A Corrosive, Not Explosive, Threat

HIV/AIDS, Demographic Change, and Stability in Sub-Saharan Africa

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The HIV/AIDS epidemic is profoundly altering the demographic picture of Sub-Saharan Africa in ways that are likely to undermine societal and economic structures at the household and community levels. In the long term, these trends will likely diminish state capacity, and perhaps, stability.[1] The disease is reducing population growth rates, shortening life expectancy, skewing age and sex structures, and increasing infant and overall mortality rates throughout the region. It is attacking economically-productive age groups, producing large numbers of orphans, undermining the family structure and the social fabric of local communities, and driving many into poverty. The most affected countries will be threatened by the loss of skilled professionals, the erosion of civil society, the decay in the state's ability to implement policies, and reduced economic growth; thereby rendering relatively fragile states even weaker. The deterioration in the quality of life could also undermine state legitimacy and contribute to civil violence and political disorder. Development, democratic institution building, and security are likely to be negatively impacted, especially in those states that lack the political will to respond to the crisis. However, these negative projections do not predestine Sub-Saharan Africa to a grim future. The consequences of the HIV/AIDS epidemic may be mitigated through a combination

of aggressive African leadership initiatives, effective partnerships with civil society, and continued global financial support.

The Scope of the Epidemic. AIDS is the leading cause of death in Sub-Saharan Africa, and an overwhelming majority of the victims are adults in the most productive age group. According to the United States Census Bureau, 9 percent of the region's population between the ages of 15 and 49 are HIV positive.[2] The spread of HIV/AIDS has been most severe in seven southern African states—Botswana, Zimbabwe, Zambia, South Africa, Namibia, Swaziland, and Lesotho—where prevalence rates reach to more than 20 percent among adult populations.[3] Almost all states in Sub-Saharan Africa report prevalence rates in excess of 5 percent for their adult populations. The number of victims continues to rise, and the scope of the HIV/AIDS crisis is likely to expand considerably if, as experts project, countries with relatively large populations like Nigeria and Ethiopia are hit hard in the next wave of infections.[4]

The extent of the spread is possibly even greater than reported. Data constraints throughout most of Africa provide an incomplete picture of affected populations and their distribution. The capacity of states to record demographic information is quite limited; South Africa may be the only country in Sub-Saharan Africa to have a nearly comprehensive registration of deaths. Moreover, the massive displacement of people and the disruption of social and government systems in places like the Great Lakes region—the area encompassing Uganda, Tanzania, Burundi, Congo-Kinshasa, and Rwanda—make it difficult to collect enough data to assess the extent of HIV infections. In Angola, where testing is restricted to the coastal zones, prevalence rates are most likely underreported, as data from surveillance sites in neighboring countries close to Angola's southern and eastern borders suggest higher infection rates.

Eroding the Human Resource Base. Sub-Saharan Africa's HIV/AIDS epidemic is dramatically changing demographic patterns in affected states. High mortality rates are driving precipitous declines in life expectancy throughout the region. Lifespans in many states have already been reduced by 10 years, and they are expected to decline another five years by 2010. Even where prevalence rates have been comparatively low, as in Nigeria, significant reductions in life expectancy—more than six years by 2002—have occurred. AIDS mortality has also reversed the progressive reductions in infant mortality rates that occurred during the 1980s and early 1990s. The negative impact on child mortality has been highest among those countries that had significantly reduced child mortality due to other causes.[5] In the absence of progress in preventing mother-to-child transmission, the child mortality rates in 2010 will continue to be significantly higher with AIDS than they would have been without AIDS.

All the countries affected by HIV/AIDS are experiencing distortions in their age and sex structures. AIDS mortality generally peaks between the ages of 30 and 34 for women and 40 and 44 for men.[6] The concentration of AIDS deaths among the adult populations is reshaping population pyramids. Severely affected states can expect a pronounced reduction in the 40-and-older age

groups; this will decrease the number of old-age dependents in the coming years. Sex ratios are also beginning to be skewed. At the end of 2002, UNAIDS estimated that 58 percent of all HIV infections in Sub-Saharan Africa were among women, and this ratio is continuing to grow. Increasing evidence suggests that men are looking for even younger female partners. In many rural areas, HIV infection rates are three to five times higher among young women than among their male counterparts. This trend is an especially troubling development in a region where females grow an estimated 70 percent of the food.[7]

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Dealing with the Crisis. Limited state capacity in effectively combating this crisis places much of the responsibility for dealing with the epidemic at the household and community levels. The debilitation and loss of productive age-group members place additional strain on the household's ability to survive, as well as on community resources.

"As households lose their breadwinners, livelihoods are compromised, and savings are consumed by the cost of health care and funerals," their capacity to produce and purchase food will be greatly diminished.[8] The burden of care, subsistence, and income generation falls frequently on children and the aged. Children are often removed from school to take care of ill family members or regain lost income, which jeopardize their education and future.

The loss of primary income earners has resulted in a rapid increase of poor and destitute families in affected regions. In Kenya, one study found that the death of an adult from AIDS caused household income to fall 68 percent in rural areas and between 47 and 66 percent in urban areas.[9] Africa's already fragile agricultural sector is particularly at risk. Two-thirds of the populations in the 25 most affected African countries live in rural areas, where agriculture is the primary source of household income and subsistence. An estimated 7 million farmers have died of the disease since 1987, thereby slashing the region's capacity for food production and hampering the transfer of farming knowledge from generation to generation.[10]

The growing number of AIDS orphans poses a particular challenge. By 2010, 20 million African children are likely to have lost one or both parents to AIDS. Extended family frequently take on the burden of caring for these orphans, but "as the number of orphans grows and the number of potential caregivers shrinks traditional coping mechanisms are stretched to the breaking point."[11] Moreover, the large numbers of uneducated, unemployed, and poorly socialized youth place an additional burden on the community. These youth populations increase the potential for

violence and crime, especially in areas where urbanization and migration weaken traditional structures, and in conflict zones where they may be recruited as fighters. Few countries have mechanisms in place to provide the needed social support for children who are orphaned or made vulnerable by HIV/AIDS. Consequently, many look primarily to nongovernmental organizations (NGOs).[12]

Formal and informal local organizations are being stretched to the breaking point by the loss of key personnel and increased demands from the growing HIV/AIDS crisis. The epidemic is claiming great numbers of teachers, doctors, community leaders, and others who form the backbone of civil society, the national health sector, and education systems. In Zambia, teachers have been dying faster than new ones can be trained.[13]

Weak States Become Weaker?

The effects of the epidemic on state capacity are less clear than the repercussions on the household and local communities. However, evidence suggests that it will probably be increasingly difficult for states to effectively implement the policies and maintain the legitimacy necessary to cope with the wide-ranging impacts of the HIV/AIDS epidemic. Weak states are likely to become even weaker as the progression of the disease and limited capacity of the state reinforce one another. Most Sub-Saharan African countries already suffer from ineffective governments and lack the infrastructure and human resources necessary to effectively address health and social problems associated with the disease. Governance measures indicate that 34 of the 47 countries in the region either stagnated at a relatively low level or became significantly worse during the period of 1997–98 to 2000–1.[14] A recent UNAIDS report cites limited financial and human resources as an impediment in the implementation of multi-sector strategies to fight the disease, noting particularly the constraint posed by the limited capacity of the non-health sectors.[15] The ability of the government to effectively implement policies and provide services is likely to decline as the epidemic deepens and revenues are lost, resources are diverted, and more of the region's relatively small group of trained and experienced elites, bureaucrats, professionals, and skilled government workers are infected or drawn away to care for the sick.

Determining the extent of the impact on government effectiveness, however, is difficult. HIV/AIDS is but one of many variables that affect a state's performance. Efforts to measure a reduction in effective governance are made more difficult by the time lag between HIV infection, full-blown AIDS, and death; the lack of accurate reporting on vital statistics in the region; and the supporting role performed by many churches and mosques, NGOs, and other groups. These factors can often mask the deteriorating state performance.

One of the most visible and early signs of decline in state performance occurs in the security sector. HIV prevalence is considerably higher among some Sub-Saharan African militaries than among their civilian counterparts. This occurs because of their age and sex structures, mobility, frequent absences from families, and tendencies toward risky lifestyles. "Ministries of Defense of some countries in Sub-Saharan Africa report HIV prevalence averages of 20 to 40 percent in countries among their armed services and rates as high as 50 to 60 percent where HIV/AIDS has been present for more

than a decade," according to UNAIDS.[16] No direct correlation between high HIV prevalence in military forces and performance in battle has been established. However, the generally high rates of infection, particularly among hard-to-replace officers, noncommissioned officers, and enlisted soldiers with specialized skills, may diminish the combat readiness and capability of military forces, thereby increasing the risk of instability.

The implications for security go beyond the state level. The effects of high HIV prevalence are also likely to negatively impact international and regional peacekeeping operations, as recruitment of forces becomes more difficult, military effectiveness is reduced, and soldiers become vectors for the further spread of HIV.[17] Infections and deaths among police forces have also been high. McPherson reports that approximately 75 percent of the deaths in the Kenyan police force can be traced to HIV/AIDS,[18] while in South Africa an estimated 25 percent of police forces are now infected, according to Price-Smith.[19]

State legitimacy is often measured by the degree to which a government pursues policies supported by their populace, or —particularly in non-democratic countries—how well they meet the general custodial needs of their population. The legitimacy of states is likely to erode with their failure to address important issues or provide necessary services to their populations. A recent global study of public attitudes, conducted by The Pew Research Center for the People & the Press, indicates that AIDS in Sub-Saharan Africa is becoming a significant concern. "AIDS and disease" was identified as the most important of national problems by respondents in eight of the ten Sub-Saharan African countries surveyed.[20]

Although HIV/AIDS to date has only become a "hot button" political issue in South Africa, it is fast moving onto the public agenda in a number of Sub-Saharan African states, including virtually all of the highly affected southern African states. The inability of the leadership of these countries to curtail the spread of the disease could in time translate into a political liability.[21] Indeed, in a survey taken in seven southern African countries with prevalence rates of over 20 percent, respondents in the most democratic states—South Africa, Botswana, and Namibia—placed HIV/AIDS among the top three most important problems facing the country.[22] Opposition parties, unions, and civil society in South Africa are becoming increasingly strident in their call for government action, especially with regards to the provision of anti-retroviral therapy for HIV-positive pregnant women.[23]

HIV/AIDS is also affecting economic growth and development. The loss of personnel, productivity, consumers, and investors is reducing the profitability of

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African businesses. Although difficult to measure, studies have attempted to estimate the macroeconomic impact in countries, mostly in Sub-Saharan Africa where the epidemic is most serious, and found probable reductions in GDP growth rate between 0.5 and 2.6 percent per year.[24] Experts at the World Bank and Harvard University have projected that GDP declines are triggered at 5 percent and 15 percent prevalence rates. At 5 percent HIV/AIDS prevalence, the economic effect remains minor; however, at 15 percent, it rises to a level equaling losses to GDP of more than 1 percent per year. While this trend may not be significant in any given year, it can equate to a tremendous loss over a 10 to 15 year span.[25] Rising HIV/AIDS rates are also likely to reduce foreign investment and place additional costs on companies already operating in the country.

Potentially one of the most alarming consequences for Africa's future is the negative impact from the high prevalence rates in southern Africa, a region with relatively well-developed infrastructure that has been considered a "growth pole" for the wider continent. Infection rates have also been high in other "growth pole" states, such as Kenya and Ivory Coast, with relatively dense transportation infrastructures and higher levels of economic activity that attract migrant populations.

Increasing Vulnerability to Instability. In the long term, the HIV/AIDS crisis is likely to increase the potential for political instability and slow democratic development in Sub-Saharan Africa. The crisis is exacerbating conditions that breed violence and conflict, poverty, the breakdown of traditional social structures, economic underdevelopment, and the struggle for power and resources. The decaying quality of life may contribute to the loss of state legitimacy and foster vulnerability to serious political crises. A CIA-sponsored task force on political instability has investigated the causes of state instability in 138 cases over a 46-year period that ended in 2001.[26] Its findings suggest that the level of infant mortality, which is rising as a result of the HIV/AIDS crisis, is a good indicator of the overall quality of life. High levels of infant morality strongly correlate with an elevated degree of political instability. High infant mortality has a particularly strong linkage with the likelihood of state failure in partial democracies, which now account for more than a third of the governments in Sub-Saharan Africa.[27] Furthermore, the disease is likely to exacerbate income inequalities in ways that could promote criminal activity and—as in South Africa where these inequalities largely mirror racial lines—inter-group hostilities.[28]

The severe social and economic impacts and tolls of HIV/AIDS on the political and military elites and middle classes of African countries are likely to intensify the struggle for political power and for control of scarce state resources as well. This ensuing internal struggle will hamper the strengthening of strong

civil society and other essential underpinnings of democracy. This will increase pressure on nascent democracies in the region by adding to economic misery and political polarization.[29]

Stemming the Spread. The roughly 10-year-long progression of the disease—from HIV infection to full-blown AIDS to death—allows for time in which interventions can mitigate the impacts of the disease. With an estimated 90 percent of Sub-Saharan Africans still HIV/AIDS free, however, it is hardly surprising that much attention will be focused on halting the spread of the disease through programs geared to prevent new infections. The Ugandan experience in driving down the country's adult infection rate from 12 percent in 1995 to 5 percent in 2001 suggests a complex set of epidemiological, socio-cultural, political, and institutional elements that are likely to play important roles in checking the disease. Although specific HIV/AIDS strategies will differ from country to country, elements of the Ugandan policies are likely to be effective in many national contexts. These concentrate on approaches such as: high-level political support; a multi-sector response; decentralized planning interventions that address women, youth, stigma, and discrimination; implementation of culturally appropriate communication on behavior change; active involvement of religious leaders and faith-based organizations; voluntary counseling and testing; emphasis on sexually transmitted infection (STI) control and prevention programs; and a decrease in multiple sexual partnerships and networks.[30]

Predicting the epidemiological and demographic impacts of various interventions is difficult. However, several prevention and treatment programs are recognized as providing potential for reducing new infections, such as sexually transmitted disease (STD) control, voluntary counseling and testing (VTC), mother-to-child transmission prevention (MTCTP), and antiretroviral drugs (ART). One recent study, which modeled the impact of interventions in averting new HIV infections, suggests that between July 2002 and June 2015 prevention-only interventions (STD, VCT, and MTCTP) could avert 1.5 million new cases of HIV in South Africa alone.[31] In addition to aiding in the reduction of new HIV infections, ART programs are likely to reduce the number of maternal orphans under the age of 18 too, by extending the lives of HIV positive parents.

The absence of political will, the paucity of strong leadership, and poor state capacity are major constraints in the now two-decade-long fight against the epidemic. These problems must be overcome, if the battle against HIV/AIDS is to be won. Strong leadership is important for the commitment of resources and to help to remove the stigma attached to HIV/AIDS, which has impeded prevention and treatment. The bold leadership of Uganda's President Museveni was a driving force in that country's aggressive response to the disease. "The country's HIV/AIDS problem remains significant, but Museveni has had success in his relentless campaign to change behavior by urging people not to have sex with multiple partners, publicly acknowledging the threat posed by AIDS, de-stigmatizing the disease, and decentralizing HIV education programs down to the village level."[32] The government in Senegal, which has also been engaged in an HIV/AIDS program since 1986, is credited with limiting the spread of the dis-

ease in that country. The infant mortality rate in Senegal is among the lowest in Sub-Saharan Africa.

Even strong leadership cannot ensure the effective implementation of a program if the state lacks institutional and bureaucratic capacities. Working to alleviate these shortcomings through initiatives designed to develop leadership and support capacity building could be an important first step toward facilitating the development and implementation of effective strategies and programs. Part of the success of Uganda and Senegal can be attributed to both their governments' capacities to coordinate NGO efforts and resources.[33] Efforts to develop civil society are also essential. Researchers such as Alan Whiteside have also noted the importance of civil society in combating the disease. Civil society, although fragile, has played an active role in the political and economic advances in a substantial number of African countries in the last 10 to 15 years.[34]

Halting negative demographic and epidemiological trends will require a multifaceted approach that addresses the constraints impeding effective implementation of prevention, treatment, and care. The international community and affected governments face overwhelming pressures to finance treatment, prevention, and care, including the costly efforts to find an effective vaccine. They will be challenged to ensure that adequate attention is also focused on removing some of the longstanding obstacles to the effective realization of prevention and treatment programs. Efforts to combat the HIV/AIDS epidemic will necessarily require substantial resources from the international community. With President Bush's commitment of additional resources promised in his January 2003 State of the Union speech, the outlook on global funding for HIV/AIDS awareness and prevention is more positive than ever before.

Author's Note: All statements, opinions, policies, and positions expressed herein are solely those of the author. They have not been approved by and are not necessarily reflective of the policy or position of the author's employer.

NOTES

1 State capacity, also known as governance, involves a state's performance—the ability to implement policies effectively—and its legitimacy—the ability to justify itself and its policies to its people.

2 Karen A. Stanecki, "The AIDS Pandemic in the 21st Century," U.S. Census Bureau, draft report for the XIV International Conference on AIDS, Barcelona, Spain, July 2002.

3 The spread of the disease in the southern African region was facilitated by the relatively well-developed transportation and economic infrastructure and high population mobility. The ability of the southern African state bureaucracies and health systems to record vital statistics is better than in many Sub-Saharan African states—producing perhaps a more accurate picture of the extent of the disease in these countries than is true in countries with less effective states.

4 National Intelligence Council, "The Next Wave of HIV/AIDS: Nigeria, Ethiopia, Russia, India, and China," September 2002.

5 Child mortality refers to deaths of children less than 5 years of age; infant mortality captures the number of deaths for children 1 year and under per 1,000 live births.

6 Stanecki, U.S. Census Bureau, 4–5.

7 United Nations Food and Agricultural Organization, "Rural women carry family sorrows and burdens," Internet, http://www.fao.org/focus/e/aids/old/women-e, 1997.

8 UNAIDS Fact Sheet, "The Impact of HIV/AIDS," July 2002, 1.

9 C. Leighton, "The Direct and Indirect Costs of HIV/AIDS," in S. Forsythe and B. Rau, eds., *AIDS in Kenya* (Arlington, VA: Family Health International, 1996).

10 United Nations Food and Agricultural Organization, "HIV/AIDS: a rural issue," Internet, http://www.fao.org/focus/e/aids/aid1-e, June 2001, 1.

11 UNAIDS, "Waking up to devastation: Report on the Global HIV/AIDS epidemic," June 2000, 27.

12 Joint United Nations Programme on AIDS, "Supplement to UNAIDS Regional Profiles: State of the Epidemic," Internet, http://www.unaids.org/UNGASS/

docs/UNAIDScompanion_0103_en.doc, 2002, 4.

13 Alan Whiteside, "HIV/AIDS, Health, and Education," *State of the Art: AIDS and Economics*, prepared for International AIDS Economic Network's Economics of HIV/AIDS in Developing Countries Symposium, Barcelona, Spain, June 2002, 27.

14 Based on Daniel Kaufmann and Aart Kraay, "The New Worldwide Governance Research Indicators Dataset, 1997/98 and 2000/1," World Bank Institute, 2001.

15 Joint United Nations Programme on AIDS, "Supplement to UNAIDS Regional Profiles," 2.

16 UNAIDS Fact Sheet, "AIDS as a Security Issue," July 2002, 2.

17 National Intelligence Council, "The Global Infectious Disease Threat and Its Implications for the United States," January 2000, 33.

18 Malcolm F. McPherson, "Macroeconomic Models of the Impact of HIV/AIDS," draft paper, Center for Business and Government, John F. Kennedy School of Government, Harvard University, February 2003, 6.

19 Andrew Price-Smith, "Pretoria's Shadow: The HIV/AIDS Pandemic and National Security in South Africa," *Chemical and Biological Arms Control Institute, Special Report 4* (2002), 24.

20 The Pew Research Center for the People & the Press, "What the World Thinks in 2002," The Pew Global Attitudes Project.

21 Jennifer Brower and Peter Chalk, *The Global Threat of New and Reemerging Infectious Diseases: Reconciling U.S. National Security and Public Health Policy* (Santa Monica, CA: RAND, 2003), 7.

22 Alan Whiteside et al., "Examining HIV/AIDS in Southern Africa through the eyes of ordinary Southern Africans," Center for Social Science Research Working Paper No. 11, University of Cape Town, 2002.

23 Price-Smith, "Pretoria's Shadow," 26.

24 Robert Greener, "AIDS and Macroeconomic Impact," *State of the Art: AIDS and Economics*, prepared for International AIDS Economic Network's Economics of HIV/AIDS in Developing Countries Symposium, Barcelona, Spain, June 2002.

25 David Gordon, "Plague Upon Plague: AIDS & Violent Conflict in Africa," United States Institute of Peace, 15.

26 Science Applications International Corporation, "State Failure Task Force Report: Phase III Findings," forthcoming.

27 Based on the Polity IV dataset, Center for International Development and Conflict Management, Internet, http://cidcm.umd.edu/inscr/polity, University of Maryland, 2002. The level of democracy for each country and year is assigned using a scale developed by Ted Robert Gurr that ranks states according to their procedures for open, competitive, participatory politics.

28 Price-Smith, 10.

29 National Intelligence Council, "The Global Infectious Disease Threat," 32.

30 U.S. Agency for International Development, "What Happened in Uganda? Declining HIV Prevalence, Behavior Change, and the National Response," September 2002.

31 Johnson and Dorrington in "The Cost and Benefits of Preventing and Treating HIV/AIDS," a Treatment Action Campaign Fact Sheet, Internet, http://www.tac.org.za, February 2003, 3. In addition to averting mother-to-child transmissions, MTCPT programs include a voluntary counseling and testing component that can also significantly reduce the number of new infections among adults.

32 National Intelligence Council, "The Next Wave of HIV/AIDS," 17.

33 United Nations Development Programme, "HIV/AIDS—A Government Challenge," Bureau for Development Policy, Special Initiative on HIV/AIDS, July 2001, 1.

34 Alan Whiteside, "The Threat of HIV/AIDS to Democracy and Governance," briefing prepared for USAID, 1999. Also see Gordon, "Plague Upon Plague," 14.