

# 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/<br>Business | Farm Houses | Totals         |
|----------------------|----------------|-------------------------|-------------|----------------|
| AbaQulusi            | 20 193         | 157                     | 0           | 20 350         |
| eDumbe               | 6 108          | 54                      | 0           | 6 162          |
| Nongoma              | 735            | 222                     | 0           | 957            |
| Ulundi               | 6 691          | 289                     | 0           | 6 980          |
| uPhongolo            | 3 903          | 232                     | 0           | 4 135          |
| <b>Total (urban)</b> | <b>37 630</b>  | <b>954</b>              | <b>0</b>    | <b>38 584</b>  |
| AbaQulusi            | 15 681         | 1                       | 37          | 15 719         |
| eDumbe               | 8 705          | 0                       | 144         | 8 849          |
| Nongoma              | 33 098         | 0                       | 1           | 33 099         |
| Ulundi               | 28 285         | 2                       | 42          | 28 329         |
| uPhongolo            | 17 637         | 0                       | 326         | 17 963         |
| <b>Total (rural)</b> | <b>103 406</b> | <b>3</b>                | <b>550</b>  | <b>103 959</b> |
| <b>Total</b>         | <b>141 036</b> | <b>957</b>              | <b>550</b>  | <b>142 543</b> |

Present population and projected population growth rates:

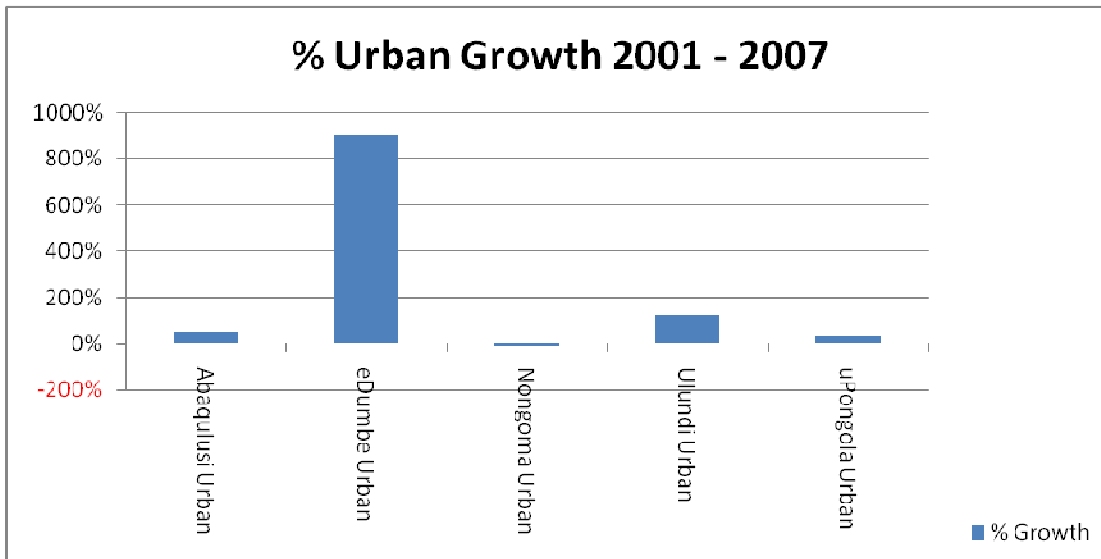
Population and economic growth rates are used to determine future developmental requirements within the ZDM. This determines the required increase or decrease in water services. Non-domestic consumer unit growth, particularly commercial, industrial and agricultural growth, also gives an indication of 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.

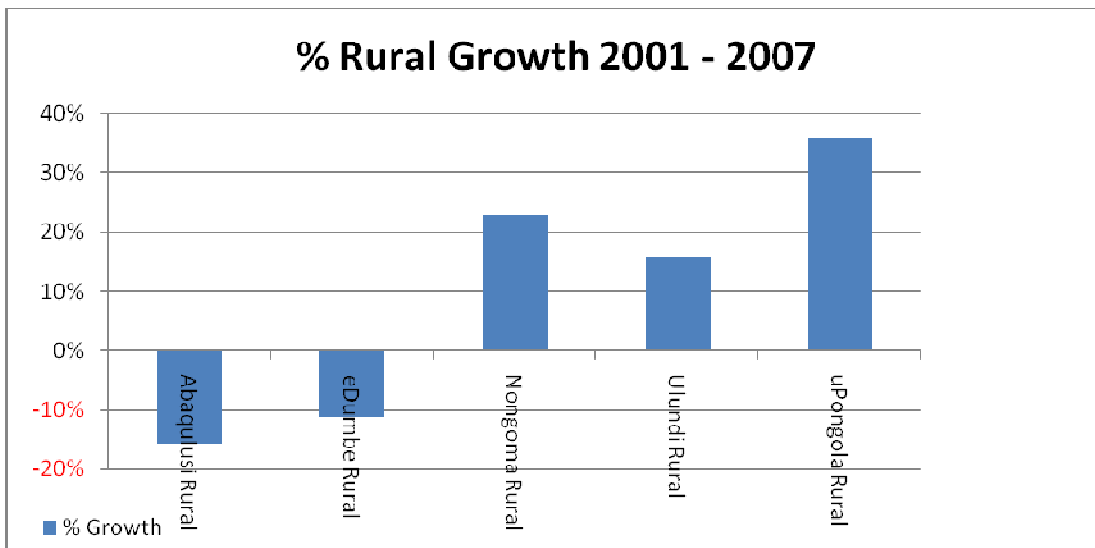
The following two graphs show urban and rural percentage household growth per LM in the district between 2001 and 2007.

**Figure 1.1 (a): % Urban Household Growth per Local Municipality**



Data derived from 2001 Census and 2007 Aerial Photography

**Figure 1.1 (b): % Rural Household Growth per Local Municipality**



Data derived from 2001 Census and 2007 Aerial Photography

The two figures shown above illustrate a tendency for a reduction in the rural population in Abaqulusi and eDumbe with significant growth in the urban areas. The other municipalities have all experienced rural growth with only Ulundi showing significant urban growth as well.

The population growth rates are based on a DBSA Report<sup>2</sup> that provides estimated growth rates per province over five-year intervals, taking account of the impact of HIV/AIDS. Although the impact of HIV/AIDS is known to have a skewed effect on the age, gender and household structure of the population, there is currently limited statistical data on these factors. Therefore the growth rates for KZN have been applied to the ZDM population, as represented in Table 1.1 (b) below:

**Table 1.1 (b): Population growth rate projections for the ZDM (2000 – 2020)**

| Period           | % Growth rate | Growth factor | Population       |
|------------------|---------------|---------------|------------------|
| 2001-2005        | 1.44%         | 1.074         | 711,607          |
| 2001-2004        |               | 1.059         | 822,732          |
| 2004-2005        |               | 1.015         | 943,715          |
| 2006-2010        | 0.96%         | 1.049         | 957,701          |
| 2011-2015        | 0.58%         | 1.029         | 1,004,561        |
| 2016-2020        | 0.08%         | 1.004         | 1,034,035        |
| <b>2004-2020</b> |               | <b>1.100</b>  | <b>1,038,181</b> |

Source: DBSA (2000).

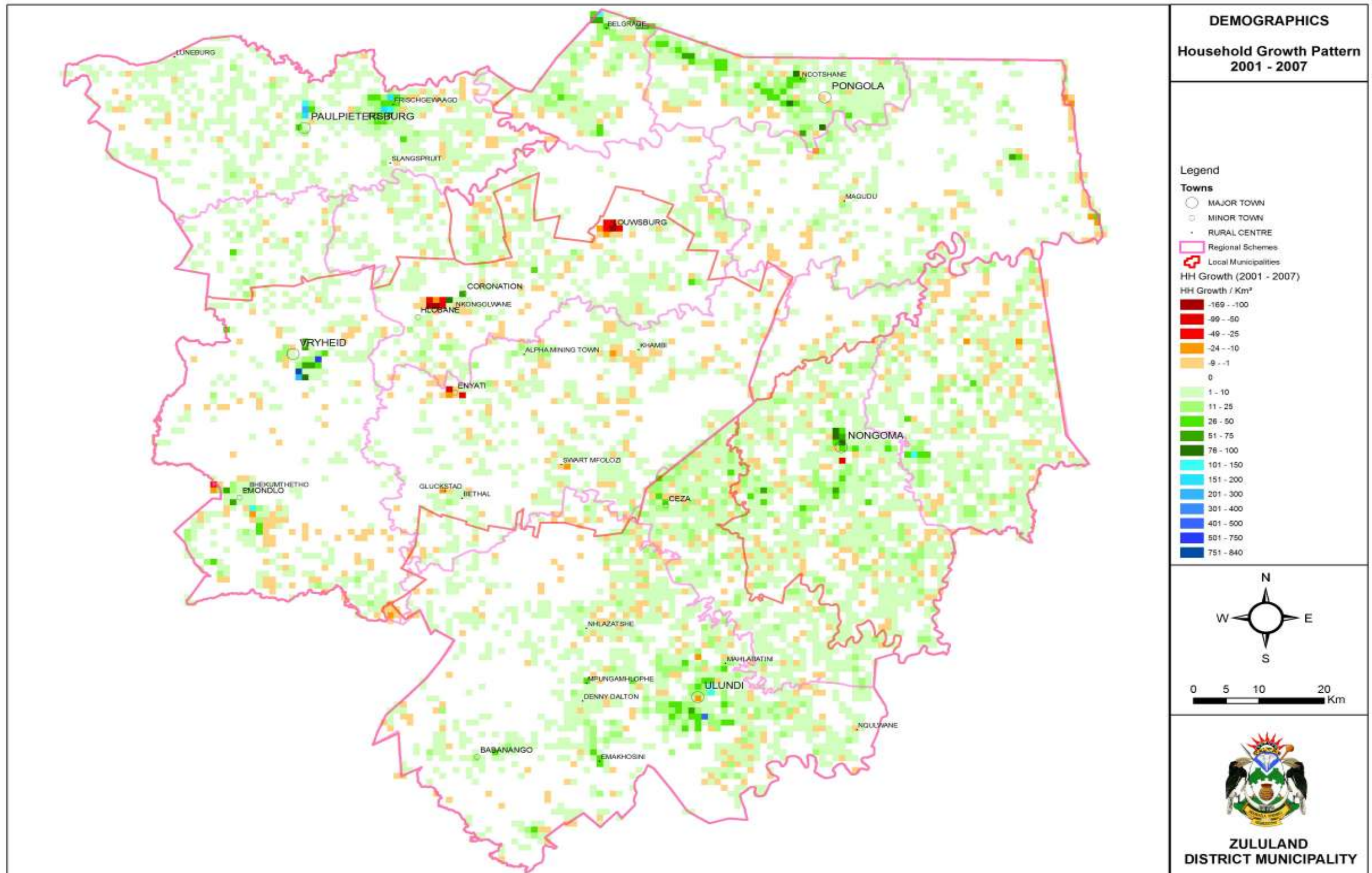
Demographic trends and migration patterns:

Demographic trends and migration patterns are difficult to predict but when comparing household data from aerial photography in 2001 to aerial photography in 2007 there appears to be some migration from rural households to the various urban centers in the district, which is consistent with the reality that can be seen in the field. The map attached below (Figure 1.1(c)) illustrates the migration of households between 2001 and 2007, as was seen from the different sets of aerial photography.

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<sup>2</sup> DBSA (2000).

Figure 1.1 (c): Demographic trends and migration patterns



Age and gender profile:

The age characteristics of the District's population are shown in the table hereunder:

**Table 1.1 (c): Percentage Age Breakdown**

| <b>Age Breakdown for the ZDM (2001 census)</b> |     |
|--|-----|
| Age: 0 – 4 years                               | 14% |
| Age: 5 – 9 years                               | 15% |
| Age: 10 – 14 years                             | 15% |
| Age: 15 – 19 years                             | 12% |
| Age: 20 – 24 years                             | 9%  |
| Age: 25 – 29 years                             | 6%  |
| Age: 30 – 34 years                             | 5%  |
| Age: 35 – 39 years                             | 5%  |
| Age: 40 – 44 years                             | 4%  |
| Age: 45 – 49 years                             | 3%  |
| Age: 50 – 54 years                             | 2%  |
| Age: 55 – 59 years                             | 2%  |
| Age: 60 – 64 years                             | 2%  |
| Age: 65 – 69 years                             | 2%  |
| Age: 70 – 74 years                             | 1%  |
| Age: 75 – 79 years                             | 1%  |
| Age: 80 – 84 years                             | 0%  |
| Age: 85+ years                                 | 0%  |
| Age: unspecified                               | 1%  |

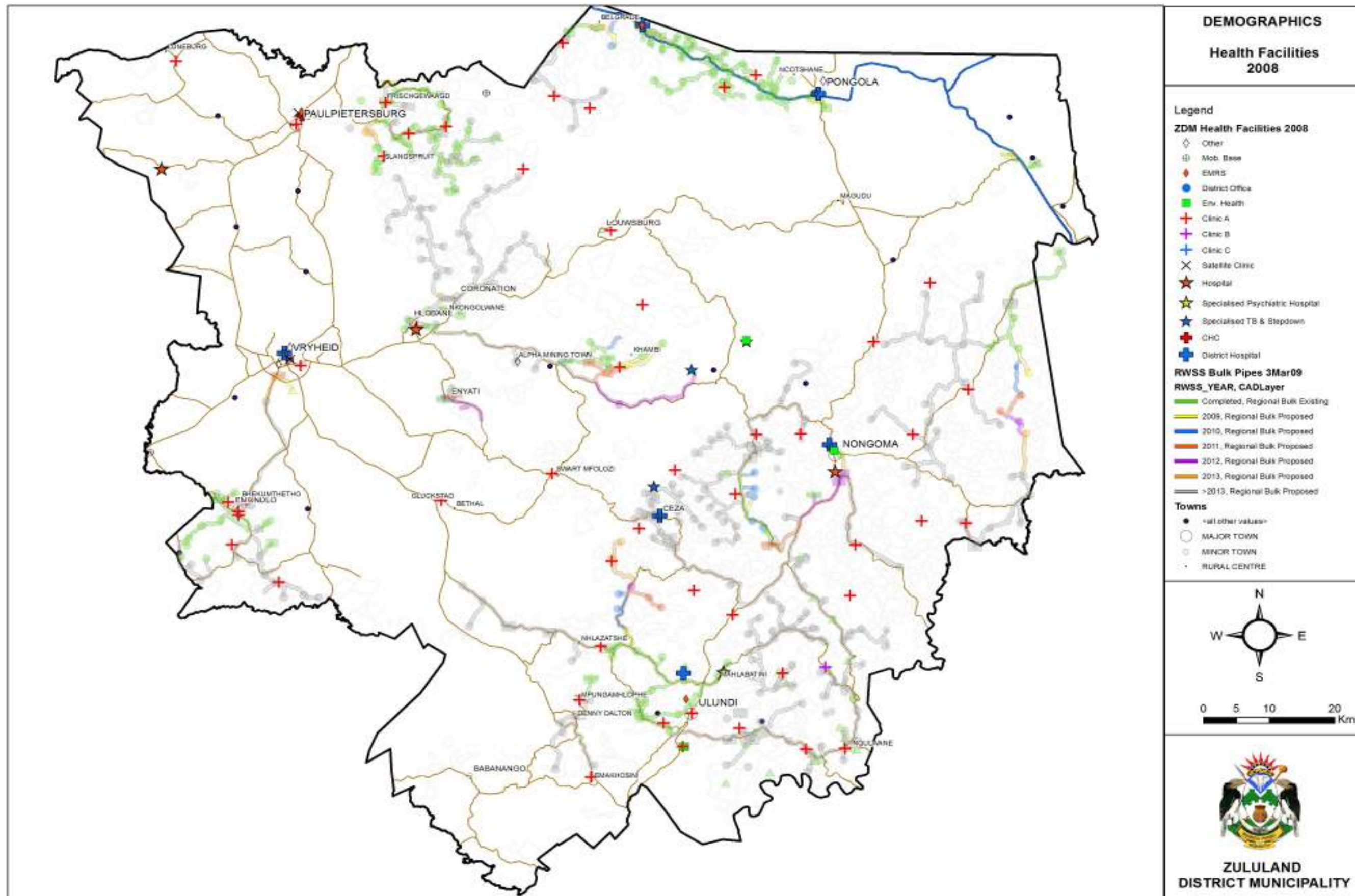
Source: 2001 Census

The female population (54%) is significantly higher than the male population (46%) which could be attributed to migration patterns in the province in general.

## 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) below indicates hospitals and clinics in the district and the location of these facilities relative to existing water schemes:

Figure 1.2 (a): Clinics and hospitals in the district relative to existing water schemes



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.

**Table 1.3 (a): Household Income Breakdown for the ZDM**

| <b>Household Income Breakdown for the ZDM</b>     |     |       |
|---|-----|-------|
| Derived household income: none                    | 21% | 22709 |
| Derived household income: R1 – R2 400             | 12% | 12358 |
| Derived household income: R2 401 – R6 000         | 22% | 23222 |
| Derived household income: R6 001 – R12 000        | 14% | 15086 |
| Derived household income: R12 001 – R18 000       | 7%  | 7618  |
| Derived household income: R18 001 – R30 000       | 6%  | 6532  |
| Derived household income: R30 001 – R42 000       | 3%  | 3186  |
| Derived household income: R42 001 – R54 000       | 2%  | 2207  |
| Derived household income: R54 001 – R72 000       | 2%  | 1941  |
| Derived household income: R72 001 – R96 000       | 1%  | 1319  |
| Derived household income: R96 001 – R132 000      | 1%  | 1005  |
| Derived household income: R132 001 – R192 000     | 0%  | 520   |
| Derived household income: R192 001 – R360 000     | 0%  | 304   |
| Derived household income: R360 001 or more        | 0%  | 150   |
| Derived household income: n/a: institution/hostel | 0%  | 328   |
| Derived household income: unspecified/dummy       | 8%  | 8547  |

Source: 2001 Census

Employment levels are shown in the following table:

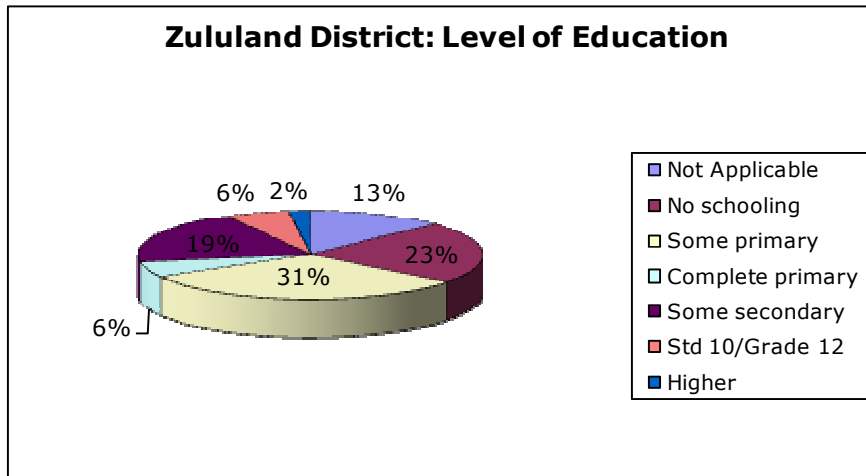
**Table 1.3 (b): Levels of Employment**

| <b>Employment Breakdown for the ZDM (2001 census)</b> |      |
|---|------|
| Employment status: employed                           | 38%  |
| Employment status: unemployed, looking for work       | 47%  |
| Employment status: not working – not looking for work | 13%  |
| Employment status: unspecified                        | 1%   |
|   | 100% |

Source: Census 2001

At overleaf, a graph is attached that represent the education levels of the Zululand population. There is a correlation between income, employment and education levels as can be seen from the tables and graphs referred to.

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



Poor household definition

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.

**Proposed definition of poor household by the municipality:**

**All households earning a combined income of less than R 800 per month.**

## 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).**

|                  |                                  | % of GGP<br>1994 | % of<br>Employment<br>1996 | % of<br>Employment<br>2001 |
|------------------|----------------------------------|------------------|----------------------------|----------------------------|
| 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.