

## Content

### Abstract

1. Background
2. Africa: demographic trends
3. Country-specific demographic trends
4. The drivers of population aging in Africa
5. Why we should be concerned about an aging population in Africa
6. Conclusions and policy implications

### Abstract

*This brief describes trends in population aging in Africa relative to those in economically advanced countries. It highlights the key drivers of the phenomenon, both globally and in the African context more specifically. The brief also analyzes country-specific trends and demonstrates the reasons why the proportion of population 65 years and older is growing in many countries across the continent. Aging is highly correlated with long-term physical and mental disability, and a number of long term chronic conditions and will likely increase personal care requirements. Furthermore, most socio-economic indicators for the elderly in Africa are low, and in many countries poverty rates among the elderly are significantly higher than the national average. In countries with a high prevalence of HIV/AIDS, many households are increasingly headed by the elderly*

*leading to even greater vulnerability to poverty. Aging, however, is not visible in most policy dialogue, and so tends to be deprioritized in terms of budgetary allocations, thereby increasing the vulnerability and marginalization of older Africans. Unlike children, youth, and women who are given a high profile in the MDGs agenda, for example the elderly tend not to be targeted as a specific group in terms of poverty reduction policies. However, correctly managed and with the appropriate level of healthcare provision and social protection programs population aging can present an unprecedented opportunity for older citizens to enjoy a full and active life, far beyond the expectations of previous generations. Policymakers will need to take full account of the phenomenon, to safe-guard family and community resources and to put in place robust public pension, insurance and healthcare systems.*

Mthuli Ncube  
[m.ncube@afdb.org](mailto:m.ncube@afdb.org)  
 +216 7110 2062

Charles Leyeka Lufumpa  
[c.lufumpa@afdb.org](mailto:c.lufumpa@afdb.org)  
 +216 7110 2175

Désiré Vencatachellum  
[d.vencatachellum@afdb.org](mailto:d.vencatachellum@afdb.org)  
 +216 7110 2205

Victor Murinde  
[v.murinde@afdb.org](mailto:v.murinde@afdb.org)  
 +216 7110 2072

<sup>a</sup> Alice Nabalamba, Principal Statistician, Statistics Department (ESTA), [a.nabalamba@afdb.org](mailto:a.nabalamba@afdb.org)

<sup>b</sup> Mulle Chikoko, Principal Social Protection Officer, Human Development Department (OSHD), [m.chikoko@afdb.org](mailto:m.chikoko@afdb.org)

**Reviewers:** Barbara Barungi, Lead Economist OSFU; Peter Ondiege, Chief Research Economist, EDRE; Ruth Karimi Charo, Social Development Specialist, KEFO; Barfour Osei, Chief Research Economist, EDRE; Tavengwa Nhongo, Africa Platform for Social Protection, Nairobi, Kenya.

The findings of this brief reflect opinions of the authors and not those of the African Development Bank, its Board of Directors or the countries they represent.

## 1. Background

As of 2010, 36 million elderly people aged 65 years and over accounted for 3.6% of Africa's population, up from 3.3% ten years earlier. In 1980, 3.1% of the population was elderly aged 65 and above, and there has been a steady increase during the last forty years. Population aging<sup>1</sup> in Africa is expected to accelerate between 2010 and 2030, as more people reach age 65. Projections show that the elderly could account for 4.5% of the population by 2030 and nearly 10% of the population by 2050 (UN DESA, 2011.) In many countries in Africa, the proportion of older persons will be close to that of industrialized countries by 2030 and 2050.

One important consequence of an aging population is the shift in the **demographic dependency ratio**. The total demographic dependency ratio is the ratio of the combined

youth population (0 to 15 years) and senior population (65 or older) to the working-age population (16 to 64 years). It is expressed as the number of "dependents" for every 100 "workers." The senior demographic dependency ratio is the ratio of seniors to the working-age population.<sup>2</sup>

Africa's population is aging simultaneously with its unprecedented growth of the youth population and its related challenges. The aging population in Africa faces a different set of challenges. Aging is highly linked with long-term physical and mental disability and a number of long-term chronic conditions and will likely increase personal care needs. Yet, much of Africa faces weak health care systems to adequately address these emerging health problems among the elderly. As well, much of the region is faced with a lack of viable social

safety nets, increased prevalence of poverty, particularly among elderly headed households, and a shrinking cohort of caregivers in countries ravaged by the HIV/AIDS epidemic. Linked to the HIV/AIDS epidemic are the changing family structures where older parents are increasingly caring for grandchildren left behind by victims of HIV/AIDS. More than 50 percent of the orphans in Africa currently live with their grandparents with limited resources and unstable incomes to support their households (UNICEF, 2003).

### Global Aging Trends:

In many developed countries, the aging demographic transition is already taking shape as the average age of populations continues to rise, as a direct consequence of the postwar II "baby boom" (Anderson and Hussey, 2000). Fertility rates have declined below the replacement rate of 2.1 in many industrialized countries. Similarly, the average life expectancy at birth continues to rise. In OECD countries, for example, the average life expectancy in 2007 was 79.1 years, up by 10.6 years since 1960 (OECD 2010).

<sup>1</sup> Population aging is described as the rise in the median age of a population resulting in a shift in the age structure of that population. It is the consequence of a number of factors, including declining fertility rates, decreased premature deaths, and prolonged life expectancies.

<sup>2</sup> The demographic dependency ratio is based on age rather than employment status. It does not account for young people or seniors who are working, nor for working-age people who are unemployed or not in the labor force. It merely reflects population age structure and is not meant to diminish the contributions made by people classified as "dependents."

The UN medium-scenario projections indicate that fertility rates will remain below the replacement rate through to 2020 for most of the industrialized countries. At the same time, the proportion of persons aged 65 years and older will increase rapidly over the next few decades, to reach upwards of a quarter of the population in most countries. By comparison, only 10–14% of the population was 65 years or older at the turn of the century in most industrialized countries (UN DESA, 2011).

The purpose of this brief is to (a) highlight the changing demographics on the African continent; and (b) to demonstrate the challenges of an aging population and the major issues that need to be addressed.

The brief is organized in six sections. The first section introduces trends of population aging in Africa relative to those in economically advanced countries. Section two analyzes Africa specific demographic trends and demonstrates the reasons why the proportion of population 65 years and older is growing in many countries across the continent. In the third section, the brief focuses on country-specific trends over time and high-

lights gender differences in the changing population structure. Section four addresses the drivers of population aging in Africa. Section five demonstrates why we should be concerned about an aging population in Africa, highlighting many health and socio-economic challenges faced by Africa's older population. The brief concludes with some broad policy implications to guide policy makers and development partners in general, on how to address emerging challenges related to population aging.

## 2. Africa: demographic trends

In contrast to industrialized countries, in developing countries, particularly those in Africa, life expectancy at birth has remained relatively low for both men and women. In 1990, Africa's average life expectancy at birth was 52.7 years, although it increased steadily to 56.0 years until 2010 (AfDB's Data Portal, 2011)<sup>3</sup>. In 1990, women's life expectancy at birth was 54.3 years compared to 51.1

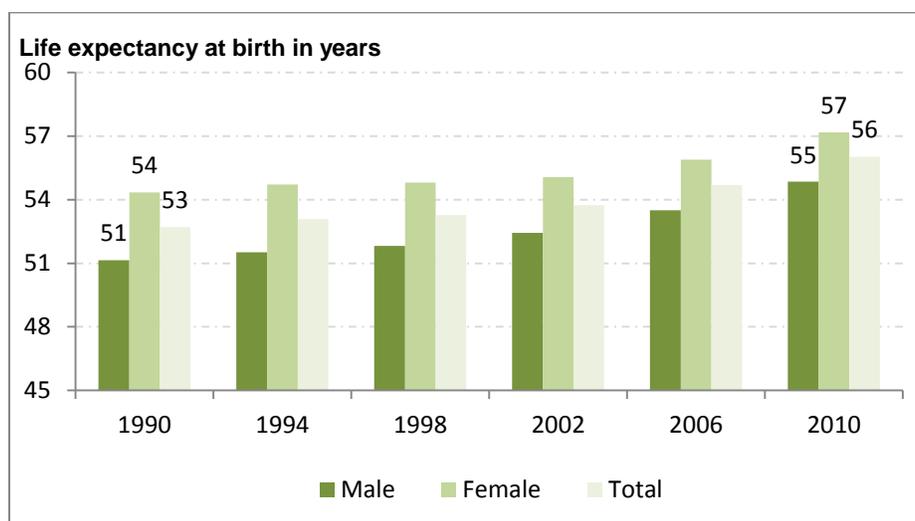
years for men. By 2010, this had risen to 57.1 years for women and to 54.8 years for men (Figure 1).

Healthy life expectancy – defined as life expectancy weighted at each age to account for levels of health status over the life course – although lower at 39.5 years for Africa as a whole in 2000, had increased to 42.7 years by 2002 and to 48.9 years by 2007.

Similar to developed countries, the life expectancy figures indicate that Africa is also witnessing a shift in the population structure. In 1980, 3.1% of Africa's population was aged 65 and older, but this had risen slightly to 3.5% by 2010. Women aged 65 years and older represented 3.4–3.9% of the total female population between 1980 and 2010. Men in this age group represented 2.8–3.2% of the male total population during the same period (Figure 2).

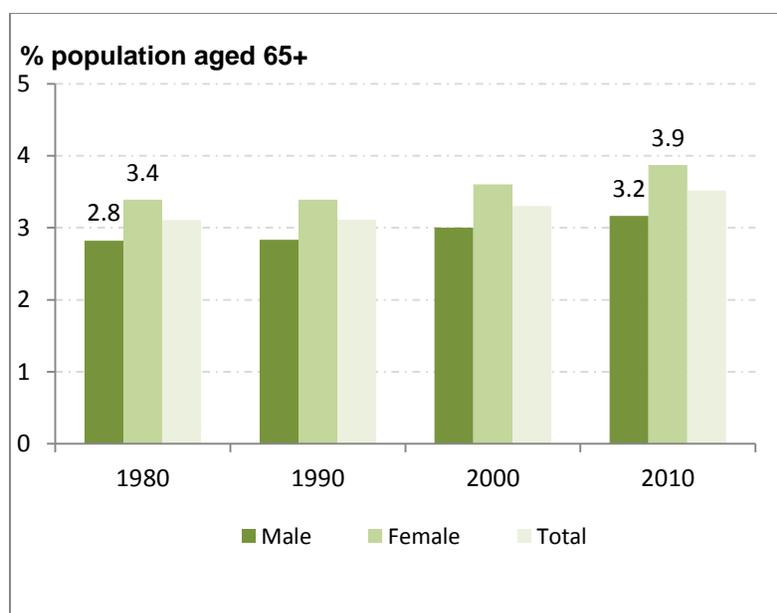
<sup>3</sup> Statistics presented in this brief have been sourced from ESTA's Social and Economic Statistics database, unless otherwise attributed.

**Figure 1: Life expectancy at birth in Africa, 1990–2010**



Source: AfDB, Social and Economic Statistics Database (2011).

**Figure 2: Proportion of men and women aged 65 and above in Africa, 1980–2010**



Sources: UN DESA (2011); AfDB, Social and Economic Statistics Databases (2011).

### 3. Country-specific demographic trends

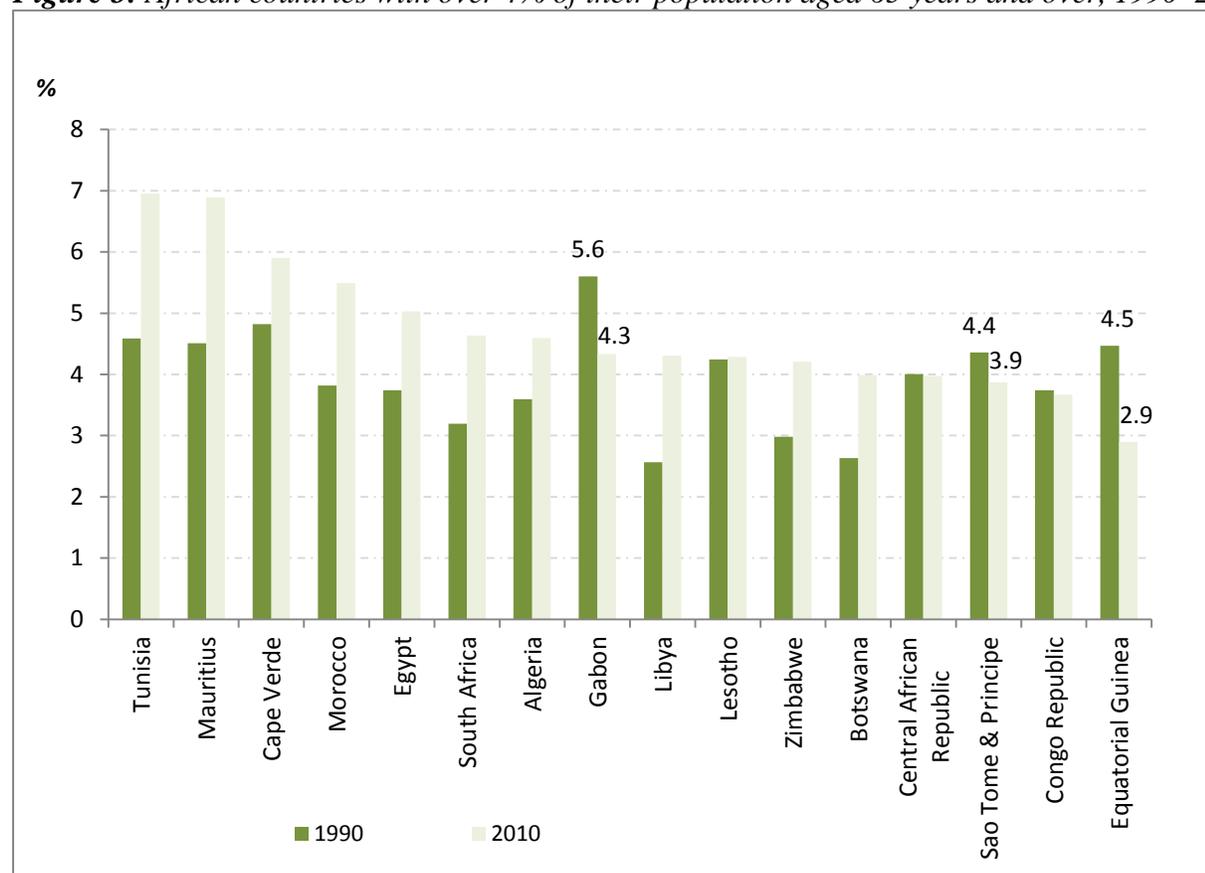
An examination of the demographic trends at the country level reveals some interesting patterns (Figure 3). Between 1990 and 2010, nearly one-third of the countries (16 out of a total of 53) recorded that at least 4% of their populations was aged 65 or above. In 1990, Gabon had the largest elderly population (5.6%), followed by Cape Verde (4.8%) and

Tunisia (4.6%). By 2010, Tunisia had surpassed all other countries as the country with the highest proportion of elderly population (7.3%), followed closely by Mauritius at 6.9%. The elderly population of these two countries nearly doubled over the 20-year period. Other countries such as Libya, Botswana, and South Africa witnessed a similar phenomenon.

There are marked variations among African countries though. The proportion of population aged 65

years and older declined in Gabon, São Tomé and Príncipe, and Equatorial Guinea, while it remained unchanged in the Central African Republic over the 20-year period. The reasons for the decline in the former three countries are not very clear. Paradoxically, these three countries are among those with the highest GDP per capita in Africa, so one might have expected the improved living standards to lead to an increase in life expectancy.

**Figure 3:** African countries with over 4% of their population aged 65 years and over, 1990–2010



Sources: UN DESA (2011); AfDB, Social and Economic Statistics Databases (2011).

### The gender dimension

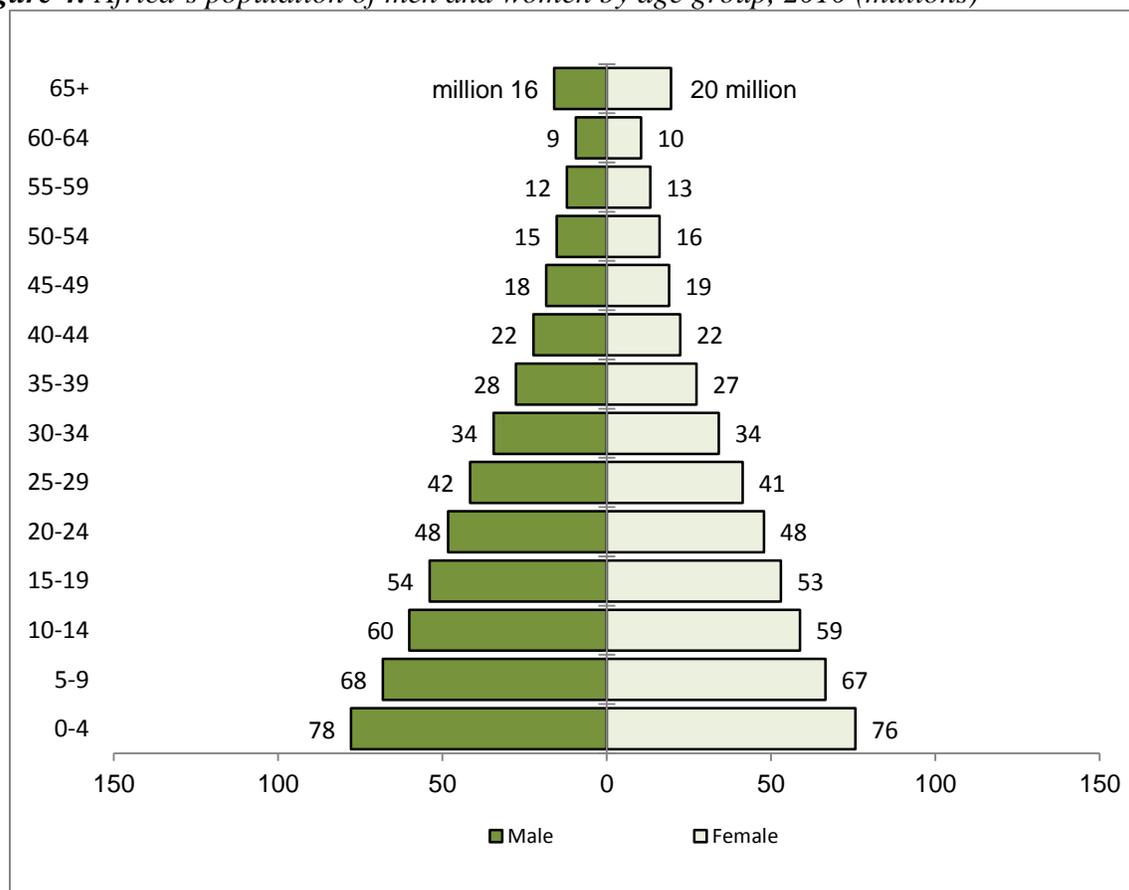
While the ratio of males to females is about 50:50 up until the age of 64, it quickly changes after this age, with women outliving men (Figure 4). Among those aged 65 and older, there were 25% more women than men in 2010. This pattern is consistent with demographic changes elsewhere in the world.

In 2010 there were 17 more African countries with an elderly female population that exceeded

4% of their total population (Figure 5) than there were in 1990. The growth in the elderly female population over this time frame ranged from 1.2% in Algeria to 3% in Tunisia. This represents an increase of 404,000 and 207,000 females aged 65 or older in Algeria and Tunisia respectively. However, Gabon, São Tomé and Príncipe, and Congo Republic experienced a decline over the 20-year period. Evidence emerging from recent gender equality studies points to a persistently

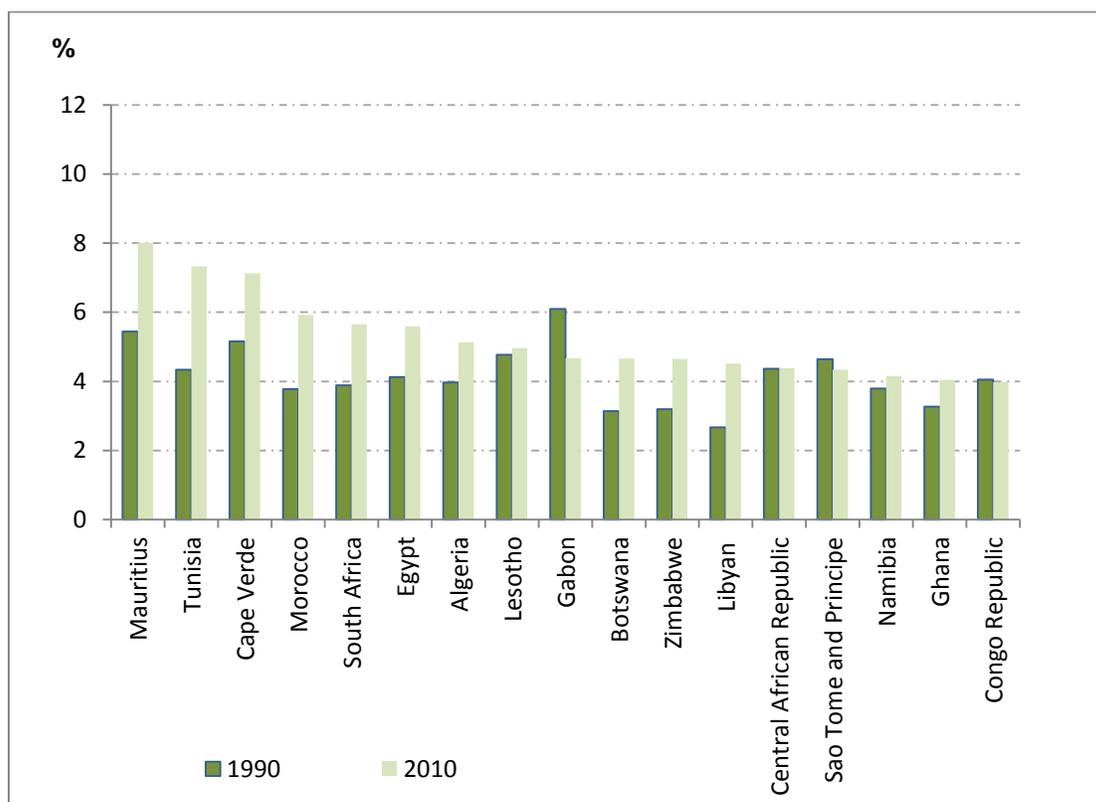
elevated female mortality in low-income countries. This is largely attributable to high rates of maternal mortality, especially in Sub-Saharan Africa. This is exacerbated by inadequate access to healthcare in many countries in Sub-Saharan Africa, and to low investments in the health sector. These weaknesses in the system mean that fewer women live to reach the age of 65 than might otherwise be the case (World Bank, 2011).

**Figure 4:** Africa's population of men and women by age group, 2010 (millions)



Sources: UN DESA (2011); AfDB, Social and Economic Statistics Databases (2011).

**Figure 5:** African countries with at least 4% elderly (65 and older) female population, 1990 and 2010



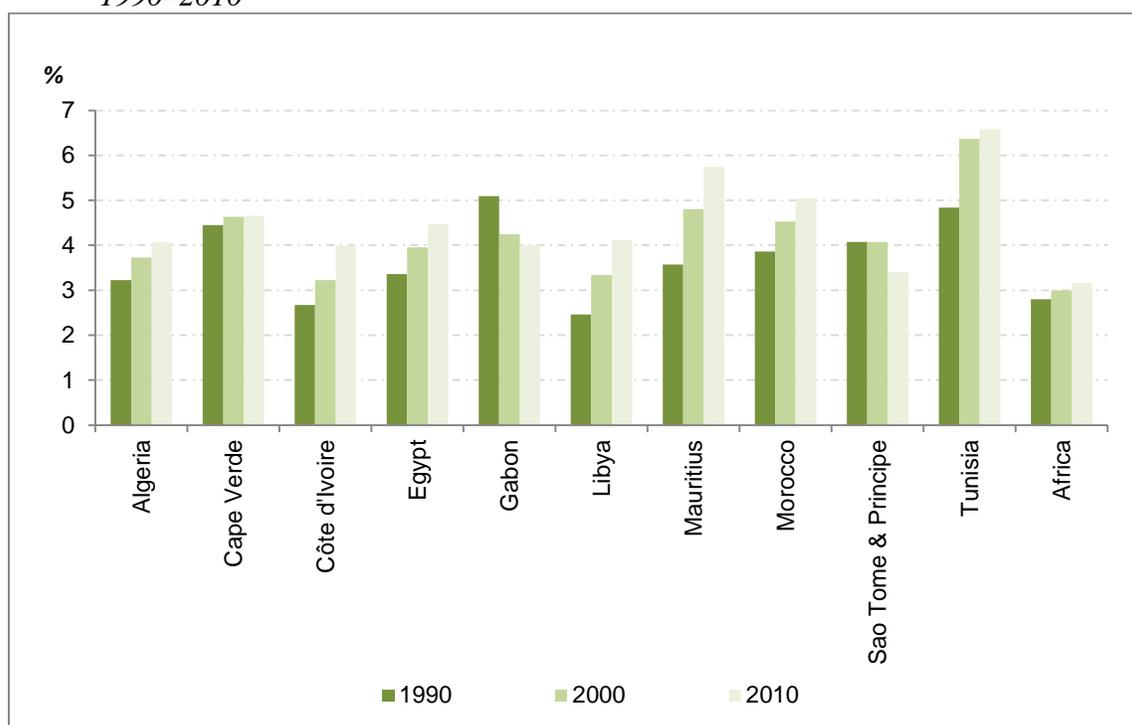
Source: AfDB, Social and Economic Statistics Databases.

Figure 6 shows that far fewer countries have a male elderly population exceeding 4% of their total populations, compared to their elderly female populations. By 1990, only four countries had a male elderly population of 4% or greater, namely Gabon (5.1%), Tunisia (4.8%), Cape Verde (4.4%), and São Tomé and Príncipe

(4.1%). By 2000, the number had nearly doubled with the addition of Mauritius, Morocco, and Egypt and this increased to a total of nine countries by 2010. The new additions were Libya, Algeria, and Côte d'Ivoire. However, São Tomé and Príncipe's male elderly population dropped from 4.1% in 1990 and 2000, to 3.4% by 2010.

Gabon also witnessed a decrease in its male elderly population from 5.1% in 1990 to 4.0% in 2010. Tunisia, Mauritius, and Morocco recorded the highest increases in the proportion of elderly male population between 1990 and 2010, while Côte d'Ivoire and Libya also made good progress over the 20-year period.

**Figure 6:** African countries with at least 4% elderly (aged 65 years and over) male population, 1990–2010



Source: AfDB, Social and Economic Statistics Databases.

#### 4. The drivers of population aging in Africa

Overall, it has been the middle-income countries – such as Mauritius, Tunisia, Morocco, Algeria, Egypt, and South Africa – which have witnessed the greatest increase in population aging. These countries' populations aged 65 years and older range between 4.5% and 7.3% of the total population. Other countries such as Libya, Botswana, Zimbabwe, and Djibouti have also witnessed a significant increase in their elderly population.

The rise in the elderly population in many of these countries corresponds to a sharp decline in the fertility rates compared to the rest of Africa over a 40-year period (Table 1). Likewise, many of these countries have made remarkable strides in improving health care delivery systems, reducing child mortality and as a result are experiencing improved life expectancy at birth and healthy life expectancy (Table 2). However, for countries such as South Africa, Botswana, Lesotho, Zimbabwe and Swaziland, the increase in the size of the elderly population as a

proportion of the national population can be attributed to a shrinking adult age cohort due to a high prevalence of HIV-AIDS, linked to the fact that HIV-AIDS is concentrated in the younger population. In fact while fertility rates have dropped substantially, the life expectancy of all five countries has declined over the 20 year period (Tables 1 and 2). Similarly, the adult age cohort has either experienced stagnant or negative growth (Figure A3) when compared to countries such as Mauritius and Tunisia where the

same age cohort has grown from 20-32% and 10-24% among 25-44 and 45-64 year olds respectively (Figure A4).

**Table 1: Fertility rates for selected African countries, 1980–2010**

	1980	1990	2010
<b>AFRICA, average</b>	-	<b>5.30</b>	<b>4.40</b>
Mauritius	2.76	2.23	1.80
Tunisia	5.33	3.63	1.83
Morocco	5.65	4.03	2.31
Cape Verde	6.44	5.31	2.61
Lesotho	5.59	4.92	3.20
Algeria	6.91	4.71	2.32
Egypt	5.61	4.56	2.77
Gabon	5.17	5.18	3.17
South Africa	4.79	3.66	2.48
Libya	7.38	4.81	2.59
Botswana	6.22	4.70	2.78
Zimbabwe	7.10	5.19	3.29
Seychelles	nd	nd	2.30*

Source: AfDB, Social and Economic Databases.

Notes: \*Estimate is for 2008.

nd: Data not available

**Table 2: Life expectancy at birth, total and disaggregated by gender, for selected African countries, 1980 and 2010**

	Life Expectancy at Birth					
	Total		Men		Women	
	1980	2010	1980	2010	1980	2010
<b>AFRICA, average</b>	<b>50.1</b>	<b>55.7</b>	<b>51.1</b>	<b>54.5</b>	<b>48.5</b>	<b>56.8</b>
Libya	67.8	74.3	65.8	72.0	70.5	77.2
Tunisia	68.6	74.2	66.9	72.1	70.6	76.3
Algeria	67.0	72.7	65.9	71.2	68.3	74.1
Mauritius	69.2	72.1	65.5	68.5	72.9	75.8
Morocco	64.1	71.6	62.3	69.4	66.1	73.9
Egypt	62.9	70.3	61.6	68.6	64.3	72.2
Botswana	64.2	55.1	61.9	55.1	66.4	54.8
South Africa	61.4	51.7	57.8	50.3	65.2	53.1
Lesotho	59.3	45.6	57.4	45.0	61.0	45.7
Swaziland	60.5	46.4	58.3	47.1	62.6	45.5
Zimbabwe	60.8	45.7	57.5	45.3	64.3	45.6

Source: AfDB, Social and Economic Databases (2011).

## 5. Why we should be concerned about an aging population in Africa

Population aging is highly correlated with physical and mental disability and an increase in the prevalence of a number of long-term chronic conditions. In 2006, the World Health Organization (WHO) projected that diseases associated with aging such as Parkinson's disease, Alzheimer's and other forms of dementia, accounted for 6.3% of disability-adjusted life years. This is significantly higher than the contribution to disability-adjusted life years globally of HIV/AIDS (5.5%), all cancers (5.3%), heart disease (4.2%) and respiratory diseases (4.0%). Alzheimer's and other forms of dementia alone account for 12% of the burden of neurological disorders. More recent studies suggest that these conditions are on the rise due to an aging population. More alarming is the evidence suggesting that these conditions will increase more rapidly in developing countries than in developed countries.

Data from six countries with an elderly population equal or exceeding 4 per-

cent show that the prevalence of chronic conditions such as angina, osteoarthritis and diabetes is not only on the rise, but more than twice as high among elderly population aged 60 and above compared to those under 60 years (Figure A5).

The management of long-term chronic conditions and related disabilities requires a considerable amount of resources – both human and financial – from governments, communities, and families. Yet in much of Africa, governments still spend far less per capita on healthcare in general, let alone social protection, than is the case in most developed countries. Few African countries have public pension programs or formal systems for caring for older persons; indeed, most rely on traditional family structures. For example, in 2005, governments in 48 of the 53 African countries spent US\$ 25.7 per capita on health on households, while private households spent more than twice that amount (US\$ 58.2) per capita (ICP-Africa data, 2005). Such a high disparity in healthcare expenditure between governments and households has several

implications, principally that the burden of care is increasingly being shifted to those least able to afford it. A study of 15 countries in Africa showed that large proportions of the lower-income populations resort to borrowing and selling assets to cope with high healthcare expenditures (Leive and Xu, 2008). This practice drives many families into even deeper poverty and poorer health.

An even bigger challenge for Africa is the decline of informal systems of social protection in the form of cash and support from both extended family and community sources. An additional challenge is the change in family structures and shrinking social support networks. Traditionally, the informal social protection has been effective for generations in providing a major share of support to the elderly parents and the most vulnerable. With increasing urbanization, and the ravages of HIV/AIDS, this support network is increasingly being dismantled. In fact in some societies, particularly those experiencing the HIV/AIDS epidemic, the roles have been reversed. On the one hand, older parents are increasingly caring for grandchildren

left behind by victims of HIV/AIDS. For example, more than 60% of orphans in South Africa, Zimbabwe, and Namibia – and 50% in Botswana, Malawi and Tanzania – live with their grandparents (UNICEF, 2003). On the other hand, the rise in HIV/AIDS death rates has led to a rapidly increasing new category of neglected elderly individuals or older adults living alone, without the benefit of any caregivers.

Despite these serious demographic shifts, aging is not visible in most policy dialogue. The invisibility of vulnerable older people in major policy documents is reinforced by their invisibility in most national development plans. While the MDGs provide specific targets for children, youth and women, they do not refer to older people as a specific group. As a result, older people are less likely to benefit from targeted development support. Lack of recognition of aging even in the MDG agenda, which is the overarching framework for international development priorities, contributes to this lack of attention.

The African continent has other urgent and pressing demographic problems

such as: (i) rapid population growth, evidencing in high youth populations and high unemployment; (ii) high infant and child mortality rates, (iii) excessive urban expansion; and (iv) high maternal mortality rates, etc. This has resulted in governments and societies de-prioritizing older people in favor of other, often more vocal age groups. Governments' development priorities are tending to favor expenditures that invest in the long-term productive potential of the young. In recent years, we have seen governments focusing on the youth because of high levels of unemployment among this age group and their potential to create social and political unrest if their demands and life chances are not fulfilled. Thus countries accord low priority in their national development policies and programs to the aging populations.

The continent is not well prepared for a major increase in its aging population. For example, contributory pension schemes cover very few people due to the informality of most livelihood activities and employment. Most societies are predominantly rural and much of the population operates outside the

security of formal sector, wage-dependent markets.

Economic indicators for the elderly show that households headed by older persons are among the poorest. For example, in Kenya and Tanzania, households headed by older people have a poverty rate that is over 20% higher than the national average. In Sierra Leone and Uganda, the poverty rate of these households is 8% and 5% higher than the national average (Kakwani & Subbarao, 2005; HelpAge, 2011). Poverty in old age often reflects poorer economic status earlier in life and has the potential to be transmitted to the next generations if effective interventions are not applied.

## 6. Conclusions and policy implications

This brief has discussed the problems of an aging population and the major issues that need to be addressed. There is a need for governments, development partners, communities, and families themselves to be aware of the problem and to collaboratively work out a way of tackling the needs of this growing segment of the population. Some broad

proposals for governments and health services in particular are outlined below to be included in policy discussions. Development partners can also assist through research and targeted support.

***Budgetary provisions.***

Governments should pay greater attention to issues of aging. There is an urgent need to develop and implement coordinated national policies for this age cohort and to mainstream aging issues in national development frameworks and poverty reduction strategies. This is in order to address the socioeconomic needs and rights of older people and improve their well-being. One requirement is to make adequate provision in national budgets for the provision of social services for the elderly. The focus should be on the provision of shelter, healthcare, food security, nutrition, and social security schemes, among others.

***Scaling up social protection schemes.***

Most African countries will need to develop and improve the coverage of comprehensive social protection systems for their senior citizens. The majority of African countries do not have formal systems of

social protection that cater to the specific needs of older people. However, South Africa, Mauritius, Lesotho, Botswana, Cape Verde, and Namibia have introduced non-contributory social pension programs for the elderly.

***National old-age pension schemes*** will need to extend coverage and also consider contributory pension plans for those who are working now, in a bid to alleviate old age poverty, guarantee a minimum income for older people, and prevent the intergenerational transmission of poverty. The majority of Africa's population is self-employed and works in the informal and agriculture sectors. This sector does not offer much in terms of social security and protection, including for old age. Therefore, public-private partnerships (PPPs) should be explored as a way of promoting and expanding contributory pension schemes.

***Targeted healthcare.***

Healthcare systems will need to be responsive to the needs and demands of an aging population, including the greater access to specialist services and treatments. In particular, governments need to consider introducing access to

free and subsidized health services, medication and longer-term healthcare facilities for the elderly.

***Community and family care.***

Family and community will remain the basic resource for the older persons in the absence of publicly funded social security schemes. There is need to support and promote community-based care in order to ensure that better services are provided to the aging population. The informal systems of social protection through extended family and community support will continue to be a viable option for short to medium term. Therefore improved employment opportunities to induce younger people to remain in rural homes could benefit the elderly both economically and socially and would facilitate adequate support and care for the elderly. Strengthening the resources of women, who are the traditional caregivers, would benefit all family members, including the elderly. This would expand the impact of existing self-help and mutual aid groups. Therefore policies should also aim at improving the situation of rural communities, and specifically target women

who make up the majority of the elderly population.

***The role of statistics: scaling-up the availability of age-disaggregated data.***

Governments need to strengthen their national statistical systems and to collect age-disaggregated data for all relevant sectors. This will allow governments to monitor progress, for example, in reducing old-age poverty and in tracking how health funds are being expended for this age group. Such data should be made readily available to policymakers and other data users, including development partners. Further research is needed to build the evidence base on aging to inform policy-making and programming within a specific country context. Countries should examine the economic and social implications of population and demographic changes and how these relate to development concerns.

Development partners such as the AfDB can play a supportive role in several respects:

- Help to build the statistical capacity of regional member countries (RMCs) to undertake the collection and dissemina-

tion of statistics pertaining to aging trends to better inform policy decisions;

- Provide leadership in the analysis of emerging issues around population aging;
- Enhance policy advice and support for coordinated long term solutions to promote social protection programs that include the critical needs of the elderly.

**References:**

African Development Bank Group, Data Portal (accessed May 2011).

Anderson, G.F. and P.S. Hussey (2000). "Population Aging: A comparison among industrialized countries." *Health Affairs*, vol. 19, no. 3, pp. 191–203.

Cordaid/HelpAge International. (2011). *A Study of Older People's Livelihoods in Ethiopia*. London and The Hague: HelpAge and Cordaid. Report available online at: [www.helpage.org/download/4d9aeec5f28b8](http://www.helpage.org/download/4d9aeec5f28b8)

HelpAge International. (2011). *Aging in Africa*, vol. 36.

Kawani Narak and Kalanidhi Subbarao (2005), *Aging and Poverty in Africa and the Role of Social Pensions*, *Social Protection Discussion Paper Series*. The

World Bank, Washington, DC.

Kalasa, B. (2001). "Population and aging in Africa: a policy dilemma?" Paper presented at the International Scientific Study of Population's XXIV General Population Conference, held in August 2001 in Brazil.

Kidd, S. and E. Whitehouse (2009). "Pensions and old age poverty," in R. Holzmann, D. Robalino, and N. Takayama (eds.), *Closing the Gender Gap: The Role of Social Pensions*. Washington, DC: World Bank.

Leive, A. and K. Xu (2008). "Coping with out-of-pocket health payments: empirical evidence from 15 African countries." *Bulletin of the World Health Organization*, 86 (11).

OECD (2010). *OECD Factbook: Economic, Environmental and Social Statistics*. OECD Publishing. Accessed online October 14, 2011.

Salomon, J.A. and C.J.L. Murray (2000). "The epidemiological transition revisited: new compositional models for causes of death by age and sex". Part of the working paper series: *The Global Burden of Disease 2000 in Aging Populations*. Research Paper No. 01.17. Harvard Burden of Disease Unit. Cambridge, MA: Harvard Center for

Population and Development Studies.

UN DESA(2011). *World Population Prospects: The 2010 Revision*, CD-ROM Edition. New York: United Nations, Department of Eco-

nomic and Social Affairs, Population Division.

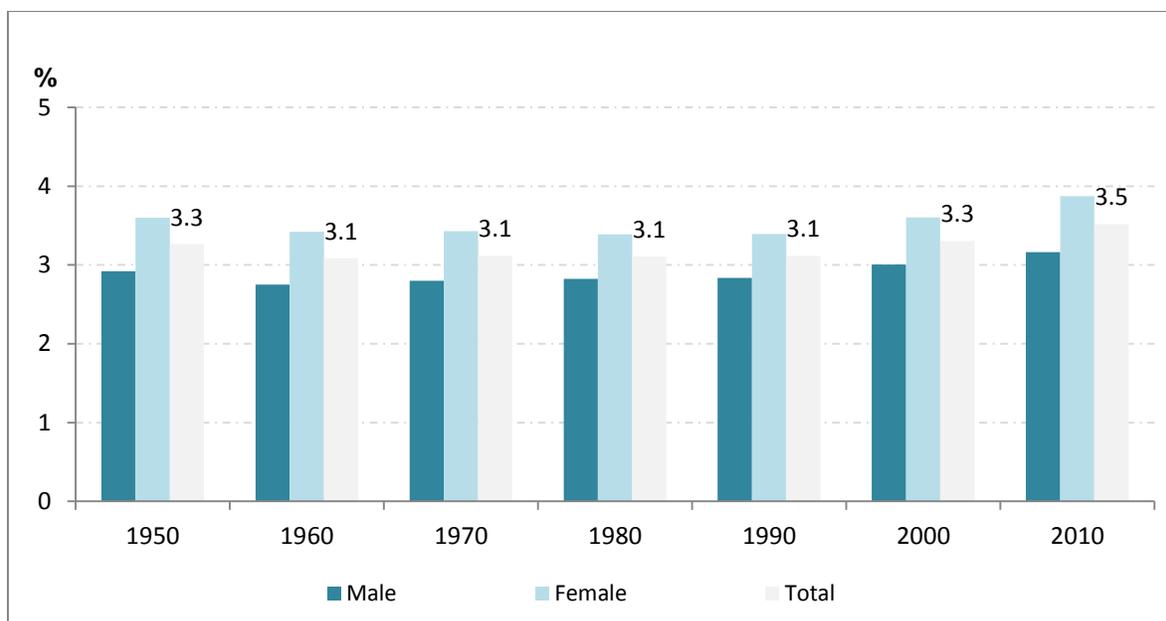
UNICEF (2003), *Africa's Orphaned Generations*. New York, NY.

[www.unicef.org/sow06/pdfs/africas\\_orphans.pdf](http://www.unicef.org/sow06/pdfs/africas_orphans.pdf)

World Bank (2011). *World Development Report: Gender Equality and Development*. Washington, DC: World Bank.

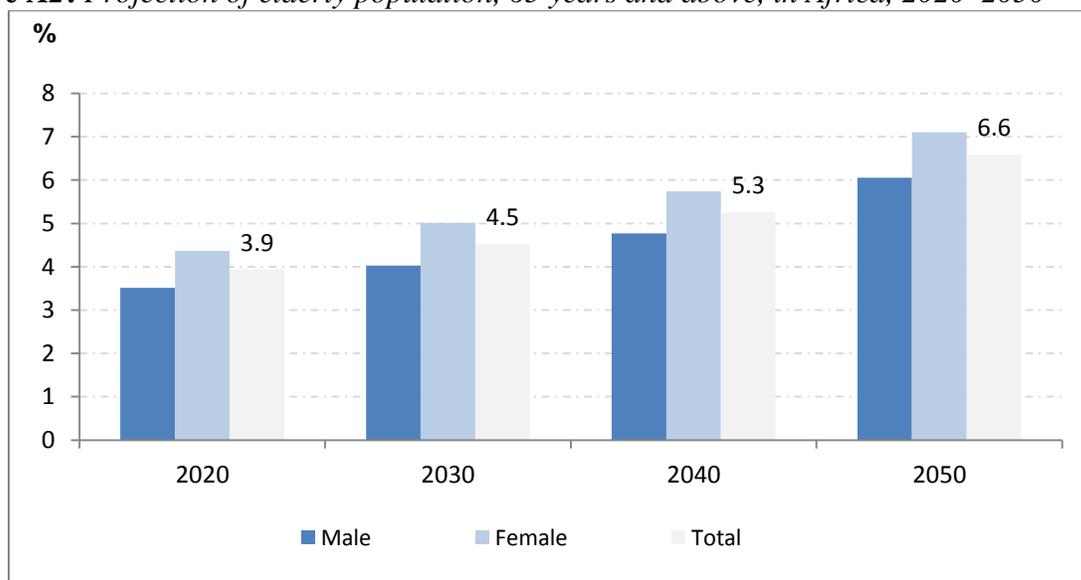
## Annex 1.

**Figure A1:** Estimated proportion of elderly population, 65 years and above, in Africa, 1950–2010

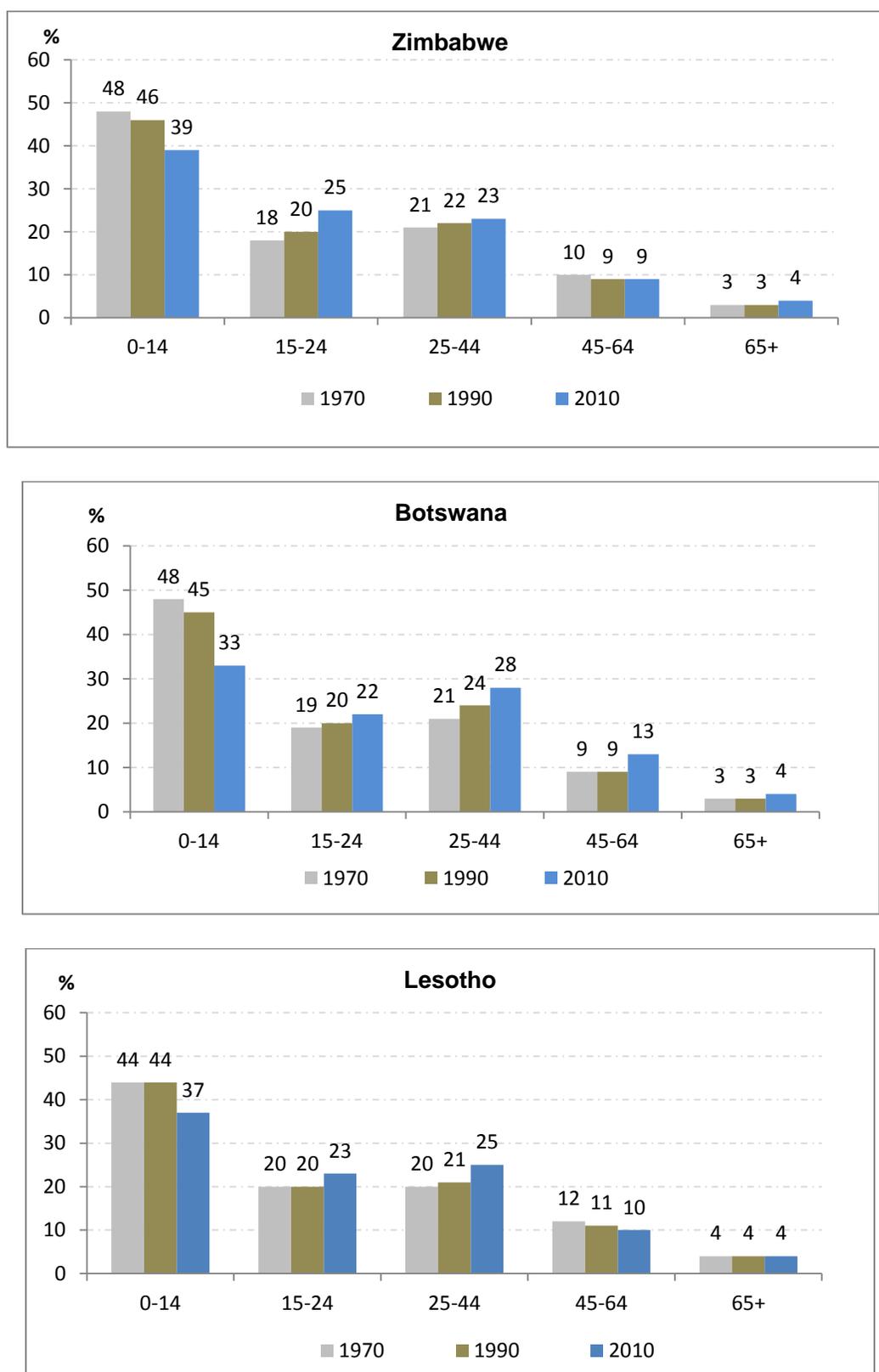


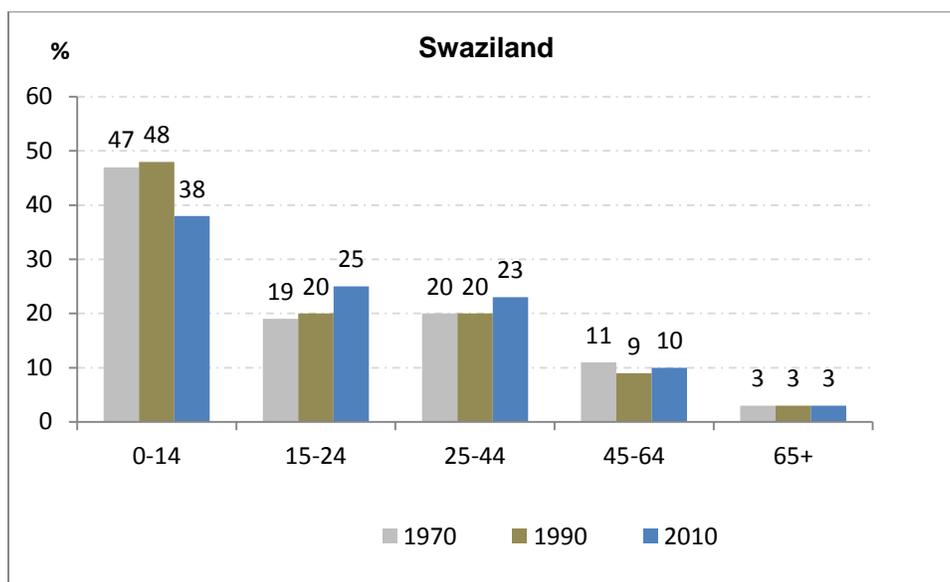
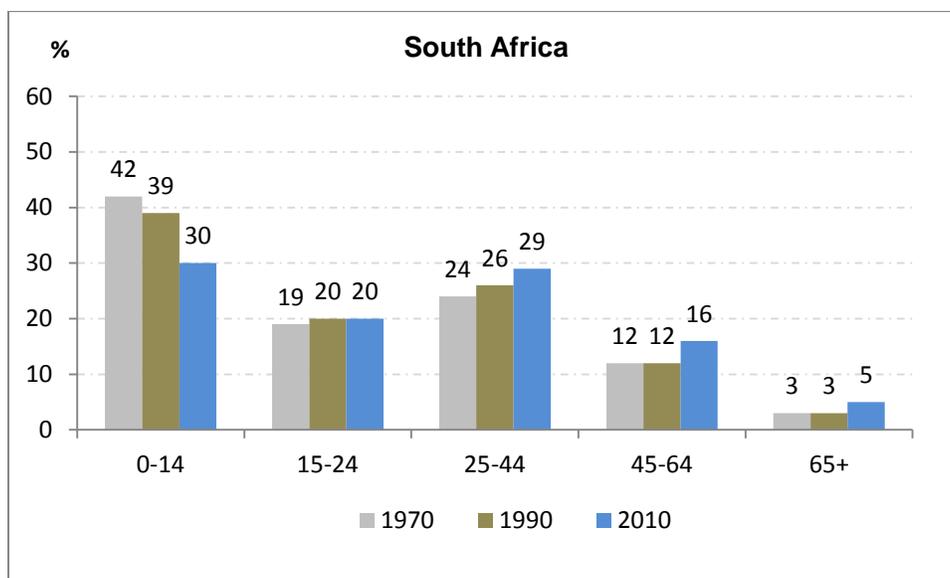
Sources: UN DESA (2011); AfDB, Social and Economic Statistics Databases (2011).

**Figure A2:** Projection of elderly population, 65 years and above, in Africa, 2020–2050



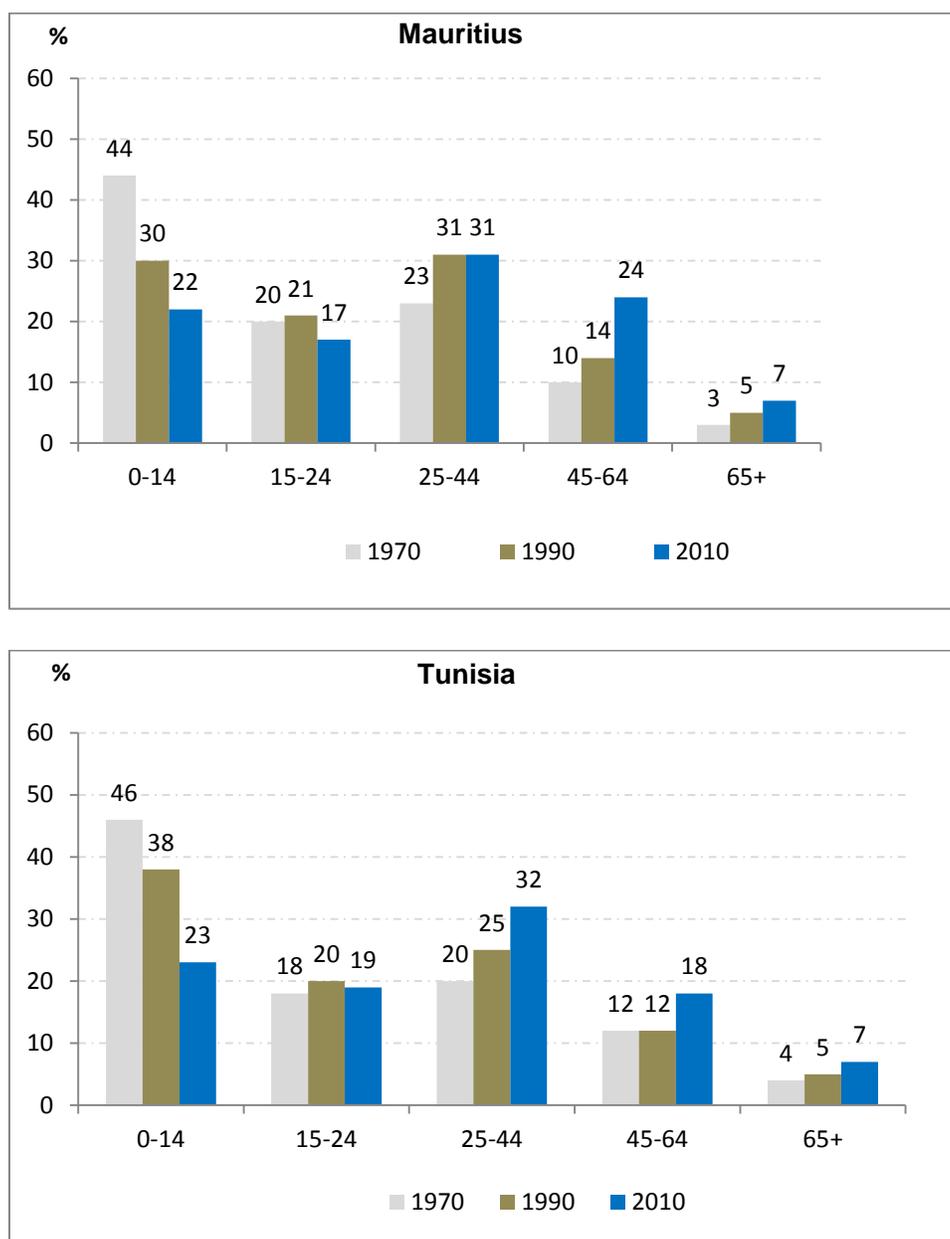
Sources: UN DESA (2011); AfDB, Social and Economic Statistics Databases (2011).

**Figure A3.** Southern Africa: The Effect of HIV/AIDS on the Adult Age Cohort



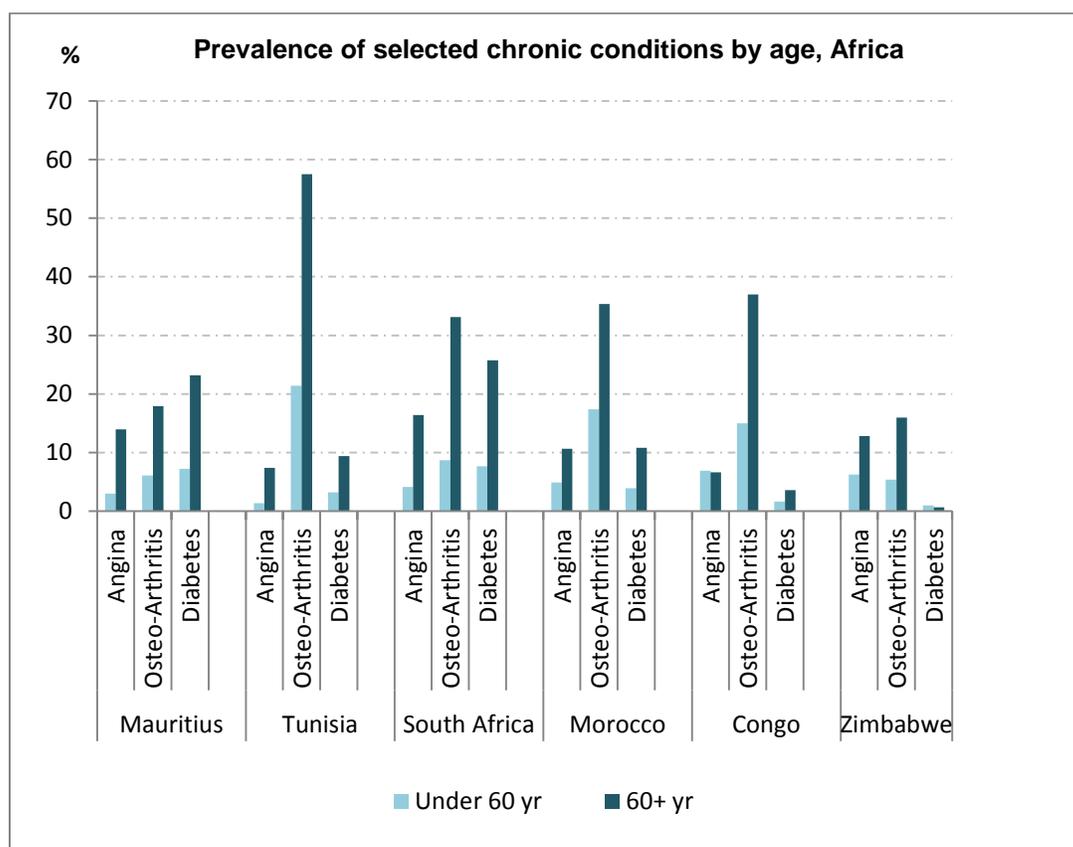
Sources: UN DESA (2011); AfDB, Social and Economic Statistics Databases (2011).

**Figure A4.** *The Effect of HIV/AIDS on the Adult Age Cohort: Selected Comparison Countries*



Sources: UN DESA (2011); AfDB, Social and Economic Statistics Databases (2011).

Figure A5: Prevalence of Selected Chronic Conditions by Age, Africa



Sources: WHO (2002); World Health Survey: Results from Mauritius, Tunisia, South Africa, Morocco, Congo and Zimbabwe.