THE EFFECTS OF HIV/AIDS ON THE ACHIEVEMENT OF THE MILLENNIUM DEVELOPMENT GOALS IN SUB-SAHARAN AFRICA

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ABSTRACT

The primary means of HIV transmission – sexual intercourse – has been known for over two decades, but that information does not prevent thousands of men and women from contracting the virus every day. The AIDS epidemic creates a high and ongoing mortality in the economic and social active sector of populations in sub-Saharan Africa. The epidemic is being driven by inequities and uneven development, exacerbating existing poverty and human misery. In hard-hit countries in sub-Saharan Africa, the AIDS epidemic sets back development with human development figures as low as it was in the 1950s. The epidemic has a severe impact on women as caregivers and on children, the most vulnerable sector of society. All eight Millennium Development Goals are directly linked to the impact of the AIDS epidemic. This article discusses the affect that HIV/AIDS has on the achievement of the targets of the Millennium Development Goals (MDGs) in sub-Saharan Africa. The analysis shows that because the HIV/AIDS targets in the region will not be achieved, most of the other MDGs targets will also not be achieved.

INTRODUCTION

AIDS is threatening human development like no other disease before in modern history. sub-Saharan Africa is experiencing one of the most severe HIV/AIDS epidemics in the world with national antenatal prevalence of HIV in some countries around 35%, millions of children being left orphaned, life expectancy reduced to levels seen more than 50 years ago and more or less all sectors in society being affected to varying degrees. This

article describes the global AIDS epidemic with up-to-date information on the drivers of the epidemic. A short history on the origins of the Millennium Development Goals and why they are important in human development is provided. The effect of the AIDS epidemic on the achievement of the Millennium Development Goals in the region will be examined. The impact of the AIDS epidemic on the poor, women and children will be discussed against the background of the many challenges that faces the sub-Saharan African region.

HIV/AIDS IN SUB-SAHARAN AFRICA

Knowledge of the transmission of HIV, prevention, disease management, treatment and care has been known for about 25 years, but the epidemic is still growing. Scientists, scholars, practitioners and role players have come to the realisation that in order to adequately respond to the AIDS epidemic a thorough knowledge of the epidemic is necessary: The heterogeneity of HIV and epidemic typologies need to be studied to understand that there are different epidemics across countries, even different epidemics within a country, and these epidemics should be addressed differently

One generic solution cannot respond to an epidemic which can be low-level, concentrated, generalised and a hyper-endemic in the same country (Jackson, 2006). The understanding of the evidence of the AIDS epidemic is essential. Without reliable data and interpretation of data the type and timing of interventions will be poorly executed. The response to the AIDS epidemic needs to take cognisance of epidemic trends, comprehension of the evidence, the impact of interventions and the drivers of the epidemic.

Continuous research has shown that the drivers of the AIDS epidemic are in three layers, with the social and structural drivers on the outer level, next is the level of the contributing drivers and the key drivers are in the core (Southern African Development Community, 2006:3). The contributing drivers are male attitudes and behaviours, intergenerational/age-disparate sex, gender and sexual violence, stigma, lack of openness, untreated viral STIs and lack of consistent condom usage in long term multiple concurrent partnerships. The key drivers are multiple and concurrent partnerships by men and women with low consistent condom use, and in the context of low levels of male circumcision.

According to UNAIDS, there are approximately 33 million [30.3 million – 36.1 million] people living with HIV/AIDS world-wide, of which 22,5 million are in sub-Saharan Africa (Figure 1). There were about 2,7 million new infections in 2007 and 2 million deaths due to AIDS in the same period (UNAIDS, 2007:1). Of the new infections, an estimated 65% occurred in sub-Saharan Africa. Despite the launch of the global programme on AIDS and billions of US dollars in aid to combat HIV transmission, the global AIDS epidemic has escalated from a few cases in the early 1980s to approximately 33 million in 2007.

The AIDS epidemic has escalated into an epidemic with not only health consequences, but with far-reaching economic and social impacts on the individual, the community, societies and governments. AIDS has become the stumbling block of developing countries for the achievement of their development goals; impacting on poverty, food security, education, gender equality, child death rates, maternal health and other infectious diseases such as tuberculosis (TB).

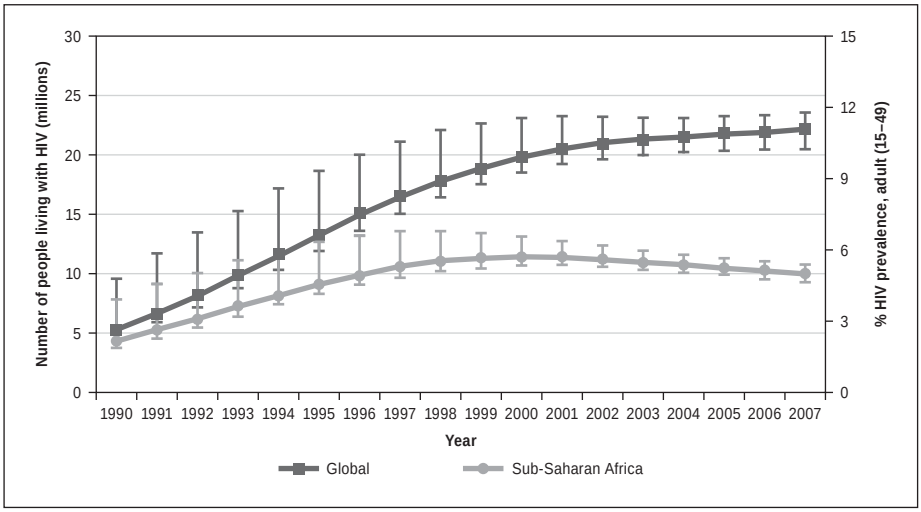
Figure 1: Adults and children estimated to be living with HIV in 2007

Source: UNAIDS 2008. 08 Report on the global AIDS epidemic*. Geneva: UNAIDS.*

The epicentre of the HIV/AIDS epidemic is in sub-Saharan Africa with more than 60% of all infections occurring in the region (Figure 2). Some factors which played a role in the high HIV prevalence in sub-Saharan Africa are poverty, in particular where it is associated with inequities of income and a high rate of unemployment; women's status in the community; high occurrence of other sexually transmitted infections (STIs); low levels of condom use combined with low levels of male circumcision; multiple concurrent sexual partnerships; and high mobility of people due to employment, conflict or drought (Smart, 2004:23). The age group that is most infected and affected by HIV/AIDS is the adult age group of 20-49 years, the so-called sexually, economically and socially active people in a population. People in this age group have families and jobs and contribute to the economy of their countries.

The people living in sub-Saharan Africa already face challenges such as increased illness and death because of malaria and other infectious diseases; extreme poverty and food insecurity; unemployment; low rates of education and literacy; and political instability (Schaefer, 2004:1).

Figure 2: Estimated adult (15-49 years) HIV prevalence percentage globally and in sub-Saharan Africa, 1990-2007



Source: UNAIDS 2008. 08 Report on the global AIDS epidemic*. Geneva: UNAIDS.*

THE MILLENNIUM DEVELOPMENT GOALS

The International Development Targets (Table 1) are divided into three distinctive fields, namely economic well-being, social development and environmental sustainability, and regeneration aimed at poverty reduction (Black & White, 2003:3). These targets show that the idea of development practice has started to change. For development to take place, there needs to be human development, and not only

poverty reduction by the injection of funds. It has become clear that poverty is not only about income or the lack thereof, but about other aspects of well-being, such as health and education.

Table 1: The international development targets and their origins

Target	Indicator	Origins of target
Economic well-being	By 2015, the number of people living in extreme poverty should be halved	• 1995 – Copenhagen Declaration and Programme of Action
Social development	By 2015, the following should be attained: • Universal primary education for all • Elimination of gender disparity in primary and secondary education • Infant mortality and child mortality rates decreased by two thirds • Maternal mortality rate reduced by three quarters • Access to reproductive health services for all	• 1990 – Jomtien Conference on Education for All • 1994 – Cairo Conference on Population and Development • 1995 – Endorsed at Copenhagen Summit on Social Development • 1995 – Beijing Conference on Women
Environmental sustainability and regeneration	• Every country should have a strategy for sustainable development • This strategy should ensure the reversal of the loss of environmental resources	• 1992 – Rio Conference on Environment and Development
Meet the needs of the world's poorest people	• Eradicate poverty and hunger • Achieve universal primary education • Promote gender equality and empower women • Reduce child deaths • Improve maternal health • Combat HIV/AIDS, malaria and other diseases • Ensure environmental sustainability • Develop a global partnership for development	• 2000 – Millennium Declaration Millennium Development Goals

Sources: Adapted from Black, R. & White, H. (Eds.) 2003. Targeting development: Critical perspectives on Millennium Development Goals*. New York: Routledge. Ruxin, J., Binagwaho, A. & Wilson, P. 2005.* Combating AIDS in the developing world. Achieving the Millennium Development goals*. London: Earthscan.*

These targets were designed in such a way that they were quantifiable and the results were the expected outcomes of development. This is different from previous target settings that was always done in terms of monetary resources. For the first time, governance became part of the target outputs, and the importance of democratic accountability and anti-corruption in development became a precondition for attaining targets. These targets were not fixed and as new challenges such as HIV/AIDS presented themselves, they were added to the targets. These targets were criticised as they did not reflect all developing countries' views.

The Millennium Declaration of 2000 contained a new set of targets, the Millennium Development Goals, which replaced the International Development Targets. The Millennium Development Goals form a blueprint agreed to by most countries and all the leading development institutions to help meet the needs of the world's poorest people.

The setting of international targets and goals create a sense of common purpose in the development community. The targets were developed by all the role-players who committed their accountability and responsibility. The Millennium Development Goals aim to resolve extreme poverty, uphold basic human rights and ensure environmental sustainability (Table 2). Because these goals are the most broadly supported, comprehensive and specific poverty reduction targets that the world has ever established they are of extreme importance (United Nations Millennium Project, 2005:2). The international political system uses the Millennium Development Goals as the core on which development policy is based. For the billion people living in abject poverty, the Millennium Development Goals give a glimmer of hope for a productive life and economic growth. At global justice and human rights level, the goals are important for international and national security and stability.

Many countries in the developing world are to some or other degree dependent on overseas development assistance (ODA) or foreign aid to deliver services and alleviate poverty. Almost all funds that enter a country as donor funding or aid, are being handled by governments. In Africa, and especially sub-Saharan Africa, donor funds play an important role in countries' budgets and the way these funds are administered has a direct influence on policy and administration. Most of the donors and their partners follow the United Nations' guidelines on aid and mainstreaming of HIV/AIDS in their development work. Mainstreaming of HIV/AIDS, aid effectiveness, harmonisation and alignment have become the key issues for the donor community.

Table 2: The Millennium Development Goals and their targets

Goals		Targets	
Goal 1	Eradicate extreme poverty and hunger	Target 1	Halve by 2015 the proportion of people whose income is less than US$1/day
		Target 2	Halve by 2015 the proportion of people who suffer from hunger

Goals		Targets	
Goal 2	Achieve primary education for all	Target 3	Ensure by 2015 all children have completed primary school
Goal 3	Promote gender equality and the empowerment of women	Target 4	Eliminate gender disparity in all levels of education by 2015
Goal 4	Reduce child deaths	Target 5	Reduce by two thirds the under 5 mortality rate by 2015
Goal 5	Improve maternal health	Target 6	Reduce by two thirds the maternal death rate by 2015
Goal 6	Combat HIV/AIDS, malaria and other diseases	Target 7	Have halted by 2015 and begun to reverse the spread of HIV/AIDS
		Target 8	Have halted by 2015 and begun to reverse the number of new cases of malaria and other major diseases
Goal 7	Ensure environmental sustainability	Target 9	Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources
		Target 10	Halve by 2015 the proportion of people who have access to clean water and basic sanitation
		Target 11	By 2020 to have achieved a substantial improvement in the lives of no less than 100 million slum residents
Goal 8	Develop a global partnership for development	Target 12	Develop an open, rule-based, predictable, non-discriminatory trading and financial system
		Target 13	Address the special needs of the least developed countries
		Target 14	Address the special needs of landlocked countries and small developing states
		Target 15	Deal with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term

Goals		Targets	
		Target 16	In co-operation with developing countries, develop and implement strategies for decent and productive work for young people
		Target 17	In co-operation with pharmaceutical companies, provide access to affordable essential drugs in developing countries
		Target 18	In co-operation with the private sector, make available the benefits of new technologies, especially information and communications

Source: United Nations. 2000. UN Millennium Development Goals. *[Online] Available at: http://www.un.org/millenniumgoals/ [Accessed: 27 June 2006].*

IMPACT OF HIV/AIDS ON THE MILLENIUM DEVELOPMENT GOALS

Since the adoption of the Millennium Declaration and the Millennium Development Goals in 2000, they have become the framework for development and the method for developing countries and their development partners in their quest of sustainable development for all. The aim is to use the eight millennium development goals (MDGs) as a blueprint to meet the needs of the world's poorest people. These development goals have influenced the development agendas and policies of most of the major donors and donor agencies. However, the potential impact of HIV/AIDS on development is such that all the development goals will be jeopardised should the HIV/AIDS pandemic not be dealt with as part of each one of the MDGs (Table 3).

Table 3: The impact of the HIV/AIDS epidemic on the MDG

Millennium Development Goals		Impact of HIV/AIDS
Goal 1	To wipe out extreme poverty and hunger	• Household capacity • Food security • Orphans and vulnerable children
Goal 2	To ensure primary education for all	• Child labour • Child-headed households • Orphans and vulnerable children • Loss of teachers

Millennium Development Goals		Impact of HIV/AIDS
Goal 3	To promote gender equality and the empowerment of women	• Girls withdrawn from school • Women's higher vulnerability • Poverty • Transactional sex
Goal 4	To reduce child deaths	• Need to roll-out prevention from mother to child transmission (PMTCT) • Paediatric antiretroviral treatment
Goal 5	To improve maternal health	• Need to roll out prevention from mother to child transmission (PMTCT) • Cost of antiretroviral treatment
Goal 6	To combat HIV/AIDS, malaria and other diseases	• HIV/AIDS 'lost' in other medical emergencies
Goal 7	Ensure environmental sustainability	• Need to provide access to clean water and sanitation to prevent illnesses such as diarrhoea • Food security
Goal 8	Develop a global partnership for development	• Need to provide affordable essential drugs • Adequate and effective aid for the AIDS epidemic

Source: Adapted from Sandström, A. 2004. Dialogue, mainstreaming and direct support*. Presentation at HIV/AIDS and Economists Workshop, Lusaka, Zambia 23-25 February.*

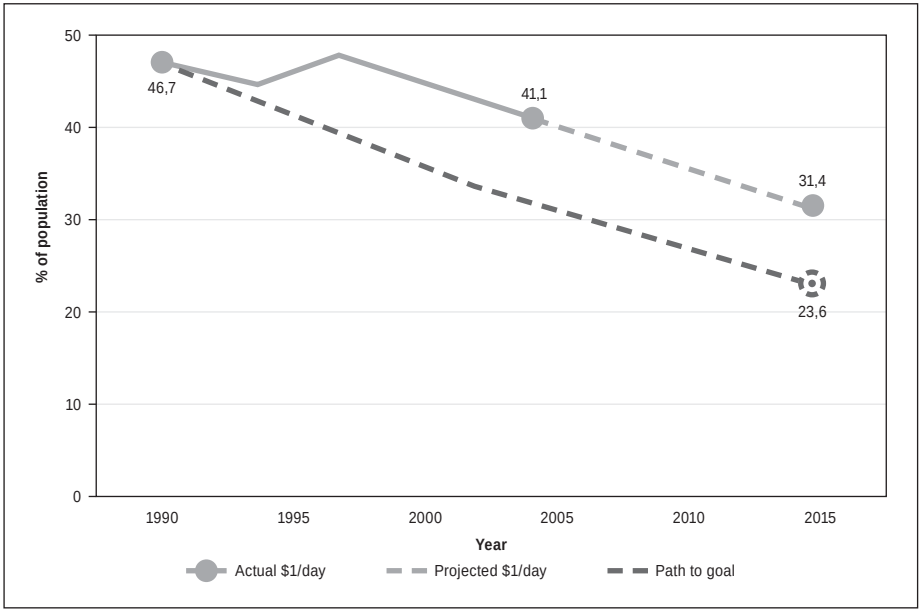
Despite official development assistance from the rich countries, the sub-Saharan African region has lagged far behind in the human development indicators. The region is the only one in the world that is not on track to achieve a single target of the Millennium Development Goals (Schaefer, 2004:3). Although the region has had a growth rate of 5,8% during 2005, it was mainly due to the high growth rate in Angola (19,1% due to oil revenues), Mozambique and South Africa (Conference of African Ministers, 2006: section 2.2). The overall development indicators remain below the target set for the MDGs and the progress in combating poverty, diseases, gender inequality and illiteracy remains slow. As illustrated in Table 3, all eight Millennium Development Goals (MDGs) have not been achieved, and the failure may be attributed to the failure of sub-Saharan Africa's lack of adequate response to the AIDS epidemic. The AIDS epidemic exacerbates the plight of poor people with many parents dying, with the result of loss of income and food security; children, especially the girl child being taken out of school to work; death of infants and mothers; and the increase of other diseases such as tuberculosis and malaria.

Millennium Development Goal 1 (MDG 1): Eradicate extreme poverty and hunger

MDG 1 aims to halve by 2015 the proportion of people whose income in less than US$1 per day and also halve by 2015 the proportion of people who suffer from hunger. Extreme poverty is defined as the proportion of people living in developing countries who live on less than $1 per day (this was based on the purchasing power parity 1993 constant prices) (International Bank for Reconstruction and Development/The World Bank, 2008: Annex). According to the 2007 Millennium Development Goals Report the poorest are getting a little less poor in most regions (United Nations, 2007:7), with the proportion of people that live in extreme poverty is down from almost 33% to 19 % in the period 1990 to 2004. In sub-Saharan Africa, the poorest region in the developing world, the proportion of people that live in extreme poverty came down from 46,8% to 41,1 % in the same period. Although there has been a reduction, the region is lagging far behind the other regions in attaining MDG 1 (Figure 3) and should the trend in the region continue, the targets for the first goal will not be achieved (WaterAid 2007).

There is a proven relationship between poverty and the development of epidemics; and epidemic disease, the same as any other illness, has the possibility to increase poverty

Figure 3: Share of people living on less than $1 or $2 a day in 2004 and projections for 2015 for sub-Saharan Africa



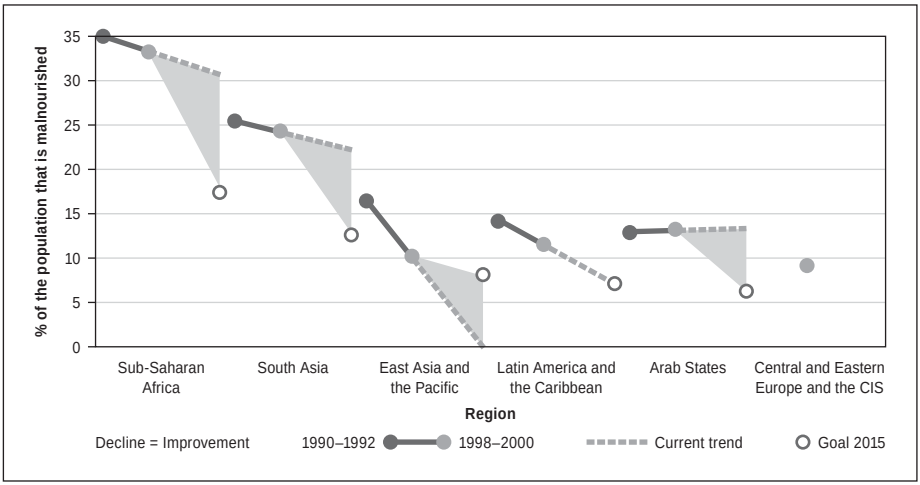
Source: International Bank for Reconstruction and Development/The World Bank. 2008. Global Monitoring Report 2008. MDGs and the environment. Agenda for inclusive and sustainable development. *Washington, DC: The World Bank.*

(Barnett & Whiteside, 2002:§1). It is therefore important to consider the association between the AIDS epidemic and poverty and its accompanying social vulnerability. Some of the hardest hit countries in sub-Saharan Africa were also poor at the onset of the AIDS epidemic, and because of the vulnerability of the population, the epidemic had and will have an exceptionally harsh effect. There is a note of caution in generalising, as two of Africa's wealthiest nations, South Africa and Botswana, also have amongst the most severe HIV/AIDS epidemics in the world. In these countries with generalised epidemics, HIV will affect both rich and poor alike (Ruxin, Binagwaho, & Wilson, 2005:20). However, the poorest households will to a certain extent be worse affected by HIV/AIDS (Isaksen, Songstad, & Spissøy, 2002:10). Some of the characteristics of poverty in the region are (Isaksen et al., 2002:10):

- poverty primarily in rural areas;
- poor people in rural areas mostly engage in subsistence farming;
- the new face of poverty is in the urban areas, mostly informal settlements;
- large families, children and old people are among the poorest; and
- poverty has a gendered dimension, women are poorer than men.

The impact of the AIDS epidemic will be the hardest at household level of poor people. With the onset of AIDS, the household will have increasing medical, funeral and legal costs. This will erode the household's savings with the resulting changes in consumption and investment patterns. The whole household's financial, social and health status will be affected with the loss of breadwinners. With the economically active adults of the household ill and dying, the household could dissolve with children left to fend for themselves. Orphans are often

Figure 4: The percentage of the population that is malnourished



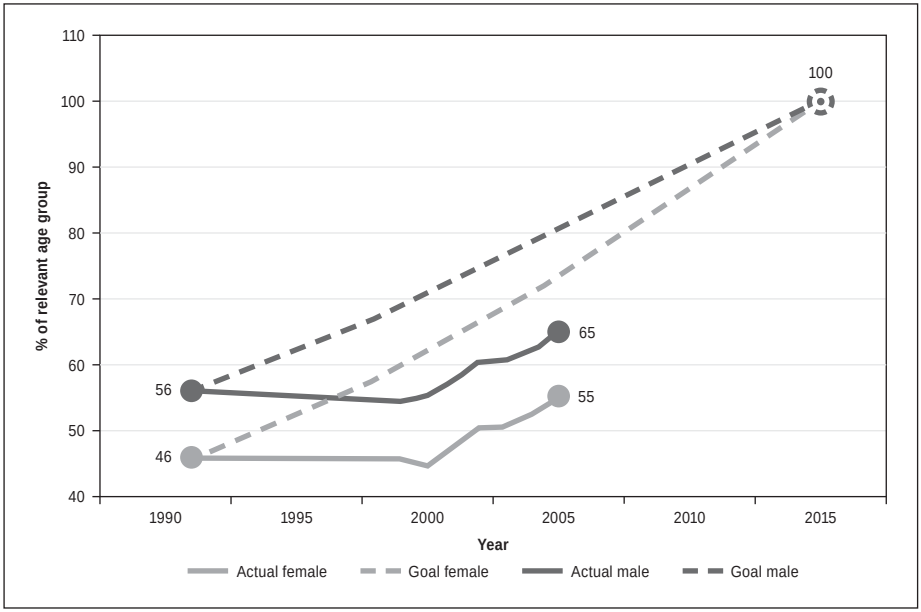
Source: United Nations Development Programme. 2003. Human Development report 2003. Millennium development Goals: A compact among nations to end human poverty. *New York: Oxford University Press.*

taken into households that themselves already have difficulty in surviving. Grandparents, and especially grandmothers have become the primary caregivers of their grandchildren, with between 40 and 60 per cent of orphaned children in severely HIV-affected countries being cared for by grandparents (International Federation of Red Cross and Red Crescent Societies, 2008:21). In poor communities where food security is already compromised, illness and death due to HIV/AIDS will exacerbate the situation. As shown in the projections of the 2003 Human Development Report (United Nations Development Programme, 2003) sub-Saharan Africa is way of target to halve by 2015 the proportion of people who suffer from hunger (Figure 4). In most countries in the region antiretroviral treatment is being offered, but food security and hunger will compromise treatment if food and nutrition do not play an integral part of the treatment regime.

Millennium Development Goal 2 (MDG 2): Achieve primary education for all

The target is for all children, boys and girls alike, to have at least completed their primary school education by 2015. Sub-Saharan Africa is off track for both boys and girls (International Bank for Reconstruction and Development/The World Bank, 2008: Annex) and will not reach the target if current trends continue (Figure 5).

Figure 5: Primary school completion rates and goals



Source: International Bank for Reconstruction and Development/The World Bank. 2008. Global Monitoring Report 2008. MDGs and the environment. Agenda for inclusive and sustainable development*. Washington, DC: The World Bank.*

The AIDS epidemic destabilises the education system, limits education opportunities and reduces school attendance, especially for girls (International AIDS Vaccine Initiative, 2007:2). In countries with a generalised AIDS epidemic, young parents die in large numbers, resulting in changing social structures and orphaned children. Older children in the household are often taken out of school to look after sick parents, tend the fields and look after their siblings. Girl children are particularly vulnerable, as they are the first to be taken out of school to care for the sick and other siblings (Isaksen *et al*., 2002:15). By 2005 there were an estimated 12 million orphaned children in sub-Saharan Africa, half of which are a result of AIDS and the number is expected to increase to 16 million in 2010 (Economic Commission for Africa, 2008:13). The implications of the lack of education do not only have bearing on literacy, but on poverty levels, gender equality, the status of women and the vulnerability and susceptibility of orphaned and vulnerable children to HIV infection. The vicious cycle continues, because of HIV/AIDS children are orphaned, thus making them more vulnerable to contract HIV themselves.

Table 4: Estimated figures for children in nine southern African countries – 2006

Country	Life expectancy at birth – years	Estimated children HIV+	Estimated number of orphans
Botswana	40,0	14 000	97 000
Lesotho	41,5	18 000	100 000
Malawi	41,5	91 000	550 000
Mozambique	45,0	140 000	510 000
Namibia	53,5	17 000	85 000
South Africa	48,0	240 000	1 200 000
Swaziland	37,5	15 000	63,000
Zambia	40,0	130 000	710 000
Zimbabwe	35,5	160 000	1 100 000

Sources: United Nations Development Programme (UNDP). 2005. Human Development Report 2005. New York: UNDP. PlusNews. 2004. Country profiles. [Online] Available at: http://www.plusnews.org [Accessed: 29 May 2006]. UNAIDS. 2006. Report on the global AIDS epidemic. A UNAIDS 10th anniversary special edition. Geneva: UNAIDS.

The many orphans due to AIDS are sometimes referred to as a lost generation because of the risk of little or no education, poor socialisation, social disturbance and belonging to an inferior economic class (Alban & Guinness, 2000). Due to the large numbers (Table 4), the social systems are overwhelmed and many orphans are left to fend for themselves or

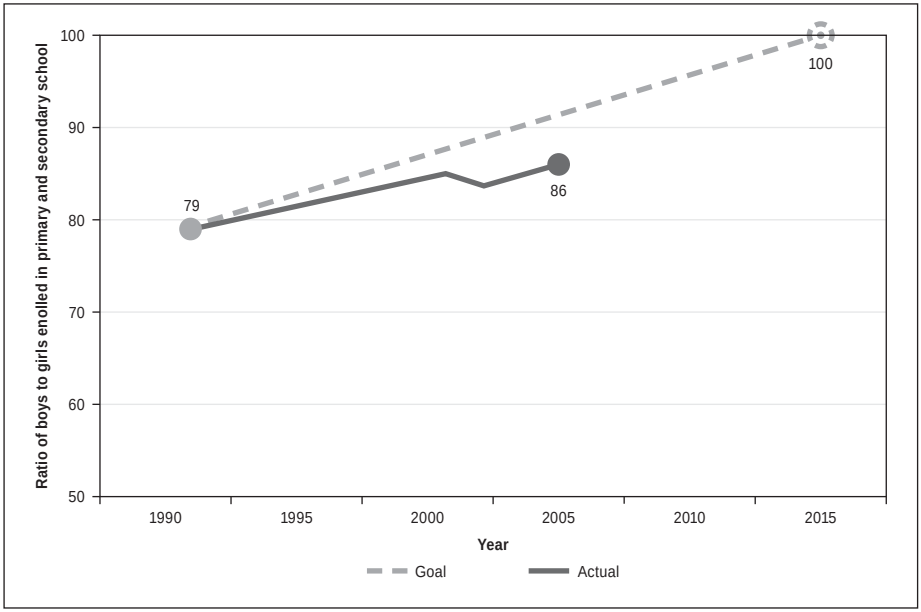
put in foster care in a community that is already suffering under the burden of the disease. Many children are born HIV due to vertical transmission from mother to child and these children face an unclear future of disease and early death.

Millennium Development Goal 3 (MDG 3): Promote gender equality and the empowerment of women

The target for this goal is to eliminate gender disparity in all levels of education by 2015. According to the 2008 Global Monitoring Report sub-Saharan Africa is off tract to meet MDG 3 (Figure 6), with gender gaps in wages and labour participation remaining substantial.

In Africa poor rural women will bear the brunt of the AIDS epidemic. Women, as the primary caregivers of the household, will have to care for the sick, giving up their jobs or unpaid work that contributed to the survival of the family (Isaksen, *et al*., 2002:14). High levels of illiteracy and little or no financial independence exacerbate the women's situation. With the deterioration of household finances, women's expenditure and access to health care will most probably be affected, making them more vulnerable. The elimination of gender inequality and achievement of women's empowerment are fundamental to realise all of the MDGs.

Figure 6: Ratio of boys to girls enrolled in primary and secondary school



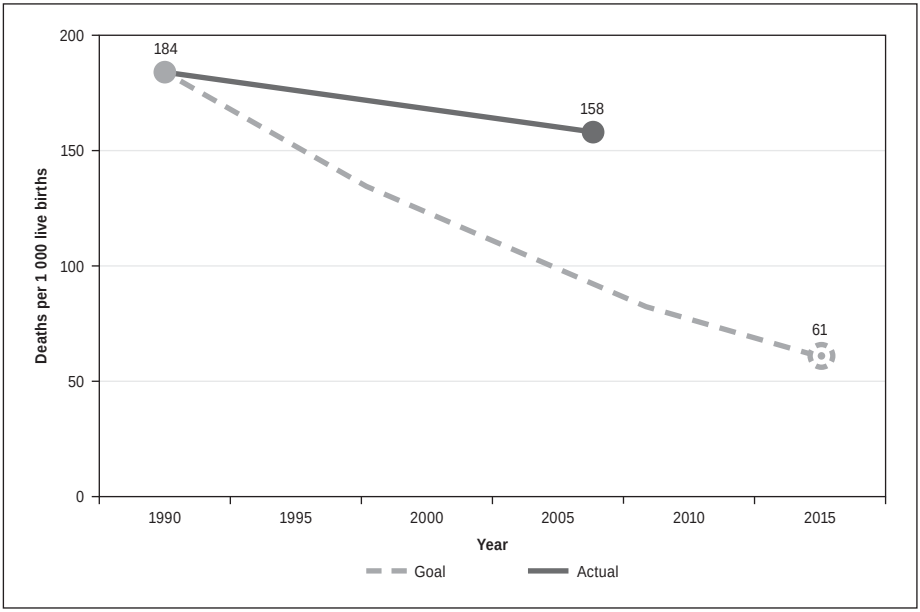
Source: International Bank for Reconstruction and Development/The World Bank. 2008. Global Monitoring Report 2008. MDGs and the environment. Agenda for inclusive and sustainable development*. Washington, DC: The World Bank.*

Another aspect of the impact of AIDS on women and children is the burden it places on the grandmothers. Many grandmothers are forced to take their grandchildren in, which places a tremendous stress on the women as well as the children (Isaksen *et al*., 2002:17). The additional financial and social burden it places on grandmothers increases their vulnerability to become dependent themselves. Surviving siblings often foster many children, placing a financial burden on their own families.

Millennium Development Goal 4 (MDG 4): Reduce child deaths

Poverty, gender inequality, lack of education, HIV/AIDS, tuberculosis (TB), malaria, infectious diseases, access to water and sanitation and maternal health are all factors that impact this MDG. To achieve the target of reducing the under-five mortality rate by two thirds by 2015 sub-Saharan Africa will have to step up programmes to prevent mother-to-child transmission of HIV and providing antiretrovirals to children. The child mortality rates in countries with a generalised HIV epidemic, such as South Africa, Zambia, Swaziland, Zimbabwe and Botswana have all risen in the last 10 years and this phenomenon is ascribed to the spread of the HIV/AIDS epidemic (Alban & Anderson, 2007:163). Children born to HIV positive mothers are also at an increased risk of dying

Figure 7: Under 5 mortality rate



Source: International Bank for Reconstruction and Development/The World Bank. 2008. Global Monitoring Report 2008. MDGs and the environment. Agenda for inclusive and sustainable development*. Washington, DC: The World Bank.*

if the mother dies. Children born in areas with a high HIV prevalence are at a greater risk of dying before the age of five than children born in low prevalence areas (Alban & Anderson, 2007:163).

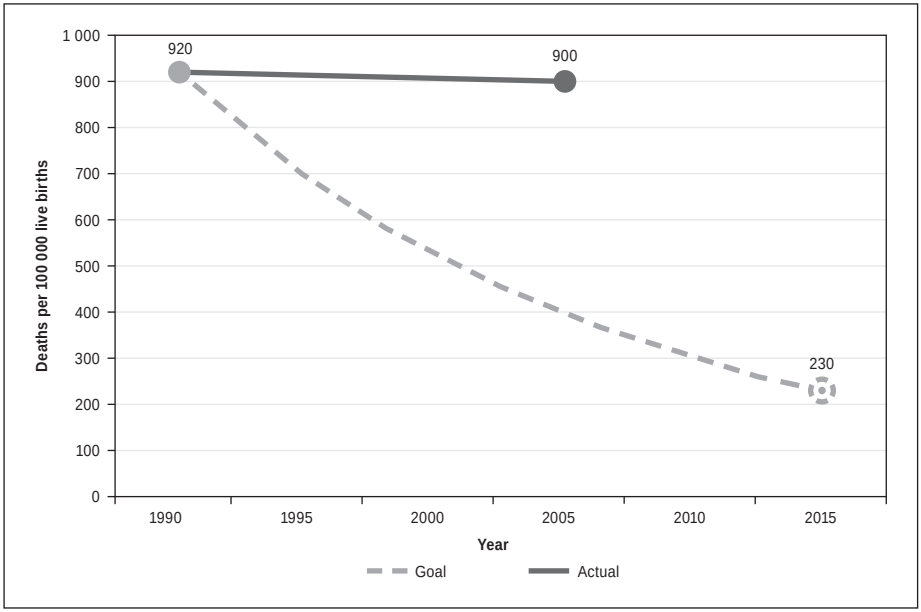
If the current trend continues, the target for this goal will not be achieved (Figure 7).

Millennium Development Goal 5 (MDG 5): Improve maternal health

As with the previous MDG, to improve maternal health, poverty, gender inequality, lack of education, HIV/AIDS, tuberculosis (TB), malaria, infectious diseases, access to water and sanitation will have to be addressed. Indicators on maternal deaths are difficult to measure and often subject to the high uncertainty of the figures (Alban & Anderson, 2007:163). Research has shown that in high prevalence countries such as South Africa, HIV/AIDS is the leading cause in obstetrics' maternal deaths (Alban & Anderson, 2007:164).

Women who are HIV positive have an increased risk of dying and one of the most common causes of death of HIV positive mothers is co-infection with TB. The sad fact is that almost all maternal deaths could be averted with access to care during pregnancy and childbirth, and access to programmes aiming at antiretroviral treatment. As illustrated in Figure 8, the target will not be met should trends continue.

Figure 8: Maternal mortality rates, sub-Saharan Africa



Source: International Bank for Reconstruction and Development/The World Bank. 2008. Global Monitoring Report 2008. MDGs and the environment. Agenda for inclusive and sustainable development*. Washington, DC: The World Bank.*

Millennium Development Goal 6 (MDG 6): Combat HIV/AIDS, malaria and other diseases

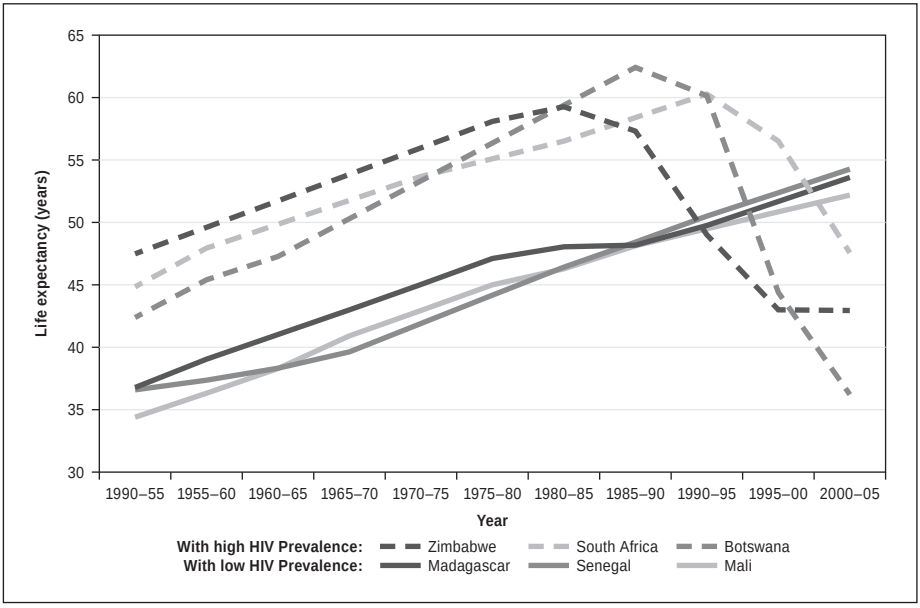
The HIV/AIDS epidemic can be described as a long-wave event with demographic, political and economic consequences. Life expectancy will decrease and the population growth will slow down. It is estimated that the impact of AIDS on the world population will reach its peak by the second half of the 21st century (UNAIDS, 2006:81). The most affected countries will be in sub-Saharan Africa and AIDS will continue to slow or even reverse improvements in life expectancy, and distort the age-sex structures of affected populations.

Figures 9, 10 and 11 clearly shows that countries with a high HIV prevalence rate will also have a marked reduction in life expectancy. Countries such as Botswana, Lesotho, Mozambique, South Africa and Swaziland that are expected to have a negative population growth will present with population pyramids with a chimney shape (Economic Commission for Africa, no date:3).

According to the World Bank (Bollinger & Stover, 1999:8), the HIV/AIDS epidemic appears to be a major reason why per capita growth is slowing down in sub-Saharan countries. Poverty is expected to increase and development to falter due to the epidemics' effects on households, governments, businesses and national economies.

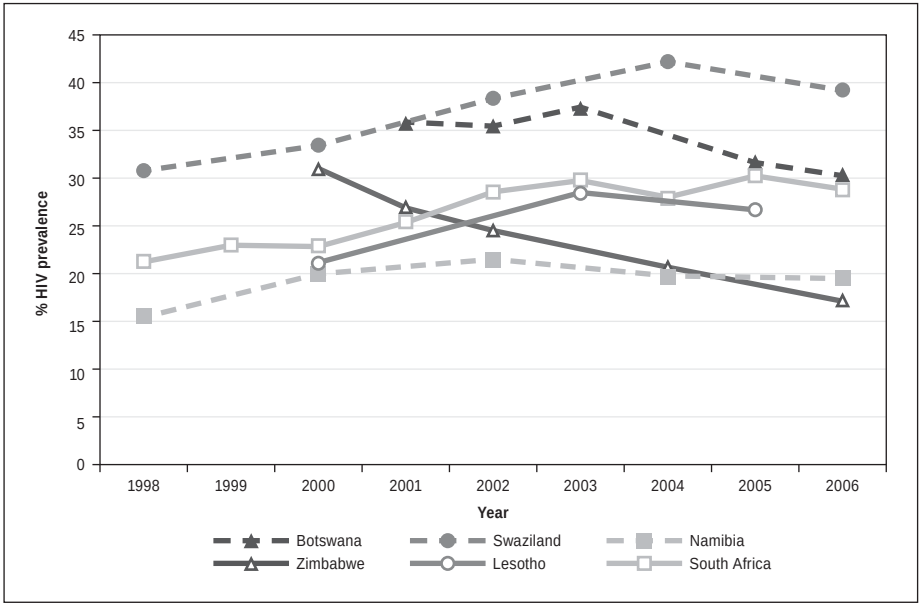
The impact of HIV/AIDS on life expectancy in African communities is already devastating and the gains in the child mortality rate over the past 50 years have been

Figure 9: Life expectancy in selected African countries with low and high HIV prevalence, 1950-2005



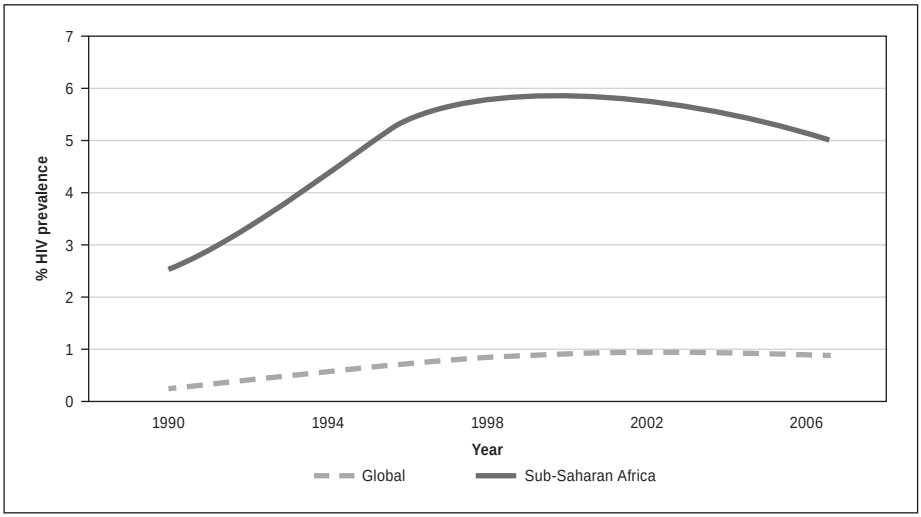
Source: UNAIDS 2002. Report on the global HIV/AIDS epidemic. *Geneva: UNAIDS.*

Figure 10: HIV prevalence of pregnant mothers presenting at the public sector 1998–2006



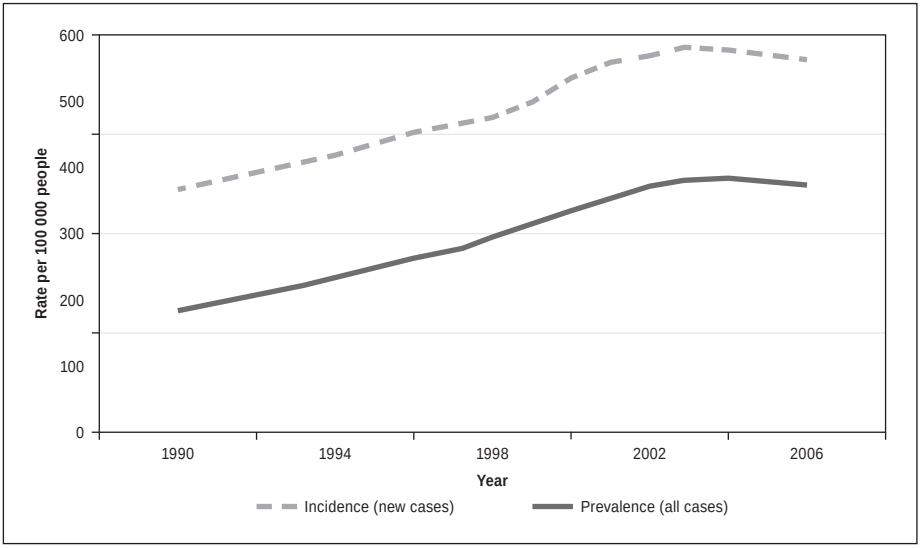
Source: UNAIDS 2008. 08 Report on the global AIDS epidemic*. Geneva: UNAIDS.*

Figure 11: Estimated HIV prevalence trends for ages 15–49 in sub-Saharan Africa



Source: International Bank for Reconstruction and Development/The World Bank. 2008. Global Monitoring Report 2008. MDGs and the environment. Agenda for inclusive and sustainable development*. Washington, DC: The World Bank.*

Figure 12: Tuberculosis incidence and prevalence rates 1990–2006 (sub-Saharan Africa)



Source: International Bank for Reconstruction and Development/The World Bank. 2008. Global Monitoring Report 2008. MDGs and the environment. Agenda for inclusive and sustainable development*. Washington, DC: The World Bank.*

eroded by the impact of AIDS. Seven countries in sub-Saharan Africa, namely Angola, Botswana, Lesotho, Malawi, Mozambique, Rwanda and Zambia, have recorded life expectancy at birth below 40 years of age (Economic Commission for Africa, no date:3). The way AIDS selectively destroys human capital can weaken and even destroys the mechanisms that build human capital (Economic Commission for Africa, no date:6).

In South Africa, the twin epidemics of tuberculosis (TB) and HIV goes hand in hand. TB is the most common opportunistic infection and the leading cause of death for people living with HIV (Booth, 2008:16). As illustrated in Figure 12, the TB cases in six out of ten sub-Saharan African countries have increased HIV prevalence (Alban & Anderson, 2007:165). Co-infection with HIV, TB and malaria impacts on the progression of the diseases, especially among pregnant women (International AIDS Vaccine Initiative, 2007). As discussed above, the HIV epidemic in most of the countries in the region are generalised or hyper-epidemics, and if the current trend continues, the region will not reach the target of MDG 6 to halt the spread and begin to reverse the affect of HIV by 2015 (Figure 12).

Millennium Development Goal 7 (MDG 7): Ensure environmental sustainability

The 2007 Millennium Development Goals Report states that, with halve the developing world without basic sanitation, meeting the MDG target will require extraordinary efforts

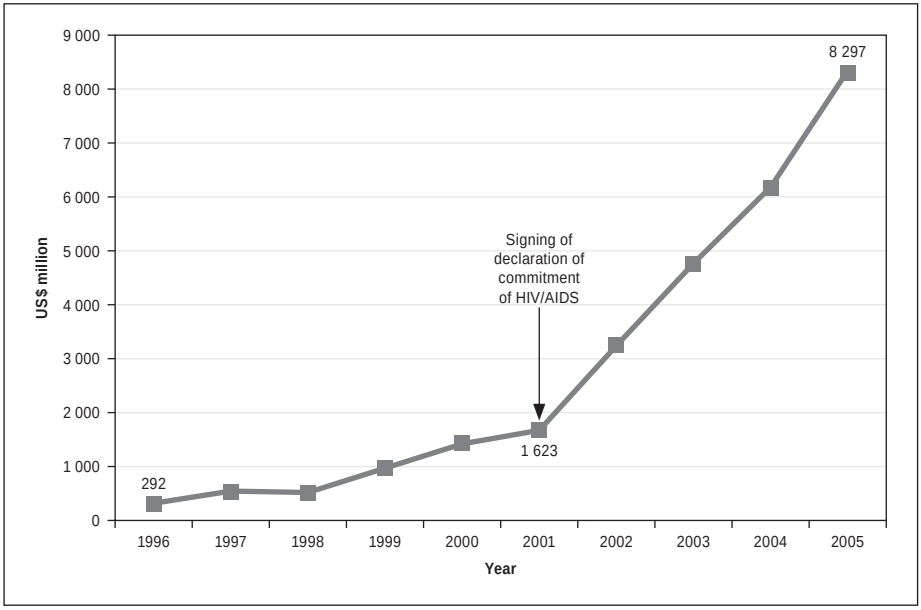
(UNAIDS, 2007:25). A lack of access to safe water and basic sanitation causes 1.8 million deaths annually, deaths that could be prevented (International Bank for Reconstruction and Development/The World Bank, 2008). In countries with a high HIV prevalence access to clean water and basic sanitation have a direct impact on mortality and morbidity. HIV positive mothers have the possibility of providing formula feed to infants, but in the absence of clean water infants are susceptible to diarrheal diseases.

The achievement of the targets of the environmental sustainability MDG is dependent on the achievement of the targets of the other MGDs, specifically poverty, education, and gender inequality.

Millennium Development Goal 8 (MDG 8): Develop a global partnership for development

The global official development assistance debate is at least 50 years old and over the years, billions of dollars were spent on development in Africa, but the developing world has become poorer, debt has increased, there is an increase in deaths occurring form preventable diseases and there are increases in malnutrition and infant mortality in sub-Saharan Africa. Many developing countries are to some degree dependent on official development assistance (ODA) to implement their development strategies. With the AIDS epidemic reaching catastrophic proportions, ODA from multilateral, bilateral and

Figure 13: Estimated total annual resources available for AIDS, 1996–2005



Source: UNAIDS. 2006. Report on the global AIDS epidemic. A UNAIDS 10th anniversary special edition. *Geneva: UNAIDS.*

philanthropic organisations has reached an unparalleled scale. The unpredictability of aid flows, the setting up of parallel structures, diversity of aid disbursement mechanisms and a predetermined technical assistance component as part of aid have contributed to the rethinking of ODA.

For approximately 10 years after the onset of the AIDS epidemic, governments in sub-Saharan Africa either denied that AIDS is a problem and chose to wait and see what will happen (Denis & Becker, 2006:31). While governments in the region were in the denial phase, the epidemic raged on unabated. The denial took on many forms, from outright denial that the new syndrome exists to accusations of a Western plot to annihilate Africa. The WHO acknowledged that it was slow to recognise the AIDS epidemic as a global threat, but established the Global Programme for the Fight against HIV/AIDS as a vertical programme in 1987 (Denis & Becker, 2006:33). In this climate of denialism and accusations, governments were slow to respond, and if they responded to the AIDS epidemic, it was too little too late.

Although aid to AIDS has been scaled up significantly since 1996, the epidemic is still out of control in sub-Saharan Africa. The signing of the Declaration of Commitment on HIV/AIDS in 2001 can be seen as the watershed in the response to the global AIDS epidemic (Figure 13). The international community responded to the epidemic through the establishment of institutions such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, the President's Emergency Plan for AIDS Relief (US) and the Global Coalition on Women and AIDS.

Discussion

This article analysed the achievement of the Millennium Development Goals in the light of the HIV/AIDS epidemic in sub-Saharan Africa. A short discussion on the drivers of the epidemic and the epidemic in the region set a framework for the discussion. The origins of the MDGs and why they were developed give meaning to the development agenda of both the developing and developed world. All the MDGs are interlinked and depended on each other.

Many African governments and international agencies have tried to respond to the HIV/AIDS epidemic with limited results. According to the UNDP, there are three main reasons for this limited success. Firstly, many of the prevention initiatives ignored the social and economic circumstances of individuals and groups that are more vulnerable to HIV infection than others (Van Donk, 2005:5). The second reason is that successful interventions were not sufficiently studied and replicated elsewhere. Lastly, most of the countries' responses were too little and not sufficiently comprehensive. For a country to launch a comprehensive and on-scale response to the epidemic, there is a need for a better understanding of the relationship between HIV/AIDS and development and the determinants of the spread of the epidemic. There is also a need to create appropriate frameworks, tools and methods for mainstreaming HIV/AIDS into development programmes (Van Donk, 2005:5).

Initially governments were slow to respond to the AIDS epidemic, and when they started to respond it was not comprehensive enough or on scale. The AIDS epidemic

is exacerbated by poverty, illiteracy, weak educational and public health systems, the low status of women and the prevalence of other serious diseases such as malaria and tuberculosis in the region (Ainsworth & Over, 1997). Africa's income levels have fallen behind the rest of the world and the impact of the AIDS epidemic, if not arrested, will push the people of Africa further into marginalisation and poverty (Barnett & Whiteside, 2006:139). Barnett and Whiteside call the situation in Africa 'an abnormal normality' where for the past 100 years the continent has been subjected to colonialism, then freedom and becoming nations. The legacy of the last 50 years of the continent's history of disorder, inequality, exploitation and poverty served as a fertile foundation in which the AIDS epidemic could grow and thrive (Barnett & Whiteside, 2006:143).

Very early in the history of the epidemic it became clear that this is more than just a health issue. The adverse effects that the AIDS epidemic had on development institutions and their programmes in Africa forced the health and non-health development agencies alike to approach the problem from a different angle. The epidemic's language was adopted to suit the new developments and terminologies such as multisectoral, cross-sectoral, integrated approach, multifaceted, mainstreaming and cross-cutting were used to describe the new approach. The fact that the AIDS epidemic's impact is widespread and severe on the individual, communities, the workplace, governments globally elevated the epidemic to a development crisis. The epidemic has a direct impact on all eight Millennium Development Goals and prevention and mitigation efforts need to be intensified in the region if the targets are to be reached.

It has been acknowledged that the most devastating impact of the AIDS epidemic is at individual and household level. The social impact on the household entails an increase in food insecurity, less children going to school, more children having to work harder, changes in the household structure and composition (Kelly, Parker & Gelb, 2002:59), increased burden of care for the ill and orphans and social isolation mostly due to stigma and discrimination. People in rural areas, the elderly, women and children are the most affected in terms of loss of possessions, not getting the right nutrition and decease in education. The economic consequences of AIDS for the household may include the loss of possessions, loss of income and productivity, increased expenses for healthcare and poverty. Orphans put a strain not only on the immediate family, but on the community, the society and the country. Orphaned children due to 'normal' deaths are assimilated by society, but with the unnatural high number of deaths of both parents, orphan care has become a development crisis. The large number of orphans due to HIV/AIDS has led to child-headed households, therefore children have been cared for by either the elderly or the very young (Kelly *et al.,* 2002:59). This in turn increases poverty, food insecurity and low school enrolment which may lead to street children, poor healthcare, and many other social problems.

Many studies have been done to determine the economic impact of the AIDS epidemic. In the early years of the epidemic alarmists have predicted the collapse of economies across sub-Saharan Africa. This did not happen and it is generally accepted that not enough research has been done on such a complex issue. The economic impact of the AIDS epidemic is more visible at personal and household level and also certain sectors, such as health, education and agriculture. There is not enough data available that

links the achievement of the MDGs with the severe HIV/AIDS epidemic in the region. This whole field needs to be researched.

CONCLUSION

The African continent faces some daunting challenges in the new millennium, such as crippling national debt, corruption in governments, human rights violations, poverty, conflict and famine. Sub-Saharan Africa is no stranger to these challenges, and with the world's largest number of people living with HIV/AIDS in the region it faces a potential disaster. The UNDP report on development, planning and HIV/AIDS in sub-Saharan Africa states in its introduction that HIV/AIDS is one of the most critical development challenges in the region. The report further argues that it is widely recognised that HIV/AIDS overturns the successes in human development in sub-Saharan Africa with the end result of undermining development and economic growth. The epidemic also creates grave challenges to public sector management and governance.

HIV/AIDS is potentially one of the most serious threats to sustainable development in Africa. Life expectancy at birth has dropped to below 40 years in nine African countries, namely Botswana, Central African Republic, Lesotho, Malawi, Mozambique, Rwanda, Swaziland, Zambia and Zimbabwe. As AIDS affects the most productive sector of the population on a continent where four out of ten people live on less than US $1 per day, HIV/AIDS needs to be taken seriously and become a priority.

Other major development challenges such as food security, education, empowerment of women and poverty are closely linked to HIV/AIDS. The region has 34 of the world's 50 least-developed countries and it will need a special effort from both the continent and the developed countries to make major progress towards reaching the Millennium Development Goals. Africa is the poorest region in the world, with sub-Saharan Africa per capita GNP one-tenth of that of Latin America. Although Africa has a positive growth rate, it will not be enough to meet the Millennium Development Goals by 2015. The International Monetary Fund (IMF) has estimated that the sub-Saharan region should have a growth rate of about 7% per year if the MDGs are to be achieved. HIV/AIDS will have an impact on sub-Saharan African governments' spending, specifically the health and social budgets. Some of the indirect effects will come from the collective economic impacts, the increase of poverty, distorted development spending, and the increased demands on government to alleviate poverty. With six years to go before the deadline for the achievement of targets, sub-Saharan Africa will not meet the targets for the MDGs should the current trends continue.

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