

# 1. SOCIO-ECONOMIC PROFILE

The ZDM is the Water Services Authority (WSA) for the entire district in terms of Section 1 of the Water Services Act, 1997<sup>1</sup>. In order to efficiently plan the development of water services in the DM's jurisdictional area it is necessary to determine the existing or current situation with respect to water and sanitation supply. This Section presents and identifies, both visually and statistically, the physical and consumer profile within the DM.

## 1.1 Demographics

The current consumer profile of the district is indicated in Table 1.1 (a) below:

**Table 1.1 (a): Current consumer profile (units)**

LOCAL MUNICIPALITIES	DOMESTIC	INDUSTRIAL / BUSINESSES	FARM HOUSES	TOTAL
AbaQulusi	16 031	1 947	-	17 978
eDumbe	5 119	336	-	5 455
Nongoma	629	483	-	1 112
Ulundi	5 834	638	-	6 472
uPhongolo	3 732	576	-	4 308
<b>Total (urban)</b>	<b>31 345</b>	<b>3 980</b>	<b>-</b>	<b>35 325</b>
AbaQulusi	29 463	-	424	29 887
eDumbe	11 286	-	266	11 552
Nongoma	45 041	-	-	45 041
Ulundi	40 564	-	52	40 616
uPhongolo	24 400	-	336	24 736
<b>Total (rural)</b>	<b>150 754</b>	<b>-</b>	<b>1 078</b>	<b>151 832</b>
<b>Total</b>	<b>182 099</b>	<b>3 980</b>	<b>1 078</b>	<b>187 157</b>

### Present population and projected population growth rates:

Population and economic growth rates are used to determine future developmental requirements within the ZDM. This determines the required increase or decrease in water services. Non-domestic consumer unit growth, particularly commercial, industrial and agricultural growth, also gives an indication of the expected increase in water demand and associated wastewater flow discharges. Factors that affect population growth rate include:

- Immigration due to displaced farm labour, land restitution and declining job opportunities in neighbouring provinces;
- Emigration to urban centres or outward migration from the region in search of job opportunities; and
- The HIV/AIDS epidemic that is predicted to seriously affect economically active persons (18-45 years). Full-blown AIDS sufferers who are unable to continue working may return home to the rural areas. This may be an internal urban/rural shift, or migration from urban areas outside the DM. With the prevalence of HIV/AIDS, especially in KZN, it is important to ensure adequate water services provision in the rural areas.

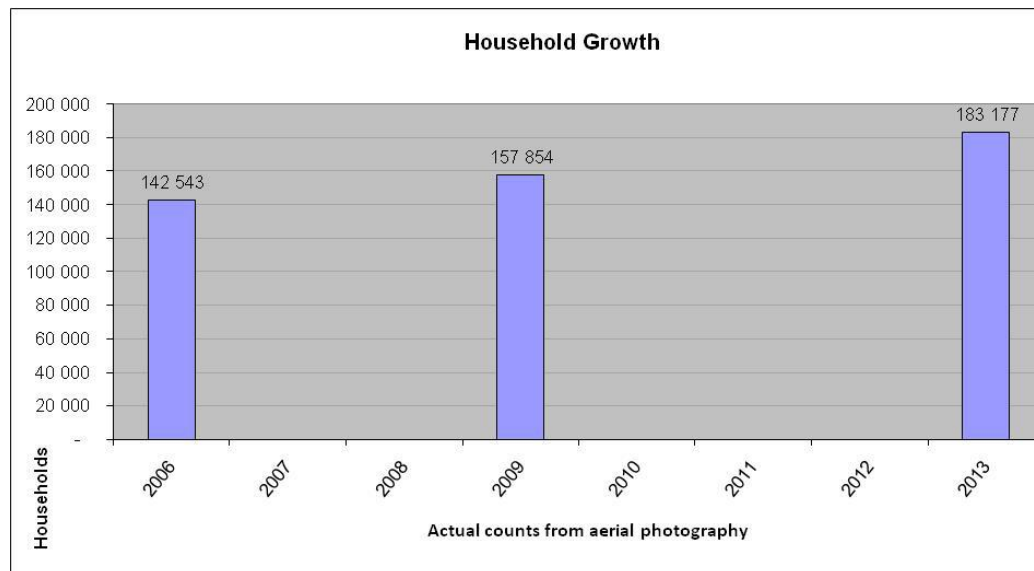
<sup>1</sup> Act 108 of 1997 as amended.

A comparison table between households captured from 2009 aerial photography and the latest 2013 aerial photography can be reviewed in Table 1.1(b) and (c):

**Table 1.1 (b): Household and population figures**

Local Municipality	Actual Household Statistics (Captured from aerial photography over 3 consecutive periods)								STATSSA Census 2011	
	2006	2007	2008	2009	2010	2011	2012	2013	Annual household growth rate	Average Population per household
AbaQulusi	36 069			40 302				45 918	3.5%	4.90
eDumbe	15 011			16 880				16 671	-0.3%	5.10
Nongoma	34 056			38 171				45 670	4.9%	4.40
Ulundi	35 309			37 365				46 450	6.1%	5.70
uPongolo	22 098			25 136				28 468	3.3%	5.40
<b>Total</b>	<b>142 543</b>			<b>157 854</b>				<b>183 177</b>	<b>3.5%</b>	<b>5.10</b>

**Table 1.1 (c): Household growth (2009 - 2013)**



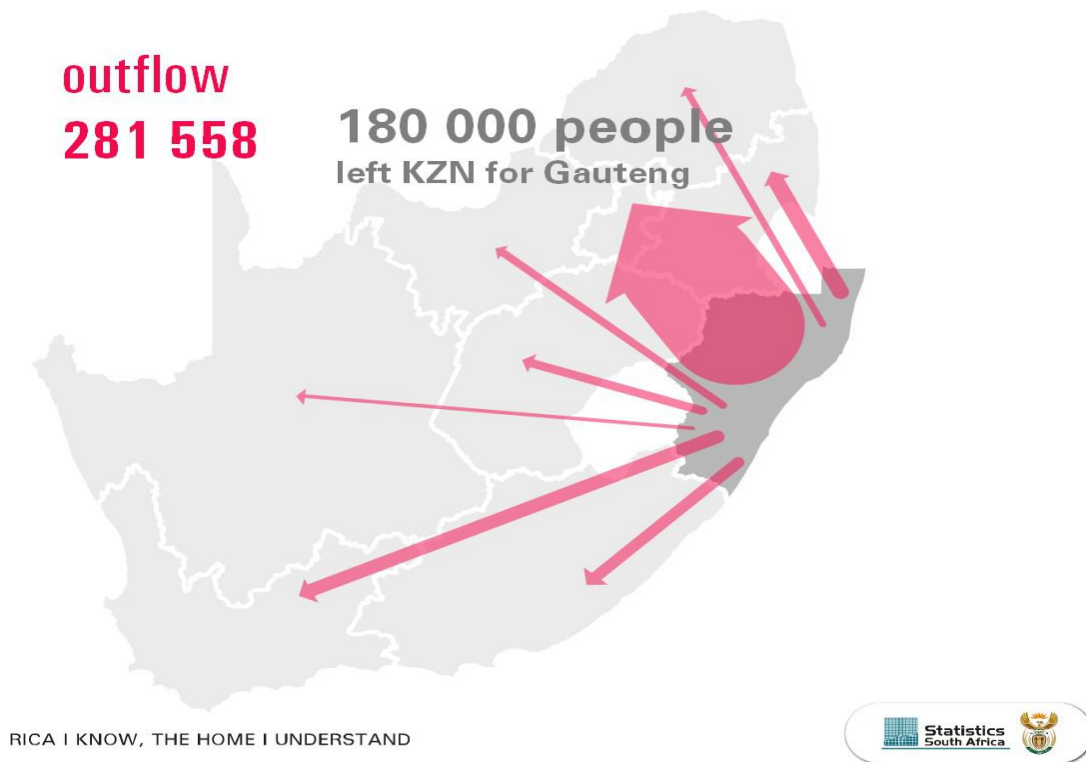
An increase in the number of households of 16% over 4 years can be seen when compared with the previous 2009 households count. An **annual average household growth of 3.5%** is therefore evident over the period from 2009 to 2013. The period from 2005/2006 to 2009 shows an average annual household growth of 3.7%.

For population analysis, the 2011 Census figures will be applied to the ZDM household count as per local municipality. A comparison table can be reviewed under Table A3.(a) below, showing household growth and population figures per local municipality.

The final household count of ZDM, with the population figures from Census 2011, are therefore reflected in Table 1.1(d) as current demographic figures for ZDM until the EA area statistics are available for more accurate population figures.

According to Census 2011, the population growth rate for ZDM from 2001 to 2011 is only 0.3%. This may either be contributed to the negative influence that illnesses such as HIV/AIDS has, or it may be the result of migration where younger persons are leaving rural homes and living on their own in cities where they study, or in more urbanised areas away from their rural homes where job opportunities are more readily available. The migration factor can be seen in the STATSSA's statistical release document, where a strong tendency exist specifically towards migrating from KZN to Gauteng:

**Figure 1.1 (a): Migration trends for KZN (Source: STATSSA)**



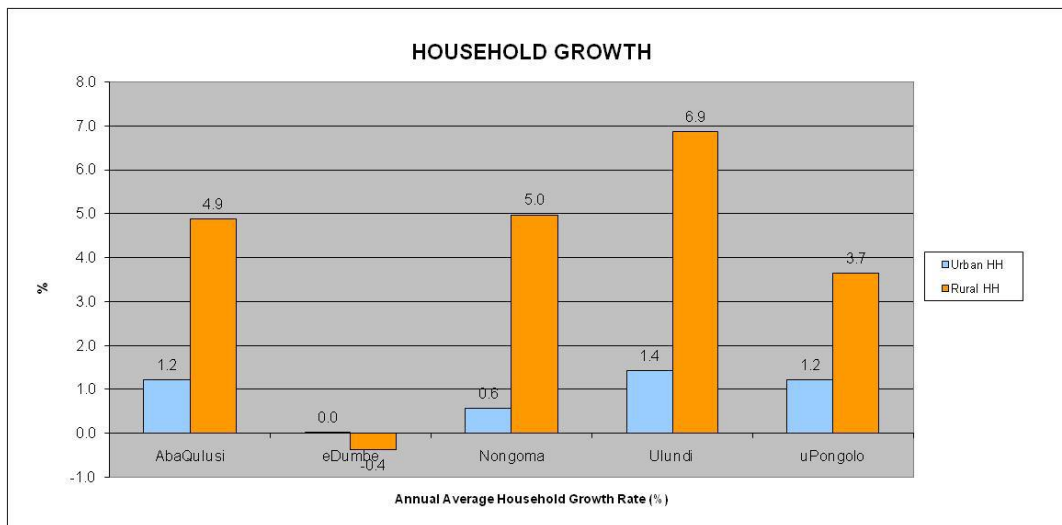
**Demographic trends and migration patterns:**

Demographic trends and migration patterns are difficult to predict, but when comparing household data from 2009 to 2013, there appears to be some migration from rural areas to the various urban centers in the district, as well as areas where infrastructure is provided. This is consistent with the reality that can be seen in the field, where in some rural areas up to 30% of traditional dwellings are abandoned and people have moved to areas where services are provided.

The following graph show urban and rural percentage household growth per LM in the district over a 4 year period between 2009 to 2013.

Very little growth has taken place in the urban areas, with most of the growth taken place in the rural areas.

**Figure 1.1 (c): Annual Urban and Rural Household Growth per Local Municipality**



*Data derived from 2009 and 2013 Aerial Photography (NGI)*

The 2011 Enumerated Area (EA) Census details allows the ZDM to compare its demographic analysis with that of the 2011 Census, especially in terms of actual population trends, which cannot be obtained from aerial photography. According to an overview on KZN done by STATSSA, rural-urban migration remains a **"growing phenomena"**.

In Figure 1.1(c) the 2009 household count per square kilometer was compared with the latest 2013 household count. This clearly confirms the above statement from STATSSA that there is a strong migration from rural areas to urban areas (especially former township areas), or areas where infrastructure are available.

Growth trends per local municipality can be summarised as follows:

- **AbaQulusi**  
Negative growth in the surrounding eMondlo rural areas, with strong positive growth in all the urban areas.
- **eDumbe**  
Strong negative growth in the far eastern rural area.
- **uPhongolo**  
Negative growth in the western rural area, but strong positive growth along the N2 from Pongola town to Belgrade township, as well as the Gumbi settlement.
- **Nongoma**  
Strong positive growth along the Ulundi/Nongoma road, as well as the Nongoma/Hlabisa road.
- **Ulundi**  
Strong positive growth along the P700 and around Ulundi town, as well as the Mpungamhlope and Ceza rural areas.

Figure 1.1 (b): Demographic trends and migration patterns in household

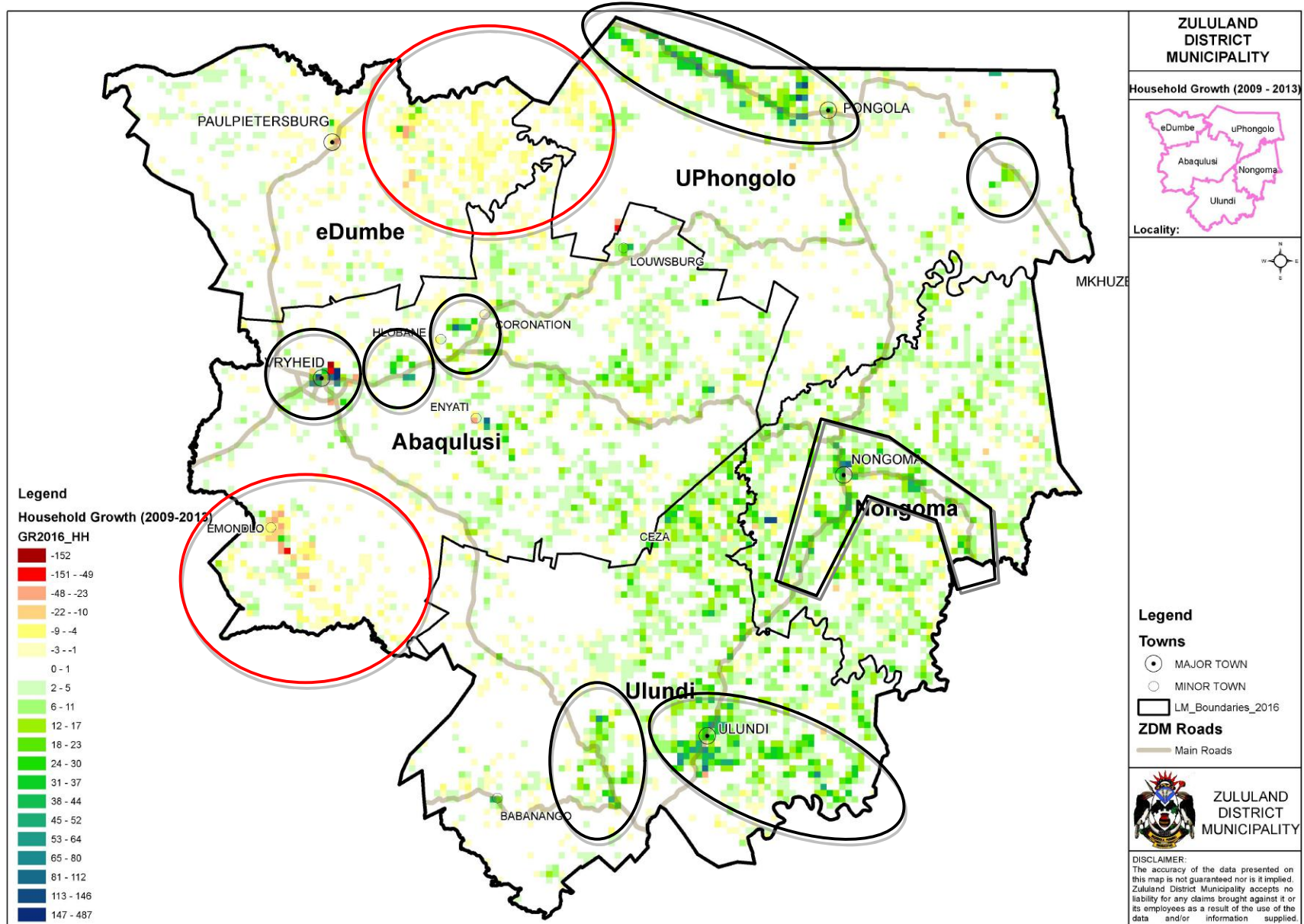
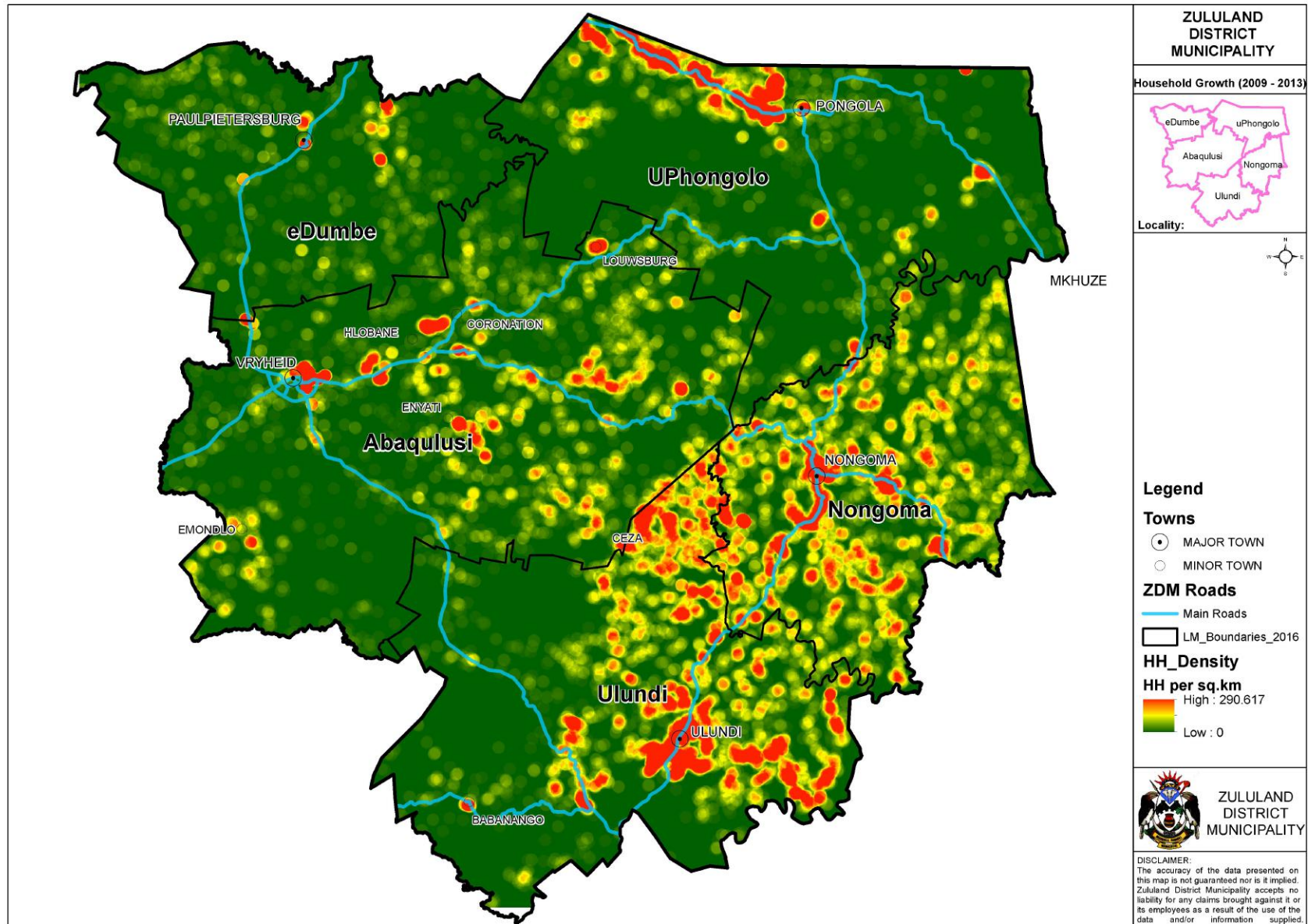




Figure 1.1 (c): Household density map for new households captured



### **Settlement types:**

Existing settlement types as indicated in the provincial WSDP guidelines is summarised in the table below.

**Table 1.1 (e): Settlement Types for ZDM**

Class	Settlement Type	Nr of Settlements	Total households
<b>URBAN</b>	Urban - Formal Town	4	6 277
	Urban - Former Township	5	14 626
	Urban - Ex Homeland Town	13	9 985
	Urban - Working Town	6	1 324
	Urban - Service Centre	8	1 567
	Urban - Squatter Camp	1	95
<b>RURAL</b>	Urban Fringe - Informal Settlement	20	9 398
	Peri-Urban - Squatter Camp	1	278
	Rural - Formal Dense >5000	2	2 803
	Rural - Formal Dense <5000	36	10 485
	Rural - Scattered Dense	5	2 517
	Rural - Scattered Medium Density	5	233
	Rural - Scattered Low Density	58	10 296
	Rural - Scattered Very Low Density	1 104	109 080
	Rural - Scattered households	N/A	4 213
<b>TOTAL</b>		<b>1 268</b>	<b>183 177</b>

ZDM has undertaken a settlement verification process to verify settlement names, boundaries settlement extensions as well as water and sanitation level of service on household level. This process was completed in April 2013, and details will be incorporated in the next WSDP 5-year review. Table 1.1f summarises the location of the new settlements:

**Table 1.1 (f): Settlement Types for ZDM**

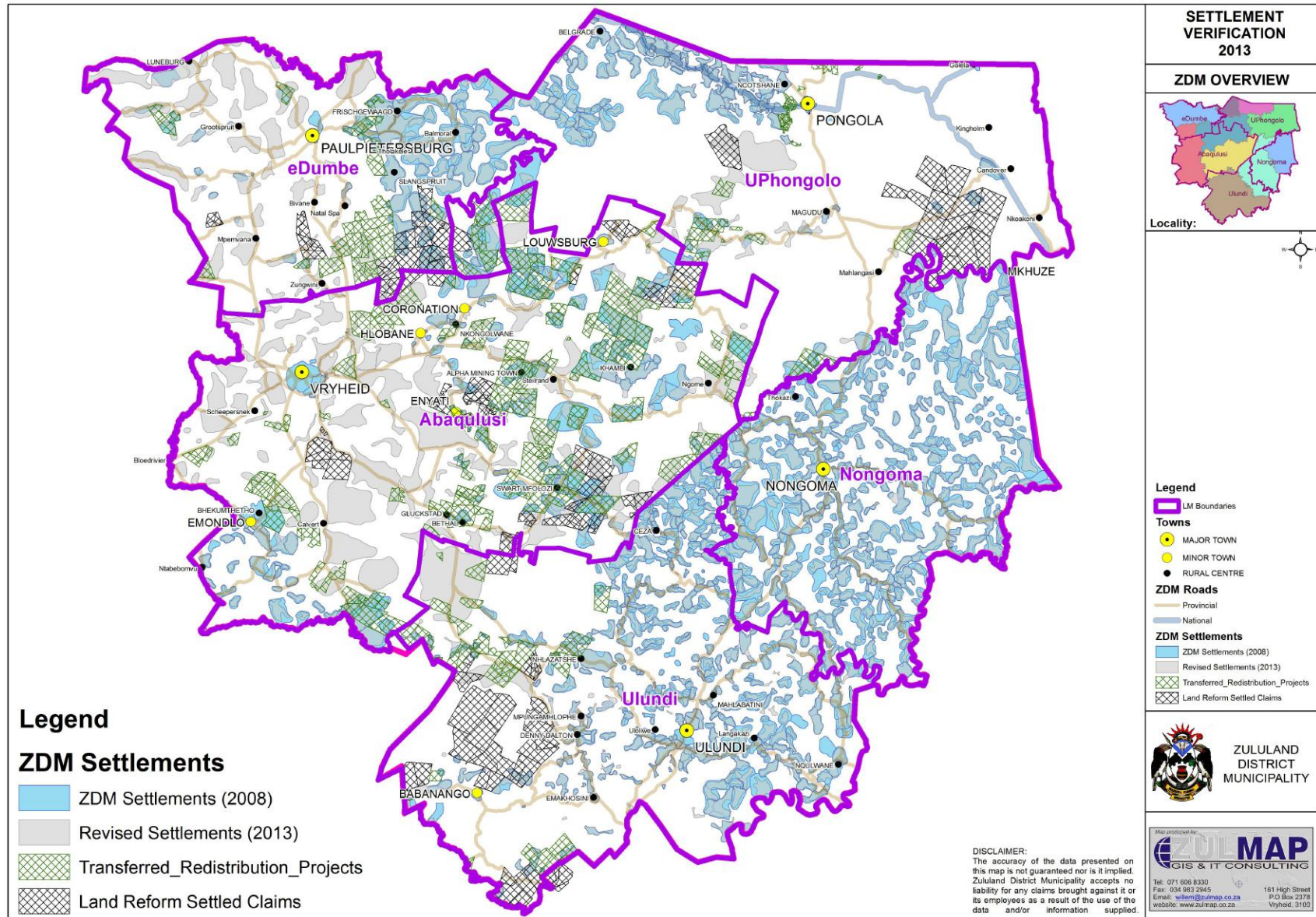
Settlement Location	Nr of Settlements
Urban	27
Communal Property	27
Land Reform Areas	75
State-owned	26
Tribal Areas	857
Private Land	256
<b>TOTAL</b>	<b>1 268</b>

A comparison map between the 2008 and 2013 settlements can be seen in Figure 1.1d. The latest settlement data set will be utilised for the next 5-year rollout plan of the WSDP. New settlements are incorporated and prioritised into the WSDP details for rollout purposes. These include:

- **Expansion of existing settlements**
- **New settlements**
- **Additional Land Reform areas not previously catered for in the rollout programmes.**



Figure 1.1(d) Settlement Map

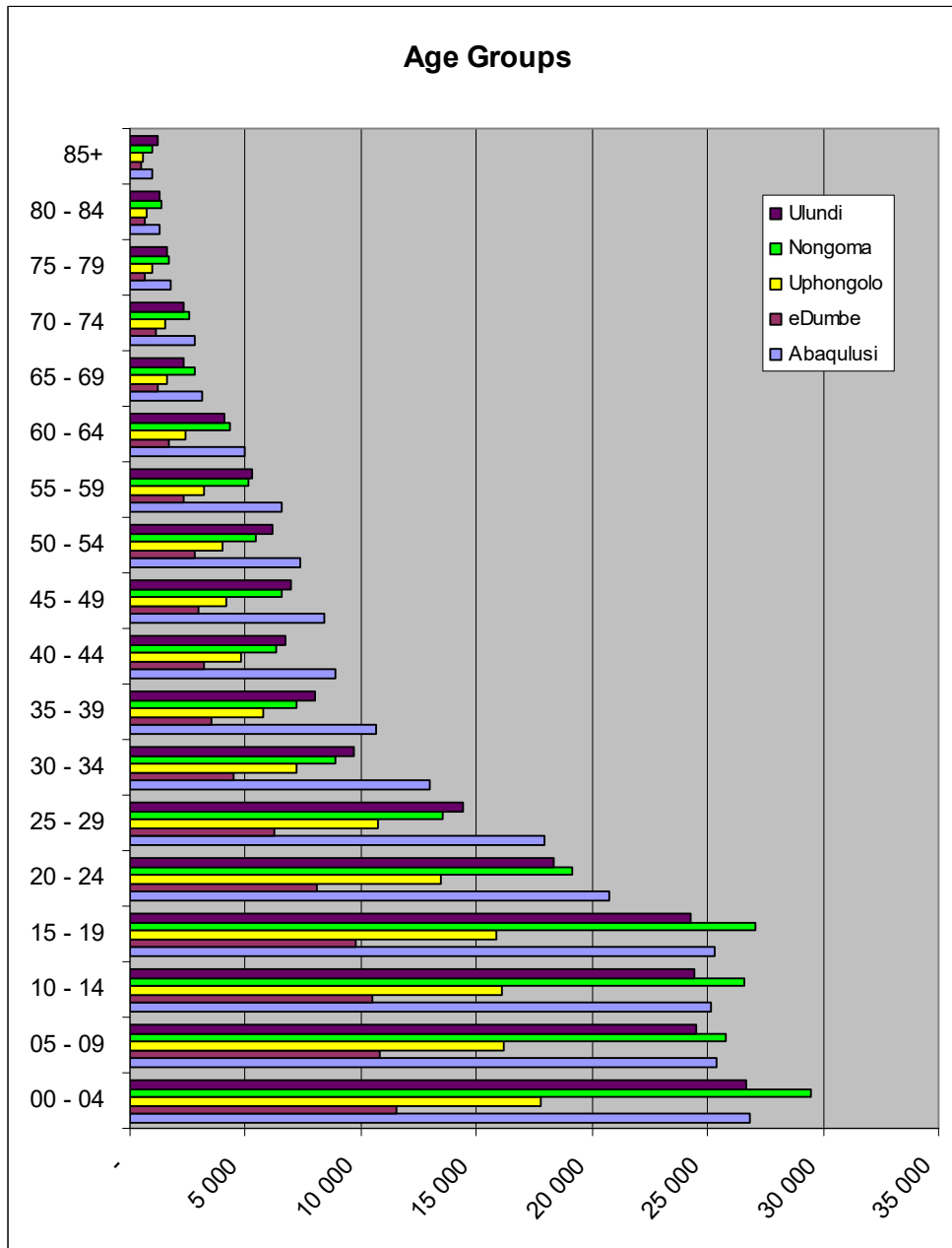




### Age and gender profile:

The age characteristics of the District's population are shown in the table hereunder (STATSSA 2011):

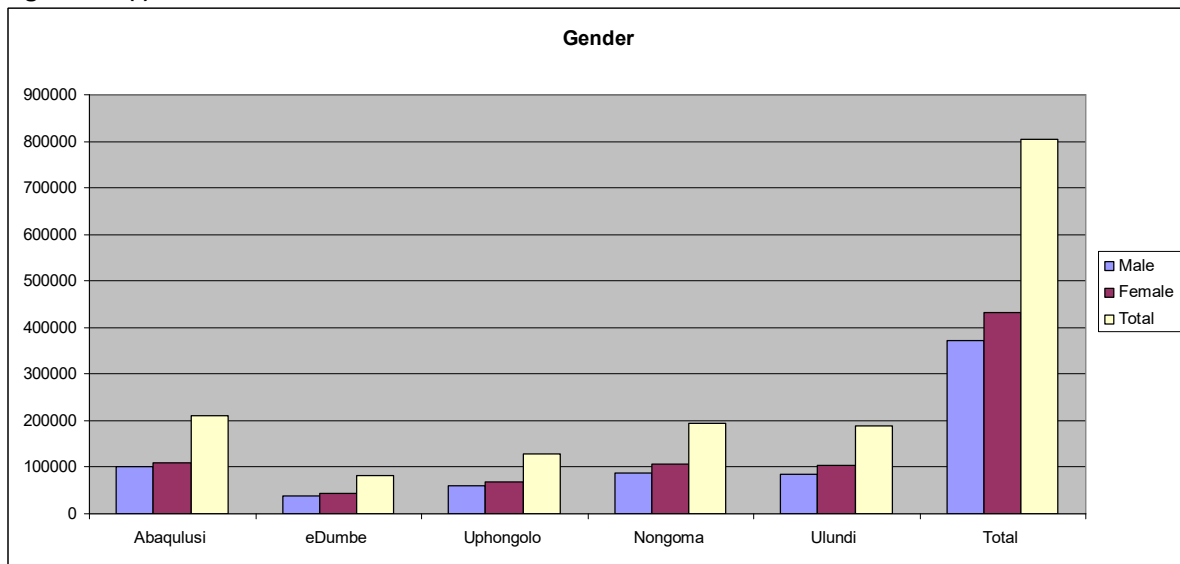
**Figure 1.1 (e): Age Groups Breakdown**



Source: Census 2011

It is evitable that the majority of population is between the age of 0 to 19. This may be contributed to school students leaving their homes to study or look for work opportunities.

**Figure 1.1 (f): Gender Breakdown**



Source: Census 2011

The male and female population is very close to one another, with the biggest difference in Nongoma and Ulundi.

## 1.2 Health

Water is the essence of life. A person requires a sufficient quantity of good quality water to maintain a state of good health; therefore the provision and quality of water services is required to ensure a sufficient standard of health and hygiene. The quality of water supplied must be sufficient to maintain good health, and sanitation services must provide households with hygienic conditions that will not harbour disease. Figure 1.2 (a) and Figure 1.2 (b) below indicate the current status of water and sanitation services at hospitals and clinics in the district:

Figure 1.2 (a): Current status of water services at clinics and hospitals in the district

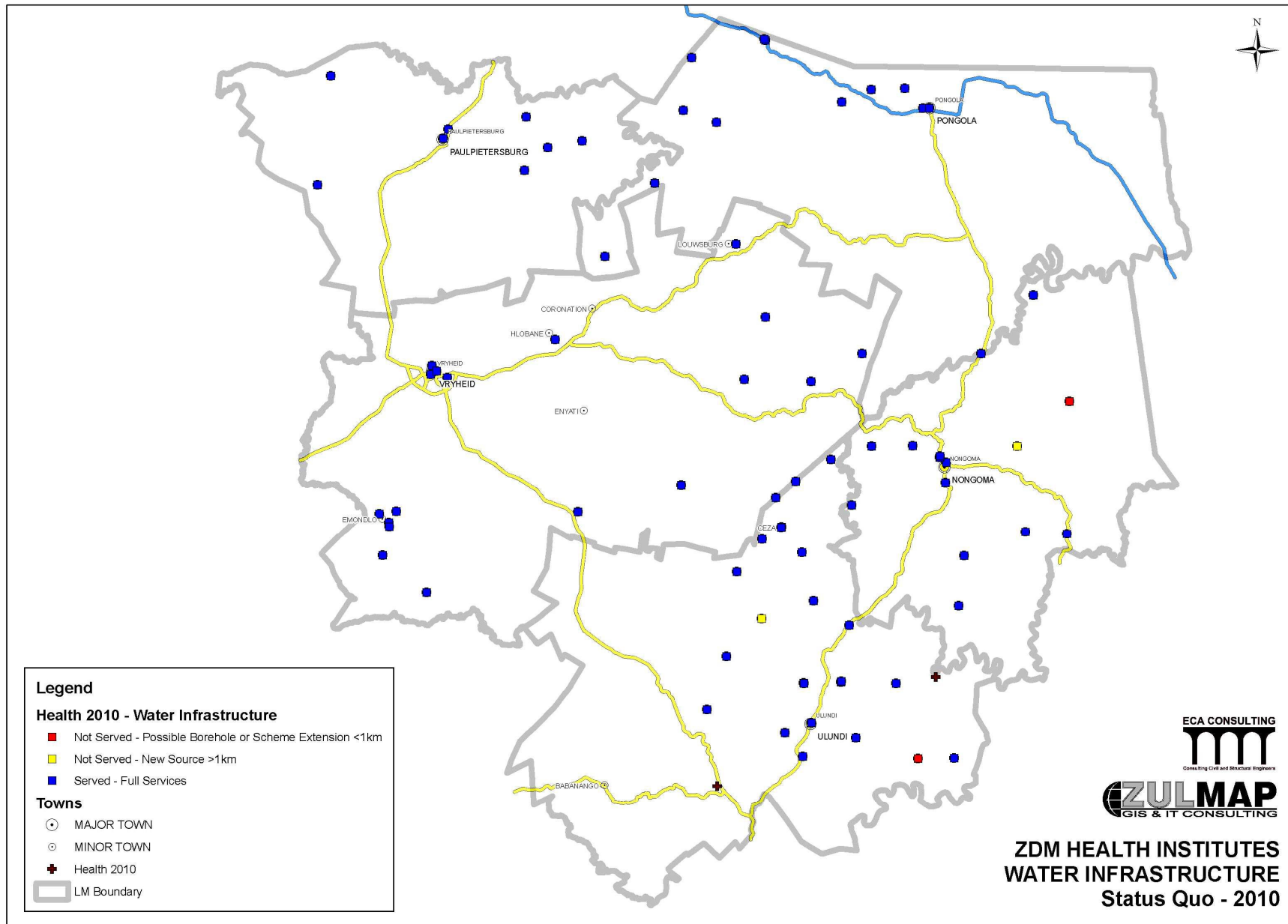
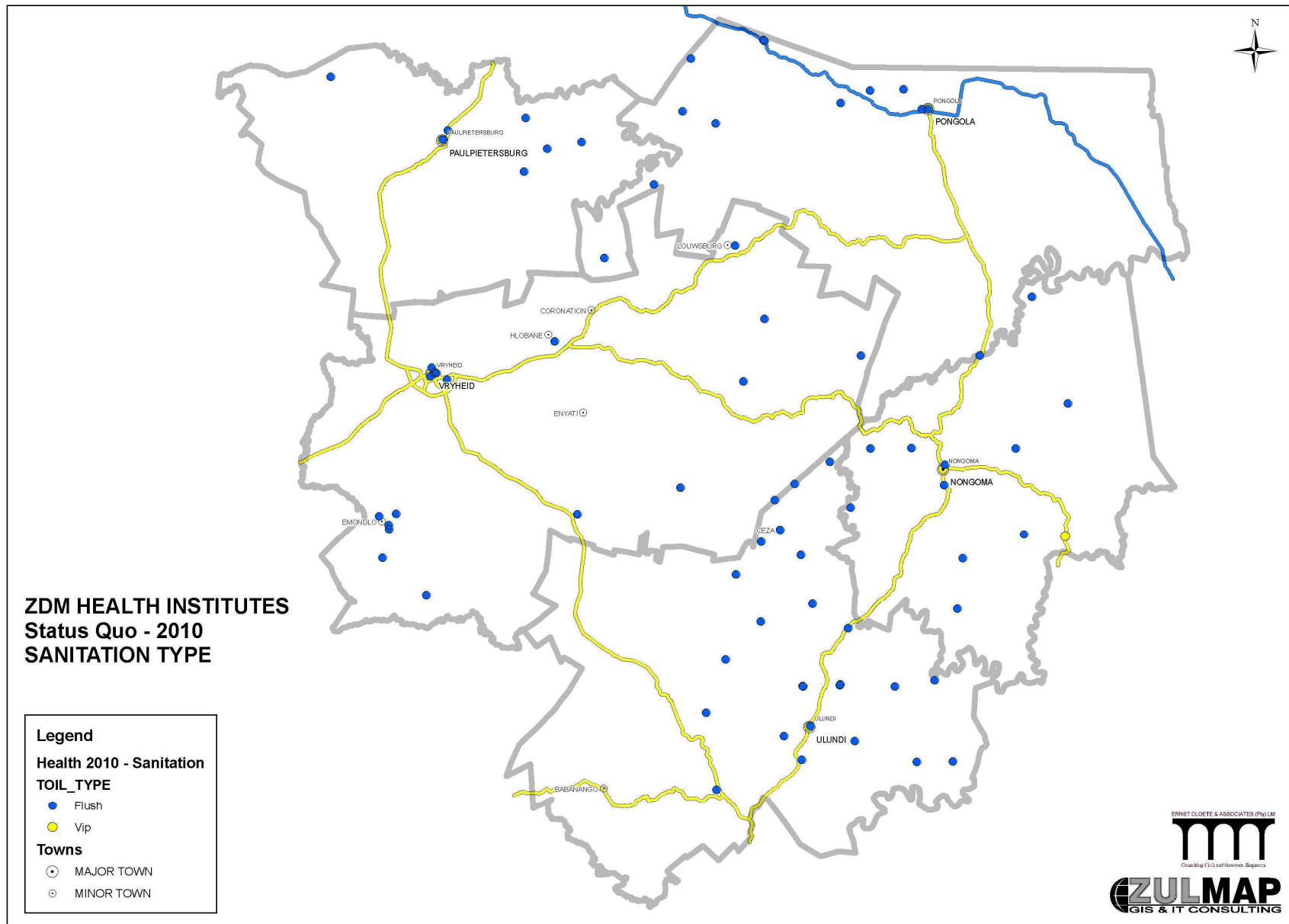


Figure 1.2 (b): Current status of sanitation services at clinics and hospitals in the district





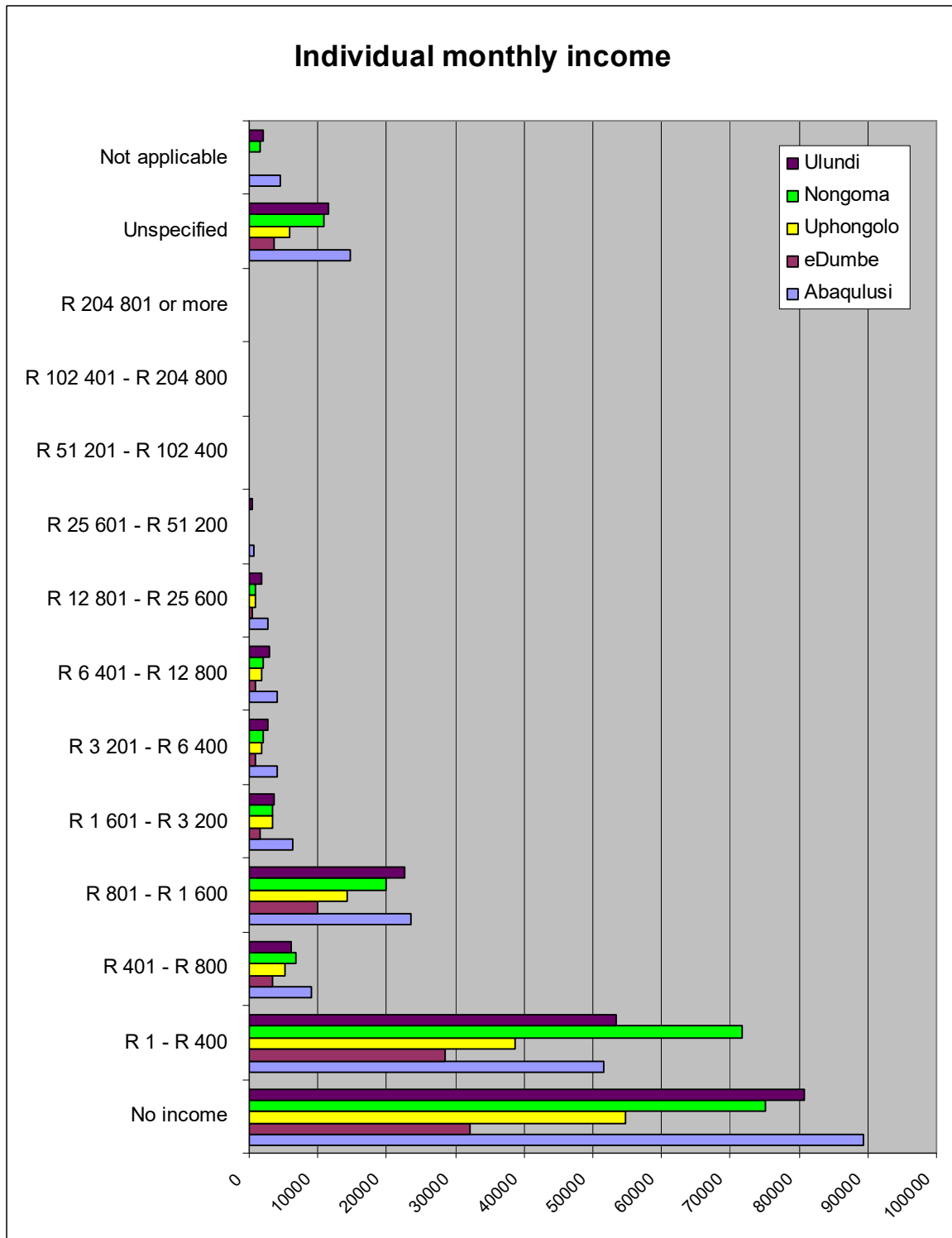
It is very important to consider the prevalence of **HIV/Aids** and the impact it has on the socio-economic conditions of the District. HIV/Aids will have a significant negative impact on the whole South African society and with Zululand being no exception. The implications are as follows:

- KwaZulu-Natal's present share of the South African population is about 21%. This is expected to remain constant over the next 20 years under a "low impact" HIV/AIDS scenario, according to the DBSA.
- However, KZN had the highest recorded HIV-positive rate in the country between 1997 and 1999, indicating that the impact is likely to be more severe than in the rest of South Africa, rather than less so. The Department of Health national statistics estimated KZN's HIV prevalence rate at 32,5% in 1999.
- The KZN's Office of the Premier reports that 'the prevalence appears to be higher among women than among men. Women are infected considerably earlier than men. Among women, prevalence rises sharply from about 15 years, reaches a peak at 25-30 years then begins to taper off. Among men, it rises sharply from about 20 years then peaks from about 35-40.
- This suggests that older boys and men are infecting large numbers of young women and girls. There is also survey evidence that, for a significant percentage of youth, sexual activity commences at very young ages.' In geographic terms, the highest prevalence rates in KZN were found in Pietermaritzburg (35%), Durban (34,8%), Jozini (32,7%), Ulundi (32,3) and Ladysmith (31,8%).

### 1.3 Employment and income

The following table and figure provides a comparative breakdown of the annual household income in the Zululand District Municipality. From the chart it is clear that the majority of people earn less than R400 per month, with a small percentage earning up to R1600.

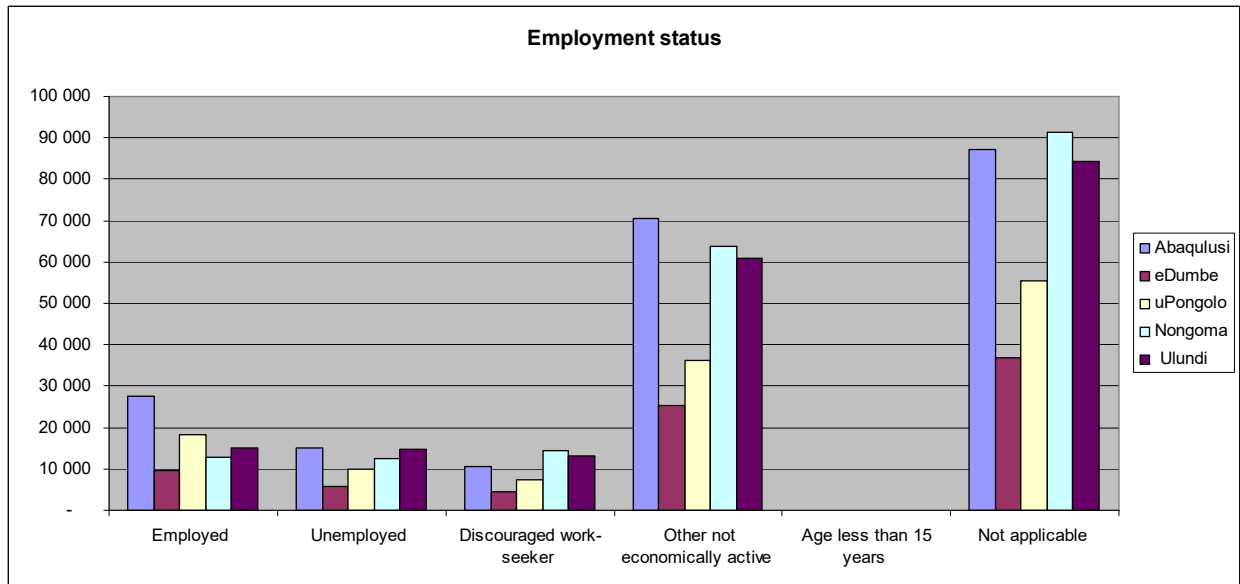
Figure 1.3 (a): Household Income Breakdown for the ZDM



Source: Census 2011

Employment levels are shown in the following table. A high percentage of population has no schooling.

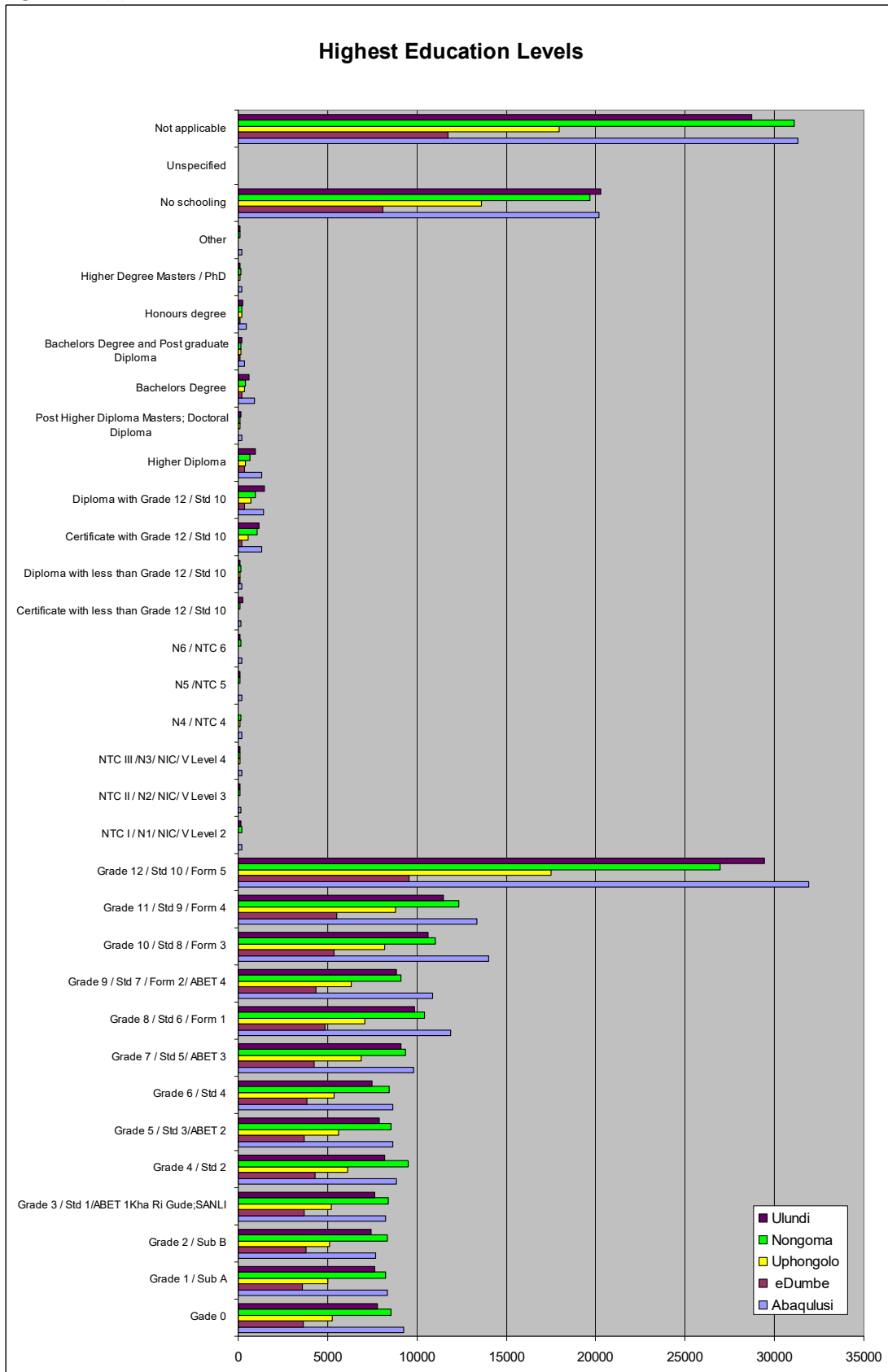
**Figure 1.3 (b): Levels of Employment**



Source: Census 2011

A very small percentage of the total population has full-time employment. This, together with very low income per person, as well as a high percentage of people with their highest level of education below Grade 12, contribute to a poor socio-economic standing for the ZDM area.

**Figure 1.3 (c): Levels of education**



Source: Census 2011



### **Definition of a poor household**

The definition of a poor household in terms of water services is required to assist the ZDM in the implementation of free basic water and sanitation, and the efficient, effective and sustainable use of the equitable share. The poor household definition relates to income poverty, or the lack of sufficient income to satisfy basic and essential needs such as food, clothing, energy and shelter. This definition therefore should be in line with the ZDM's Indigent Policy that is used for all free basic services, and usually relates to the total monthly household income.

In terms of a National Government policy, free basic water relates to a level of water supply derived from the World Health Organisation standard (25 litres per person per day) that is sufficient to promote a healthy living. Based on an average household of 8 persons, this amounts to 6,000 litres (or 6 kl) per household per month. As part of free basic sanitation, the National policy deals with level of service only. However, the long-term O&M component still requires clarification. Although a broad national policy commitment exists to extend free basic services to all households, poor households, for whom free basic services represent a significant poverty alleviation measure, are the primary targets. In addition, the ZDM must ensure long-term sustainability in the implementation of these policies. Taking into account the socio-economic standing of persons living within the ZDM area of jurisdiction, the potential income and expenditure for water services, and the contribution of equitable share, the ZDM poor household definition is set out below.

<b>Proposed definition of poor household by the municipality:</b>
<b>All households earning a combined income of less than R 1 100 per month.</b>

## **1.4 Economic sectors, GGP contribution and employment**

The ZDM constitutes 16% of the area and  $\pm 8.5\%$  of the population of KZN. The contribution to the Gross Geographic Product (GGP) of the province and that of individual sectors to the current local GGP still needs to be assessed. The relative contribution of each sector during the 1990s, highlight the dominance of mining and quarrying. However, owing to the effects of open market policy on coal mining and agriculture the ZDM experienced an economic decline in these sectors during the late 1990s. Nevertheless, over this period agriculture, social services and trade have increased their contribution to employment, whereas manufacturing has decrease its contribution and mining has remained the same.

**Table 1.4 (a): Economic sector contribution to GGP.**

<b>Economic sector</b>	<b>Total no. of employees</b>	<b>No. of local employees</b>
Government	Unknown	Unknown
Manufacturing	3 223	3 223
Retail/Trade (incl. Tourism)	7 539	7 539
Farming/Agriculture	11 276	11 276
Utilities (power & water supply)	391	391
Mining	1 673	1 673
Social services	18 211	18 211
Finance	3 292	3 292
Transport & communications	2 838	2 838
Construction	2 727	2 727
<b>Total*</b>	<b>51 170</b>	<b>51 170</b>

\*These values do not include the person employed within private households or undetermined categories – Census 2001.

**Table 1.4 (b): GGP and employment by type of economic activity (1994 and 1996).**

		<b>% of GGP 1994</b>	<b>% of Employment 1996</b>	<b>% of Employment 2001</b>
Primary Sector	Agriculture, forestry, fishing	12,4	12.1	16.9
	Mining & quarrying	31,8	2.5	2.5
Secondary Sector	Manufacturing	4,2	17.1	4.8
	Utilities (power & water supply)	0,2	0.7	0.6
	Construction	2,0	4.2	4.1
Tertiary Sector	Retail/Trade	12,9	9.7	11.3
	Transport & communications	13,9	5.5	4.2
	Finance	7,0	4.8	4.9
	Government & social services	15,6	17.1	27.2
	Private households	N.A	8.8	9.7
	Unspecified/unknown	N.A	17.5	13.8
<b>TOTAL</b>		<b>100,0</b>	<b>100,0</b>	<b>100,0</b>

## 1.5 Economic trends

Up to the early 1990s, the ZDM's economic base depended heavily on coal mining, supported by agriculture, transport trade and government services. Formal economic activity was strongly concentrated in the then Vryheid magisterial district, from which no less than 73% of GGP was generated. Administrative and government services were concentrated in Ulundi and Vryheid. A significant weakness was, and remains, the reliance on the primary sector (44,4% of GGP), and the underdeveloped secondary sector which contributed only 6,4% of GGP.

By the late 1990s the ZDM had experienced an economic decline owing to the effects of open market policy on coal mining and agriculture. By 2000 all but one of the large-scale mining operations (Zululand Anthracite Colliery) had closed. Although tourism has started to play a larger role, this by no means fills the gap caused

by the closing of the mines that had a knock-on impact for all economic sectors and has been felt particularly in Vryheid and surrounding areas.

A number of recent economic studies and reports from the business sector suggest that the contribution of mining and quarrying have fallen to a low level, with little contribution from manufacturing activities, and that some increase is evident in transport (in support of forestry activities), trade and catering (on account of tourism). The informal sector, mainly petty commodity trading, has grown considerably over the last decade, but is constrained by the slump in primary and secondary sectors of the formal economy. The potential for economic growth in Zululand lies in tourism and agriculture.