

André Pelser

The demographic and development landscape of HIV and AIDS in the Free State, South Africa

Many of the current and expected demographic changes in southern and South Africa are destined to emanate from the influence of HIV and AIDS on the population structure. This article elucidates the most important demographic trends and changes to which the population of the Free State will be subjected over the next few years. Some implications of these changes for human development in the province are also explored. It is argued, *inter alia*, that an integrated development strategy — one that is mainstreamed with HIV/AIDS prevention and antiretroviral treatment (ART) campaigns — is pivotal as part of a comprehensive response to address the spread and impact of the epidemic in the Free State.

Die demografiese en ontwikkelingslandskap van MIV en Vigs in die Vrystaat, Suid-Afrika

Baie van die huidige en verwagte demografiese veranderinge in Suider- en Suid-Afrika sal onvermydelik voortvloei uit die impak van MIV en Vigs op die bevolkingstruktuur. Die artikel belig die belangrikste demografiese tendense en veranderinge waaraan die bevolking van die Vrystaat in die volgende paar jaar onderworpe sal wees. Enkele implikasies van hierdie veranderinge vir menslike ontwikkeling in die provinsie word ook uitgewys. Daar word onder meer geargumenteer dat 'n geïntegreerde ontwikkelingsstrategie — een wat in pas is met die voorkoming van MIV/Vigs en met antiretrovirale behandelingsveldtogte — van kernbelang is as deel van 'n omvattende respons om die verspreiding en impak van die epidemie in die Vrystaat die hoof te bied.

Prof A J Pelser, Senior Research Associate, Centre for Health Systems Research & Development, University of the Free State, P O Box 339, Bloemfontein 9300; E-mail pelseraj.bum@mail.uovs.ac.za

Since the first AIDS cases were reported in the early 1980s, HIV/AIDS has evolved into a global epidemic which is now posing serious challenges to policy-makers — challenges involving a wide range of social, economic, political and health issues.¹ At the beginning of the 1990s few observers predicted the present extent and impact of the HIV/AIDS epidemic, and it was generally accepted that the epidemic would have little influence on, for instance, the population structure of even seriously affected countries. In fact, up to the mid-1990s population projections worldwide very seldom, if ever, took into consideration any expected effects of epidemics or disasters (like famine) on demographic change (Pelser 2004). The AIDS epidemic has, however, changed all of this, and almost all demographic models now allow for the impact of the epidemic, at least in the case of the most seriously affected countries. Also in South Africa — and for that matter, in all of southern Africa in particular — many of the current and expected demographic changes are destined to emanate from the influence of HIV/AIDS on the population structure.

Population data (how the population is spread, patterns of concentration, growth and demand) are widely considered to be among the most fundamental pieces of information needed in planning and policy-making (McCarthy & Rogerson 1992, Schlemmer & Lovell 2000). Such data provide the basis from which resource allocation can be made to various geographic areas and population sectors. Therefore, there can be little doubt that analysing demographic trends holds major advantages for planning and strategy. In the South African context, this means — as stated Makhanya & Moodley (2002: 112) — that population data have “... an important role to play in the provision of vital [...] information to policy makers and planners for effective change to improve the quality of life of all South Africans”. An understanding of current and future demographic change is therefore of vital importance to inform planning and decision-making at local, regional and national levels.

1 This article is an adapted version of a paper presented at the conference titled *Implementing the Comprehensive Care and Treatment Programme for HIV and AIDS patients in the Free State: sharing experiences*, Bloemfontein, 30 March-1 April 2005.

Against the above background this article elucidates the most important demographic trends and changes to which the population of the Free State province will be subjected over the next few years. More specifically, the article explores the compound impact of demographic transition and HIV/AIDS on population changes in the Free State. Some implications of these changes for human development and planning in the province are also explored. It is argued that thousands of new HIV infections can be prevented if policy-makers (in the province and in South Africa at large), firstly, acknowledge HIV/AIDS to be an exceptional human development crisis which has the potential to devastate entire populations and economies and, secondly, if they mobilise all resources — human, financial and technological — and use them effectively to arrest the spread and impact of the epidemic. The argument draws upon comparative demographic, economic and health statistics and projections, for both the Free State and South Africa.

For the purposes of this article, recent data published by the South African Institute of Race Relations were used, as supplied by the Bureau of Market Research, the Actuarial Society of South Africa and the Medical Research Council. This has been supplemented with data obtained from Statistics South Africa, the Institute for Futures Research, as well as the national and provincial Departments of Health. Yet, it is important to bear in mind that it is almost impossible to obtain wholly accurate empirical data on the extent and impact of HIV/AIDS, whether on the national or the provincial level. Most of the information is derived from plausible mathematical models based on statistical data. Although the data therefore offer a broad understanding of the extent of HIV/AIDS in the Free State, figures in the tables should not be taken to be absolutely exact or regarded as indisputably accurate presentations of the extent of the epidemic. In accordance with acceptable demographic practices, all figures are based on the “no-change” assumption, in which case there would be no change in sexual behaviour, no intervention to stem mother-to-child transmission, and no antiretroviral treatment (ART) provided during the specified intervals. Where applicable, however, the impact of ART intervention on projected demographic changes is also pointed out.

1. Changing population trends and dynamics in the Free State

As in the case of the South African population, the Free State population too is currently undergoing profound changes — changes which will gain momentum to affect the size, structure and distribution of the province's population in the decades to come. Throughout the 1980s and most of the 1990s the South African population was expected to grow vigorously. Recent projections, however, show that the expectations and scenarios have changed dramatically, firstly as a result of a downward trend in fertility rates and, more recently, due to the impact of HIV/AIDS. These dynamics have collaborated to initiate a significant decline in the population growth rate. At the same time the drop in the population growth rate will be accompanied by a relative rise in dependency and poverty, owing to AIDS-related illnesses and other effects. The gains made on key population, development and health indicators over the past 40 to 50 years, especially in infant and child mortality and life expectancy, had in fact rapidly been eroded by HIV/AIDS since the mid 1990s (cf Tables 3 & 4).

Compared with the other eight provinces, the Free State shows a number of notable current and projected demographic characteristics (Tables 1-4; SAIRR 2004):

- the slowest total population increase (3.7%) for the period 2001-2006;
- the only province projected to experience an actual population decline over the period 2003-2010;
- the second highest HIV prevalence rate in the total population (17.7% in 2003, and the highest (17.1%) in 2010);
- the third lowest life expectancy at birth in 2003 (49 years), and the second lowest in 2010 (40 years);
- the third highest under-five mortality rate (106 per 1 000) in 2002;
- the highest crude death rate in 2001 and 2011.

From the above characteristics it follows that the HIV/AIDS epidemic seems set to dominate the main demographic features and trends of the Free State population in the future. The following is a brief overview

of some prominent trends and expected changes which will be discernible in the province's population over the next few years.²

1.1 A slowdown in population increase and a (possible) decline in population size

The effect of HIV/AIDS on population growth is significant in countries where the HIV prevalence rates are the highest. Some demographic projections show that populations may well decline in a number of African countries, including South Africa (cf Bureau of Market Research 2004a, Population Reference Bureau 2004, UNFPA 2004).

The Free State population is expected to be 2.8 million in 2010 — an increase of only 0.3% from the total in 2000 (Table 1). Looking at the future, however, the 2003 population in the province (2.93 million) is projected to drop to 2.87 million in 2010 (SAIRR 2004: 23) — a decline of 2.1%. This projected decline in the total population is largely the result of the impact of the HIV/AIDS epidemic, manifesting itself, *inter alia*, in the relatively steep increases in the number of AIDS deaths and the infant mortality rate in the Free State (Table 3), but it can also be attributed to the fertility rate declining more rapidly than anticipated in earlier estimates (Pelser 2004).

Table 1: Total population of the Free State and South Africa (2000, 2003, 2010)

Base year / Target year	Free State	South Africa
2000	2 862 088	45 078 805
2010	2 871 268	47 392 059
Increase 2000 to 2010	0.3%	5.1%
2003	2 931 662	46 495 000
2010	2 871 268	47 392 059
Decrease/Increase 2003 to 2010	-2.1%	1.9%

Source: Compiled from SAIRR 2004: 23

2 Obviously not all the population trends and changes set out here can be ascribed to the impact of HIV/AIDS. Yet, in some cases, the epidemic does indeed intensify and even accelerate existing demographic changes.

Another contributing factor to the expected drop in the population in the Free State is the economic demise of the Free State Goldfields, causing staggering unemployment and resulting in out-migration of people to other provinces in search of job opportunities (cf section 3). For instance, the population of the Free State Goldfields dropped from 703 425 in 1996 to 657 013 in 2002 — a decline of almost 7% (Pelser & Botes 2005: 6). The drop in the white population in the Free State from nearly 400 000 in 1991 to 239 060 in 2001 (according to Census 1991 and Census 2001) is a further contributing factor to the projected overall decline in the provincial population numbers (Statistics South Africa 2003). The decline in the white population numbers means that in ten years' time, the Free State will have lost approximately 160 000 white people — an average decline of -4.3% per year. Between 1996 and 2001 the decline further increased to -5.4% per annum (Marais & Pelsler 2006). Comparatively speaking, the white population in South Africa declined by -0.6% between 1996 and 2001. This decline is mainly ascribed to emigration and the fertility rate of the white population (currently at 1.8) which has dropped below the demographic replacement level of 2.1 (cf section 1.2), and not so much to the impact of HIV/AIDS.³ One consequence of this trend is the loss in human and financial capital — vital prerequisites for much-needed social and economic development in the province, strengthening the comprehensive campaign to arrest the spread and impact of the HIV/AIDS epidemic.

1.2 Declining population growth rates and fertility rates

Fertility rates in the Free State (and in South Africa) are expected to follow the worldwide decline in this respect, resulting in declining population growth rates over the past two decades. The worldwide decline in fertility rates can be attributed to increases in literacy and educational levels, particularly among women, as well as to an increased use of contraceptives and improved reproductive health care. It is also important to bear in mind that HIV-infected women — 55% of all persons living with HIV/AIDS in sub-Saharan Africa are women — often do not outlive their reproductive period. In fact, HIV/AIDS has

3 The projected adult HIV prevalence rate in 2004 among the white population of South Africa, for instance, was 4.2%, while the equivalent rate in the case of the black population was projected at 22.1% (Bureau of Market Research 2004a).

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a threefold impact on fertility. Firstly, as more women die young before completion of their reproductive period, the trend of a downward fertility rate can be expected to continue at an even faster pace. Secondly, HIV infection usually reduces the chances of a woman to fall pregnant, because of ill health and AIDS-related diseases. A third impact relates to the fact that increased condom use as a result of public education about the prevention of HIV infection may further boost contraceptive use, and it thus (indirectly) contributes towards a declining fertility rate (National Population Unit 2000, Pelser 2004).

Table 2: Growth rates and fertility rates of the population in the Free State and South Africa (1996-2006)

	Free State	South Africa
Annual population growth rate		
1996 to 2001	1.12%	1.52%
2001 to 2006	0.72%	1.18%
Decrease 2001 to 2006	-35.7%	-22.4%
Fertility rate ⁴		
1996 to 2001	2.7	3.1
2001 to 2006	2.6	2.8
Decrease 2001 to 2006	-3.7%	-9.7%

Source: Compiled from SAIRR 2004: 2-27

Over the past few years the annual growth rate of the population in the Free State has declined from 1.12% (1996-2001) to the current 0.72% (2001-2006) — a decline of almost 36% (Table 2). In fact, the population projection for the Free State for 2010 points to a negative growth rate of -0.7% — the only province in the country already projected to experience a negative population growth rate during this decade (Bureau of Market Research 2004a). Following national and international trends, it is projected that fertility rates in the Free State — and inevitably the population growth rate as well — will continue to decline in the future.

4 The fertility rate is the average number of children born alive to a woman during her reproductive years (15 to 49).

1.3 Declining birth rates and increasing death rates

Following the trend towards declining birth rates in South Africa and elsewhere, the crude birth rate in the Free State has declined significantly during the past decade or more. Table 3 shows that the current (2001 to 2006) birth rate for the Free State stands at 23.3 per 1000 of the population, more or less the same as that for the rest of South Africa. The declining birth rate is bound to continue, and a total drop of 25% in the birth rate is projected for the Free State for the first decade of the present millennium.

In contrast to the declining trend in crude birth rates, the declining trend in crude death rates which has been experienced worldwide, has already been reversed in South Africa and in the Free State, and will continue to increase in the next five to six years as a result of HIV/AIDS (Table 3). Particularly significant in Table 3 is the high infant mortality rate for the Free State; much higher, in fact, than the comparative rates for South Africa. This most probably suggests that very high levels of mother-to-child transmission of the HI-virus still prevail in the province. It is further indication that the prevention of mother-to-child transmission, as a key strategy to arrest the spread of the virus, still has a long way to go in the Free State.

The Free State already had the highest death rate of all provinces in 2001, and projections show that the province will still occupy the first place in this category in 2011 (Haldenwang 2001: 71). The annual number of AIDS-related deaths in the Free State is projected to increase more than five-fold by 2010 (Table 3). In the same year, AIDS-related deaths are projected to account for approximately two thirds of all deaths, in both the Free State and South Africa. Nationwide, the death rate is projected to increase by 50% during 2001 to 2011, compared with an increase of 33% in the Free State during the same period (Table 3). Although the gradual ageing of particularly the white population group contributes to the increase in the death rate, the HIV/AIDS epidemic remains the primary cause of the steep increase. It is projected that by 2010, more than 55 000 people in the Free State will die annually as a result of AIDS-related causes (Table 3). This represents a more than four-fold increase in AIDS-related deaths in the province for the 10-year period 2000 to 2010. At the same time, AIDS-related deaths, expressed as a percentage of all deaths in the Free State, will have increased from

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Table 3: Selected vital statistics for the Free State and South African populations (1996-2011)

Indicators	Free State	South Africa
Crude birth rate ⁵		
1996 to 2001	26.8	26.1
2001 to 2006	23.3	23.2
2006 to 2011	20.1	20.5
Decrease 2001 to 2011	-25%	-21.5%
Crude death rate ⁶		
1996 to 2001	11.7	9.4
2001 to 2006	14.9	11.0
2006 to 2011	15.6	14.1
Increase 2001 to 2011	33.3%	50%
Infant mortality rate ⁷ (per 1000 live births)		
1996 to 2001	113.6	83.7
2001 to 2006	161.5	110.2
2006 to 2011	175.4	156.2
Increase 2001 to 2011	54.4%	86.6%
Total deaths		
2000	34 877	526 676
2010	81 477	1 185 193
Increase 2000 to 2010	133.6%	125.0%
AIDS deaths (annually)		
2000	10 067	139 009
2010	55 899	779 098
Increase 2000 to 2010	455.3%	460.5%
AIDS deaths as % of total deaths		
2000	28.9%	26.4%
2010	68.6%	65.7%
Increase 2000 to 2010	137.4%	148.9%
Accumulated AIDS deaths (to mid-year)		
2000	21 391	298 645
2010	381 994	5 237 867

Sources: Compiled from SAIRR 2004, Statistics South Africa 2003, Department of Health 2004, Haldenwang 2001

- 5 The crude birth rate is the number of births per 1000 of the population in any specific year or for a specific period.
- 6 The crude death rate is the number of deaths per 1000 of the population in any specific year or for a specific period.
- 7 The infant mortality rate is the number of deaths among babies in their first year of life, expressed per 1000 babies born alive in a specific year, or for a specific period.

29% in 2000 to almost 69% in 2010 — an increase of more than 137%. The province will have to deal with this catastrophe amidst staggering conditions of low human development, poverty, unemployment and limited financial resources.

1.4 Continued decline in life expectancy

Throughout the world, gains in life expectancy accelerated after 1950. Improvements in health and socio-economic conditions contributed significantly to gains in life expectancy, mostly because of better infant and child survival, and a drop in maternal mortality. In Africa, however, progress has been much slower, with an average life expectancy of only 49 years in sub-Saharan Africa in 2004 (Population Reference Bureau 2004).

In line with international trends — and before the AIDS epidemic started to take effect — South Africa too enjoyed a drop in mortality, with a consequent rise in life expectancy. AIDS has reversed this process, to such an extent that the measurable demographic impact of the epidemic will in all likelihood last for the next century (National Population Unit 2000). The increase in life expectancy in South Africa since the middle of the twentieth century, has been reversed since the mid 1990s, and this decline will continue in the next decade or two as a result of increased mortality due to HIV/AIDS, as depicted in Table 3. Consequently, life expectancy at birth for the Free State population is projected to decrease from 56 years in 2000 to only 39 years in 2010 (Table 4), albeit with huge disparities between the different population groups. After 2016, as the HIV/AIDS epidemic peaks in respect of mortality, life expectancy for the Free State population is expected to slowly increase to 55 years by 2031 (Haldenwang 2001).⁸

Emanating from the demographic trends and changes outlined above, it becomes clear that HIV/AIDS will (continue to) impact significantly on the provincial and national demographic and human development landscape in years to come. Subsequently, the wider contours of HIV/AIDS in South Africa, and specifically in the Free State, are briefly mapped.

8 Between 2007 and 2010, adult HIV prevalence rates in South Africa are expected to reach their zenith among all the population groups. This will be followed by declining prevalence rates as the number of AIDS-related deaths exceeds the number of new infections (Bureau of Market Research 2004a).

Table 4: Life expectancy for the Free State and South African populations (2000-2010)

Life expectancy at birth	Free State	South Africa
2000	56 years	56 years
2003	49 years	50 years
2010	39 years	41 years
Decrease 2000 to 2010	-30.4%	-26.8%

Source: Compiled from SAIRR 2004: 18

2. A status profile of HIV and AIDS in South Africa and the Free State

HIV/AIDS has become a major cause of disease burden in South Africa, and arguably the single most important phenomenon which will shape future demographic, health and development trends in the country (Pelser *et al* 2004: 276). As many as 6.5 million South Africans had acquired HIV infection by the end of 2002 (cf Table 6), and by 2011 a cumulative total of more than 5 million will have died as a result of AIDS-related diseases — a figure which could increase to 9-10 million by 2021 (Bureau of Market Research 2004a, Pelser 2005).

The epidemic has a grave social and economic impact on all the sectors of South African society, although the health, education and business sectors are amongst the hardest hit. Still rapidly growing in most provinces, the epidemic is reversing development gains, obliterating millions of lives, widening the gap between rich and poor, and undermining social and economic security. The economic consequences of HIV/AIDS will lead to substantial declines in productivity, skills, and expertise. Table 5 reflects the current and projected impact of the epidemic in South Africa for a range of selected sectors.

Table 5: Current and projected impact of HIV and AIDS in South Africa for selected sectors

Impact/Sector	High projection	Low projection
HIV/AIDS infections in various sectors: 2002	33.6% (mining)	9.9% (heavy manufacturing)
Decline in the labour force due to AIDS: 2015	23.5%	21.0%
Shrinkage of real GDP due to AIDS: 2015	9.6%	2.8%
Effect on producer price increases: 2002-2015	+3.3% points/year	+1.9% points/year
Workforce HIV/AIDS infection rate: 2005	30%	25%
Infected teachers: 2001	20%	12%
Number of AIDS orphans: 2010	7 000 000	1 950 000

Source: Compiled from SAIRR 2004: 294

Table 6 shows the differences in HIV infection levels for the Free State and South Africa for the period 2000 to 2010. In general, the HIV prevalence rates show a consistently rising trend over time. The trend further suggests that the pace at which the epidemic was growing in most provinces during the 1990s (not shown), has slowed down and that the prevalence of HIV may be levelling off — at least in some provinces. However, the stabilisation in figures — particularly in provinces such as Mpumalanga and the Free State — does not necessarily point to a decline in infections, but rather to a decline in fertility rates as women became ill (cf SAIRR 2001). This means that women who have been infected for some time are less likely to fall pregnant — an observation which, for instance, is confirmed by the rapid decline in the birth rate for the Free State (and South Africa) over the past few years (cf Table 3). Hence fewer HIV-positive women were attending antenatal clinics, and were therefore not reflected in the statistics. The prevalence rate since the 1990s reflects a combination of a reduction in the rate of increase of new infections, and of the increasing number of AIDS-related deaths (cf Table 3).

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Table 6: HIV and AIDS infection levels: Free State and South Africa (2000-2010)

	Free State	South Africa
HIV prevalence rate (antenatal)		
1992	2.9%	2.2%
1996	17.5%	14.2%
2000	27.9%	24.5%
2004	29.5%	29.5%
Increase 1996 to 2004	917%	1 241%
HIV prevalence rate (total population)		
2000	8.6%	11.7%
2007	18.5%	16.1%
2010	15.6%	15.3%
Increase 2000 to 2010	81.4%	30.8%
Total HIV infections		
2000	398 627	5 263 841
2010	491 547	7 252 801
Increase 2000 to 2010	23.3%	37.8%
Population segments living with HIV/AIDS (mid-2002)		
Adults (18-64)	467 542 (16.3%) ¹⁰	6 141 579 (13.6%)
Child-bearing age women (15-49)	227 703 (7.9%)	3 199 493 (7.1%)
Children (0-14)	12 776 (0.4%)	205 134 (0.5%)
Youth (15-24)	84 772 9 (2.9%)	1 210 748 (2.7%)
Total population with HIV/AIDS ⁹	487 772 (16.7%)	6 461 370 (14.2%)
Estimated new AIDS cases		
2003	29 310	388 701
2005	40 128	530 658
2007	46 960	624 720
Increase 2003 to 2007	60.2%	60.7%

Sources: Compiled from Department of Health 2003, FSDoH 2005, SAIRR 2004

- 9 Figures will not add up vertically, since there is an overlap in some categories. For instance, certain HIV-positive women who are of child-bearing age (15-49) will also be captured in the category "Adults" (18-64).
- 10 Percentages in parentheses are the proportions of the total population, and not the infected proportion of the specific age segment.

As elsewhere in South Africa, HIV prevalence rates in the Free State too have increased dramatically since the early 1990s. For the past few years, the Free State has consistently ranked among the top three to four provinces with the highest HIV prevalence rates in the country. By mid 2002, almost half a million people in the Free State — that is almost 17% of the total population in the province¹¹ — were estimated to be living with HIV/AIDS. The HIV prevalence rate for the total population in the Free State is projected at 15.6% for the year 2010, a percentage which translates into more than 490 000 infected people (Table 6). The next five to ten years will be critical for the Free State and the rest of the country as far as HIV and AIDS is concerned: The HIV prevalence rate for the total Free State population will most likely peak by 2007, the total number of HIV infections in the province will increase by more than 20% over the next few years, while the number of new AIDS cases will increase by more than 60% by 2007 (Table 6).

Several possible reasons can be listed for the high incidence of HIV/AIDS in the Free State, most of which either directly or indirectly relate to the prevailing socio-economic conditions in the province. The poor educational status of women in particular, gender inequality, labour migration, high levels of unemployment and poverty, as well as the down-scaling mining industry leading to further economic deprivation, all interlock to create fertile breeding ground for the spreading of the virus. (A closer analysis of these and other factors currently fuelling the spreading of the epidemic in the Free State, is offered by another article in this edition). A few of the most prominent socio-economic trends in the Free State, which inform the broader context of HIV/AIDS in the province and serve as a backdrop for the rest of the discussion in this paragraph, are outlined below (Gaffney's Group 2004, Pelser & Botes 2005):

- The average economic growth in the Free State of 2% per year (1996-2002) is lower than that for the country as a whole (2.8%), and has been severely strained in recent years by the down-scaling of the mining industry. The average economic growth rate for the Free State Goldfields region, for example, was -4.3% for the period 1996-2002.

11 Comparatively, of all the provinces only KwaZulu-Natal (with 18.4%) had a larger proportion of its population infected with HIV in 2002 (SAIRR 2004: 296).

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- Almost 52% of the Free State's population — totalling more than 1.5 million people — were living in poverty¹² in 2003. Almost six out of every ten black persons in the Free State are living in poverty, compared with less than one in every ten whites.
- Approximately four out of every ten persons amongst the economically active population in the Free State were officially unemployed in 2003.
- The average annual household income for the Free State in 2003 (R46 000) was significantly lower than the comparative national figure of R70 000.
- The per capita income for the province stands at R20 401 per year (2003), compared with the national figure of R26 792 for the same year.

The HIV prevalence rate for the Free State shows significant variations between the five district municipalities in the province, with the mining-dominated Lejweleputswa district municipality (Lejweleputswa) registering an antenatal prevalence rate of more than 40% in recent years (Table 7). Since 1999, the annual HIV prevalence rate in Lejweleputswa — the district municipality which is home to the Free State Goldfields — has been consistently higher than the equivalent rates for the Free State and South Africa over the same period. Table 7 further shows that, with the exception of the period 2002-2003, it has also been the district with the highest HIV prevalence rate in the Free State. A nexus of socio-economic and demographic reasons underpins this trend. As mentioned earlier, mobility patterns and economic activities in Lejweleputswa revolve to a large extent around the gold mining industry in the region. Job losses in the mining industry alone in Lejweleputswa amounted to almost 70% during the period 1996-2001. During the same period, the ranks of the unemployed in the region swelled by almost 45%. The net result of the above impacts was a negative economic growth of -4.3% for the region during 1996 to 2002 — a dire economic situation which manifested itself in almost 53% of all people in the Free State Goldfields living in poverty (Municipal Demarcation Board 2004, SAIRR 2004).

12 The proportion of people living in poverty is the percentage of people living in households with an income less than the poverty income, which for 2003 ranged from R678 per month for a single person to R2 899 for a household of eight or more (SAIRR 2004: 182).

Table 7: HIV prevalence rates in the Free State district municipalities (1999-2003)

District	HIV prevalence rate (antenatal)					
	1999	2000	2001	2002	2003	2004
Xhariep district municipality DC16 (estimated population 2002: 132 070)	*	*	*	*	25.7%	21.3%
Motheo district municipality DC 17 (estimated population 2002: 736 292)	26.6%	29.6%	28.5%	31.0%	36.3%	27.6%
Lejweleputswa district municipality DC18 (estimated population 2002: 657 013)	31.9%	30.1%	41.1%	29.8%	33.3%	33.0%
Thabo Mofutsanyana district municipality DC19 (estimated population 2002: 738 328)	27.9%	27.1%	27.8%	26.0%	28.0%	27.1%
Fezile Dabi district municipality DC20 (estimated population 2002: 487 971)	27.6%	21.1%	29.4%	28.1%	23.8%	32.2%
Free State	27.9%	27.9%	30.1%	28.8%	30.1%	29.5%

Sources: FSDoH 2004, Municipal Demarcation Board 2004

Deteriorating economic conditions in Lejweleputswa — triggered mainly by the downscaling of the mining industry — caused large proportions of poor people to find themselves in conditions which inevitably fostered the spread of HIV. Under these conditions, high-risk sexual behaviour has been proved in previous studies not only to be fostered, but also to be propelled by increased out-migration as many unemployed men go job-hunting elsewhere (cf Marais & Pelsler 2006, Pelsler *et al* 2004). The high HIV prevalence rate in the Motheo district municipality — a recognised labour sending area for Lejweleputswa

— further testifies to the link between migrant labour and the spread of HIV. Motheo, and particularly Mangaung with the apartheid-established Botshabelo forming part of the local municipality, has for many years been a labour sending area for the Goldfields region. Krige, already in the early 1990s, pointed at Botshabelo as a labour export zone in the form of providing monthly commuters to the Free State Goldfields and other core areas (Krige 1991: 112). At the beginning of the 1990s, more than 50% of the labour force of Botshabelo were working outside the area, migrating or commuting between their homes and work place. Taking into consideration the dynamics of poverty, unemployment, migrant labour and mining activities in Lejweleputswa and Motheo, it is therefore not surprising that these two district municipalities have also been home to the highest HIV prevalence rates in the Free State for most of the period 1999-2004. It is obvious that an integrated development strategy — one which is mainstreamed with HIV/AIDS and ART campaigns — is pivotal as part of a comprehensive response to address the prevalence and impact of the epidemic in the Free State.

3. Some demographical and developmental implications of HIV and AIDS for the Free State: bringing ART into the picture

There is no doubt that the increasing AIDS-related morbidity (disease) and mortality (deaths), and a consequently decreased life expectancy will have a negative effect on provincial development objectives. Not only does HIV/AIDS reverse many years of gains in health, socio-economic and demographic indicators, but it seriously affects the overall development potential of the province and its people. In economic terms, the expected declines in life expectancy and productivity will lead, among other things, to a situation where household incomes are further eroded and poverty levels increase. The Free State already being one of the poorest provinces, this state of affairs will no doubt place an increased economic burden on the non-infected sector of the Free State population in years to come. Those infected by HIV and affected by AIDS will increasingly rely on provincial health and other support services, thereby greatly shifting the expenditure burden onto (the provincial) government (Bureau of Market Research 2004b). Costing reports indicate that nationwide a total of 1.7 million lives could be saved (of the

projected 5.2 million accumulated AIDS deaths by 2010 — cf Table 3), if by 2010 there were a universal roll-out of antiretroviral medicines to those needing them (SAIRR 2004: 324). However, nationally the total cost of such a universal roll-out would amount to between R16.9 billion and R21.4 billion by 2010 (SAIRR 2004: 324). The costs of ART per AIDS patient run into several thousands of rands per year, and the human and physical infrastructure needed to sustain treatment is very expensive. Other countries that have undertaken similar treatment programmes have typically had to target fewer people than the numbers challenging South Africa (NDoH 2003: 22).

The objective of the 2003 *Operational Plan for comprehensive HIV and AIDS care, management and treatment for South Africa (Comprehensive Plan)* is to ensure that by 2009 all the estimated 1.4 million South Africans requiring treatment for AIDS will be able to access comprehensive care and treatment, including ART (NDoH 2003: 26, 53). Currently (early 2005) it is estimated that approximately 31 000 people are in need of ART in the Free State. However, by March 2005 only 1 174 patients had received treatment from the provincial Department of Health — thus already causing a huge backlog (Doherty *et al* 2005). By 2007/08, an estimated number of 66 555 people in the Free State will be on ART (NDoH 2003: 249). In addition, based on the comparative figure for 2000, it is projected that by the year 2010 the ranks of those infected with HIV in the province would have increased by almost 100 000 (Table 6). Accordingly, the number of new AIDS cases in the Free State who will be requiring ART in the next decade or more, will increase proportionately (cf Table 6). The scale of the epidemic, the extent of the backlog of people not yet receiving ART and the shortage of resources are all set to increase the pressure on the already strained facilities, resources and implementation staff of the Free State. In the case of the said province, the estimated budget required for the employment of additional staff to implement the *Comprehensive Plan*, will amount to R62.5 million in 2007/08. The comparative national figure for the same financial year is estimated to exceed R1 billion (NDoH 2003: 242). The total management budget for the *Comprehensive Plan* in the Free State will amount to more than R8 million per year from 2005/06 onwards (NDoH 2003: 257).

Despite many concerns among some interest groups about the side-effects of antiretroviral drugs, ART is nonetheless internationally recognised for its positive impact on the life expectancy of HIV-infected people. If the South African government manages to meet the ART access target by 2009 as set in the *Comprehensive Plan*, this may prevent the national life expectancy from dropping to below 45 years (cf Table 4). The introduction of ART will increase the life expectancy of HIV-infected adults by up to 10-15 years, thereby shifting the concentration of deaths from the 30-40 age group to the 40-50 age group. The effect will also be that the number of AIDS-related deaths in the country may not increase to almost 800 000 per year by 2010 (cf Table 3), but will probably decline in the next few years, before gradually increasing again to 500 000 per year by 2010 (Department of Social Development 2004: 43).

Various other development issues and challenges are already crystallising out of the interaction between the rising mortality rate and declining life expectancy. Cause for particular concern is the fact that ever-increasing proportions of the provincial budget may have to be allocated to health and welfare services. This will of necessity be to the detriment of other priorities like education, infrastructure, housing and job-creation projects — all of which are burning development priorities in the Free State. For example, earlier projections (disregarding ART) estimated the number of orphans in South Africa to stand at 2 million by 2014, mainly as a result of the effects of HIV/AIDS. Other projections suggest that, nationally, 1.8 million more children would be orphaned by 2010 if ART were not provided (SAIRR 2004: 324). The successful implementation of ART could halve the projected number of orphans. At the same time, however, the present number of 600 000 orphans in South Africa will continue to increase by some two-thirds in the following decade (Department of Social Development 2004), thus still leaving the country with a range of socio-economic challenges in this regard. Applied to the Free State, this inevitably points to an increase in the numbers of the poor and eventually also in the numbers of dependants on government grants. Although the *Comprehensive Plan* in respect of the provision of ART represents an important step towards relieving the impact of the epidemic, the authorities will have to do much more to address the fundamental factors fuelling the spread of

the disease. Nationally, but particularly in the Free State, this means, among other things, that the social and economic breeding grounds of the virus — poverty, ignorance, gender inequality, high-risk sexual behaviour, sexual violence, etc — will flourish until more determined and focused policy programmes are put in place to address these issues.

It would appear that current economic realities in the Free State leave policy-makers with little room for rendering large-scale and sustainable financial and health support to the infected population. In fact, a key challenge confronting policy-makers in the Free State will no doubt be that of balancing the growing needs and demands of the swelling infected and affected sector with the economic and development needs and priorities of the province at large. This will have to be done amidst a limited and pressurised resource base.¹³ At the same time, speeding up the implementation of ART is pivotal as part of a comprehensive policy programme to eradicate poverty and arrest the spread and impact of the epidemic.

4. The way forward: the need for a development-oriented intervention

The nature and extent of current and projected demographic changes, as well as the implications of these changes, clearly confirm that HIV/AIDS is not a short-term problem; in fact, the legacy of AIDS will affect the Free State and South Africa many decades from now. AIDS depletes resources, weakens infrastructure and obliterates decades of progress in human and economic development. As a result, the epidemic deepens the traps of poverty, underdevelopment, and inequality. How the epidemic in the country, and more specifically in the Free State, could evolve over the next 20 years will be based on policy decisions taken today by provincial and national leadership. Decisions taken today — such as the public provision of ART — and the will and dedication which

13 Housing approximately 6.3% of the national population, the Free State contributes only 4.8% to the Gross Domestic Product (GDP) of South Africa (2003). Economic growth in the province has been particularly strained in recent years by the down-scaling of the mining industry. The contribution of the mining industry to the provincial Gross Geographical Product (GGP), for instance, dropped from 13.6% in 1998 to 8.5% in 2003 (Pelser & Botes 2005).

accompany the implementation of such decisions will shape the social and economic future of the province and of the country. However, huge obstacles are still thwarting the campaign against HIV/AIDS, particularly in the Free State, including a combination of poorly resourced and overstressed systems, and escalating costs.

International evaluations have shown that a core prerequisite for successful HIV/AIDS campaigns and for an effective response is the explicit and strong commitment of leaders at all levels of society, and that such campaigns and responses are built on a community and multi-sectoral response which mainstreams HIV/AIDS. Many critics, however, feel that the AIDS campaign — despite isolated successes — is insufficiently mainstreamed, does not prioritise certain key interventions, and suffers from insufficient leadership in many sectors of society, including that of national government. One such key intervention requires that HIV/AIDS be viewed in its broader development context. The increase in AIDS-related deaths in the Free State and the rest of South Africa provides just one of numerous illustrations of the relationship between health and poverty — a relationship which is increasingly recognised and understood. Since this relationship is much more significant in societies with glaring inequalities, it calls for a dedicated strategy of poverty alleviation as part of the overarching health policy of the province. Such a strategy needs to complement and feed the strengthening of HIV prevention programmes — the latter being one of the key challenges for the implementation of the *Comprehensive Plan* (NDoH 2003:49). This requires a comprehensive and integrated strategy to address the overarching issues which are not only fuelling the spread of the epidemic, but are also adversely affected by its impact. In doing so, sensitivity for gender issues and specific attention to the most vulnerable groups — women, children and the youth — should be maintained at all times. All supporting programmes, however, require sustained allocation of financial and human resources for them to be effective in practice, while strong and innovative alliances between the authorities, the private sector and other sectors are crucially important for the mobilisation of the necessary resources. To date, however, at both the national and the provincial levels, there have been too many signs of poor inter-departmental co-operation, the virtual absence of a political will to recognise HIV/AIDS as a national crisis, and a lack of expertise — all factors which hamper the streamlined implementation of a successful

AIDS campaign. From a policy perspective, the Free State, with its limited resources and growing demands, can barely afford the luxury of fragmented development and planning actions. The available expertise and resources will simply have to be more strongly and more effectively streamlined and targeted so that the province can position itself in respect of the demographic changes and socio-economic impacts which are already sporadically making their presence felt in various fields.

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