

**Education and the Epidemic:  
The Effects of HIV/AIDS  
on Basic Education in Namibia**

by

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## **Dedication**

To my grandmother, mother, and sisters for the ways they have molded me,

and to

my former students and fellow teachers at Hekima Girls Secondary School

“on beautiful Miriam Hill in Kashozi,” Tanzania, who taught me that

education has more to do with trust, belief, and relationships than with

classrooms, books, and formulas.

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Among the LBJ School Faculty, are many wonderful people who have helped me discover new lenses through which to view the world and taught me to evaluate how to evaluate these lenses when addressing public policy. In particular, I would like to mention Ken Ashworth, Jamie Galbraith, Ken Matwiczak, Chandler Stolp, and Pat Wong.

Finally, I would particularly like to thank Ken Tolo, my reader, professor, and mentor for the innumerable ways he has helped me over the past two years.

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## **Forward**

This document was born out of my personal interest in exploring the impact of HIV/AIDS on education. As my academic background is in the fields of engineering and public policy, I neither claim expertise in education nor in public health. On the other hand, my interests and work experience lie in the fields of education and development. It is in this respect that I came to study the impact of AIDS on education in one developing country, Namibia. From my perspective, the impact of AIDS on the education sector in developing countries is a field that has not been given thorough enough consideration. Indeed, I feel there has not been sufficient thought given to the devastating effects of AIDS on any type of development work. I hope, therefore, that this document can serve as a starting point for people beginning to consider the links between AIDS and education.

This work was very helpful for me in learning about the issues surrounding HIV/AIDS and education and in considering thoughtful reaction to the realities posed by the epidemic. For all errors and misinterpretations in my documentation and analysis, I offer my apologies and I accept full responsibility. For those who read this work, I thank you for your interest in these issues and I appreciate any work you do to address them. Your work is extremely important. This document is merely one meager start on a very long road towards effectively addressing the serious issues posed by the AIDS epidemic.

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The University of Texas at Austin, 2000

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**Abstract**

This report considers the effects HIV/AIDS will have on the national education system in Namibia. It considers the factors that have aided and continue to aid the spread of the disease throughout Africa and throughout Namibia. It explores the effects AIDS will have on children and on student enrollment in the Namibian education system. It also considers the effects AIDS will have on the supply and demand for teachers. Finally, it provides recommendations for addressing the AIDS crisis to leaders of all sectors of Namibian society, national and international aid organizations, and education policymakers.

## Table of Contents

<b>List of Figures .....</b>	<b>x</b>
<b>List of Tables.....</b>	<b>xi</b>
<b>Chapter 1. Introduction.....</b>	<b>1</b>
<b>Chapter 2. AIDS in Africa.....</b>	<b>7</b>
<b>Origins of AIDS.....</b>	<b>7</b>
<b>Spread of AIDS.....</b>	<b>8</b>
<b>Factors Affecting the Spread of AIDS.....</b>	<b>10</b>
<b>Chapter 3. Namibia—A New Country with Old Problems.....</b>	<b>26</b>
<b>Geography, Exploration, and Colonization.....</b>	<b>26</b>
<b>South Africa Takes Control.....</b>	<b>27</b>
<b>Modernization and the Struggle for Independence.....</b>	<b>28</b>
<b>Independence Achieved and the Legacy of Inequality.....</b>	<b>29</b>
<b>Chapter 4. AIDS in Namibia .....</b>	<b>32</b>
<b>Factors Affecting the Spread of AIDS.....</b>	<b>33</b>
<b>Spread of AIDS.....</b>	<b>37</b>
<b>Chapter 5. Characteristics of Basic Education in Namibia.....</b>	<b>40</b>
<b>Ministry of Basic Education and Culture.....</b>	<b>41</b>
<b>Structure of the Basic Education System .....</b>	<b>43</b>
<b>Current Issues .....</b>	<b>45</b>

<b>Chapter 6. Effects of AIDS on Children .....</b>	<b>54</b>
<b>Children Infected with HIV .....</b>	<b>54</b>
<b>AIDS Orphans .....</b>	<b>57</b>
<b>Forecasting the Effects of AIDS on the Student Population.....</b>	<b>60</b>
<b>Chapter 7. Effects of AIDS on Educators .....</b>	<b>72</b>
<b>Forecasting Teacher Demand .....</b>	<b>74</b>
<b>Teacher Supply.....</b>	<b>77</b>
<b>Summary Effects of HIV/AIDS on the Education Sector .....</b>	<b>81</b>
<b>Chapter 8. Confronting AIDS: Recommendations for Governmental and Non-Governmental Policymakers .....</b>	<b>83</b>
<b>To Namibian Leaders.....</b>	<b>84</b>
<b>To Namibian Education Policymakers .....</b>	<b>86</b>
<b>To Health and Social Welfare Organizations.....</b>	<b>90</b>
<b>To International Development Organizations.....</b>	<b>93</b>
<b>Summary .....</b>	<b>94</b>
<b>Bibliography.....</b>	<b>99</b>
<b>Vita .....</b>	<b>105</b>

## List of Figures

<b>Figure 4.1</b>	<b>The Rise of AIDS in Southern Africa .....</b>	<b>33</b>
<b>Figure 4.2</b>	<b>AIDS Rates by Region.....</b>	<b>37</b>
<b>Figure 5.1</b>	<b>1998 Enrollment in Grades 1 through 12 .....</b>	<b>44</b>
<b>Figure 5.2</b>	<b>Namibian Teachers' Academic Qualifications .....</b>	<b>46</b>
<b>Figure 5.3</b>	<b>Teacher-Training Credentials in Namibia .....</b>	<b>47</b>
<b>Figure 5.4</b>	<b>Average Student-Teacher Ratios by Region.....</b>	<b>49</b>
<b>Figure 6.1</b>	<b>Enrollment Rates of Males and Females between the Ages of 12 and 24.....</b>	<b>56</b>
<b>Figure 6.2</b>	<b>Population by Age and Gender .....</b>	<b>58</b>
<b>Figure 6.3</b>	<b>Projected Student Population without the Effects of HIV/AIDS .....</b>	<b>64</b>
<b>Figure 6.4</b>	<b>Projected Student Population with Varying Dropout Rates for HIV-Affected Children .....</b>	<b>66</b>
<b>Figure 6.5</b>	<b>Effects of Change in New Student Enrollment on Total Population of Students (Assuming 15% of HIV-Affected Student Drop Out).....</b>	<b>67</b>
<b>Figure 6.6</b>	<b>Effects of Change in New Student Enrollment on Total Population of Students (Assuming 30% of HIV-Affected Student Drop Out).....</b>	<b>68</b>
<b>Figure 7.1</b>	<b>Growth of Teaching Corps from 1991 to 1998.....</b>	<b>73</b>
<b>Figure 7.2</b>	<b>Four Scenarios for Teacher Demand between 1992 and 2027 .....</b>	<b>76</b>
<b>Figure 7.3</b>	<b>Age of the Namibian Teaching Force .....</b>	<b>78</b>
<b>Figure 7.4</b>	<b>Demand for New Teachers.....</b>	<b>80</b>



## **List of Tables**

<b>Table 5.1 1997 and 1998 Budget Allocations to Education Regions.....</b>	<b>50</b>
<b>Table 5.2 Regional Disparities in School Facilities: 1998 .....</b>	<b>51</b>

## Chapter 1. Introduction

Give a man a fish and you feed him for a day. Teach him how to fish  
and you feed him for a lifetime.  
—Chinese Proverb—

As this proverb suggests, using education as a means to improve the lives of people and to develop nations has long been a strongly intuitive notion. Who can fail to see the power in teaching a person to fish, to grow food, to build better tools, or to communicate more effectively? Although education seems to be a necessity in developed countries, studies suggest that the societal and individual rates of return on investments in education are even higher in less developed countries.<sup>1</sup> Furthermore, many of these studies suggest that these rates of return, particularly for primary education, can be higher than the rates of return on non-human capital investments.<sup>2</sup>

Investment in education is not the silver bullet of development, but it is certainly among the most important tools. Thus, the World Bank, national and international development organizations, and many of the more progressive governments in less developed countries devote significant resources to expanding and improving education to foster development. Since independence movements in the 1960s began freeing nations and native people across Africa, many of these nations have seen promising increases in many of the basic human welfare indicators. Life expectancy in

many nations increased, literacy rates improved, and infant mortality rates fell, as did fertility rates.

After battling to improve these indicators for the past four decades, many of these nations are facing a period where most of these indicators will dramatically worsen. The cause is HIV/AIDS. One example of this disease's impact on the lives of people in Sub-Saharan Africa is a significant decline in life expectancy. According to UNAIDS, the Joint United Nations Programme on HIV/AIDS, life expectancy in Sub-Saharan Africa increased from 44 years in the 1950s to 59 years in the 1990s. With AIDS, though, UNAIDS estimates that life expectancy will decrease to 45 years between 2005 and 2010, essentially erasing almost 50 years of improvements.<sup>3</sup>

Similarly, as the mother-to-infant transmission rate for AIDS is estimated to be between 25 and 35 percent, infant mortality rates have risen and will likely to continue to rise. The United States Census Bureau estimates infant mortality rates in the most heavily affected regions of the world may increase by as much as 75 percent, while the mortality rates for children under five may increase by over 100 percent.<sup>4</sup> Of course, the remaining two-thirds of the infants born to HIV-positive mothers are practically guaranteed to live a large portion of their young lives without one or both parents. They will join a group of orphans estimated to number 13 million by the end of the year 2000.<sup>5</sup>

Indeed, the effects of HIV/AIDS on children and youth in Africa are staggering. It is not sufficient to only consider children orphaned by AIDS,

though. With approximately 23.3 million HIV-positive people in Sub-Saharan Africa, many children live in families with great emotional and financial stress.<sup>6</sup> Further, children and young adolescents, particularly females, are at risk of contracting AIDS through sexual encounters. In some countries in southern Africa, 50 to 60 percent of people newly contracting the disease are between the ages of 10 and 24.<sup>7</sup> For this age group in the most affected countries, HIV-positive females outnumber HIV-positive men two to one.<sup>8</sup> In the case of people between the ages of 15 and 19, females are between five and six times more likely to be infected than their male counterparts.<sup>9</sup>

Fortunately, hope is not entirely lost. Some studies suggest that efforts such as sexual education, STD/AIDS education, and education in general can affect behavior by delaying people's first experience with sexual intercourse, by increasing condom use, and by decreasing dangerous sexual practices and behaviors.<sup>10</sup> In effect, barring the sudden discovery of an inexpensive cure or vaccine, education is among the only options available for fighting the epidemic and mitigating its tragic impacts on individuals and societies. This further increases the value of education in developing countries.

Herein lies the problem. Although education is needed to help countries develop, to fight the AIDS epidemic, and to address the effects of the epidemic, education systems and educators within these countries are themselves attacked by AIDS epidemics. While AIDS increases demands

on these systems for increased sexual education and expanded support for children affected by the disease, these demands come at a time when both human and economic resources are needed to address the disease in other areas such as health and human services. Further, studies confirm the intuitive notion that the disease will have negative economic effect, particularly in countries hardest hit.<sup>11</sup> Furthermore, AIDS affects the greatest resource available to national education systems—AIDS kills teachers.

This report considers the effects HIV/AIDS will have on the education system in one developing country, Namibia. First, it considers the factors that have aided and continue to aid the spread of the disease throughout the country. Second, it explores the effects AIDS will have on children and on student enrollment in the Namibian education system. It then considers the effects AIDS will have on the supply and demand for teachers in Namibia. Finally, it provides recommendations for addressing the AIDS crisis to leaders of all sectors of Namibian society, national and international aid organizations, and education policymakers.

Namibia presents an interesting case study for two main reasons. First, the rate of growth of the AIDS epidemic there has been phenomenal. Although located near several of the other most highly affected countries in the world, the expansion of the epidemic in Namibia developed somewhat later and grew more rapidly than in countries like Botswana, Zambia, and Zimbabwe. Second, given Namibia's historical ties with and similarities to South Africa, studying Namibia may give some insight into how AIDS may

develop in South Africa and, thus, will hopefully provide ideas to help prevent South Africa from developing AIDS rates similar to those of its northern neighbors. Continued development and stability in Southern Africa depend on a strong and healthy South Africa. AIDS threatens both.

## Notes

<sup>1</sup> George Psacharopoulos, "Returns to investment in education: a global update," *World Bank Policy Research Papers, No. 1067* (January 1993).

<sup>2</sup> Jan S. Hogendorn, *Economic Development, Second Edition* (New York, New York, Harper Collins Publishers, 1992).

<sup>3</sup> UNAIDS, *AIDS Epidemic Update* (December 1999).

<sup>4</sup> UNAIDS, *Facts and Figures: 1999 World AIDS Campaign* (Geneva, Switzerland, 1999), p. 5.

<sup>5</sup> UNAIDS, *Children Orphaned by AIDS: Front-line responses from eastern and southern Africa* (December 1999).

<sup>6</sup> UNAIDS, *Children Orphaned by AIDS: Front-line responses from eastern and southern Africa* (December 1999).

<sup>7</sup> UNAIDS, *UNAIDS Statement on the World Conference of Ministers Responsible for Youth*, Lisbon, Portugal, 8-12 August 1998. Online. Available: <http://www.unaids.org/publications/documents/children/young/lisbon98.html>. Accessed: December 12, 1999.

<sup>8</sup> AVERT-AIDS Education and Research Trust, *Women HIV and AIDS*, May 1999. Online. Available: <http://www.avert.org/womenaid.htm>. Accessed: January 12, 1999.

<sup>9</sup> UNAIDS, *AIDS Epidemic Update* (December 1999).

<sup>10</sup> UNAIDS, *Facts and Figures: 1999 World AIDS Campaign* (Geneva, Switzerland, 1999), p. 8.

<sup>11</sup> Mead Over, *The Macroeconomic Impact of AIDS in Sub-Saharan Africa* (Population and Human Resources Department, The World Bank, June 1992), p. 27.

## Chapter 2. AIDS in Africa

When AIDS came, bushes were dry. They just needed this spark to take fire. Why were bushes dry and what were the factors that helped fire spread?

—Yoweri Museveni, President of Uganda, 10<sup>th</sup> International Conference on AIDS and STDs in Africa, Kampala, 1996—

### Origins of AIDS

Since AIDS was first identified in 1981, there has been speculation concerning its origin and history. Current research has uncovered evidence of AIDS appearing nearly simultaneously in Europe (HIV-1), Central Africa (HIV-1), and West Africa (HIV-2) in the late 1950s and early 1960s.<sup>1</sup>

Although there are many theories concerning the origin of the virus, the most prominent theory suggests that the different HIV strains were originally simian immunodeficiency virus (SIV) that crossed the species barrier from primates into humans sometime within the past century. Even for those who promote this theory, though, there are several proposed theories for how and when this transfer occurred. While it has been fairly widely accepted that HIV-2 originated with the sooty mangabey of West Africa, in 1999 researchers at the University of Alabama at Birmingham reported their research indicating a species of Central African chimpanzees as the source of HIV-1.<sup>2</sup>

Although we know now that HIV has existed in humans for over 40 years, it was originally identified in 1981 as a disorder affecting homosexual



men in the United States. Since then, HIV has infected people from all backgrounds and sexual orientations throughout the world. Among the areas of the world struck first and struck hardest was East Africa. Studies suggest that the disease had already reached epidemic level in some of these countries in the 1970s. When AIDS monitoring and surveillance began in the mid-1980s, some of these countries already had large numbers of pregnant women testing positive for HIV. In 1985, tests of pregnant women in urban areas in Uganda found that 10.7 percent of them were HIV-positive. By 1992, this rate reached a high of 29.4 percent before beginning to decline again for the rest of the decade. Although the urban rates in Tanzania, Kenya, and Malawi have never quite reached these levels, rural sites in all of these countries have reported rates near or greater than 30 percent. All these countries saw the greatest numbers of newly reported cases peak in the early 1990s (1991 for Uganda, Tanzania, and Malawi and 1993 for Kenya). To date, Kenya and Tanzania have seen the greatest number of AIDS cases reported of any African nations.<sup>3</sup>

### **Spread of AIDS**

As the AIDS rates in East Africa appear to be subsiding, new epidemics are emerging throughout the rest of Africa. Of the remaining regions, the countries in the South Central Region and Southern Region appear to be on the verge of having the greatest breakout of the disease yet seen, while North Africa and West Africa have seen more moderate growth. The question for planners in these less affected areas is whether their time is

coming or whether societal differences will prevent the disease from spreading as it has in Eastern and Southern Africa.

Current estimates of HIV/AIDS prevalence among adults suggest that the top four most affected countries in the world are in Southern Africa. In 1998, these countries, Zimbabwe, Botswana, Namibia, and Zambia, had estimated HIV/AIDS adult prevalence rates of 25.8, 25.1, 19.9, and 19.1 percent, respectively. The remaining countries in the region are also experiencing high and increasing prevalence of the disease. There is great fear that South Africa, which already has an estimated adult prevalence of 12.9 percent, will soon experience rates more like its neighbors to the north.<sup>4</sup> Of the estimated 23.3 million HIV-positive people in Africa, approximately 10 million live in Southern Africa.<sup>5</sup>

Overall, Sub-Saharan Africa is by far the hardest hit region of the world. UNAIDS suggests that an estimated 70 percent of the 33.6 million HIV-positive people in the world live in Sub-Saharan Africa. Further, given the rate of spread of the disease on the continent relative to other parts of the world, this percentage is likely to increase. The cumulative statistics related to AIDS in Africa are staggering. They suggest that 3.8 million children, most under the age of 5, have the disease, while another 10 million are orphaned by the disease. Zimbabwe alone is estimated to have around 500,000 AIDS orphans. The estimated overall adult prevalence in the region is 8.0 percent.<sup>6</sup>

## **Factors Affecting the Spread of AIDS**

Although HIV is rightfully feared, it is a surprisingly difficult virus for a healthy person to contract via vaginal heterosexual contact.<sup>7</sup> The infection rate per healthy, unprotected, vaginal sexual contact is a very low 0.1 to 0.5 percent. Still, as heterosexual encounters are the primary vector of spread of HIV/AIDS in Africa, there are obviously many factors that have allowed the disease to spread at such a phenomenal rate in this region. As Yoweri Museveni, the President of Uganda, asked when addressing the 10<sup>th</sup> International Conference on AIDS and Sexually Transmitted Diseases (STDs) in Africa, what are the factors that allowed the fire of AIDS to spread so wildly and quickly across the continent?

As a disease normally transmitted through intimate social interactions, AIDS in Africa is strongly affected by interactions between social, cultural, political, and economic factors. Further, these factors vary from region to region, from country to country, from urban areas to rural areas, from culture to culture, and from one socioeconomic group to another. Given the complex interaction between factors, it will likely be impossible for researchers to untangle what factors are most influential in the spread of the disease. Nevertheless, research has been and will continue to be important for better understanding the epidemic and for developing strategies to combat it.

### **Concurrence of AIDS and STDs**

Studies have suggested that the presence of a sexually transmitted disease may multiply the probability of transmitting HIV through vaginal intercourse between five to ten times. As a study done in Africa suggested, men having sex with women with genital ulcers had a five to ten percent chance of contracting HIV in a single sexual encounter. This compares to a different study that suggested that the non-infected spouse of an HIV-positive mate had only a 7 to 23 percent chance of contracting the disease over a *course of years*. Some researchers have suggested that AIDS cannot reach epidemic proportions in a heterosexual population without simultaneously occurring factors such as a high prevalence of other STDs.<sup>8</sup>

### **Economics**

There should be no question that poor economic conditions in the region's countries and many of its households play a large role in the spread of AIDS. On the national level, weak economies severely hamper governments' abilities to address epidemics through their education and healthcare systems. As the spread of AIDS depends on the continuation of certain behaviors, any efforts to prevent the spread of the disease must often foster dramatic changes in individual behavior. Such widespread behavioral changes are not easily or inexpensively achieved.

In terms of personal economic status, researchers have observed that AIDS in Africa appears to have a bi-modal distribution, with large numbers of poor contracting the disease as well as large percentages of the relatively

affluent.<sup>9</sup> This suggests that the socioeconomic positions of the wealthy and of the poor expose them to risk factors through different avenues. The wealthier members of societies encounter risks through the opportunities provided by their income and employment. In particular, their incomes and employment either require them or allow them to be more mobile. This added mobility and income also provide more opportunities to engage in unsafe sex. One disturbing trend related to elevated rates of AIDS among wealthy Africans is that these people comprise the most educated class in Africa, suggesting that an increased risk of becoming HIV-positive is one of the fruits of higher education. It also means that the AIDS epidemic effectively targets the most educated and economically active members of African societies.<sup>10</sup>

That AIDS disproportionately affects the African poor is not surprising. Poverty increases the risk of contracting the disease in many ways. It leads to overall poorer health and poorer access to health care, poorer nutrition, poorer literacy, and poorer access to education on AIDS prevention. As with the rich, the poor are often forced to be more mobile and to migrate from their traditional homes to urban environments or to other areas such as fisheries or mining camps, which promise better employment. Finally, some behaviorists suggest that, especially for the poor, the trade-off between the current and tangible pleasure of unsafe sex is worth the future and uncertain risk of contracting a disease. The length of

time between contracting the virus and developing full-blown symptoms only exacerbates this problem.

Given poverty as a risk factor, structural adjustment programs implemented by African governments and motivated by the International Monetary Fund (IMF) and the World Bank, with their prescriptions that increase unemployment and reduce spending on social, health, and education programs, effectively worsen the economic situation of the rural and urban poor and almost certainly increase their risks of contracting AIDS.<sup>11</sup> Given the strong link between the prevalence of other STDs and the increased susceptibility of spreading AIDS, it is not difficult to imagine how powerful increased awareness, increased condom use, and increased access to health screening and antibiotics could dramatically decrease the spread of the disease.

### **Gender Inequality**

The December 1999 *AIDS Epidemic Update* produced by UNAIDS reported that recent studies in several African nations have shown that girls between 15- and 19-years-old are five to six times more likely to be HIV-positive than their male counterparts of the same age. Men tend to contract the disease at significantly later ages. Eventually the rates of infection of the two sexes equalize, but not until ages in the late 20s and early 30s. This suggests that older men are responsible for infecting younger women. Further, as high population growth rates in Africa produce population profiles that look like inverted pyramids, with significantly more people at

each successively younger age, the gender gap in age at infection results in substantially more HIV-positive women than men. UNAIDS estimates that, at the end of 1999, 12.2 million women in Africa were HIV-positive compared with only 10.1 million men.<sup>12</sup>

There are many sociological and biological factors that increase the risk of AIDS for women as a group in general and for younger women in particular. In general, women are more prone to be infected with AIDS and other STDs. The risk of women becoming infected during unprotected vaginal intercourse is two to four times higher than the risk for men. This vulnerability is even higher for younger women, as they have less developed cervixes and minimal vaginal secretions.<sup>13</sup> Female genital circumcision and “dry sex” practices that limit vaginal secretions also increase women’s susceptibility to contracting the virus.<sup>14</sup>

Along with being more prone to STD infections, women are also less likely to realize they have an infection, as the symptoms of infection are less visible on a female. Studies have concluded that as many as 50 to 80 percent of women infected with STDs in Africa are unaware of their infections.<sup>15</sup> Finally, the practice of heterosexual anal sex also puts females at substantially higher risk than males and is substantially more risky than vaginal intercourse.<sup>16</sup> As in other parts of the world, anal sex is practiced in some parts of Africa to preserve virginity and to prevent unwanted pregnancies.<sup>17</sup>

In many African cultures, women's biological vulnerabilities are compounded by social, cultural, and economic vulnerabilities. Many of these additional vulnerabilities relate to a substantial imbalance of power between the two sexes. In many African cultures, women have particularly low social standing. Although economically active, women in these cultures must still depend on their male relationships for economic survival and social status. This is true for commercial sex workers who have found prostitution to be one of the few viable occupations for a single woman; for girls who depend on older male relatives for housing and support; and for married women of all ages and socioeconomic status who have no access to land, capital, credit, or employment to support themselves and their children.

This lack of power severely limits women's capacities to protect themselves against AIDS. It affects their ability to earn money, to attain access to health care and education, to hold property, to refuse sexual advances, and to require their sexual partners to wear condoms. Although women are not in full control of their sex lives, sex can be seen as one of the few assets they can control and barter. It is not rare for women in different areas to informally exchange sex for grades, gifts, money, or basic necessities. Again, it is difficult for women to require their partners to wear condoms in these situations.

Married women have similar difficulties protecting themselves. One sad manifestation of this reality is that most married women in Africa who are HIV-positive report that their husbands have been their only sexual



partner.<sup>18</sup> As a friend of mine who is a nurse in Tanzania once told me, “I used to get mad when I found condoms in my husband’s suitcase. Now, I thank God when I see them.” Later in this conversation she revealed that she just assumed that her husband would not submit to wearing a condom when having sex with her.

This imbalance of power also allows men to exhibit more violent and sexually predatory behaviors. Although preying on young women, rape, and commercial sex exist in all cultures, these behaviors are often overlooked, ignored, or not considered issues in some African cultures. It seems obvious that enhancing women’s economic, social, marital, and political power in African societies could have great positive effects in reducing the spread of AIDS and STDs.<sup>19</sup>

### **Attitudes Towards Sex and Impediments to Prevention**

Among the greatest impediments to addressing the HIV/AIDS threat in Africa is the puritanical tendency in many African cultures to consider sex a taboo topic for discussion. Unfortunately, while religious organizations often constitute the strongest and most widespread networks for social interaction and information distribution within African nations, they are often the most vocal and powerful opponents of encouraging the public discourse necessary to prevent the spread of the disease. Thankfully, this is not always the case and, even when it has been, some of these groups eventually drop their opposition and join efforts to fight AIDS. Nevertheless, epidemics are often firmly established before these

organizations, national governments, and average citizens are willing to openly discuss the sexual behaviors that spread the disease. AIDS is particularly insidious in the African context, as high death rates from other diseases, and the long asymptomatic period of AIDS, combined with initial societal unwillingness to address the disease, allow it to reach epidemic proportions before it is seen as a public priority. Probably the greatest frustration felt by people who have dedicated themselves to preventing AIDS in Africa has been their inability to effectively coax people into hearing the information they need to save their lives in time for it to make a difference.

While public dialogue becomes more open and prevention techniques such as condom use become more known, this seldom immediately results in behavioral changes. Here, again, the stigma of discussing sex, imbalances of power in sexual relations, and different norms of sexual behavior combine to make change difficult. Even when women realize that condoms can protect them from contracting AIDS, suggesting that their partners wear a condom is taboo. It can be tantamount to accusing their mate of philandering, visiting prostitutes, or, often worse, a suggestion that they themselves have been unfaithful. Neither of these actions is particularly acceptable, with the first interpretation potentially resulting in violence against the wife and the second interpretation potentially resulting in both violence and the wife being thrown out of her home.<sup>20</sup> Further, condom use prevents pregnancy, an expected outcome of marriage and a

source of social status for women. Historical and current practices of polygamy in some cultures can also encourage the spread of the disease, as they ensure that most men have multiple sexual partners.

### **Core Transmitter Groups**

Core transmitter groups represent populations of people whose occupations or behaviors put them at particularly high risk of contracting and spreading a disease. In the case of AIDS and STDs, core transmitter groups traditionally mentioned in the African context are commercial sex workers, clients of commercial sex workers, long-distance truck drivers, sailors, miners, and members of military groups. Other than commercial sex workers, the other groups have traditionally been male occupations that commonly separate men from their families for extended periods of time. While separated, many of these men are thought to engage in particularly risky sexual interaction with prostitutes or other small groups of women who have multiple sexual partners themselves. As a person's risk of contracting an STD is largely a function of the probability that partners have the disease, the number of sexual encounters, and the efficiency of infection for the type of intercourse practiced, it is easy to see how the rate of infection can rise rapidly in these populations. Indeed, random testing of many of these groups in several African countries has revealed that they have AIDS rates much higher than those of non-core groups in the same countries.

Although the core transmitter group concept easily explains high AIDS rates in these more easily identified groups, it has fallen out of favor

with some researchers and policy advocates. On one front, it is criticized as a tool of prejudice and scapegoating. On another, it is criticized because many of its early advocates erringly suggested that AIDS epidemics could be largely slowed or stopped by targeting these groups. These advocates, often heavily relying on oversimplified mathematical models, failed to fully identify all potential core groups and failed to fully account for factors such as the amount of interaction between core groups and non-core groups, interaction between urban and rural populations, urbanization, and migration. Despite these weaknesses, core transmitter groups still have great potential for spreading the disease within population groups with which they have sexual relations.<sup>21</sup>

### **Migration**

One explanation for the failure of the core transmitter group concept to predict the spread and growth rate of epidemics in Africa was its failure to account for movement and interaction among population groups. While it more easily explained the higher AIDS rates in cities, in trading centers, and along trade routes such as transnational highways and in port cities, it was less able to model the more complex interactions of different groups mixing and to account for the effects of migration.

The causes of migration in Africa are many. Among them are the need to migrate as a requirement of occupation, the desire to seek better economic opportunities elsewhere, and the need to flee natural disasters, drought, environmental degradation, desertification, and war. Migration in

the African context has a particularly pernicious side to it in that it often results in gender imbalances in communities. A classic example has been the migration of men in Southern Africa to mining camps in South Africa and Namibia. The gender imbalances in these camps lead to increased participation in commercial sex.<sup>22</sup> Females, especially when forced to migrate, may also find themselves in situations where prostitution becomes one of few employment options.

### **Urbanization**

Perhaps the most systemic migratory change seen worldwide is urbanization. Urbanization is largely driven by the perception that economic opportunities are better or more abundant in cities than in rural areas. The past two decades have witnessed a great increase in urban populations in Sub-Saharan Africa. From 1980 to 1997, the urban populations in Sub-Saharan Africa increased from 87.6 million to 198.0 million, representing a 126 percent increase in urban populations in the region. Part, although not all, of this increase results from urbanization trends that, over this same period of time, raised the percentage of urban population from 23 percent to 32 percent of the region's total population.<sup>23</sup>

As urbanization can be viewed as an inevitable process, it is disturbing to consider its potential for assisting the spread of AIDS. First, cities typically have higher AIDS rates than surrounding rural areas. Thus, as cities grow, there are likely to be more AIDS cases. Urbanization can also result in loosened family structures and weakened social norms as

families are broken apart and different groups mix. Further, many of the immigrants may come from poorer outlying areas under misguided assumptions that they will find work. Much of this can help create large numbers of urban poor without education and access to health services who intermingle with each other, engage in commercial sex, and promote the spread of the disease among each other. Further, these immigrants (both male and female), after infected, can return to their rural homes to unknowingly spread the disease there.

### **War**

As soldiers comprise one of the traditionally discussed core transmitter groups even during peaceful times, it is no wonder war helps spread AIDS. Still, war's ability to promote the disease is not solely a factor of the relatively high AIDS rates of soldiers. Although AIDS is spread as warring soldiers move through new areas having sex with both willing and unwilling participants, war has other effects that also help spread the disease. Among these are the many negative effects war has on non-combatants, on societies, on migration, and on economies. War has great potential to create fertile ground for the spread of the disease. One must wonder whether the decades of warring in Uganda helped precipitate the world's first great heterosexual AIDS epidemic, which began there as early as the mid-1970s.

### **Insufficient Response from National and International Organizations**

One of the lamentable tragedies of AIDS is how preventable it can be. Many factors help spread the disease, but there is no question that this

spread can be largely prevented through empowering people with the knowledge and rights to make a few adjustments in their lives. Granted, changing societal and behavioral attitudes is not easy, but this is not the issue. The issue is whether the national and international organizations responsible for and dedicated to protecting societies from catastrophes such as AIDS have ever truly mobilized to address the AIDS crisis in Africa.

Although people in governments and non-governmental organizations around the world have been working on and studying the AIDS crisis for years, one telling reality of how little has been done in response to the disease is the exceptionally sparse amount of money spent on AIDS in Africa. One report issued by UNAIDS and the Harvard School of Public Health estimated that, in 1996, the total resources expended by 26 African governments, the World Bank (in the form of loans), and overseas development agencies totaled only slightly more than \$141 million.<sup>24</sup> This is but a fraction of the cost of a single United States stealth bomber.

Along with highlighting the relatively low levels of development assistance dedicated to HIV/AIDS in Africa, the UNAIDS report also soundly castigates national governments for insufficient response to the epidemics killing thousands in their countries. Of the \$141 million of funding identified, less than \$13 million originated in the budgets of the African nations. Six nations, Angola, Burkina Faso, Ethiopia, Madagascar, Mozambique, and Rwanda, had no expenditures reported. Only Mauritius and Botswana, extreme outliers, reportedly spent more than five dollars of

government funds per HIV-positive person. Only four nations, Botswana, Kenya, Malawi, and Uganda, spent more than a million dollars each addressing the epidemics in their countries.<sup>25</sup>

If organizations, whether national or international, governmental or non-governmental, religious or secular, intend to make a serious difference in preventing the spread of AIDS and minimizing the consequences of those already touched by it, then they must dedicate significantly more resources to these efforts. Why more was not done sooner has many roots, including blind negligence, reluctance to address socially sensitive topics, unwillingness to accept the horror that underlay the statistics, perceived lack of importance of African nations as trading partners and strategic allies, pessimism about being able to affect positive outcomes in Africa, and a lack of strong moral leadership in too many camps. Nevertheless, with more recent reports on increasing numbers of children dying and orphaned and startlingly high percentages of HIV-positive people in many countries, organizations will hopefully begin to address more fully the epidemics ravaging so many nations.



## Notes

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<sup>2</sup> Feng Gao et al., "Origin of HIV-1 in the Chimpanzee pan troglodytes troglodytes," *Nature*, Vol. 397 (February 4, 1999), pp. 436-441.

<sup>3</sup> UNAIDS, *Epidemiological Fact Sheet on HIV/AIDS and Sexually Transmitted Diseases* (1999).

<sup>4</sup> UNAIDS, *Epidemiological Fact Sheet on HIV/AIDS and Sexually Transmitted Diseases* (1999).

<sup>5</sup> UNAIDS, *AIDS Epidemic Update* (December 1999).

<sup>6</sup> UNAIDS, *AIDS Epidemic Update* (December 1999).

<sup>7</sup> Center for International Cooperation in Health and Development, *AIDS and Africa--Sexual Transmission of HIV*. Online. Available: [http://www.ccisd.org/sidafrique/a\\_SA1\\_2\\_1\\_SFTSE.htm](http://www.ccisd.org/sidafrique/a_SA1_2_1_SFTSE.htm). Accessed: January 22, 2000.

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<sup>9</sup> Desmond Cohen, *Socio-Economic Causes of the HIV Epidemic in Southern Africa: A Case Study of Namibia*, Issues Paper #31, United Nations Development Programme. Online. Available: <http://www.undp.org/hiv/issues/English/issue31.htm>. Accessed: December 6, 1999.

<sup>10</sup> Desmond Cohen, *Socio-Economic Causes of the HIV Epidemic in Southern Africa: A Case Study of Namibia*, Issues Paper #31, United Nations Development Programme. Online. Available: <http://www.undp.org/hiv/issues/English/issue31.htm>. Accessed: December 6, 1999.

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- <sup>17</sup> AVERT, *Women, HIV and AIDS*, updated May 24, 1999. Online. Available: <http://www.avert.org/womenaid.htm>. Accessed: December 1, 1999.
- <sup>18</sup> Desmond Cohen, *Socio-Economic Causes of the HIV Epidemic in Southern Africa: A Case Study of Namibia*, Issues Paper #31, United Nations Development Programme, . Online. Available: <http://www.undp.org/hiv/issues/English/issue31.htm>. Accessed: December 6, 1999.
- <sup>19</sup> UNAIDS, *AIDS Epidemic Update* (December 1999).
- <sup>20</sup> AVERT, *Women, HIV and AIDS*, updated May 24, 1999. Online. Available: <http://www.avert.org/womenaid.htm>. Accessed: December 1, 1999.
- <sup>21</sup> The World Bank, *Confronting AIDS: Public Priorities in a Global Epidemic* (Oxford University Press, November 1997). Online. Available: <http://www.worldbank.org/aids-econ/confrontfull/chapter2/>. Accessed: December 6, 1999.
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- <sup>23</sup> The World Bank, *Entering the 21<sup>st</sup> Century: World Development Report 1999/2000* (New York, New York, Oxford University Press, August 1999), p. 219.
- <sup>24</sup> UNAIDS and the Harvard School of Public Health, *Level and Flow of National and International Resources for the Response to HIV/AIDS, 1996-1997*, (Geneva, Switzerland, UNAIDS, April 1999), p. 24.
- <sup>25</sup> UNAIDS and the Harvard School of Public Health, *Level and Flow of National and International Resources for the Response to HIV/AIDS, 1996-1997* (April 1999), p. 24.

## **Chapter 3. Namibia—A New Country with Old Problems**

### **Geography, Exploration, and Colonization**

Namibians sometimes aptly refer to their new nation as “the land of contrasts.” Although this is normally proudly spoken in admiration of the stark yet beautiful desert landscapes that characterizes many parts of the country, it is probably more true of the Namibian people, their history, and their society.

Namibia borders the Atlantic Ocean to the west, Angola to the north, South Africa to the south, and Botswana to the east. Given the near freezing temperatures of the Benguala Current in the Southern Atlantic, the rocky Skeleton Coast, and the waterless Namib Desert, Namibia thwarted the interest of colonists and explorers from the time of the early Portuguese explorations of the late 15<sup>th</sup> century until near the end of the 19<sup>th</sup> century.<sup>1</sup> In 1878, the United Kingdom claimed Walvis Bay as part of its Cape Colony (part of modern day South Africa). Later, in 1883, a Bremen tobacco merchant, Adolf Luderitz, with the support of German Chancellor Otto von Bismarck claimed the remaining coastal area for the German Empire.<sup>2</sup> Within the next few years, through negotiations with the British Government, Germany consolidated the area of land within the present borders of modern Namibia. The colony of German South West Africa included the narrow Caprivi Strip, the panhandle in the extreme northeast of

the country, which was acquired from the British to allow German access to the Zambezi River and German territory in East Africa (currently Tanzania).<sup>3</sup>

### **South Africa Takes Control**

German control of Namibia ended in 1915 during World War I. At that time, South Africa, an Allied country, occupied South West Africa. Following the war, in 1920, the League of Nations granted South Africa administrative authority over the territory as a League of Nations mandate. Upon the creation in 1946 of the United Nations as a successor to the League of Nations, attempts were made to place the territory of South West Africa under a United Nations trusteeship. South Africa refused to recognize this transfer of identity.

The immediate post-World War II period was very significant in the history of South Africa and, thus, in the history of Namibia. Although not broadly realized, the apartheid policies of racial separation for which South Africa gained ignominy only became codified in the late 1940s and early 1950s after the primarily Afrikaner National Party gained power in 1948.<sup>4</sup> For the next 42 years, the National Party largely held strict to its policies based on ideas of racial superiority and racial separation.

Given South Africa's rocky start with the United Nations regarding its control of South West Africa, world opinion began to further turn against South Africa during the 1960s as most of the European powers began granting independence to their African colonies. This led the United

Nations General Assembly in 1966 to revoke South Africa's mandate to govern South West Africa. Later decisions by the International Court of Justice in 1971 and the United Nations Security Council in 1978 reaffirmed international opinion that South West Africa, which was already being referred to as Namibia, should be granted independence.

### **Modernization and the Struggle for Independence**

The 1960s also saw the emergence of the South West Africa Peoples' Organization (SWAPO), the political party and rebel group that would eventually lead Namibia to independence and form Namibia's first government. With bases in Zambia and later Angola, SWAPO, largely comprised of ethnic Ovambo, initially had socialist leanings and carried out guerrilla attacks against the South African presence in Namibia.

Despite fighting world opinion and a guerrilla war, South Africa remained largely defiant and in control of Namibia until 1990. During this time, between negotiations with SWAPO and the UN, South Africa continued to develop mining and fishing interests in the nation and developed a road system that allowed for more rapid deployment of military forces to the northern border region with Angola. The wealth derived from the mines and the money spent on infrastructure helped create many of the economic inequities that persist in Namibia to this day. Although a huge percentage of Namibia's black population lives at the most basic subsistence level, large portions of the country are free from malaria and cattle diseases endemic in other parts of Africa, have reliable power and potable water, and

have access to good roads. Along with these disparities are great contrasts in income. While Namibians have an *average* annual income that ranks among the highest in Africa, approximately 70 percent of its people derive their livelihood from subsistence farming—a very modest existence in a country that is entirely arid to semi-arid and lacks any free flowing waterways wholly within its boundaries.<sup>5</sup>

### **Independence Achieved and the Legacy of Inequality**

With the gradual diminution of the perceived Soviet threat to the governments of South Africa and the United States, ever intensifying international pressure, consistent internal pressure from SWAPO and other pro-independence forces in Namibia, and a long economic recession largely caused by inefficiencies inherent in the apartheid system, South Africa finally agreed to true Namibian independence in December 1988. The next year and a half witnessed gradual preparation for the eventual handover of power to the new, democratically elected Government of the Republic of Namibia on March 21, 1990.

The Namibian struggle for independence, although long and hard fought, marked only the beginning of an even more difficult struggle, the struggle for development and for developing a more equitable and empowered society. The apartheid years, as mentioned earlier, left great disparities and distrust among different groups of Namibians. Most of the white minority (approximately 6 percent of the population of approximately 1.7 million) have lives and incomes comparable to those of citizens of many

developed countries. People of mixed race (7 percent), traditionally called Coloreds and Bastards, largely fill the next rung of the social ladder, having benefited from better education and employment opportunities during the colonial and apartheid years. Given the complex, pervasive, and divisive influences of apartheid, there also exists an informal hierarchy of black ethnic groups following the Coloreds and Bastards. Although it can easily be debated where these groups fall, the Herero (7 percent) in the central region of the nation, the Ovambo (50 percent) in the northern region, and Caprivians (4 percent) are relatively better off than groups from the Kavango Region (9 percent), the Nama (5 percent), Damara (7 percent), and bushmen (3 percent).<sup>6</sup>

## Notes

<sup>1</sup> United States Department of State, *Background Notes: Namibia*, April 1995. Online. Available: <http://dosfan.lib.uic.edu/ERC/bgnotes/af/namibia9504.html>. Accessed: December 12, 1999.

<sup>2</sup> United States Department of State, *Background Notes: Namibia*, April 1995. Online. Available: <http://dosfan.lib.uic.edu/ERC/bgnotes/af/namibia9504.html>. Accessed: December 12, 1999.

<sup>3</sup> United States Department of State, *Background Notes: Namibia*, April 1995. Online. Available: <http://dosfan.lib.uic.edu/ERC/bgnotes/af/namibia9504.html>. Accessed: December 12, 1999.

<sup>4</sup> Heins Marais, *South Africa Limits to Change: The Political Economy of Transformation* (Cape Town, South Africa, University of Cape Town Press, 1998), p. 16.

<sup>5</sup> United States Department of State, *Background Notes: Namibia*, April 1995. Online. Available: <http://dosfan.lib.uic.edu/ERC/bgnotes/af/namibia9504.html>. Accessed: December 12, 1999.

<sup>6</sup> United States Central Intelligence Agency, *CIA – The World Factbook 1999 – Namibia*. Online. Available: <http://www.odci.gov/cia/publications/factbook/wa.html>. Accessed: December 6, 1999.



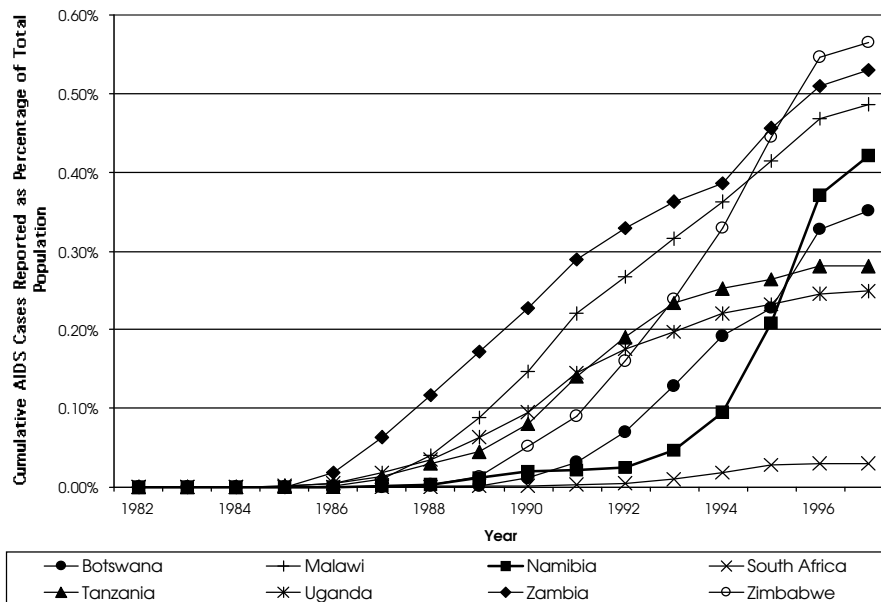
## Chapter 4. AIDS in Namibia

800 000 to die of AIDS before 2010  
—Headline from *The Namibian*, September 24, 1999—

On Friday, December 3, 1999, World AIDS Day, Namibia's National AIDS Co-ordination Programme (NACOP) reported its latest statistics on HIV/AIDS in Namibia. Among the most startling figures reported were that 65,895 AIDS cases have been reported in Namibia since 1986 and that an estimated 200,000 (35 percent) of Namibian adults have the disease. These figures and the related story made the front-page story of *The Namibian*, Namibia's primary English language newspaper, the following Monday. In the story, Dr. Nestor Shivute of the Ministry of Health and Social Services is quoted as saying, "HIV/AIDS has indeed been continuing unabated."<sup>1</sup>

With a population estimated to be under 1.7 million, estimating that AIDS cases may number as high as 200,000 is shocking.<sup>2</sup> Perhaps more shocking is how quickly AIDS has overtaken Namibia. Currently one of the four most infected countries in the world, Namibia saw its first four reported AIDS cases in 1986. In the early 1990s, while many countries in Southern and Eastern Africa were already several years into major epidemics, Namibia was still relatively unaffected. In the mid-1990s this began to change as Namibia's AIDS rate began growing at a rate few, if any, countries have seen (see figure 4.1 below).

**Figure 4.1 The Rise of AIDS in Southern Africa**



Source: UNAIDS, *Epidemiological Fact Sheet on HIV/AIDS and Sexually Transmitted Diseases for Botswana, Malawi, Namibia, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe* (July 1998), p. 6.

## Factors Affecting the Spread of AIDS

### Economics and Industries

Namibian cultures share many of the characteristics identified in other African cultures as assisting the spread of HIV/AIDS. While Namibia's per capita GDP in 1998 was an estimated \$4,100,<sup>3</sup> approximately 60 percent of Namibians live in rural areas and have annual incomes between \$100 and \$200.<sup>4</sup> Even though a majority of Namibians are subsistence farmers, Namibia is better known for its mining and fishing industries. It has also recently worked to modernize the deep-water port at Walvis Bay (reacquired from South Africa in 1994), along with its good

network of highways and railways, as a major point of access for shipping and transportation into the interior countries of Southern Africa. The workers in these industries—mining, fishing, sailing, and transport—are all considered core transmitters of HIV and STDs.

### **Gender Inequality**

As with other African nations, women in Namibia traditionally have had low social status and find it difficult to assert their will in sexual relations. Although not as prevalent as in many other African nations, polygamy is still practiced in Namibia. A 1993 study in Namibia estimated that approximately 12 percent of Namibian women were in polygamous unions.<sup>5</sup> As with other countries in the region, it appears that women contract the disease at significantly younger ages than males, although rates of teenage female infections do not appear to be quite as high in comparison to their male counterparts as has been seen in other countries.<sup>6</sup> This may partially be the result of relatively high rates of female attendance in primary and secondary schools. As with many things in Namibia, this varies dramatically by region. In one study in a rural hospital in Northern Namibia, for example, 68 percent of teenage females were found to have STDs and 13 percent were found to be HIV-positive. On the other hand, none of their male counterparts of the same age were found to have any STDs.<sup>7</sup>

### **Apartheid and the Struggle for Independence**

Perhaps the greatest factor distinguishing Namibia from many of its neighbors is its more recent history with the struggle against apartheid and

white minority rule. As mentioned earlier, war, poverty, and migration are all factors associated with encouraging the spread of AIDS. It seems plausible that the white minority government, its apartheid policies of segregation, and the struggle for independence all may have helped delay the onset of the disease throughout Namibia while simultaneously laying the groundwork for the major outbreak witnessed in the past few years.

Among the apartheid policies that likely hampered the spread of the disease initially were pass laws confining people to ethnically based homelands and specified areas outside major cities. These laws also likely restrained natural migration and urbanization and much of the intermixing of sexual networks facilitated by these movements. It is possible that Namibia's political isolation from its neighbors during this period also could have helped prevent the disease from easily entering the country.

While some policies likely helped discourage an early onset of the disease, many others are likely responsible for the overwhelming rate of the disease's expansion now being experienced. Among these were the government-backed enforced-labor practices of the mining and fishing industries that provided only single-sex work camps. This, along with the consistent military struggle and troop movements, likely helped introduce the disease into certain pockets of the country. Probably the most egregious fault of the former government, though, was its crushing disrespect for the dignity of black Namibians. Preventing the spread of AIDS in the black populations in South Africa and Namibia simply was not a policy priority

for the white minority government. Further, upon independence, black Namibians were left to run their new country having nearly no experience in governance, no civic tradition, a weak history of education, few capital resources, no access to land, and a history that encourages divisiveness rather than cooperation.

### **Post-Apartheid Changes**

After independence, many changes occurred that likely helped the disease spread. First, after the war, well over 40,000 political refugees returned to Namibia. Many of these refugees, such as the soldiers who had spent their time in exile in SWAPO military training camps, had likely been exposed to HIV while out of the country. After returning home, they and other Namibians began moving around the country to find work.<sup>8</sup> The country also became more open to interaction with its neighbors and began developing an international system of trade with a hub port in Walvis Bay and a recently completed transnational highway through the Caprivi Strip. As expected, AIDS rates in Walvis Bay and along the Caprivi Strip are among the highest in the nation.<sup>9</sup>

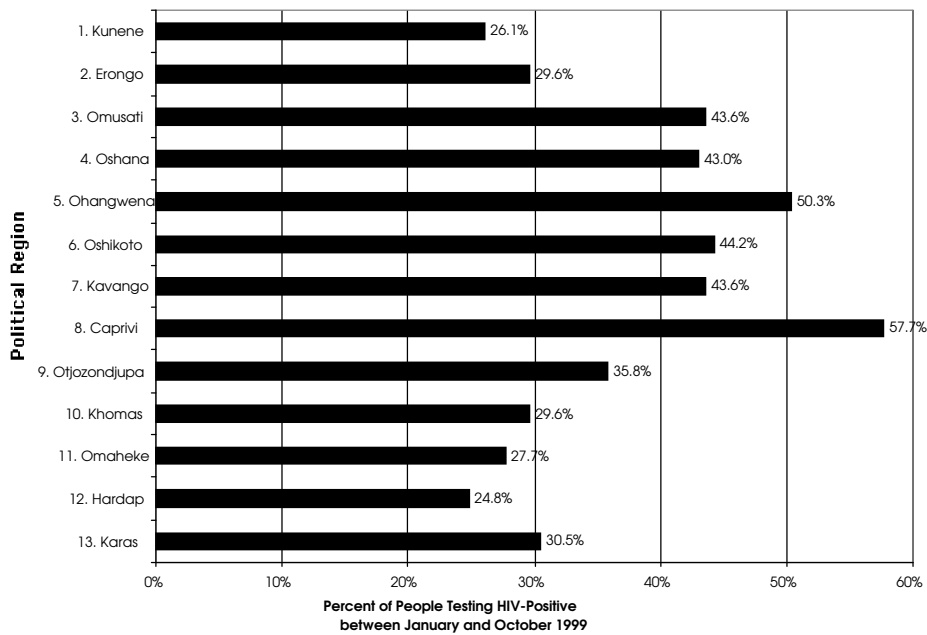
Another change since independence has been a more rapidly urbanizing population. While all of Namibia is currently experiencing population growth, the growth rate in urban areas is twice that of rural areas. This is driven by dramatic differences in rural and urban economics. While the average annual salary of a black Namibian in the modern sector is roughly \$750, the remaining blacks in Namibia make an estimated \$85 per

year. Still more impressive are the salaries of the largely white economic elite who, on average, earn an estimated \$16,500 per year.<sup>10</sup>

## Spread of AIDS

Although AIDS rates throughout Namibia are high, it appears the disease has spread fastest in the north and northeast portions of the country. Of the thirteen political regions, the six regions reporting the highest adult AIDS rates are all located in this area and are the only regions reporting AIDS rates higher than 40 percent. Two of these regions, Caprivi and Ohangwena have reported rates higher than 50 percent. Figure 4.2 shows the rates for all thirteen political regions as reported by the Namibian Ministry of Health and Social Services in December 1999.

**Figure 4.2 AIDS Rates by Region**



Source: Christof Maletsky, "35% of Namibians have HIV-AIDS," *The Namibian* (Windhoek, Namibia, December 6, 1999), p. 1.

As figure 4.2 shows, despite the differences in AIDS rates in political regions, it is obvious that AIDS is a problem throughout the country. Even the historically advantaged regions, such as Hardap and Karas report rates over 20 percent. What remains to be seen is whether any of these regional rates are stable. As recent as 1996, the highest prevalence rate reported anywhere in Namibia was 24.2 percent, a rate similar to the 24.8 percent recently reported in Hardap.<sup>11</sup> While it is obvious that a great deal of effort is needed to stop the wild spread of the disease in the northern regions of the country, all regions must make AIDS prevention the highest priority.

## Notes

<sup>1</sup> Christof Maletsky, “35% of Namibians have HIV-AIDS,” *The Namibian* (Windhoek, Namibia, December 6, 1999), p. 1.

<sup>2</sup> United States Central Intelligence Agency, *CIA-The World Factbook 1999-Namibia*, 1999. Online. Available: <http://www.odci.gov/cia/publications/factbook/wa.html>. Accessed: December 6, 1999.

<sup>3</sup> United States Central Intelligence Agency, *CIA-The World Factbook 1999-Namibia*, 1999. Online. Available: <http://www.odci.gov/cia/publications/factbook/wa.html>. Accessed: December 6, 1999.

<sup>4</sup> United States Agency for International Development, *Namibia and HIV/AIDS* (1999).

<sup>5</sup> National Research Council, *Preventing and Mitigating AIDS in Sub-Saharan Africa: Research and Data Priorities for the Social and Behavioral Sciences* (Washington, DC, National Academy Press, 1996), p. 60. Online. Available: <http://www.nap.edu/readingroom/books/aids/>.

<sup>6</sup> Ministry of Health & Social Services, Republic of Namibia, *The National Strategic Plan on HIV/AIDS (Medium Term Plan II) 1999 – 2004* (Windhoek, Namibia, Namib Graphic (PTY) LTD, 1999), Appendix F.

<sup>7</sup> United States Agency for International Development, *HIV/AIDS Program Initiative* (September 29, 1999).

<sup>8</sup> United States Agency for International Development, *HIV/AIDS Program Initiative*, (September 29, 1999).

<sup>9</sup> Christof Maletsky, “35% of Namibians have HIV-AIDS,” *The Namibian* (Windhoek, Namibia, December 6, 1999), p. 1.

<sup>10</sup> Desmond Cohen, *Socio-Economic Causes of the HIV Epidemic in Southern Africa: A Case Study of Namibia*, Issues Paper #31, United Nations Development Programme, . Online. Available: <http://www.undp.org/hiv/issues/English/issue31.htm>. Accessed: December 6, 1999.

<sup>11</sup> UNAIDS, *Epidemiological Fact Sheet on HIV/AIDS and Sexually Transmitted Diseases for Namibia* (July 1998), p. 4.



## **Chapter 5. Characteristics of Basic Education in Namibia**

Primary education shall be compulsory and the State shall provide reasonable facilities to render effective this right for every resident within Namibia, by establishing and maintaining State schools at which primary education will be provided free of charge.  
—Article 20 [Education], Constitution of the Republic of Namibia—

Since gaining independence from South Africa, the Government of Namibia has devoted an exceptionally large portion of its total resources to improving and expanding education to all Namibians. The Constitution of Namibia stipulates that education is compulsory for all Namibians “until they have completed their primary education [grade seven] or have attained the age of sixteen years, whichever is the sooner.”<sup>1</sup>

Although a Constitutional requirement, universal basic education was far from a reality in 1990. For decades prior to independence, both the white governments and many black leaders intentionally neglected the education of the black majority. Using arguments reminiscent of the southern states prior to the United States Civil War, the white government deemed that blacks neither needed, nor were capable of using, education beyond a very basic level. Some black leaders also encouraged Namibians to eschew this meager education as a form of protest to white rule and to the biased education offered them. Thus, when the newly elected majority government took control in 1990, it found a school system with great

historical inequalities and a severely undereducated and largely illiterate majority black population.

The Namibian education system prior to independence had been separated into eleven ethnically based and unequally funded divisions. From this basis, the new government and its ministries of education were charged with the nearly impossible tasks of expanding basic education to all, erasing historical inequalities, and improving overall education quality. Despite dedicating between 25 and 30 percent of its annual national budgets to education, great inequalities still exist.<sup>2</sup> Some of these inequities, like the disparity in student-teacher ratios and the gap in student examination results, reflect the magnitude of the historical gulf between the education divisions. Still, some of the inability to address historical inequality has been the result of poor management. In fact, the most pressing problem currently facing the education system is escalating teacher wages, which currently account for almost 90 percent of the Ministry of Basic Education and Culture's recurrent budget.<sup>3</sup> With such a high percentage of total government resources attached to teacher wages, it is difficult to free funds for building schools, buying equipment and materials, providing in-service teacher training, and hiring more educators as needed to improve quality and address continued issues of inequality.

### **Ministry of Basic Education and Culture**

The Namibian Ministry of Basic Education and Culture (MBEC) head office is located in Windhoek, the capital of the Republic of Namibia.

The Ministry has two main departments: Formal Education Programmes and Continuing and Life Long Learning. Most of the Ministry's central planning, programming, and budgeting are done within these two departments. Largely under the command of the Ministry in Windhoek are the seven Regional Education Offices spread throughout the country (see Appendix B: Map of Namibia Including Education and Political Regions).

Although not directly under the control of the Ministry, another important player in the provision of basic education in Namibia is the National Institute for Educational Development (NIED), located in the town of Okahandja approximately 40 miles north of Windhoek. While the Ministry is responsible for administration, budgeting, and planning, NIED is charged with the development of curricula for basic education, the teacher training colleges, and the college of education at The University of Namibia (UNAM).

MBEC's portfolio includes formal primary and secondary education along with arts, culture, libraries, archives, and adult basic education. MBEC is one of two education ministries in Namibia. The other is the Ministry of Higher Education, Vocational Training, Science and Technology (Ministry of Higher Education). There is some current discussion of combining these two ministries, NIED, and the Ministry of Youth Development into a single ministry of lifelong learning. This merger might reduce administrative redundancies and encourage better collaboration in the delivery of basic education services at all levels.

## **Structure of the Basic Education System**

### **Primary Education**

As in most countries, formal education in Namibia can be divided into primary, secondary, and tertiary components. For the purposes of this report, only primary and secondary education are considered.

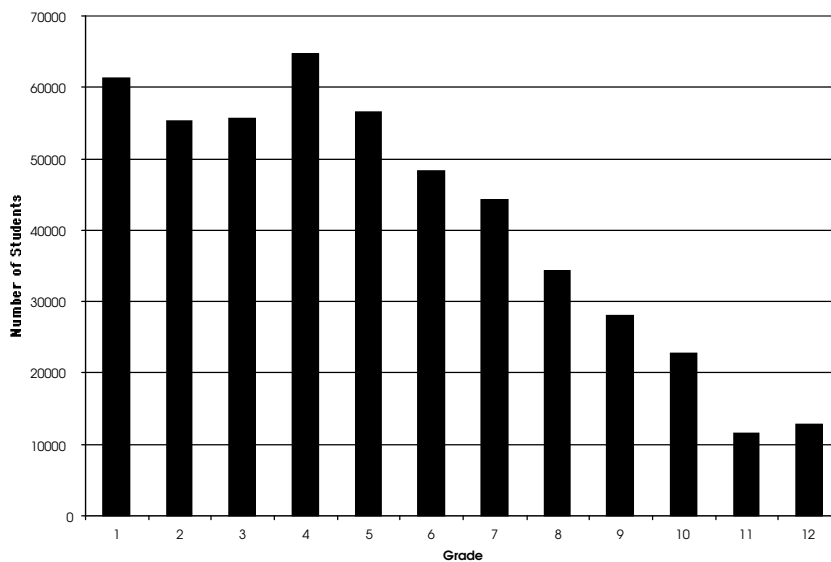
Primary education includes grades one through seven and is constitutionally mandated for all Namibians under the age of sixteen. Ideally, students should begin grade one at age six or seven, although some begin earlier and many begin much later. In 1998, for example, official statistics suggest that over 82 percent of students in grades one through ten were older than the official age for their grade while 0.8 percent were younger.<sup>4</sup> The Ministry has recently begun a concentrated effort to encourage students to begin school at the appropriate age and to prevent them from repeating grades. Although much of this problem of late entry in school arose when previously disenfranchised black Namibians returned to school after independence, over one-third of grade one students in 1998 were older than seven.

Perhaps the greatest success of Namibian education has been the expansion of primary education. From 1992 to 1998, the net enrollment ratio (NER) for formal basic education in Namibia rose from 84.7 percent to 89.1 percent.<sup>5</sup> Before independence, it is certain that these numbers were significantly lower.

## Secondary Education

Secondary education in Namibia includes grades eight through twelve. As secondary education is not mandated, a much smaller percentage of secondary school age children are enrolled. In 1998, the estimated NER for secondary school was 37.8 percent, up from 28.9 percent in 1995. These numbers, while low, are very significant, as secondary education was largely unavailable for the majority of black Namibians prior to independence. As with primary education, the ages of students in secondary schools vary from 12 to well over 24, even in grade eight.<sup>6</sup> Figure 5.1 shows the number of students enrolled in grades one through twelve in 1998.

**Figure 5.1 1998 Enrollment in Grades 1 through 12**



Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1998 Education Statistics* (Windhoek, Namibia, 1999).

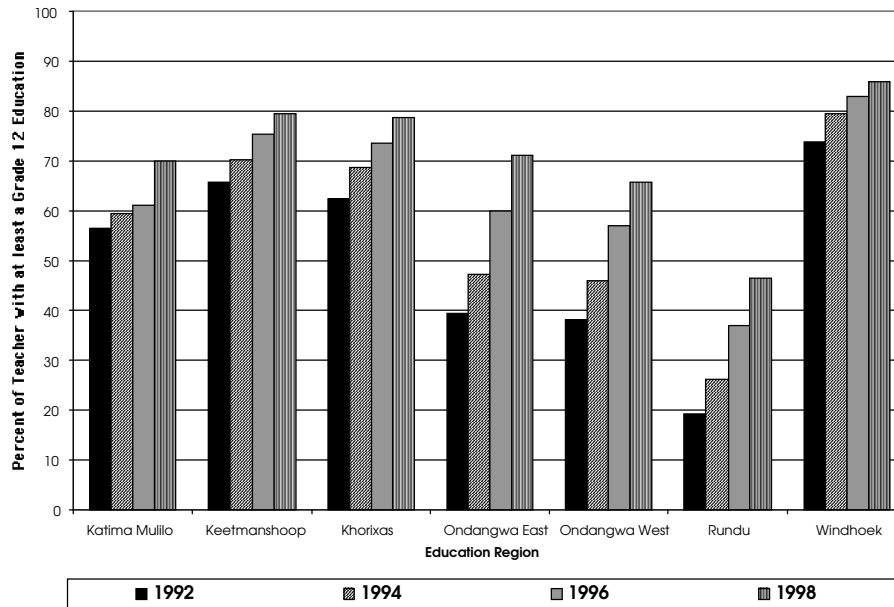
## **Current Issues**

### **Teacher Training, Wages, and Scarce Resources**

Namibia, more than most developing nations, has made a strong statement about the importance of highly trained teachers. Although teachers in Namibia's white-majority and colored schools have long held relatively high teaching credentials, prior to independence, teachers in Namibia's majority black schools seldom held academic qualifications beyond secondary school and almost never held teacher-training credentials. Since independence, Namibian teachers have become among the highest paid in Africa. In some rural areas, teachers are paid healthy salaries up to ten times the salary of an average community member.<sup>7</sup> Further, through salary incentives, Namibia encourages its teachers to rapidly upgrade their qualifications.

Figures 5.2 and 5.3 show the expansion of academic and teacher-training credentials for teachers in Namibia. Both show a great expansion of teacher qualifications in practically all regions. The only true exception to this is Rundu, where the student population has grown significantly faster than teacher recruitment and training.<sup>8</sup> This trend is seen in most of the regionally disaggregated data, where Rundu is the only region that consistently seems to be regressing or moving counter to the other regional trends. This is particularly troublesome, as Rundu had the least-developed education infrastructure at the time of independence.

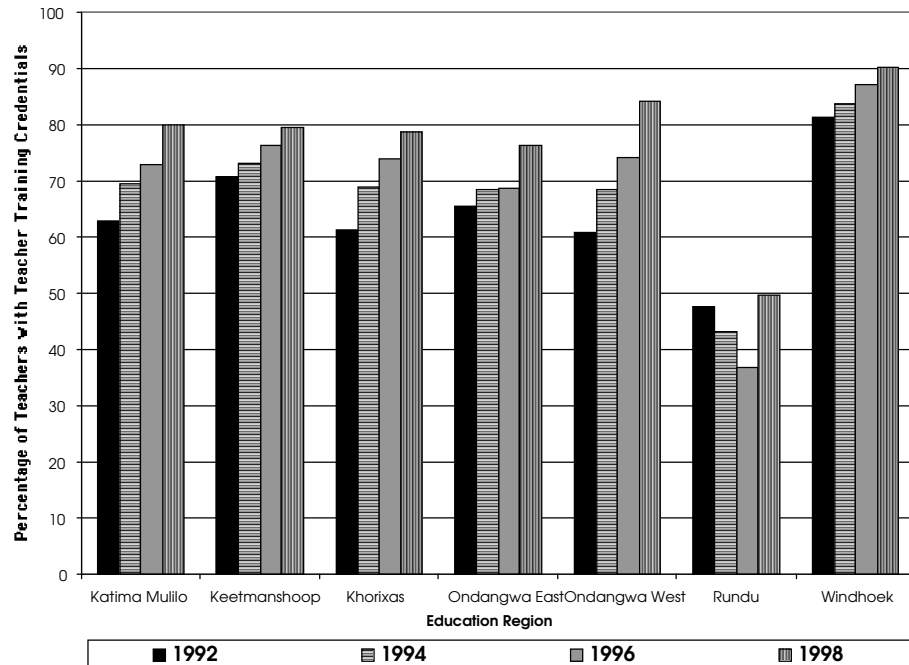
**Figure 5.2 Namibian Teachers' Academic Qualifications**



Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1993, 1995, 1997, and 1998 Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

Although these phenomenal increases in teacher training and qualifications can be seen as great successes of the post-independence government, they have come with enormous increased costs attached. In 1995, the Namibian Wage and Salary Commission (WASCOM) restructured the Ministry's wage schedule by dramatically raising teacher salaries—particularly for “fully qualified” teachers. Average salaries for teachers in the seven educational regions range from N\$36,500 (approximately US\$6,000) in Ondangwa East to N\$53,500 (approximately US\$8,000) in Windhoek.<sup>9</sup> Given a purchasing price parity (PPP) ratio for 1998 of roughly

2.55, these wages become roughly equivalent to US\$15,300 and US\$20,400, respectively.<sup>10</sup>



**Figure 5.3 Teacher-Training Credentials in Namibia**

Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, 1993, 1995, 1997, and 1998 *Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

Although most advocates for teachers may be inclined to applaud these high wages, they have created a system that will continue to drain money from other educational initiatives. Further, as there is still room for teacher credentials to increase, the percent of the recurrent budget allocated for teacher salaries will have to grow. Given the large percentage of government revenues already dedicated to education, it is unlikely that the



Government will continue to raise the Ministry's budget. Thus, the Ministry will find it increasingly difficult to meet its payroll obligations and work towards achieving other goals.

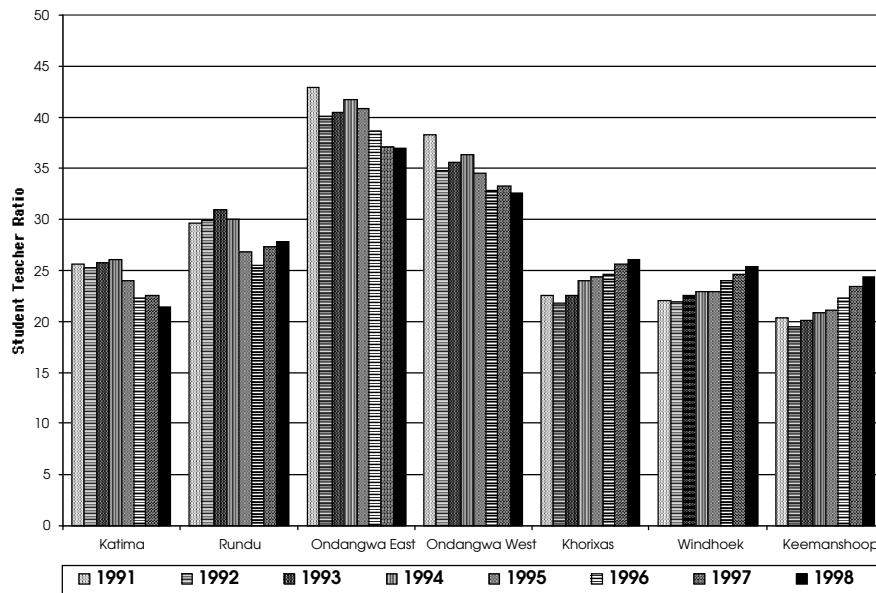
### **Regional Disparities**

At the time of independence the first Namibian Ministry of Education developed its goals of promoting equitable access, life-long learning, democratic participation, and improving internal efficiency and quality.<sup>11</sup> All of these goals have been difficult, but probably the most immediately needed and most difficult to attain among them have been those of providing equitable access and improving quality. While the push to increase teachers' academic qualifications and certification has attempted to address the quality issue, it has drawn resources away from many of the grossest inequities present in the Namibian education system. Among these are the great disparities in classroom size and in the provision of basic resources from texts to support staff to building and bathrooms. Another inequity is the dramatic disparities in educational outcomes and opportunities provided to the traditionally and currently underserved student populations in Namibia.

#### *Student-Teacher Ratio*

One of the more dramatic inequities in Namibian education is classroom size. Figure 5.4 tracks the average student-teacher ratios in the seven education regions from 1991 to 1998. While a great amount of improvement is shown, these average numbers betray the great disparities

that still exist. For example, over one-quarter of schools in Ondangwa West had student-teacher ratios greater than 40 percent and another one quarter of schools in Ondangwa East had ratios greater than 50. One political region, Ohangwena, reportedly has five percent of its schools with average student-teacher ratios greater than 80.<sup>12</sup>



**Figure 5.4 Average Student-Teacher Ratios by Region**

Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, 1993, 1995, 1997, and 1998 *Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

*Provision of Resources*

With 90 percent of MBEC’s budget allocated to salaries, very little is left for equalizing resources among education regions. Table 5.1 shows the

budgets for the seven education regions compared to their respective percentages of the overall student population.

**Table 5.1 1997 and 1998 Budget Allocations to Education Regions**

	% of Overall Student Population in 1998	1997 Budget Allocation (N\$)	% of Total Regional Allocations	1998 Budget Allocation (N\$)	% of Total Regional Allocations
Katima Mulilo	6.5%	94,598,809	8.4%	105,103,032	8.6%
Keetmanshoop	6.9%	125,878,047	11.1%	131,436,680	10.8%
Khorixas	7.5%	112,750,509	10.0%	132,199,402	10.9%
Ondangwa East	24.5%	178,223,805	15.8%	199,919,034	16.4%
Ondangwa West	27.2%	235,700,434	20.8%	256,448,336	21.1%
Rundu	10.1%	93,402,719	8.3%	97,922,874	8.0%
Windhoek	17.1%	290,745,750	25.7%	295,200,859	24.2%
<b>TOTAL</b>		<b>1,131,300,073</b>		<b>1,218,230,217</b>	

Source: Ministry of Basic Education and Culture, Republic of Namibia, *Annual Report for the year ending 1998* (Windhoek, Namibia, 1999), pp. 50 and 99.

As the chart shows, after eight years of independence, spending fails to mirror student population. Worse yet, current spending is still biased in favor of the traditionally advantaged regions of Keetmanshoop, Khorixas, and Windhoek. Although a large portion of these disparities may be explained by the higher salaries paid to the more qualified and more senior teachers in the historically advantaged regions, it is disheartening to realize that there still remains such obvious inequality in this most basic measure.

Table 5.2 shows the percentages of different building construction and classrooms from the different education regions as compared to the regional proportion of total student population in 1998. Permanent classrooms could be more easily described as modern classrooms or classrooms with more modern construction. Traditional classrooms, on the other hand, are constructed in the traditional styles of the people in the area. This often means stick or mud and dung construction with thatched roofs and few modern teaching conveniences.

**Table 5.2 Regional Disparities in School Facilities: 1998**

	% of Overall Student Population	Permanent Classrooms	Traditional Classrooms	Laboratories	Libraries	Gyms
Katima Mulilo	6.5%	6.9%	16.5%	3.3%	6.0%	1.8%
Keetmans	6.9%	11.5%	0.0%	19.2%	19.8%	18.1%
Khorixas	7.5%	10.9%	1.7%	17.0%	14.4%	20.5%
Ondangwa East	24.5%	17.5%	33.5%	7.2%	9.0%	5.8%
Ondangwa West	27.2%	21.4%	37.4%	13.6%	13.5%	3.5%
Rundu	10.1%	9.7%	10.8%	7.8%	7.2%	12.3%
Windhoek	17.1%	22.0%	0.0%	31.8%	30.2%	38.0%
<b>TOTALS</b>		10,567	2,872	359	334	171

Source: Ministry of Basic Education and Culture, Republic of Namibia, *Annual Report for the year ending 1998* (Windhoek, Namibia, 1999), p. 103.

What is most difficult to explain without photographs or film are the drastic differences in both the human and material resources in classes.

While it would be difficult to distinguish teaching practices, teaching skill, and classroom environment in schools in the South and around Windhoek from their counterpart classrooms in Europe or the United States, some students in the North are still taught under trees or taught in stick huts by teachers with little formal education or teacher training. That educational outcomes vary dramatically among regions and between schools is no surprise given current and historical inequities.

## Notes

- <sup>1</sup> Article 20 [Education], *The Constitution of the Republic of Namibia* (1990).
- <sup>2</sup> Ministry of Basic Education and Culture, Republic of Namibia, *Annual Report for the year ending December 1998* (Windhoek, Namibia, 1999), pp. 1-4.
- <sup>3</sup> Ministry of Basic Education and Culture, Republic of Namibia, *Proposals for a Ten-Year Plan for Educator Development and Support in Namibia: A Consultation Document* (Windhoek, Namibia, March 1999), p. 15.
- <sup>4</sup> Spreadsheet submitted by Ministry of Basic Education and Culture, Namibia for the United Nations *Education for All, The Year 2000 Assessment*, currently unpublished.
- <sup>5</sup> Spreadsheet submitted by Ministry of Basic Education and Culture, Namibia for the United Nations *Education For All, The Year 2000 Assessment*, currently unpublished.
- <sup>6</sup> Spreadsheet submitted by Ministry of Basic Education and Culture, Namibia for the United Nations *Education For All, The Year 2000 Assessment*, currently unpublished.
- <sup>7</sup> Conrad Wesley Snyder, Jr. and Friedhelm Voigts, *Inside Reform: Policy and Programming Considerations in Namibia's Basic Education Reform* (Windhoek, Namibia, Gamsberg Macmillan Publishers (PTY), 1998), p. 108.
- <sup>8</sup> Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1993, 1995, 1997, and 1998 Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).
- <sup>9</sup> Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *Selected Features of the Education Sector in Namibia* (Windhoek, Namibia, July 1999), p. 18.
- <sup>10</sup> The World Bank, *Entering the 21<sup>st</sup> Century: World Development Report 1999/2000* (New York, New York, Oxford University Press, August 1999), p. 231.
- <sup>11</sup> Conrad Wesley Snyder, Jr. and Friedhelm Voigts, *Inside Reform: Policy and Programming Considerations in Namibia's Basic Education Reform* (Windhoek, Namibia, Gamsberg Macmillan Publishers (PTY), 1998), p. 1.
- <sup>12</sup> Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1998 Education Statistics* (Windhoek, Namibia, 1999), p. 78.

## Chapter 6. Effects of AIDS on Children

Cry, the beloved country, for the unborn child that is the inheritor of our fear. Let him not love the earth too deeply. Let him not laugh too gladly when water runs through his fingers, nor stand too silent when the setting sun makes red the veld with fire. Let him not be too moved when birds of his land are singing, nor give too much of his heart to a mountain or a valley. For fear will rob him of all if he gives too much.

—Alan Paton, *Cry, the Beloved Country*—

### Children Infected with HIV

According to 1998 estimates by UNAIDS, 5,000 Namibian children were HIV-positive at the end of 1997. With an overall estimate of 150,000 people infected, this represents slightly more than three percent of all cases at the time.<sup>1</sup> The likelihood of becoming infected as a child is highest at or soon after birth, when children are exposed to contracting the disease from their mothers while in the womb or through breastfeeding. The United States Census Bureau estimates that by 2010 infant mortality rates (children under one year of age) in many Sub-Saharan Africa nations will double as a result of AIDS, while child mortality rates (children under five years of age) will triple.<sup>2</sup> If this becomes true for Namibia, it suggests that approximately one in three children born to a Namibian mother will not live to see their fifth birthday.<sup>3</sup>

Since children's immune systems are not as strong or fully developed as those of adults, practically no children infected with HIV in their first year survive past the age of five. Indeed, there are few reported cases of HIV-positive children in Namibia between the ages of five and fourteen.<sup>4</sup>

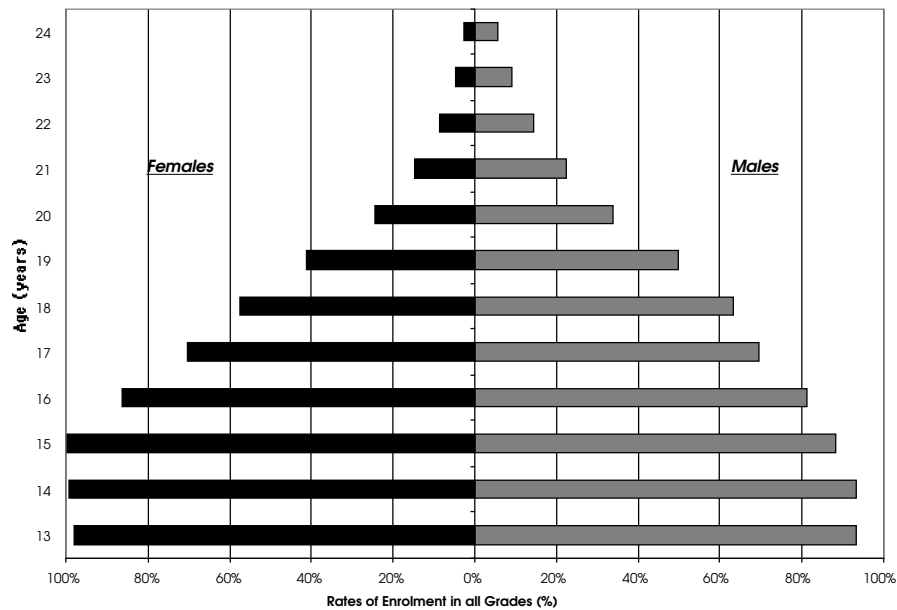
After this, the number of reported AIDS diagnoses begins to rapidly increase, particularly for females. Males currently appear to remain at relatively low risk until they are well out of their teens. According to 1998 figures released by the Namibian Ministry of Health and Social Services, similar numbers of AIDS cases in men seem to lag those of women by about five years. While the HIV-positive rates in females begin to dramatically increase in the 15- to 19-year-old range, the male rates do not begin increasing until the 20- to 24-year-old range. As HIV takes time to develop into full-blown AIDS, few AIDS-related deaths are reported for children between the ages of 5 and 19.<sup>5</sup>

From a policy standpoint, these are two separate problems—the problem of mothers transmitting the disease to their infants, and the problem of sexual transmission of the disease to adolescents. In terms of the younger group of children contracting the disease, there are possible ways to reduce an infant's risk of being infected by his or her mother. Studies suggest certain drug treatments given to pregnant and breastfeeding mothers can significantly reduce the risk of mother-to-child transmission,<sup>6</sup> which is estimated to be between 25 and 35 percent without the treatment.<sup>7</sup> Further, if the mother is found to be HIV-positive before her child's birth, she can be encouraged and aided in finding alternatives to breastfeeding her child. Unfortunately, these drugs and alternatives to breastfeeding can be prohibitively expensive for the majority of Namibians and their government.



Preventing AIDS in adolescents has all the difficulties that preventing AIDS in the population-at-large has, along with the added difficulties related to addressing children. Fortunately, there is one factor that makes reaching children easier than reaching adults—education. Because the net enrollment rates (NER) for 7- to 13-year-olds and 7- to 16-year-olds were 93.4 and 92.7, respectively, in 1998, this can significantly facilitate public awareness and sexual education efforts targeted at youth. This only works, though, if efforts are made early. While the NER for 7- to 13-year-olds is quite high, the enrollment rates begin dropping after students reach age 14. Figure 6.1 shows the enrollment rates for males and females between the ages of 12 and 24.

**Figure 6.1 Enrollment Rates of Males and Females between the Ages of 12 and 24**



Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1998 Education Statistics* (Windhoek, Namibia, 1999),

pp. 69-70.

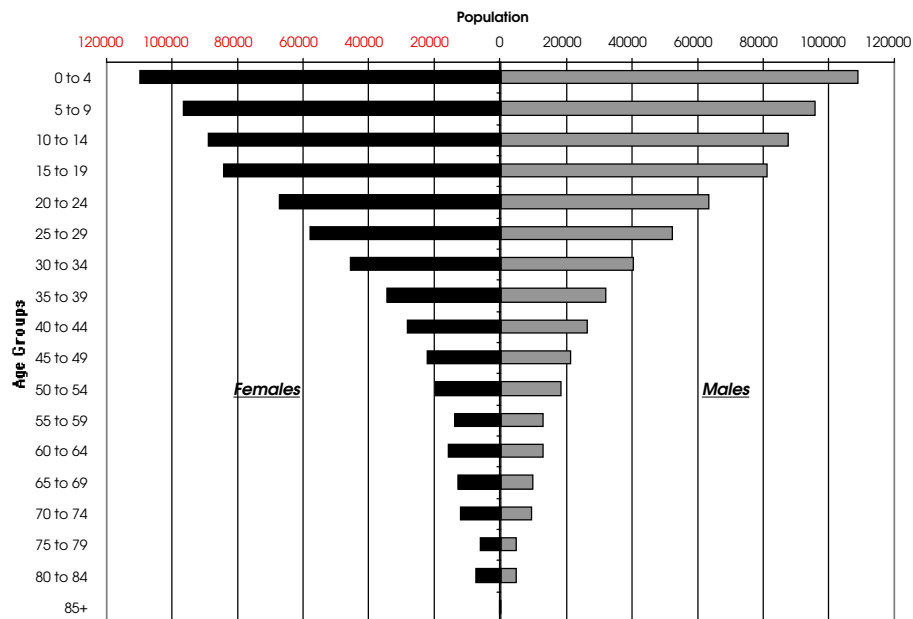
## **AIDS Orphans**

“10 MILLION ORPHANS” cried the headline in the January 17, 2000, edition of *Newsweek* referring to UNAIDS estimates that 10 million of a world total of 13.3 million orphaned children live in Sub-Saharan Africa.<sup>8</sup> With a total population of less than two million, the number of children orphaned by AIDS in Namibia will likely never make such dramatic headlines. Nevertheless, it is still a very real and growing problem.

UNAIDS and the World Health Organization (WHO) estimated that a cumulative total of 7,800 children in Namibia had been orphaned by AIDS at the end of 1997. At that time, the international consortium had estimated that only 14,000 people in Namibia had died of the disease. At the same time, though, it was estimating that a total of 150,000 Namibians were living with the disease.<sup>9</sup> If the spread of the disease had ended then, and the relative ratio between deaths and the number of orphans remained the same, this would suggest that approximately 84,000 (roughly 11 percent) of Namibian children would be orphaned by the beginning of 2005.<sup>10</sup> Unfortunately, the disease has only continued to spread since the end of 1997, and the number of children who will be orphaned by the disease may be much larger. Using a December 1999 estimate that 35 percent<sup>11</sup> of an adult population of 860,000<sup>12</sup> is currently infected with HIV, the number of orphans in Namibia may reach more than 170,000 (over 20 percent) of

children over roughly the next seven years.<sup>13</sup> Although startling, rates over 30 percent have already been reported in regions of other countries.<sup>14</sup>

Namibia, like many developing countries, historically has had a population profile resembling an inverted pyramid, with each successively younger age group larger than the one before it. Figure 6.2 shows a population pyramid for Namibia developed using data from Namibia's 1991 census. AIDS is particularly dangerous in a population profile such as this. Looking at the profile in figure 6.2 there were 1.06 Namibians under the age of 15 for every Namibian between the ages of 20 and 59. If 35 percent of these adults are suddenly removed, as a 35 percent HIV-positive rate among adults will accomplish, this dependency ratio increases to 1.62.



**Figure 6.2 Population by Age and Gender**

Source: United Nations, *Demographic Yearbook 1993* (New York, New York, 1995).

What do all of these figures mean, though, to children orphaned by AIDS? First, it means trauma and then it means a very uncertain future. Although AIDS technically orphans children only after the death of their mother, it is very likely that the process of becoming orphaned has been harmful itself. The children have had to be present, helpful, and aware of the slow and gruesome death of one or both of their primary caregivers. During this time, they live in households with gradually depleting resources and attention and may begin to endure the shame and stigma associated with AIDS. Given the failing economic situations in their homes, it is also possible that they are undernourished.

Traditionally in Namibian cultures, after a child's parents die, the child is sent to live with relatives. Although a traditionally strong social safety net, and normally preferable to orphanages, it is very possible that the child will be relatively neglected in these situations. If sent to live with aunts and uncles with children of their own, the orphan may be seen as a burden or be treated as a second-class member of the household. As the number of orphans increases and the relative number of adults decrease, this safety net will begin to tear. With a total fertility rate of 5.1, families in Namibia are quite large.<sup>15</sup> If more than one son or daughter in a family dies of AIDS, this can quickly put a very large burden on the remaining family members. In some cases, all children of one generation can die, leaving grandparents to attempt to raise all of their children's children. Without

significant assistance from their communities, their government, and non-governmental organizations, this is too often economically and humanly impossible.

As orphans fall through the traditional social safety net, they often drop out of school and migrate to the cities. The number of street children in African cities is alarming, and many of these children are there as a result of being orphaned by AIDS. In the largest cities in Uganda, Tanzania, Kenya, Zambia, and Zimbabwe, street children can number in the hundreds of thousands. While on the street, they are lost to the formal education system, malnourished, and exposed to many risks. Among these risks are sexual and criminal predation. Indeed, many of these youngsters end up as criminals or working as commercial sex workers themselves. In some African nations, male orphans have proved to be an abundant source of recruitment for militias causing civil unrest. Sadly, the AIDS rate among street children is quite high.

The major battle for AIDS orphans is keeping them in protective environments and engaged in society. Once lost to the streets, these children will lose much of the social and human capital developed by their parents. AIDS policies, therefore, must work to keep children with families and in schools.

### **Forecasting the Effects of AIDS on the Student Population**

AIDS affects the number of students in the formal education sector in several ways. First, as young children are susceptible to contracting the

disease from their mothers, this increases child and infant mortality, reducing the growth of new entrants into the education system. Second, as AIDS reduces life expectancy, it also reduces the fertility rate. Women who contract AIDS early in their productive years will die of the disease before giving birth to all the children they may have had if they had lived longer. Third, research suggests that HIV renders women approximately 20 percent less fertile.<sup>16</sup> Fourth, as students' parents and family members become ill, and eventually die, many will drop out of schools for health and financial reasons, to care for their relatives, or because of emotional trauma.

The Namibian school system essentially has only one input, new students entering into grade one. After that, the size of the student population is determined by how long each student remains in the system. Students leave the system for many reasons. They can complete all grades, fail the qualifying exams to get into either lower or upper secondary education, be forced out because they are too old, drop out, immigrate, or die. As primary education is constitutionally guaranteed at least up to the age of sixteen, the school system must accept all newcomers and must try to keep them in the system until they finish primary school or turn sixteen. This may prove difficult as the percentage of school-aged children who are orphaned by AIDS dramatically increases.

Modeling the population of the Namibian school system with only one input, new entrants, and one output, students leaving for all possible reasons, yields the following relationships:



$$Ps_{a,t} = Ps_{a,t-1} \times (1-Re) + Ps_{1,0} \times (1+Rg_1)^t$$

where  $Ps_{a,t}$  is the population of all students at time  $t$ ,  
 $Ps_{a,t-1}$  is the population of all students in the previous year  $t-1$ ,  
 $Ps_{1,0}$  is the number of new entrants to grade one at time zero,  
 $Re$  is the rate that students exit the system for all reasons,  
 $Rg_1$  is the rate of growth for the population of new entrants, and  
 $t$  is time measured in years.

Data available from the Namibian Ministry of Basic Education and Culture for the years 1992 through 1998 yielded the following values for the variables listed above:<sup>17</sup>

$$Ps_{a,1992} = 432,230 \text{ students (designating } t_0 = 1992)$$

$$Ps_{1,1992} = 50,235 \text{ students}$$

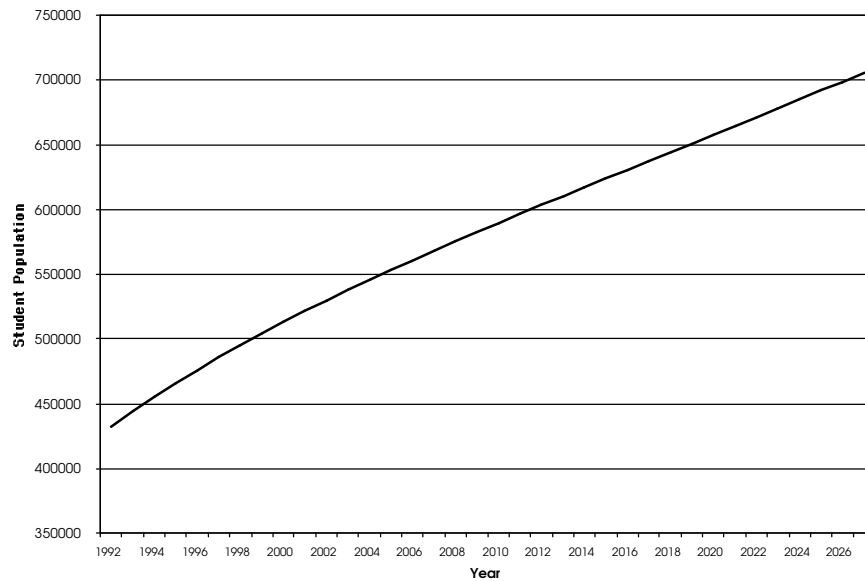
$$Re = 9.01 \text{ percent (average exit rate from 1992 to 1998)}$$

$$Rg_1 = 1.01 \text{ percent (average yearly percentage increase in new entrants from 1993 to 1998)}$$

Figure 6.3 shows a projected growth of student population from 1992 to 2027 assuming that these rates remain relatively constant. As the model suggests, without major changes, the student population in Namibia would continue to grow at a fairly rapid, although slowly declining, rate.



**Figure 6.3 Projected Student Population without the Effects of HIV/AIDS**

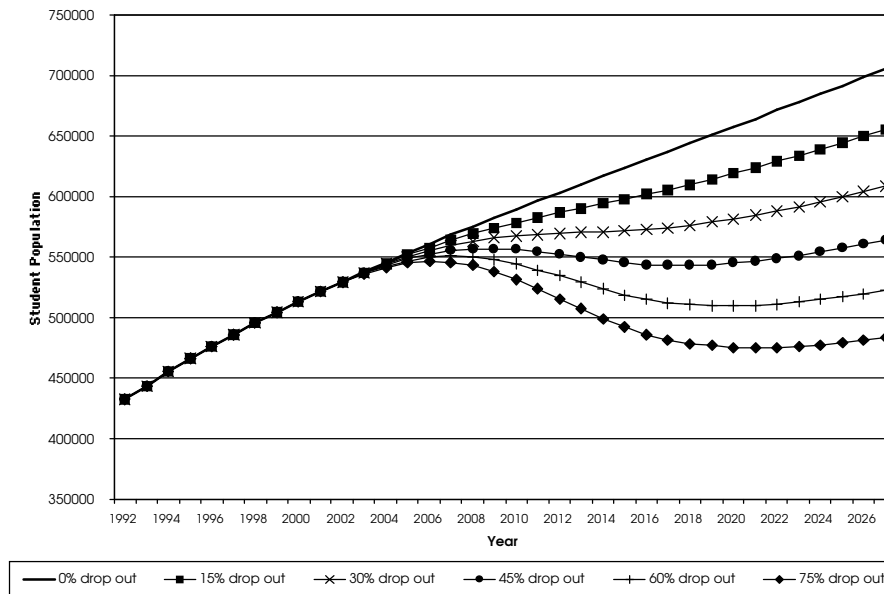


Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1993, 1995, 1997, and 1998 Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

As AIDS will affect both the rate at which students exit the system and the rate of growth for new entering cohorts of grade one students, it can strongly affect student population and the shape of the curve shown in figure 6.3. Figure 6.4 shows the effect of changing the current rate at which students exit the education system. The four additional curves are based upon the assumptions that the rate of growth of new entrants remains the same while the exit rates increase to accommodate different percentages of HIV-affected children dropping out of the system. For this scenario, it is

assumed that the change in the exit rate occurs over the next 15 years and is based on different percentages of students with HIV-positive parents (assumed to be 40 percent) gradually dropping out of the system over a 15-year period. After the 15-year period, it is further assumed that the system will reach new equilibrium levels with higher but constant exit rates. Determining which of these paths the system will take is largely a policy variable reflecting how relatively successful Namibian society will be at keeping children affected by AIDS in school. While exceptionally low rates are probably not feasible, the higher rates are likely not realistic either, as many children who are HIV-positive or live with HIV-positive parents will leave the system for other reasons before AIDS forces them out. Others, despite living in households affected by AIDS, will still make it through the system with the support of friends, families, and governmental and non-governmental assistance.

**Figure 6.4 Projected Student Population with Varying Dropout Rates for HIV-Affected Children**

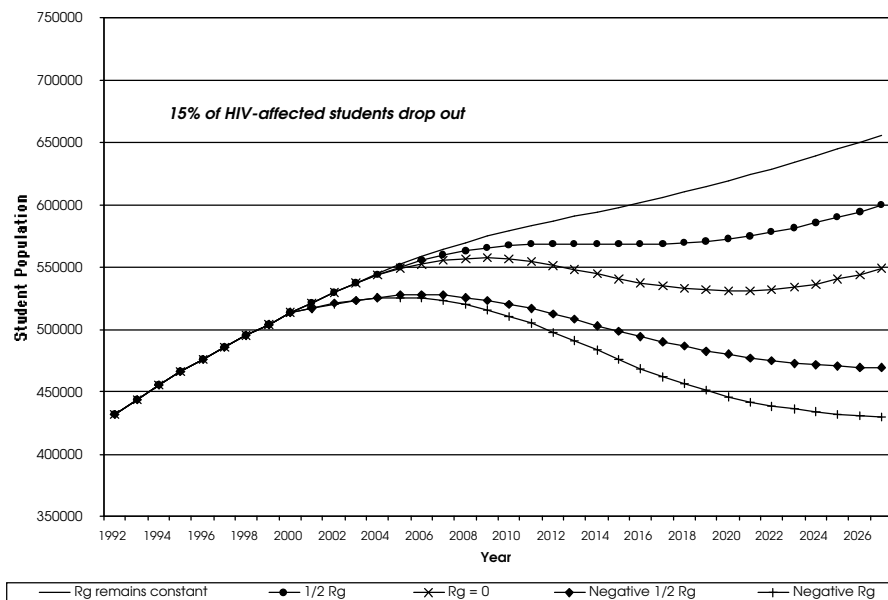


Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, 1993, 1995, 1997, and 1998 *Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

Given all of the variables that must be taken into account to determine the rate of growth for each cohort of newly entering grade one students, it is difficult to determine the overall effect that AIDS will have on the population of students newly entering grade one. Looking at the current data on the younger ages of children in the school system shows that the number of five-year-olds may already be leveling off after years of very high increases. Figures 6.5 and 6.6 show several scenarios for changing the growth rate of new entrants ( $R_g$ ), including assuming the rate remains similar to the past eight years, assuming the rate is cut in half, assuming the

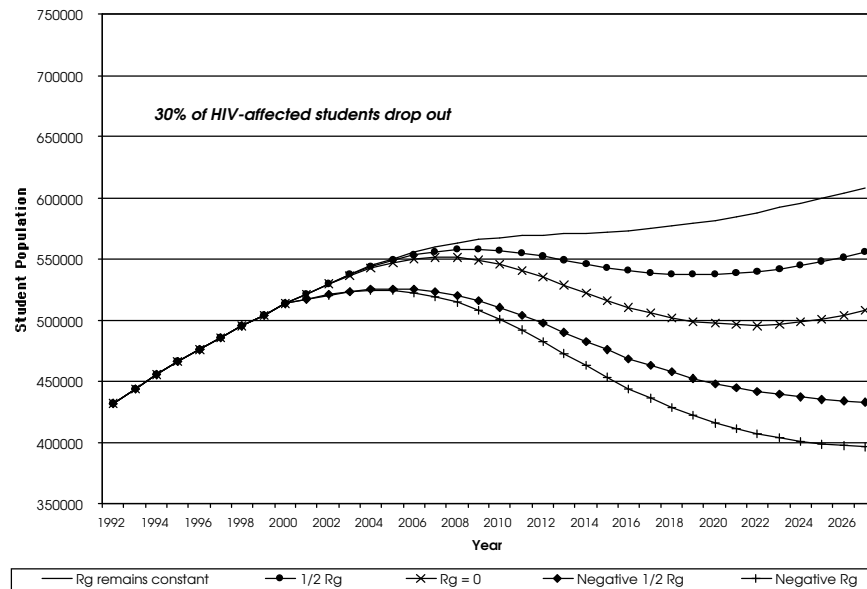
rate is zero, assuming the rate is negative one-half the current rate, and assuming a rate negatively equivalent to the current rate. In all cases, the new rate is gradually achieved over a period of ten years. In the remaining years, the system is allowed to begin a 30-year recovery that will return the growth rate to current levels. The two figures show how the changes in the growth rate interact with increased exit rates ( $R_e$ ) of 15 and 30 percent for HIV-affected children.

**Figure 6.5 Effects of Change in New Student Enrollment on Total Population of Students (Assuming 15% of HIV-Affected Student Drop Out)**



Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1993, 1995, 1997, and 1998 Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

**Figure 6.6 Effects of Change in New Student Enrollment on Total Population of Students (Assuming 30% of HIV-Affected Student Drop Out)**



Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, 1993, 1995, 1997, and 1998 Education Statistics (Windhoek, Namibia, 1994, 1996, 1998, 1999).

What is obvious from these two figures is that changes in the growth rate of the under-five population further accentuate the disruption caused by HIV-affected students dropping out. Changes in the growth rate of the under-five population also determines the rate at which the school system either continues to shrink or recovers after the shock caused by the increased exit rate.

In conclusion, it is difficult to predict exactly how much HIV/AIDS will affect the student population in Namibian schools. Education and social policy will have very little effect on the rate of change of the under-five

population. On the other hand, public and social policy have great potential for minimizing the drop out rate of HIV-affected children. Nevertheless, it is still likely that some, and perhaps many, will drop out. Thus, it is likely that the population of students will remain relatively constant over the next five to ten years and will either continue to grow at a slower rate after that point or begin to decline for five to ten years before beginning to grow once again.

## Notes

- <sup>1</sup> UNAIDS/WHO, *Epidemiological Fact Sheet on HIV/AIDS and Sexually Transmitted Diseases, Namibia*, June 1998, p. 3.
- <sup>2</sup> The White House, *Report on the Presidential Mission on Children Orphaned by AIDS in Sub-Saharan Africa: Findings and Plan of Action* (Washington, D.C., July 19, 1999), p. 10.
- <sup>3</sup> The World Bank, *Entering the 21<sup>st</sup> Century: World Development Report 1999/2000* (New York, New York, Oxford University Press, August 1999), p. 233.
- <sup>4</sup> Ministry of Health & Social Services, Republic of Namibia, *Epidemiological Report on HIV/AIDS for the year 1998* (Windhoek, Namibia, Namib Graphic (PTY) LTD, March 1999).
- <sup>5</sup> Ministry of Health & Social Services, Republic of Namibia, *Epidemiological Report on HIV/AIDS for the year 1998* (Windhoek, Namibia, Namib Graphic (PTY) LTD, March 1999).
- <sup>6</sup> The White House, *Report on the Presidential Mission on Children Orphaned by AIDS in Sub-Saharan Africa: Findings and Plan of Action* (Washington, D.C., July 19, 1999), p. 17.
- <sup>7</sup> UNAIDS, *Facts and Figures: 1999 World AIDS Campaign* (Geneva, Switzerland, 1999), p. 5.
- <sup>8</sup> Masland and Rod Nordland, "10 Million Orphans," *Newsweek* (January 17, 2000), pp. 42-45.
- <sup>9</sup> UNAIDS/WHO, *Epidemiological Fact Sheet on HIV/AIDS and Sexually Transmitted Diseases, Namibia*, (June 1998), p. 3.
- <sup>10</sup> Derived using figures for population, population growth rate, and age structure taken from *The CIA World Factbook* for 1999. United States Central Intelligence Agency, *CIA-The World Factbook 1999-Namibia*, 1999. Online. Available: <http://www.odci.gov/cia/publications/factbook/wa.html>. Accessed: December 6, 1999.
- <sup>11</sup> Christof Maletsky, "35% of Namibians have HIV-AIDS," *The Namibian* (Windhoek, Namibia, December 6, 1999), p. 1.
- <sup>12</sup> United States Central Intelligence Agency, *CIA-The World Factbook 1999-Namibia*, 1999. Online. Available: <http://www.odci.gov/cia/publications/factbook/wa.html>. Accessed: December 6, 1999.
- <sup>13</sup> Derived using figures for population, population growth rate, and age structure taken from *The CIA World Factbook* for 1999. United States Central Intelligence Agency, *CIA-The World Factbook 1999-Namibia*, 1999. Online. Available: <http://www.odci.gov/cia/publications/factbook/wa.html>. Accessed: December 6, 1999.
- <sup>14</sup> Masland and Rod Nordland, "10 Million Orphans," *Newsweek* (January 17, 2000), pp. 42-45.
- <sup>15</sup> UNAIDS/WHO, *Epidemiological Fact Sheet on HIV/AIDS and Sexually Transmitted Diseases, Namibia* (June 1998), p. 2.

<sup>16</sup> UNAIDS, *AIDS Epidemic Update* (December 1999).

<sup>17</sup> Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1993, 1995, 1997, and 1998 Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).



## Chapter 7. Effects of AIDS on Educators

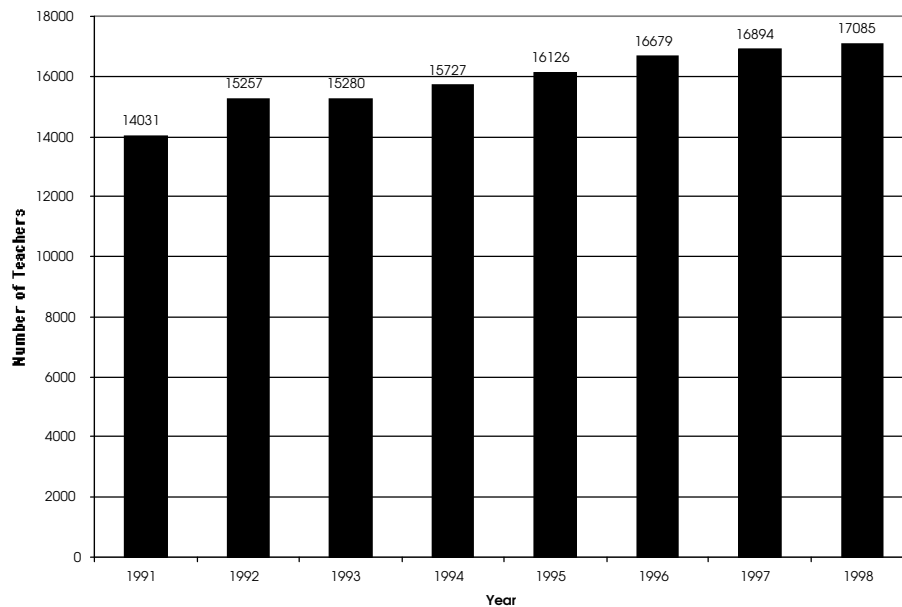
For too long we have closed our eyes as a nation, hoping the truth was not so real. For many years, we have allowed the human immunodeficiency virus to spread...at times we did not know that we were burying people who had died from AIDS. At other times we knew, but chose to remain silent.

Now we face the danger that half our youth will not reach adulthood. Their education will be wasted. The economy will shrink. There will be a large number of sick people who the healthy will not be able to maintain. Our dreams as a people will be shattered.

—South African President Thabo Mbeki, Remarks delivered as Deputy President, launching the South African Partnership Against AIDS, October 1998—

With 35 percent of the adult population in Namibia currently HIV-positive, all sectors of the Namibian economy must brace themselves for change.<sup>1</sup> In the education sector, as in others, AIDS will affect both those seeking services, in this case students seeking education, and those charged with providing the services, educators. Chapter 5 discussed the strides Namibia has made towards expanding higher quality education for all. Indeed, since independence, the national government has dedicated between 25 and 30 percent of its revenues towards improving education.<sup>2</sup> Although it has invested in buildings, new curriculum, and materials, the largest investment has been in training and recruiting new teachers and in upgrading the academic and teaching credentials of those already in the system.

**Figure 7.1 Growth of Teaching Corps from 1991 to 1998**



Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1993, 1995, 1997, and 1998 Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

As figure 7.1 indicates, Namibia has been relatively successful in this regard. Between 1991 and 1998, Namibia added an additional 3,054 teachers, a 22 percent increase, to its teaching corps.<sup>3</sup> In the process it kept the nationwide student-teacher ratio between 28:1 and 30:1, keeping pace with the phenomenal growth in student enrollment experienced as increasing numbers of black students returned to the education system. At the same time, it substantially reduced the disparity in this ratio among the traditionally advantaged and disadvantaged regions of the country.<sup>4</sup> It also successfully raised the percentage of teachers with a grade 12 education or

greater from 51.5 percent in 1992 to 71.5 percent in 1998.<sup>5</sup> Similarly, the number of teachers with formal teacher training rose from 66.5 percent in 1992 to 71.7 percent in 1998.<sup>6</sup>

Although these gains are impressive, what will happen to them over the next two decades as AIDS affects more teachers? As with children, AIDS affects teachers in many ways. In the most extreme cases, of course, teachers will have to deal with the effects of having the disease themselves. As there is no reason to believe that teachers are substantially less prone to contracting the disease, currently 35 percent of the teaching force in Namibia is likely to be HIV-positive. In addition to these teachers that will eventually grow ill and die from the disease, others will have to deal with friends and family members dying from the disease. Thus, AIDS will affect the teaching corps through dramatic losses due to death of teachers and increasing lost time and productivity from teachers being ill, caring for the ill, attending funerals, and coping with the general depression caused by these added stresses.

### **Forecasting Teacher Demand**

Teacher demand in any school system is primarily set by two variables. The first is the number of students enrolled in the system and the second is the system's policy on classroom size or student-teacher ratio. Both of these are policy variables that may be manipulated if desired. For example, as noted in chapter 6, changes in the dropout rate can substantially decrease the number of children in the school system. Further, it is easy to

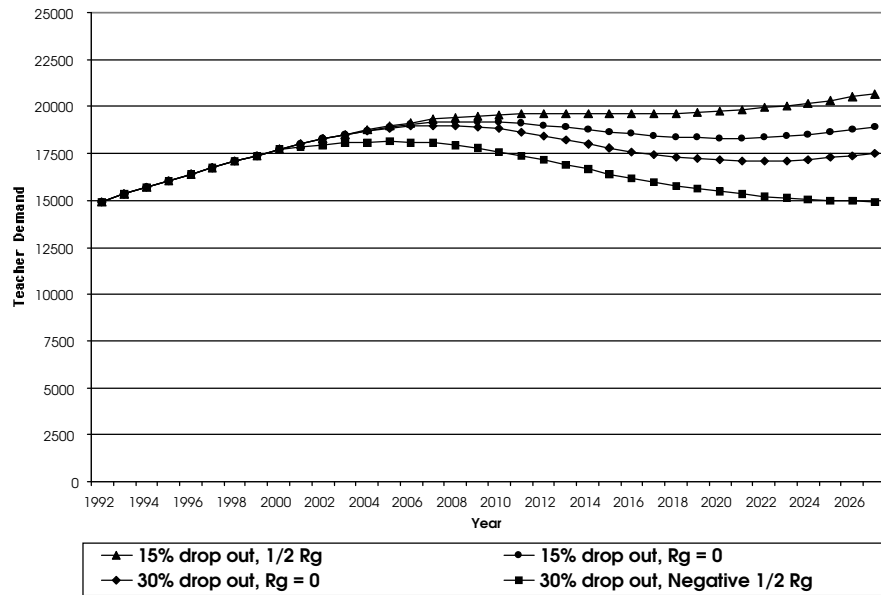
see how 60 primary school children can be “taught” by any number of teachers. The only constraints are teacher supply and finances. From a development perspective and from the perspective of the Namibian constitution, though, children should be encouraged to stay in school and improve their level of education and the education system should seek to provide an appropriate number of qualified teachers to ensure at least minimal education quality. Further, although it may seem easy for the Ministry to change staffing norms, these norms have to be negotiated with strong teachers unions and receive approval by the Public Service Commission.<sup>7</sup>

To date, the Namibian Government has yet to decisively prescribe a policy on student-teacher ratio, although the numbers will likely be around 28:1 for secondary schools and 34:1 for primary schools. On the macro level, this will not be significantly different than the national average since 1992.<sup>8</sup> More problematic, as mentioned in chapter 5, has been the need to decrease this ratio in the historically disadvantaged regions such as Ondangwa East, Ondangwa West, and Rundu. Nevertheless, for simplicity’s sake, assume that the Government’s policy will set the nationwide student-teacher ratio at 29:1. With this ratio set, overall student population provides the demand for teachers in any given year.

This, of course, is still problematic, as it is difficult to predict student population—particularly given the uncertainties of how AIDS will affect both entrance and dropout rates. This report forecasts the impact of four

progressively more drastic scenarios on teacher demand. The first has 15 percent of HIV-affected students eventually dropping out of the system, while the growth rate of new entrance drops to one-half the current level. The second scenario again has 15 percent of HIV-affected students dropping out, while the growth rate of new entrance drops to zero. The third has 30 percent of HIV-affected students dropping out and the growth rate of new entrance falling to zero. Finally, the fourth scenario again has 30 percent of HIV-affected student dropping out and the growth rate of new entrance plummeting to negative one-half the current growth rate. Figure 7.2 shows the outcomes of these three scenarios using the forecasts provided in chapter 6 divided by the proposed student-teacher ratio of 29:1.

**Figure 7.2 Four Scenarios for Teacher Demand between 1992**



**and 2027**

Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, 1993, 1995, 1997, and 1998 *Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

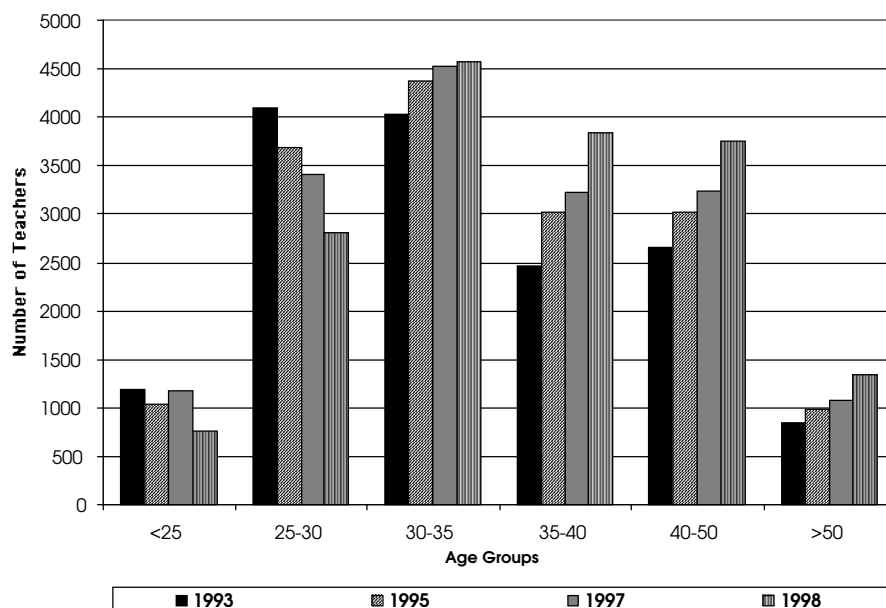
The most these forecasts vary is by 5,750 teachers in the year 2027 and at most around 3,200 in the next 15 years. In the least extreme scenario, teacher demand continues to rise for the next 13 years before mildly contracting for three, but returning to growth afterwards. In the most drastic scenario modeled, teacher demand begins contracting in 2007 and continues to decline at an ever-slower rate through the end of the time period of the forecast. The other two models see demand begin to contract in 2008 and 2009 before beginning to once again grow in 2023 and 2021, respectively.

### **Teacher Supply**

Before independence and for the first few years after, the qualification requirements for teachers in Namibia were low. As the demand for education rose soon after independence, many relatively unqualified teachers entered the system. Over the past decade, though, the Government's efforts to increase the requirements to be a teacher have gradually begun to limit the new supply of teachers to those trained in the formal teacher training system. This system includes the four teacher training colleges (TTCs), which train teachers for the primary schools, and The University of Namibia (UNAM), which trains teachers for secondary schools.

As figure 7.3 suggests, this process has resulted in a trend where the current teaching population is becoming relatively older as the supply of new, normally younger, teachers is becoming much more restricted. This has created a bubble of older teachers, who, over the next 20 years, will leave the system. In 1998, the teacher attrition rate was 7.8 percent.<sup>9</sup> With AIDS and the gradual aging of the teaching force, this rate will likely rise dramatically over the next 10 to 15 years.

**Figure 7.3 Age of the Namibian Teaching Force**



Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, 1993, 1995, 1997, and 1998 *Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

Given the new requirements for teacher qualifications, the supply of new teachers to the system is largely restricted to the capacity of the teacher

training system and the capacity of the Ministry to attract students to it. In 1998, this output of newly trained teachers from the TTCs and UNAM was approximately 1,000.<sup>10</sup> The capacity to produce more teachers than this is largely constrained by the resources available to expand the capacity of the TTCs and UNAM to train teachers and the capacity of the government to continue to keep teachers' wages attractive. Given the already large budgets for the ministries of education, it is questionable whether this is possible or sustainable.

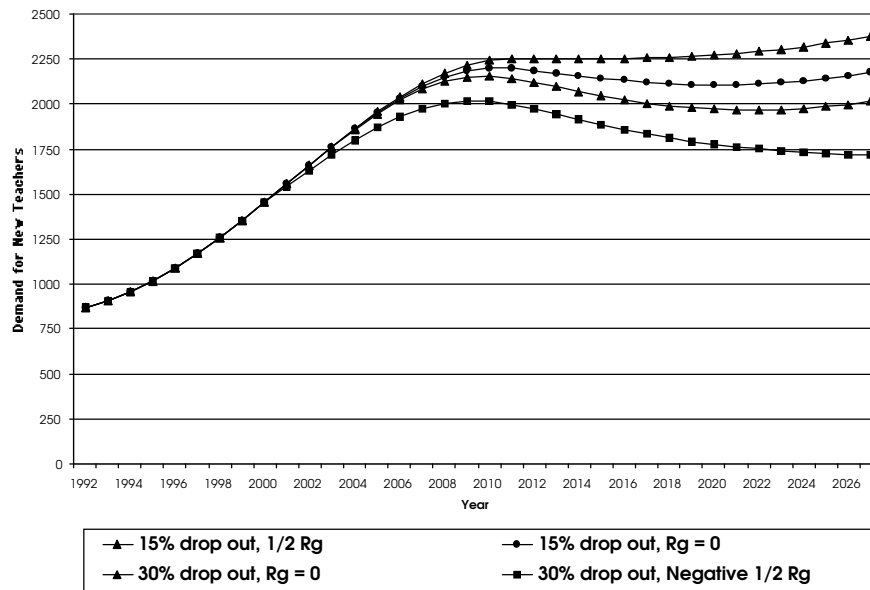
Assuming the AIDS rate in the teaching corps stabilizes around a constant of 40 percent predicts a situation where each year as much as an additional 5.7 percent of the teaching corps will be forced to leave the system due to death or illness. A rate this high is unlikely for two reasons. The first is that some teachers would leave the system for other reasons before being affected by AIDS (e.g., teachers retiring, teachers taking other positions, teachers quitting to take care of children, sick relatives). The second is that the current exit rate for teachers must already include AIDS effects. Thus, estimating that these effects already account for approximately two percent of the current exit rates suggests that, within the next 10 years, a new stable yearly exit rate around 11.5 percent could be a reality.

For the teacher training system to be able to meet demand, it must be able to replace teachers soon after they leave the system. Thus, using the four scenarios for teacher demand discussed in the previous section, and



assuming a teacher exit rate of 11.5 percent yields figure 7.4, which shows the demand curves for new teachers entering the system for each scenario. As the curves suggest, despite the fact that AIDS will decrease overall demand for teachers, the increasing exit rate of teachers overwhelms any decrease in overall demand related to decreases in student population. Assuming this prediction of an exit rate increasing to 11.5 percent in the next ten years is correct, for the education system to continue to replace exiting teachers with fully qualified new teachers, the teacher training system will need to approximately double its yearly output over the next ten years.

**Figure 7.4 Demand for New Teachers**



Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, 1993, 1995, 1997, and 1998 Education Statistics (Windhoek, Namibia, 1994, 1996, 1998, 1999).

## **Summary Effects of HIV/AIDS on the Education Sector**

In 1998, there were only 12,880 students enrolled in grade 12 throughout Namibia. If Namibia will have to produce nearly 2,000 new teachers a year, this requires that almost one in every six secondary school graduates will need to complete teacher training college and enter the teaching corps to keep pace with demand. Unfortunately, this seems to be a difficult proposition. Thus, for demand to be met, not only must the capacity of teacher training colleges be increased, but the capacity of the secondary school system must also be increased. All of this, of course, must be done in an environment where the national education system is losing teachers, administrators, planners, and students at all levels. If the system is unable to meet these demands, then it will have to accept larger student-teacher ratios, allow more students to drop out, or allow more under-qualified teachers into classrooms. None of these outcomes is positive for education.

## Notes

<sup>1</sup> Christof Maletsky, “35% of Namibians have HIV-AIDS,” *The Namibian* (Windhoek, Namibia, December 6, 1999), p. 1.

<sup>2</sup> Ministry of Basic Education and Culture, Republic of Namibia, *Annual Report for the year ending December 1998* (Windhoek, Namibia, 1999), pp. 1-4.

<sup>3</sup> Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1993, 1995, 1997, and 1998 Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

<sup>4</sup> Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1993, 1995, 1997, and 1998 Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

<sup>5</sup> Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1993, 1995, 1997, and 1998 Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

<sup>6</sup> Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1993, 1995, 1997, and 1998 Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

<sup>7</sup> Ministry of Basic Education and Culture, Republic of Namibia, *Proposals for a Ten-Year plan for Educator Development and Support in Namibia: A Consultation Document* (Windhoek, Namibia, March 1999), p. 14.

<sup>8</sup> Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1993, 1995, 1997, and 1998 Education Statistics* (Windhoek, Namibia, 1994, 1996, 1998, 1999).

<sup>9</sup> Ministry of Basic Education and Culture, Republic of Namibia, *Proposals for a Ten-Year plan for Educator Development and Support in Namibia: A Consultation Document* (Windhoek, Namibia, March 1999), p. 26.

<sup>10</sup> Ministry of Basic Education and Culture, Republic of Namibia, *Proposals for a Ten-Year plan for Educator Development and Support in Namibia: A Consultation Document* (Windhoek, Namibia, March 1999), p. 26.

## **Chapter 8. Confronting AIDS: Recommendations for Governmental and Non-Governmental Policymakers**

These are the faces of children and families living in a world with AIDS. Their spirit, their determination, and their resilience inspire all of us to join the fight. We are one world, and these children are our children. Their destiny is our destiny. Each of us can make a difference. Each of us can help save lives. Let us wage this holy war together. And for the sake of our children, we will win.

—Archbishop Desmond Tutu—

Effectively addressing a crisis such as AIDS in a country like Namibia requires the cooperation of all sectors within the country, along with cooperation and assistance from international aid organizations as well. While piecemeal efforts may help save a few lives in a few locations, AIDS affects all of a country's people. No person in Namibia is isolated from these effects. Indeed, no person in the world is isolated from the effects of AIDS.

The recommendations below are primarily aimed at governmental and non-governmental policymakers working in Namibia. They do not intend to exclude others from the process. In fact, for the fight against AIDS in Namibia to be successful many must be involved. Financial and technical assistance is needed from international governmental and non-governmental aid organizations, including international development agencies such as the United States Agency for International Development (USAID), religious organizations such as Catholic Relief Services (CRS), and other non-

governmental organizations such as the International Red Cross, the World Health Organization (WHO), the United Nations, and the World Bank.

Although a few of these organizations are already fully committed to this work, most of the largest and wealthiest are not. It has been under their, and all of our, watch that AIDS in Africa has been allowed to blossom into the astounding crisis we are now witnessing.

### **To Namibian Leaders**

*Never underestimate the power of strong leadership.* Much of the success encountered in countries such as Uganda has come as a result of very active leadership by people such as President Yoweri Museveni. Given the need for a coordinated plan to address the epidemic, leadership and cooperation is needed at the highest levels of all sectors of Namibian society.

*Be bold—never underestimate the power of strong statements.* If this requires that President Nujoma go to the highest point in Namibia to scream for Namibians to be aware of the risks of AIDS, then this is what should be done. Public personalities must use their power and charisma to bring awareness to this disaster in progress. AIDS awareness in Uganda got a great boost when one of its most famous singers admitted to having the disease and chose to dedicate the rest of his life to raising awareness. Indeed, this marked a turning point in Uganda for both governmental and societal willingness to honestly address the AIDS crisis.

*Talk about the factors that help spread the disease.* Many of these issues are not easy to discuss and, therefore, need strong people to raise them. If leaders of civic, religious, and political organizations are unwilling to do this, the stigma attached to many of these issues will continue to silence the discussions necessary to stop the spread of the disease.

*Make AIDS a top priority.* No matter the agenda or mission, it will be affected by the AIDS crises. People in all organizations, at all levels will die as a result of this disease, and many more will be touched by the deaths of friends and family members. Minimizing the spread of the disease is needed to sustain any mission or plan. No project is more important than the lives of 35 or 40 percent of a country's adult population.

*Facilitate cooperation and coordination.* AIDS in Namibia is a problem too large to be addressed solely by the Ministry of Health and Human Services. All ministries and all sectors must actively participate in evaluating their programming and efforts to determine how best they may address the disease among their stakeholders. Still, the Ministry of Health and Human Services, as it has been assigned, needs to lead efforts in monitoring the spread of AIDS in Namibia and in researching the factors encouraging this spread. It must also take the lead in disseminating information and educating leaders in other ministries and sectors so they may effectively address the disease in their spheres of influence.

*Dedicate more resources for the fight against AIDS.* It is difficult for a country to request more money from international aid organizations to address this crisis when it may appear that its Government, private sector, and civil society are not doing their fair share.

### **To Namibian Education Policymakers**

Education is a country's most direct link to its future. No other sector offers the potential to reach so many with so little effort. Every day in Namibia, an overwhelming majority of students between the ages of 7 and 16 fill Namibian classrooms. There is no better time or place to reach them with the messages that might help save their lives and the lives of their families than during their school years. Who knows how many among the 35 percent of adults already infected with HIV might have been saved with more effective and aggressive education about sex, STDs, and AIDS? How many women could have been empowered with the knowledge and will to protect themselves against sexual predation and relations that rob them of the power to make choices about their sex lives?

The Ministry of Basic Education and Culture (MBEC) and the National Institute for Educational Development (NIED) set education policy in Namibia and create the curriculum taught in Namibian schools. A great burden is on them to address this crisis. Their failures and successes will largely affect the failure and success of their young nation. In this regard

they must simultaneously work to educate their teachers to protect themselves from the disease and to teach their students the same. They must address the societal factors that promote the spread of the disease. They must provide support to the children and families of children affected by the disease. Finally, they must create policies that will cope with the realities of a teacher corps decimated by the effects of the disease. Below are more specific recommendations for education policymakers in Namibia.

*Develop HIV and STD prevention programs and curricula that effectively target different age groups and both genders.* These programs and their curricula must seek to honestly address the factors that help spread the disease in Namibia. Thus, they must address topics such as general sex education, condom use, dangerous sexual practices, myths about AIDS, STDs, and sex, prostitution, and gender inequality.

*Train all teachers to teach sex education and HIV/STD prevention.* This should be a Ministry priority and should occur both prior to service and during service. Further, attempting to train all teachers in this curriculum will bring the dual benefits of empowering teachers to address these issues with students as well as empowering them with the knowledge to save their own lives and the lives of friends and family members. Teachers are often among the most respected and best educated members of Namibian



communities and have the potential to spread this knowledge beyond the classrooms.

*Train teachers in pedagogical methods that promote gender equality and empower females.* Efforts since independence focusing on democratic classrooms and learner-centered education are strong starts. Gender equality has many positive effects on development. Now, it can potentially impede the downward developmental spiral caused by AIDS. More specific efforts to train teachers before and during service to promote gender equality and female empowerment must be made. Societal change is not easy and strong, thoughtful, and consistent efforts need to be made to help facilitate this.

*Train all teachers to identify, counsel, and support HIV-affected children and orphans.* Namibia cannot afford to lose 10 to 40 percent of its children to the streets. These children need to be kept in schools and kept in stable and caring environments. If teachers are trained to identify and assist children and the families of children affected by AIDS, they can help mitigate problems such as neglect, malnutrition, and emotional distress before these children fall through Namibia's social safety net.

*Have schools provide nutritious breakfasts and lunches to children.* As one of the priorities for addressing the needs of HIV-affected children and orphans is their health and continued school attendance, providing at least

two nutritious meals a day to school children could relieve a large financial burden from parents and families raising these children. It will also provide a great incentive for children to attend schools and for the guardians of these children to ensure this. It may also help keep AIDS orphans with family members, out of orphanages, and off the streets.

*Create a campaign to remind teachers of their value to society and their need to survive this crisis.* Educational and societal progress in Namibia depends on improving the professional and academic qualifications of its teaching corps. If teachers die at the same or higher rates than the general adult population, Namibia will increasingly be forced to rely on greater numbers of under-educated, under-qualified, and inexperienced teachers. Creative and thoughtful efforts need to be made to prevent the spread of AIDS amongst teachers. These efforts could include poster and radio campaigns in teacher training colleges, teacher resource centers, the college of education at UNAM, and teachers' lounges and facilities throughout the country. Teachers must get the message that their health is important to Namibia. Other parts of the campaign should include making condoms available at all MBEC facilities and free screening and treatment for STDs in teachers.

*Enforce policies forbidding student-teacher relationships.* While stories of such relationships are heard in Namibia, in the *Annual Report for the year*

*ending December 1998* the five regions reporting dismissals revealed that they dismissed a total of only 17 teachers for misconduct.<sup>1</sup> If this behavior is occurring, the Ministry must do a better job of investigating these reports and removing guilty teachers from their positions. Not only does this behavior degrade teacher professionalism, but it also puts students at risk for contracting AIDS. Finally, it preys on students and can serve to effectively disempower more individuals than just the students directly involved.

*Create strategies to address the effects of AIDS on the teacher corps.* As more teachers become ill and eventually die from the disease, the Ministry will need to develop a system to respond to both temporary and permanent vacancies. Few of these options are ideal or will be capable of fully addressing a severe shortage of teachers, but they include raising prescribed student-teacher ratios, decreasing the academic and professional qualifications for teachers, increasing teacher pay, and significantly increasing the output of the pre-service teacher training system. In the case that less qualified teachers are needed to keep student-teacher ratios low, the Ministry should seek to expand and improve its in-service teacher training programs.

## **To Health and Social Welfare Organizations**

The Ministry of Health and Social Services (MOHSS) is charged to be the lead agency in Namibia's National AIDS Co-ordination Programme

(NACOP).<sup>2</sup> In this role it must strive to coordinate all AIDS research and programming within Namibia. In addition, as the health and social services ministry, it must also seek to support the health and welfare of Namibians affected by HIV whether they are AIDS patients themselves, the families of AIDS patients, or children orphaned to AIDS.

*Encourage and support research into the spread of AIDS and its causes in Namibia.* In order to address appropriately the AIDS crisis in Namibia, organizations need to understand better the environmental factors encouraging the spread of the disease. They also need to know where and how to focus their efforts. Thus, the Ministry of Health and Human Services should encourage and help coordinate research into the spread and factors encouraging the spread of AIDS throughout the country.

*Develop and implement a nationwide campaign to raise awareness of AIDS, its consequences, its causes, and methods to prevent its spread.* Although some programs of this type have already been implemented by the government and NGOs, AIDS figures attest to their failure. Research should be done to ascertain why these programs have not succeeded, and larger, more ambitious programs should be created to overcome these failures and truly empower people with the knowledge they need to protect themselves from contracting the disease. Of course, a major thrust of the campaign

should include condom availability and the prevention, detection, and treatment of STDs.

*Develop initiatives that support families caring for orphans.* Children develop more fully when raised in more normal, caring household environments. Still, as the number of AIDS orphans increases, tears will appear in Namibia's traditional social safety net. To help prevent this, initiatives should be developed to help support families caring for orphans. These can include income support for children's basic needs like clothing, food, healthcare, and school materials and fees. They may also include programs that provide meals and healthcare for orphans attending schools.

*Develop contingency plans, programs, and orphanages for children that cannot be kept with families.* Although keeping children with families should be the first choice, the experiences of other African nations struck by AIDS has been that large numbers of orphans eventually end up on the streets. While orphanages are not ideal, they are preferable to children living on the streets. Where children do live on the streets, MOHSS should seek to provide health services to them and support NGOs in programming activities to keep these children engaged in education, legal employment, and society.

## **To International Development Organizations**

*Make the fight against AIDS the highest international development priority.*

These organizations should realize that all development efforts will be hampered by the effects of AIDS. AIDS is setting back development progress to levels not seen since the 1960s. All development organizations' programming decisions should be made considering whether their efforts and resources could be better used in addressing AIDS. In addition, they should always consider incorporating AIDS awareness and AIDS programming as one of their development components.

*Dedicate more human and financial resources to AIDS programming.*

Within seven years, over 23 million Africans will have died of AIDS, with little hope of the death rate decreasing soon. Humanity demands a greater response. Every person who contracts AIDS due to ignorance, misunderstanding, or social or biological vulnerability is a person who could have been saved. Substantial evidence exists suggesting the spread of AIDS is largely preventable. Little evidence exists suggesting a good-faith effort has been made to achieve this goal.

*Provide debt relief in exchange for AIDS programming.* Although less of a problem in Namibia, which in 1996 had an estimated total external debt of only \$315 million, payments made by African governments on their external debts draw resources away from education and social programming that

could address the causes and effects of AIDS.<sup>3</sup> As AIDS jeopardizes the economic capacity of governments to simultaneously meet their debt obligations and address AIDS in their countries, creditor organizations should allow these countries to exchange portions of their debt payments for investments in AIDS programming.

### **Summary**

Quality education provides many keys to development while poor education robs countries of one of their most effective tools for addressing their problems and goals. All sectors of society benefit from education and suffer when education suffers; therefore all sectors must strive to address the AIDS epidemic. The costs of failure have been and continue to be too high. In Africa, they include over 23 million people doomed to die slow deaths during what would be the most productive times of their lives. They include 10 million children orphaned to AIDS, many of whom will end up living on the streets and all of whom will live the remainder of their lives with the memories of watching their parents waste away and die. They include classrooms of children sitting in silence when told of the death of their teacher or told that no teacher could be found to teach them. The price we must pay to fight AIDS must always be considered against the costs seen in the minds of the millions tragically affected by the disease. Ignoring these costs ignores humanity.

## Notes

<sup>1</sup> Ministry of Basic Education and Culture, Republic of Namibia, *Annual Report for the year ending December 1998* (Windhoek, Namibia, 1999), pp. 56, 62, 67, 70, and 82.

<sup>2</sup> Ministry of Health and Social Services, Republic of Namibia, *The National Strategic Plan on HIV/AIDS in Namibia* (Windhoek, Namibia, Namib Graphics (PTY) LTD, 1999), p. 8.

<sup>3</sup> United States Central Intelligence Agency, *CIA-The World Factbook 1999-Namibia*, 1999. Online. Available: <http://www.odci.gov/cia/publications/factbook/wa.html>. Accessed: December 6, 1999.



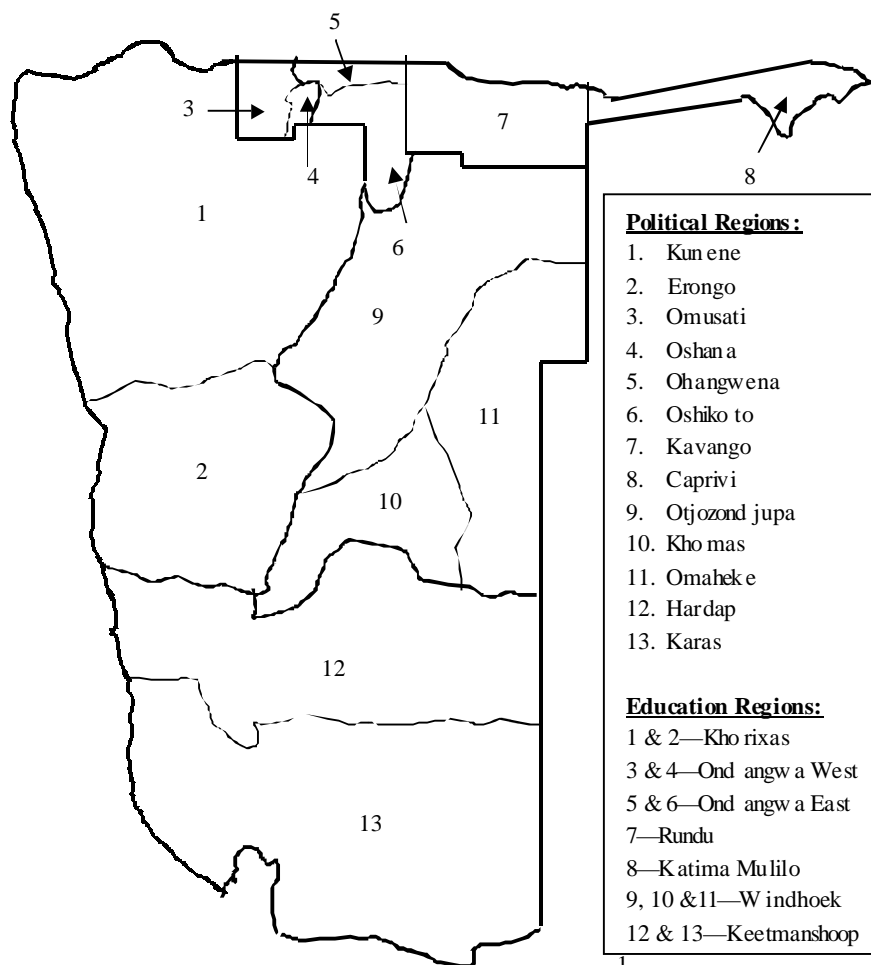
## Appendix A. Demographic Characteristics of Namibia

	<u>Namibia</u>	<u>Sub-Saharan African Countries</u>	<u>Low Income Countries Worldwide</u>
<i>Physical Geography</i>			
• Surface Area	824,000 km <sup>2</sup>	--	--
• Arable land (hectares per capita)	0.51 (1994-96) 0.64 (1979-81)	0.26 (1994-96) 0.32 (1979-81)	0.18 (1994-96) 0.23 (1979-81)
<i>Population</i>			
• Population	1.7 m (1998) 1.0 m (1980)	--	--
• Population density	2 people/km <sup>2</sup>	27 people/km <sup>2</sup>	45 people/ km <sup>2</sup>
• Population growth rate	3.0% (1990-98) 4.8% (1980-90)	3.0% (1990-98) 5.0% (1980-90)	2.6% (1990-98) 4.3% (1980-90)
<i>Economic</i>			
• GNP	\$3.2 b (1998)	--	--
• Annual growth of GNP	1.2% (1997-98)	2.2% (1997-98)	-3.9% (1997-98)
• Per capita GNP	\$1,940 (1998)	\$480 (1998)	\$380 (1998)
• Per capita GNP measured at PPP	\$4,950 (1998)	\$901 (1998)	\$1,821 (1998)
• GNP (PPP) per capita rank among 210 nations	98 <sup>th</sup>	--	--
• % of GNP from development assistance	5.0% (1997) 5.0% (1990)	5.0% (1997) 10.7% (1990)	2.9% (1997) 4.3% (1990)
• Foreign direct investment	\$137 m (1997) \$29 m (1990)	--	--

	<u>Namibia</u>	<u>Sub-Saharan African Countries</u>	<u>Low Income Countries Worldwide</u>
<i>Education</i>			
• Public Expenditure on Education (% of GNP)	9.1% (1996)	--	--
• Net enrollment ratio (1996)	91%--Primary 36%--Secondary	-- --	-- --
• Adult illiteracy (% of people 15 and above)	19M 22F (1997)	34M 50F (1997)	30M 47F (1997)
<i>Health</i>			
• Public expenditure on health	4.1% (1990-97)	1.7% (1990-97)	1.0% (1990-97)
• Access to safe water (% of Pop.)	60% (1995)	55% (1995)	47% (1995)
• Access to sanitation	42% (1995)	47% (1995)	45% (1995)
• Prevalence of child malnutrition	26% (1992-97)	--	--
• Infant mortality rate (per 1,000 live births)	65 (1997) 90 (1980)	91 (1997) 115 (1980)	84 (1997) 114 (1980)
• Under-5 mortality (per 1,000 births)	101 (1997) 114 (1980)	147 (1997) 189 (1980)	130 (1997) 178 (1980)
• Life expectancy at birth (years)	55M 57F (1997)	49M 52F (1997)	55M 58F (1997)
<i>Reproductive Health</i>			
Contraceptive prevalence rate	29% (1990-98)		
Total fertility rate (births per woman)	4.9 (1997) 5.9 (1980)	5.5 (1997) 6.6 (1980)	4.4 (1997) 6.0 (1980)
Maternal mortality rate (per 100,000 live births)	220 (1990-97)	--	--

Source: The World Bank, *Entering the 21<sup>st</sup> Century: World Development Report 1999/2000* (New York, New York, Oxford University Press, August 1999), pp. 231-245.

## Appendix B. Map of Namibia Including Education and Political Regions



*Map drawn by Author*

Source: Education Management Information Systems (EMIS), Ministry of Basic Education and Culture, Republic of Namibia, *1998 Education Statistics* (Windhoek, Namibia, 1999).

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## **Vita**

Jeffrey Joseph Goveia was born in White Sands, New Mexico on April 9, 1970 to Joseph Michael Goveia and Laura Jean Huffman. Upon graduation from Edmond Memorial High School in Edmond, Oklahoma, he attended Oklahoma State University, where, in 1993, he received a Bachelor of Science degree in mechanical engineering with a minor in Spanish. In June 1993, he joined the Peace Corps and served for two years as a mathematics, physics, and English teacher at an all-girls secondary school in rural Tanzania. Later, he served as a Peace Corps training coordinator in Tanzania and Namibia and as a recruiter for the Peace Corps in Dallas, Texas. In August 1998, he enrolled at the LBJ School of Public Affairs at The University of Texas at Austin. During the summer of 1999, he worked as an education planner with the Ministry of Basic Education and Culture in Namibia.

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