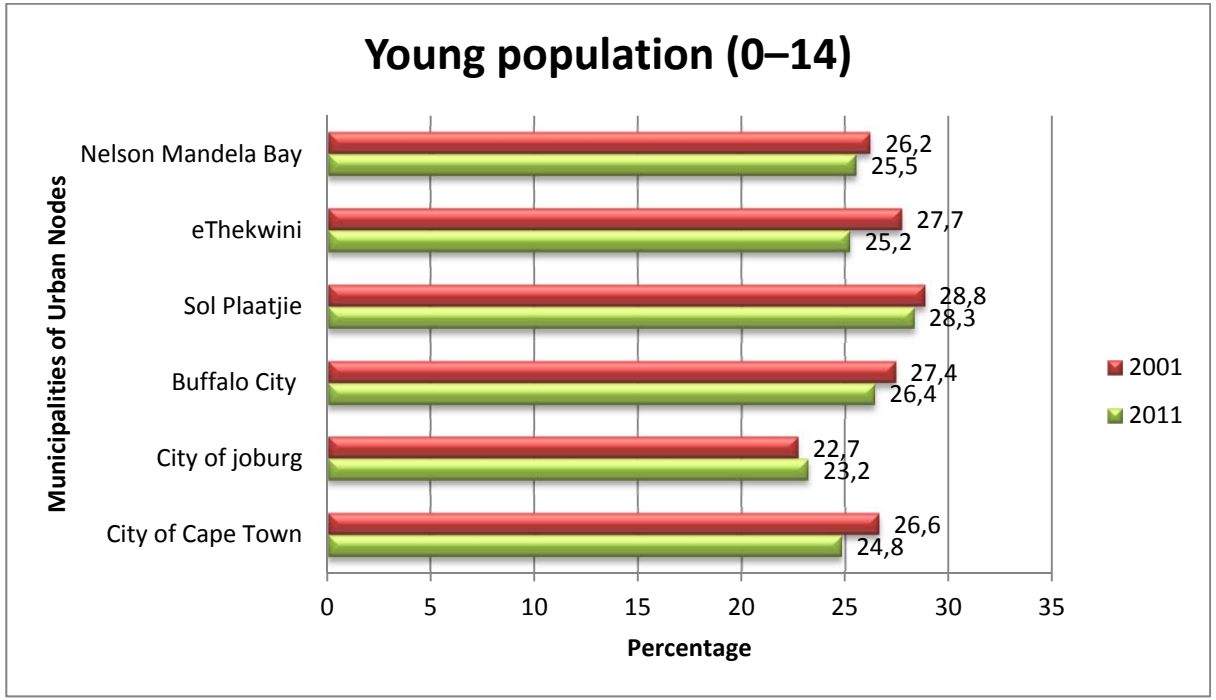
Annexure VII: Living conditions for households in municipalities and access to services in 2001 and 2011

	Formal dwelling		Piped water		Electricity		Flush toilet	
Municipalities	**2001**	**2011**	**2001**	**2011**	**2001**	**2011**	**2001**	**2011**
City of Cape Town	78,9	78,4	69,4	75	88,8	94	85,4	88,2
City of Johannesburg	77,4	81,4	50,1	64,7	85,0	90,8	82,3	87,1
Buffalo City	62,9	72,5	31,8	52,6	63,3	80,9	63,9	68,12
Sol Plaatjie	81,7	81,6	51,2	61,9	82,4	84,9	83,4	82,8
eThekwini	72,8	79	51,2	60,2	80,3	89,9	61,3	63,4
Nelson Mandela Bay	75,2	87,2	47	74,1	75,2	90,5	77,6	87,4

Annexure VIII: Contributing factors to poverty in nodal areas and non-nodal areas in 2001 and 2011

Municipalities	Nodal and non-nodal areas	Contributor/ Indicator 2001	Percentage contributor	Contributor/ Indicator 2011	Percentage contributor
City of Johannesburg	Alexandra	Unemployment	49,2	Unemployment	53,3
	Orange Farm	Unemployment	52,7	Unemployment	60,7
	Diepsloot	Unemployment	42,3	Unemployment	42,2
City of Cape Town	Khayelitsha	Unemployment	47,7	Unemployment	52,8
	Mitchell's Plain	Unemployment	45,3	Unemployment	58,6
	Gugulethu	Unemployment	42,4	Unemployment	59,6
	Kraaifontein	Unemployment	53,6	Unemployment	52,3
	Brankenfell	Unemployment	44,3	Unemployment	66,7
	Fisantkraal	Unemployment	48,4	Unemployment	44,2
eThekwini	Inanda	Unemployment	43,9	Unemployment	54,3
	Ximba	Unemployment	25,9	Unemployment	56,5
	Kwa-Mashu	Unemployment	51,1	Unemployment	60,3
	Mpumalanga	Unemployment	44,3	Unemployment	53,4
	iQadi	Unemployment	36,9	Unemployment	41,0
	Umlazi	Unemployment	45,8	Unemployment	54,0
Nelson Mandela Bay	Motherwell	Unemployment	44,8	Unemployment	55,0
	KwaNobuhle	Unemployment	51,9	Unemployment	57,5
Buffalo City	Mdantsane	Unemployment	48,9	Unemployment	44,0
	Phakamisa	Unemployment	49,1	Unemployment	35,3
	Berlin	Unemployment	36,5	Unemployment	33,3
Sol Plaatjie	Galeshewe	Unemployment	47,2	Unemployment	42,7
	Ritchie	Unemployment	23,5	Unemployment	36,4
	Motswedimosa	Unemployment	25,4	Unemployment	51,3

Annexure IX: Young population (aged 0–14) in municipalities within Nodal areas



Annexure X: Employment and youth unemployment

	Unemployment			
	Unemployment		Youth unemployment	
Municipalities	**2001**	**2011**	**2001**	**2011**
City of Cape Town	29,2	23,9	36,9	31,9
City of Johannesburg	37,4	25	45,5	31,5
Buffalo City	53,7	35,1	64,2	45,1
Sol Plaatjie	41,3	31,9	51,5	41,7
eThekwini	43	30,2	53,1	39
Nelson Mandela Bay	46,4	47,3	56,3	47,3

Annexure XI: Household income in urban nodal areas in 2001 and 2011

	No income		R1–307 200		R307 201– R1 228 800		R1 228 801+	
Income	**2001**	**2011**	**2001**	**2011**	**2001**	**2011**	**2001**	**2011**
Galeshewe	16,3	48,7	83,2	50,8	0,3	0,4	0,2	0,1
Khayelitsha	19,0	48,5	80,7	51,3	0,2	0,2	0,2	0,0
Mitchell's Plain	13,6	49,7	85,5	49,8	0,7	0,5	0,2	0,1
Motherwell	28,9	51,7	70,7	48,1	0,1	0,2	0,3	0,0
Mdantsane	26,4	48,6	73,1	51,0	0,2	0,3	0,3	0,1
Inanda	28,4	46,4	71,0	53,3	0,2	0,2	0,4	0,1
Kwa-Mashu	21,8	50,5	77,7	49,2	0,3	0,3	0,2	0,1
Alexandra	20,8	49,4	78,6	50,2	0,3	0,3	0,3	0,1

Annexure XII: Proportion of the population in urban nodal areas in 2001 and 2011 by age group

	2001	2011	2001	2011	2001	2011	2001	2011
Urban Nodal areas	**0–14**	**0–14**	**15–34**	**15–34**	**35–64**	**35–64**	**65–120**	**65–120**
Galeshewe	30	28	37	38	28	28	5	5
Khayelitsha	30	28	46	44	24	26	1	2
Mitchell's Plain	30	28	40	35	28	33	2	4
Motherwell	29	28	39	38	30	31	3	3
Mdantsane	27	27	39	36	30	31	4	6
Inanda	33	31	40	43	25	23	2	3
Kwa-Mashu	27	24	43	48	27	26	3	3
Alexandra	22	23	48	45	28	30	2	2
Grand total	**29**	**27**	**42**	**41**	**27**	**29**	**3**	**3**

Numbers are in percentages (%)

Annexure XIII: Proportion of the population 15 years and older who had no schooling by sex, in 2001 and 2011

		2001			2011		
		Population 15 year and older	**Population 15 year and older with no schooling**	**Proportion**	**Population 15 years and older**	**Population 15 year and older with no schooling**	**Proportion**
		(000)	**(000)**	**%**	**(000)**	**(000)**	**%**
RSA	Male	13 941	1 870	13,4	17 107	1 076	6,3
	Female	16 050	2 803	17,5	18 818	1 636	8,7
	Total	**29 991**	**4 673**	**15,6**	**35 925**	**2 711**	**7,5**
Urban Nodal areas	Male	1 977	39	2,0	581	17	2,9
	Female	2 069	44	2,1	612	19	3,1
	Total	**4 046**	**84**	**2,1**	**1 194**	**36**	**3,0**

Annexure XIV: Employment status of the nodal area population aged 15–64 years in 2001 and 2011

	Employed		Unemployed		Not economic active		Working age	
Nodal area	**2001**	**2011**	**2001**	**2011**	**2001**	**2011**	**2001**	**2011**
All Nodes	**377 022**	**442 397**	**385 505**	**258 530**	**354 603**	**57 593**	**111 7130**	**114 1574**
Inanda	25 092	38 888	41 937	26 202	32 233	50 255	99 262	118 246
Kwa-Mashu	36 304	48 658	50 466	31 132	36 521	37 522	123 291	128 902
Motherwell	20 281	29 546	32 410	31 140	27 361	35 286	80 052	96 834
Mdantsane	27 731	22 691	46 155	16 699	47 084	87 858	120 970	71 642
Galeshewe	17 860	111 094	22 013	68 145	27 934	56 606	67 807	274 992
Khayelitsha	78 977	30 115	81 621	22 966	67 356	827 09	227 955	105 907
Mitchell's Plain	116 057	98 144	66 100	31 218	88 544	40 960	270 702	212 251
Alexandra	54 719	63 258	44 802	31 027	27 571	388 211	127 092	132 801
Sex								
Male	217 800	242 036	178 692	124 698	145 369	195 797	541 861	562 531
Female	159 222	200 361	206 813	133 831	209 234	244 851	575 269	579 043

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