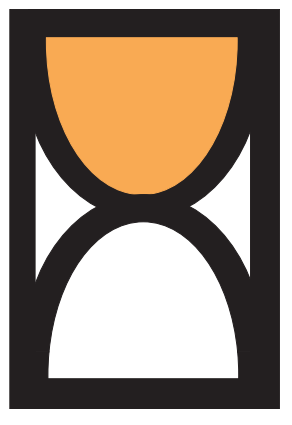


Is the HIV/AIDS epidemic accelerating or slowing down population ageing in South Africa?



Institute for Futures Research

Bärbel Haldenwang
Institute for Futures Research, University of Stellenbosch, South Africa



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'We live in an era of unprecedented, rapid and inexorable global ageing. Never before have so many people lived for so long. Growing old, once the sole prerogative of the 'developed' countries, is now a shared benefit of development worldwide. Ageing has become one of the defining global issues that will shape the future of the world's societies.' (HelpAge International, 2002:2)

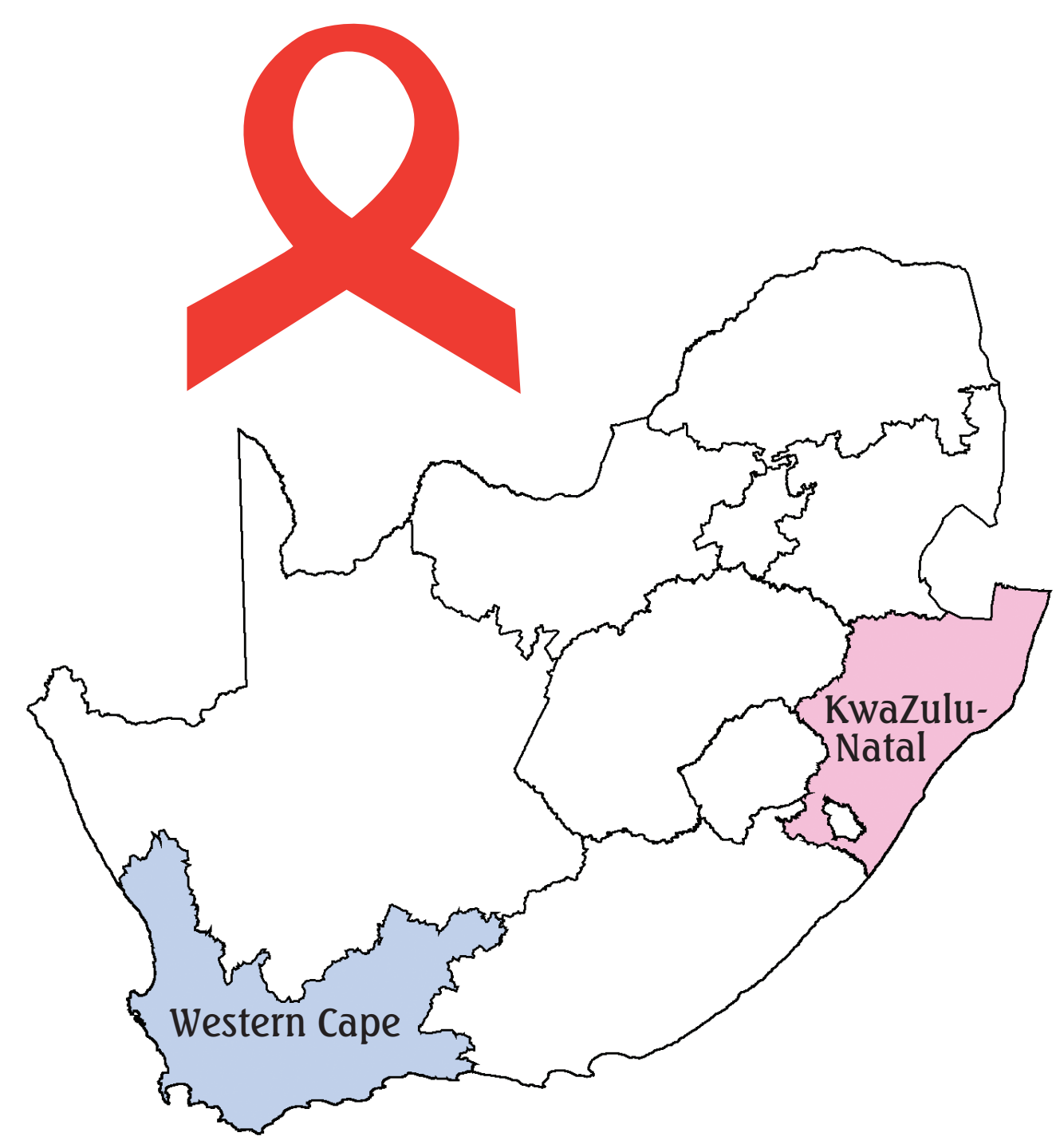
Introduction

Population ageing is an unprecedented, global demographic phenomenon with profound consequences and implications for all facets of human life and society. It is the inevitable result of declining fertility and increasing life expectancy, which in turn, is a direct consequence of declining mortality - the demographic transition. South Africa is no exception to this world-wide population ageing trend. Fertility rates have been declining and life expectancy increasing since the 1970s, although at different rates and levels for the four population groups in the country. Recent population projections indicate that population ageing in South Africa can be expected to continue in future resulting in increasing proportions and numbers of elderly people and declining numbers and proportions of children.

South Africa is also in the midst of one of the severest HIV/AIDS epidemics in the world. With an estimated 5.3 million HIV-infected people (or one in every nine South Africans), the country currently has the largest HIV-infected population in the world. The epidemic is already altering

the demographic future of South Africa by increasing mortality (including infant and child mortality), lowering life expectancy at birth, lowering fertility rates, changing the age and sex structure of the population, lowering population growth rates and leaving hundreds of thousands of orphans in its wake. Will the HIV/AIDS epidemic have an impact on the population ageing process in South Africa during the next three decades?

The aim of this presentation is to answer the latter question and to determine what the impact of the HIV/AIDS epidemic will be on the population ageing process among the four population groups in South Africa - four population groups that are not only at different stages of the demographic transition and displaying different stages of the population ageing process, but four groups that also display significantly different HIV-prevalence rates. The highest HIV-prevalence rates are currently found among Africans and coloureds, with the lowest rates among Asians and whites.



Methods

In order to determine the impact of the HIV/AIDS epidemic on population ageing in South Africa, population projections of two of South Africa's nine provinces (ie, KwaZulu-Natal and the Western Cape) are produced by population group for the period 2001-2036. KwaZulu-Natal is at the epicentre of the HIV/AIDS epidemic in South Africa with the highest HIV-prevalence rate (37.5%) among antenatal clinic attendees, while the Western Cape is the province with the lowest HIV-prevalence rate (13.1%) in the country.

Since the four population groups in South Africa have significantly different fertility, mortality, migration and HIV-prevalence rates, it is important that population projections are produced by population group, based on different sets of assumptions regarding future fertility, mortality and migration trends. The projections are produced by means of the DemProj model (No AIDS projections) and the AIDS Impact Model or AIM (With AIDS projections) of the Spectrum Policy Modelling System of the Futures Group International.

- The No AIDS and With AIDS projections are used to calculate changes in the
 - age structure of the four population groups;
 - absolute numbers and ratios of older people (65+ years) and children (0-14 years);
 - annual growth rates of the elderly populations (65+ years);
 - median ages;
 - age dependency ratios (number of children (0-14 years) plus number of elderly people (65+ years) per 100 of people aged 15-64 years);
 - old-age dependency ratios (number of people aged 65+ per 100 people aged 15-64 years);
 - ageing index (number of people aged 60+ per 100 people under age 15); and
 - potential support ratios (number of people aged 15-64 years per every person aged 65+ years).

Results

The current (2001) demographic characteristics and projected population ageing characteristics of the populations of the Western Cape and KwaZulu-Natal differ significantly:

Western Cape: Current demographic characteristics

- Home to only 4.5 million people (or 10% of the total South African population)
- Majority of population are coloureds (53.9%), followed by Africans (26.7%), whites (18.4%) and Asians (1%); the province has the lowest proportion of Africans and the highest proportion of coloureds and whites
- Relatively old population with 27.3% younger than 15 years and 5.2% aged 65+
- Age dependency ratio is 48.2; the old-age dependency ratio is 7.7; the median age is 26.7
- The total fertility rate is 2.3 and life expectancy at birth approximately 66.6 years
- The lowest HIV-prevalence rate among women attending antenatal clinics (13.1%)
- The population is highly urbanised with an urbanisation level of 90%

Western Cape: Projected population ageing characteristics

Population group	Year	Aged 65+		Aged 0-14		Annual growth rate of people aged 65+ ¹⁾		Age dependency ratio		Old-age dependency ratio		Ageing index		Potential support ratio		Median age	
		No AIDS	With AIDS	No AIDS	With AIDS	No AIDS	With AIDS	No AIDS	With AIDS	No AIDS	With AIDS	No AIDS	With AIDS	No AIDS	With AIDS	No AIDS	With AIDS
Africans	2006	32 210	31 628	443 705	434 844	6.87	6.23	46.3	45.8	3.1	3.1	12.1	12.1	31.9	32.2	26.35	26.35
	2021	94 457	86 856	550 377	503 312	7.62	6.99	40.5	42.1	5.9	6.2	29.7	29.2	16.9	16.1	30.72	29.08
	2036	263 879	214 768	573 725	504 651	6.41	5.31	42.4	45.4	13.4	13.9	76.3	67.2	7.5	7.4	34.23	32.04
Asians	2006	2 462	2 462	11 352	11 332	3.90	3.87	40.9	40.8	7.3	7.3	33.6	33.6	13.7	13.7	29.32	29.32
	2021	5 085	5 039	10 713	10 482	4.90	4.70	41.9	42.5	13.5	13.8	74.8	75.2	7.4	7.2	35.63	35.33
	2036	9 689	8 948	10 012	9 618	2.50	2.27	49.7	50.6	23.1	23.5	121.0	119.8	4.3	4.2	40.14	39.52
Coloureds	2006	115 651	115 551	725 737	721 823	3.09	3.02	47.9	47.8	6.6	6.6	24.7	24.8	15.2	15.2	28.51	28.51
	2021	209 329	203 987	722 898	688 422	5.17	4.70	44.4	45.4	10.0	10.4	47.4	47.7	10.0	9.6	31.47	30.76
	2036	394 761	361 880	653 359	613 741	3.20	2.82	46.7	47.3	17.6	17.6	85.1	82.0	5.7	5.7	35.82	34.92
Whites	2006	116 839	116 833	135 790	135 584	0.81	0.81	44.6	44.6	20.6	20.6	118.5	118.7	4.8	4.8	38.44	38.45
	2021	136 122	135 487	120 907	119 142	1.84	1.72	50.0	50.6	26.5	26.9	158.3	159.2	3.8	3.7	42.37	42.32
	2036	164 633	161 115	107 978	106 417	0.86	0.75	61.5	61.8	37.2	37.2	195.7	193.8	2.7	2.7	45.98	45.72
Total	2006	287 162	266 472	1 316 684	1 303 583	2.80	2.50	46.8	46.6	7.9	7.9	30.2	30.4	12.7	12.7	28.01	28.01
	2021	444 993	431 369	1 404 895	1 321 358	4.75	4.29	43.6	44.9	10.5	11.0	50.2	50.9	9.5	9.1	32.52	31.63
	2036	831 962	746 111	1 345 074	1 234 427	3.63	3.01	46.3	48.1	17.7	18.1	90.5	85.9	5.7	5.5	35.99	34.56

Note: 1) Annual growth rates are for the periods 2006-2011, 2021-2026 and 2031-2036.

KwaZulu-Natal: Current demographic characteristics

- Most populous province and home to 9.4 million people (or 21% of the total South African population)
- Majority of population are Africans (84.9%), followed by Asians (8.5%), whites (5.1%) and coloureds (1.5%)
- Relatively young population with 34.7% younger than 15 years and 4.6% aged 65+
- Age dependency ratio is 64.8; the old-age dependency ratio is 7.6; the median age is 21.7
- The total fertility rate is 2.9 and life expectancy at birth approximately 57 years
- The highest HIV-prevalence rate among women attending antenatal clinics (37.5%)
- The population is primarily rural with an urbanisation level of 46%

KwaZulu-Natal: Projected population ageing characteristics

Population group	Year	Aged 65+		Aged 0-14		Annual growth rate of people aged 65+ ¹⁾		Age dependency ratio		Old-age dependency ratio		Ageing index		Potential support ratio		Median age	
		No AIDS	With AIDS	No AIDS	With AIDS	No AIDS	With AIDS	No AIDS	With AIDS	No AIDS	With AIDS	No AIDS	With AIDS	No AIDS	With AIDS	No AIDS	With AIDS
Africans	2006	370 722	367 810	2 920 880	2 828 014	1.96	1.57	59.3	58.5	4.2	4.2	18.1	18.5	15.0	14.9	22.42	22.44
	2021	605 853	539 835	2 990 849	2 435 078	4.65	3.25	46.8	50.9	5.4	6.1	31.5	32.8	12.7	10.8	28.61	26.41
	2036	1 150 771	794 231	2 706 907	2 032 004	3.78	1.68	41.8	48.6	8.8	9.2	64.7	53.9	8.0	7.3	34.22	29.86
Asians	2006	52 537	52 530	178 789	178 445	5.65	5.63	38.1	38.0	6.3	6.3	48.4	48.5	11.6	11.6	31.21	31.21
	2021	106 961	106 139	182 498	178 524	3.13	2.97	45.6	46.3	11.6	11.8	86.1	86.8	5.9	5.8	36.86	36.65
	2036	156 568	150 828	164 272	157 792	1.91	1.67	51.0	52.0	16.5	16.7	131.6	130.6	4.0	3.9	41.26	40.69
Coloureds	2006	7 471	7 465	41 166	40 932	2.29	2.23	47.4	47.3	7.3	7.3	27.2	27.3	13.7	13.7	26.57	26.89
	2021	12 439	12 128	42 559	40 528	4.71	4.25	45.3	46.3	10.2	10.7	47.0	47.3	9.8	9.4	31.70	31.00
	2036	22 091	20 271	37 782	35 492	3.00	2.60	45.4	46.1	16.8	16.8	64.7	61.5	6.0	6.0	35.63	34.70
Whites	2006	69 574	69 572	77 212	77 104	1.08	1.07	44.9	44.9	21.3	21.3	125.5	125.7	4.7	4.7	39.42	39.42
	2021	83 239	82 864	69 549	68 536	1.63	1.52	52.4	53.0	28.6	29.0	166.3	167.4	3.5	3.4	42.19	42.14
	2036	95 039	93 090	63 216	62 320	0.30	0.19	61.8	62.1	37.1	37.2	190.5	188.8	2.7	2.7	45.65	45.41
Total	2006	500 304	497 377	3 218 047	3 124 495	2.28	1.97	56.4	55.7	7.6	7.7	22.5	23.0	13.2	13.1	23.52	23.54
	2021	808 492	740 966	3 285 453	2 722 666	4.16	3.04	46.9	50.5	9.3	10.8	37.6	40.0	10.8	9.3	29.57	27.64
	2036	1 424 469	1 058 420	2 972 177	2 287 608	3.29	1.56	42.9	49.4	13.9	15.6	71.3	63.3	7.2	6.4	34.83	31.12

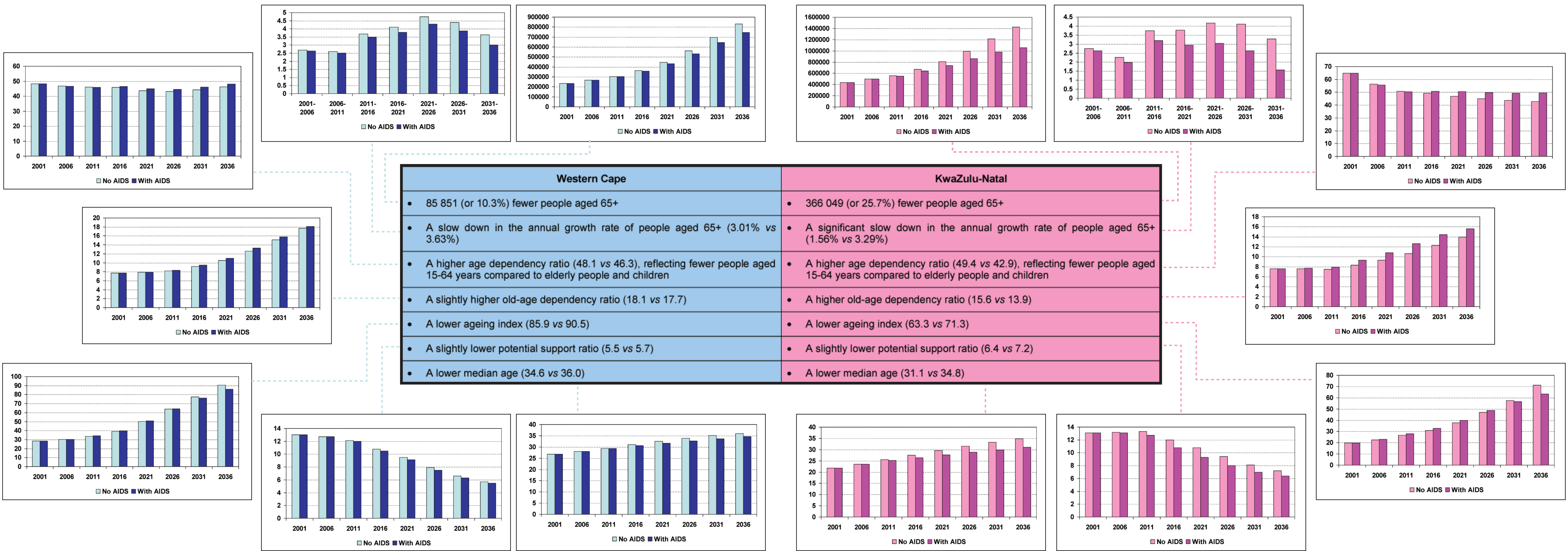
Note: 1) Annual growth rates are for the periods 2006-2011, 2021-2026 and 2031-2036.

Discussion

On the whole, the HIV/AIDS epidemic is slowing down the population ageing process in South Africa. This is more evident in KwaZulu-Natal, the province with the highest HIV-prevalence rate, than in the Western Cape, the province with the lowest HIV-prevalence rate. Furthermore, the

impact of the HIV/AIDS epidemic on population ageing is more significant among the African population, the group with the highest HIV-prevalence rate, but the youngest in demographic terms, than among the other three population groups.

The projected impact of the HIV/AIDS epidemic on population ageing in South Africa (particularly in the Western Cape and KwaZulu-Natal) by 2036, entails the following:



Conclusion

Currently, the four population groups in South Africa are at different stages of the population ageing process, with Africans regarded as the youngest population group in demographic terms, and whites as the oldest. In spite of the severe HIV/AIDS epidemic that is reaping havoc in South Africa, population ageing is projected to continue steadily among all population groups, although at a slower pace than in the absence of AIDS.

The number of elderly people, especially African elderly people is expected to increase rapidly during the next three decades. However, as a direct result of AIDS, which specifically targets the sexually-active in a population, the elderly population of KwaZulu-Natal, the province with the highest HIV-prevalence rate, is projected to be 26% smaller by 2036, compared to a 10% smaller elderly population in the Western Cape, the province with the lowest HIV-prevalence rate. The AIDS epidemic is also expected to cause higher age and old-age dependency ratios in both provinces, reflecting smaller numbers of people aged 15-64 years, the potentially economic active

part of a population. In addition, the AIDS epidemic will result in lower ageing indices, potential support ratios and median ages by 2036 than in the absence of AIDS. Since HIV-prevalence rates are considerably higher among Africans than among the other three population groups, the impact of the epidemic on population ageing is more significant among Africans than among Asians, coloureds and whites.

In spite of the impact of the AIDS epidemic on population ageing, KwaZulu-Natal and the Western Cape are projected to have elderly populations of 1.1 million (or 10.5% of the total population) and 0.7 million (or 12.2% of the total population), respectively by 2036, compared to 0.4 million (or 4.6% of the total population) and 0.2 million (or 5.2% of the total population) in 2001. On the one hand, this relatively rapid increase in the number and proportion of elderly people in KwaZulu-Natal and the Western Cape, as well as in the rest of the country, will have a far-reaching impact not only on the economy, government expenditure and the financing of retirement pensions,

but also on health care, social services, housing and the family. On the other hand, the growing elderly population of South Africa is exposed to the devastating impact of the HIV/AIDS epidemic, eg, the double burden of caring for their children dying of AIDS-related illnesses and their orphaned grandchildren; the loss of remittances; declining income and financial resources; increased food insecurity; changing living arrangements, etc. Yet, HIV-related policies and services continue to ignore this older age group.

'The need to bring ageing and older people's demands into the Millennium Development Goals, the Poverty Reduction Strategy Processes in Heavily Indebted Poor Countries, into the activities of the Global Fund for HIV/AIDS, Malaria and Tuberculosis and into international development initiatives cannot be over-stressed, if we are to meet poverty reduction targets and human rights commitments and create a society for all ages.' (HelpAge International, 2002:78)