AIDS
Socio-economic Causes and Consequences

by
Alan Whiteside

Occasional paper No. 29
Economic Research Unit
University of Natal, Durban
1993
Price: Common Monetary Area: R15.00 incl. Post, Packing & VAT.
Elsewhere: US$10.00

The Author

Alan Whiteside is a Senior Research Fellow in the Economic Research Unit at the University of Natal. He has a BA(Hons) in Development Studies and an MA in Development Economics from the University of East Anglia. From 1980 to 1983 he was an ODI Fellow working for the Government of Botswana. His interests are labour migration, industrial development, Southern African economic development and cooperation, and the economic effects of AIDS. He co-edited Facing up to AIDS: the Socio-Economic Impact in Southern Africa published by Macmillan in 1993.
Table of Contents

1. INTRODUCTION 1

2. THE DEVELOPMENT RECORD IN AFRICA 2

3. SOCIO-ECONOMIC CAUSES OF THE HIV EPIDEMIC 7
   Social Factors 8
   Economic Factors 10
   Political Factors 11

4. CONSEQUENCES OF THE HIV EPIDEMIC 12
   Individual and Household Level 13
   Community and Firm Level 15
   Sectoral and National Level 16
   International Level 22

5. RESPONDING TO THE CHALLENGE 26
PREFACE AND ACKNOWLEDGEMENTS

This paper was originally prepared for presentation at the VIIIth International Conference on AIDS in Africa and VIIIth African Conference on Sexually Transmitted Diseases, held in Marrakech in December 1993. As many of the participants made favourable comments, it was decided to publish it as an ERU occasional paper in order to make it more widely available.

The paper reviews the socio-economic causes and consequences of the AIDS epidemic, and sets out some of the responses governments can and should make as a matter of urgency. Apart from the last section, it is a synthesis of much of the work done on the topic to date. It is increasingly clear that only by addressing the socio-economic causes will the epidemic be stopped, while the consequences need to be planned for at all levels in society.

I must express my personal thanks to the DGVIII/8 of the Commission of the European Communities and the AIDS Task Force in Brussels who supported my participation at the conference, in particular Dominique Dellicour and Lieve Fransen. Professor Gavin Maasdorp cleaned up the manuscript in his meticulous manner and thus enabled us to publish speedily.

AWW
December 1993
1. INTRODUCTION

When AIDS was first recognised as a new disease, it was seen as a medical and scientific problem. Most people believed that science would soon find a cure and/or vaccine, and that the epidemic would be an isolated and anomalous occurrence in mankind's steady progress to development, better health and improved living standards. In the USA and Europe it soon became apparent that, despite the vast sums of money being expended on the problem, there was not going to be a magic medical bullet. It was also clear that in the developed world, the majority of AIDS cases would, as the epidemic ran its course, be confined largely to certain groups and subgroups in society. Root-Bernstein argues that the spread of AIDS is controlled by factors other than HIV, including:

* semen-induced auto-immunity following unprotected anal sex;
* blood transfusions or infusions of blood clotting factors;
* chronic use of recreational and addictive drugs;
* prolonged doses of various drugs;
* malnutrition and anaemia; and
* multiple concurrent infections.

2 This view is epitomised by Robert Root-Bernstein in his book Rethinking AIDS. Free Press, New York, 1993. He said of his book: "As one of the small but growing group of AIDS heretics, I was very pleased to see that the recent US National Research Council report on AIDS challenged orthodoxy. It said that HIV infection and AIDS will remain limited to specific geographic areas and risk groups identified at the beginning of the epidemic: gay men and more particularly an ever-growing population of urban, drug addicted, poverty-ridden, malnourished, hopeless and medically deprived people". Wall Street Journal. New York, 19-20 March, 1993.
He concludes that, "controlling the facts that make one susceptible to HIV and AIDS may therefore turn out to be easier and more effective than targeting HIV itself".3

In the developed world, the press has increasingly been promoting the view that there will not be an AIDS epidemic in the west among the heterosexual population. Some journalists have extended this argument to say that there is no AIDS epidemic anywhere.4

The reality is that in the developing world an epidemic of unprecedented proportions is spreading rapidly. The reasons lie in the poverty and lack of development in these parts of the world. Africa is experiencing the AIDS epidemic first, but the rest of the developing world is no less vulnerable, and it is just a question of time before it spreads there. Although many of the causes may have their roots in the lack of development, solutions may lie in successful and equitable development programmes. The paper now turns to the issue of development.

2. THE DEVELOPMENT RECORD IN AFRICA

The past decade has not been a good one for development in Africa. The worldwide GNP and growth data in Table 1. show that not only has Africa had the lowest level of development but that it is getting poorer in relative terms. Social indicators are shown in Table 2; again, it is apparent that Africa lags behind although the figures here are for single years and do not show the gains that have been made over the past two decades.

3 Ibid.
4 See, for example, the Sunday Times, London, 3 October 1993 with an article headed "The Plague that Never Was" and sub-headed "They said it was the epidemic that would devastate a continent. Yet, how many Africans are really dying of AIDS?"
<table>
<thead>
<tr>
<th>Country Group</th>
<th>1991 GNP ($billion)</th>
<th>1991 Pop. (mill.)</th>
<th>1991 GNP per capita ($)</th>
<th>Average annual growth of GNP per capita (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low and middle-income economies</td>
<td>4.571</td>
<td>4.528</td>
<td>1.010</td>
<td>4.3</td>
</tr>
<tr>
<td>Low-income economies</td>
<td>1.097</td>
<td>3.127</td>
<td>350</td>
<td>2.5</td>
</tr>
<tr>
<td>Middle-income economies</td>
<td>3.474</td>
<td>1.401</td>
<td>2.100</td>
<td>-</td>
</tr>
<tr>
<td>Severely indebted</td>
<td>1.130</td>
<td>486</td>
<td>2.220</td>
<td>5.2</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>173</td>
<td>459</td>
<td>350</td>
<td>1.7</td>
</tr>
<tr>
<td>East Asia &amp; Pacific</td>
<td>1.081</td>
<td>1.667</td>
<td>850</td>
<td>5.0</td>
</tr>
<tr>
<td>South Asia</td>
<td>372</td>
<td>1.152</td>
<td>320</td>
<td>1.2</td>
</tr>
<tr>
<td>Europe</td>
<td>1.314</td>
<td>492</td>
<td>2.670</td>
<td>-</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>1.085</td>
<td>415</td>
<td>2.390</td>
<td>4.6</td>
</tr>
<tr>
<td>Middle East &amp; N Africa</td>
<td>474</td>
<td>244</td>
<td>1.940</td>
<td>6.0</td>
</tr>
<tr>
<td>High-income economies</td>
<td>16.920</td>
<td>822</td>
<td>20.570</td>
<td>3.7</td>
</tr>
<tr>
<td>OECD members</td>
<td>16.463</td>
<td>783</td>
<td>21.020</td>
<td>3.8</td>
</tr>
<tr>
<td>World</td>
<td>21.464</td>
<td>5.351</td>
<td>4.010</td>
<td>2.8</td>
</tr>
</tbody>
</table>

**Note:** Because of incomplete coverage, discrepancies between summed sub-group figures may occur.

*Excludes South Africa*

### Table 2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Secondary</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>51</td>
<td>62</td>
<td>53.1</td>
<td>104</td>
<td>17</td>
</tr>
<tr>
<td>East Asia &amp; Pacific</td>
<td>65</td>
<td>34</td>
<td>65.1</td>
<td>49</td>
<td>44</td>
</tr>
<tr>
<td>South Asia</td>
<td>59</td>
<td>69</td>
<td>57.7</td>
<td>92</td>
<td>39</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>64</td>
<td>57</td>
<td>53.4</td>
<td>60</td>
<td>365(1)</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>66</td>
<td>17</td>
<td>60.8</td>
<td>44</td>
<td>49</td>
</tr>
<tr>
<td>Europe &amp; Central Asia</td>
<td>70</td>
<td>22</td>
<td>64.6</td>
<td>26</td>
<td>71</td>
</tr>
<tr>
<td>World</td>
<td>66</td>
<td>45</td>
<td>61.5</td>
<td>53</td>
<td>65</td>
</tr>
</tbody>
</table>

**Note:** (1) The document notes that late enrolment may push up percentages but even so this figure seems inexplicably high.

The reasons for Africa’s dismal development performance are numerous. They are reflected in the weak growth of productive sectors, poor export performance, mounting debt, deteriorating social conditions, environmental degradation and increasing decay of institutional capacity.

Weak growth in production has been experienced across most sectors. The rapid growth in manufacturing post-independence soon tailed off, and the share of this sector has not risen. Growth in agricultural production has, across the continent, been lower than population growth. Since 1973 export volumes have remained stagnant or actually declined, and the share of African exports in all total world trade fell from 2.4 per cent in 1970 to 1.7 per cent in 1985. At the same time African countries borrowed extensively to sustain expenditure. The Sub-Saharan Africa’s debt increased at current prices from $6 billion in 1970 to $161 billion at the end of 1989. The bulk of this, (94.7 per cent) is non-concessional, and nearly one half (44.6 per cent) is owed to commercial banks or other private lenders.\(^5\)

Deteriorating social conditions have been exacerbated by the lack of economic growth and chronic instability of the continent. Not only has the level of social service spending declined in the face of population growth, but expenditure has often become less efficient. Growing populations have increased environmental pressures. There is deforestation and pollution plus drought and urban decay.

Institutional and infrastructural decay has caused further problems for Africa. Events in Somalia, Sudan, Liberia and parts of Southern Africa have caused widespread death and destruction for millions of Africans. The

---

continent is home to almost one-third of the world's cross-border refugees. Infrastructure has broken down in many countries, with roads pot-holed and decayed, railways inoperable and harbours inefficient. It is a tribute to the resilience of the people of the continent that things are not worse.

The reasons for this dismal record are numerous, and the prospects for the future do not look good. Many African countries have been hard hit by falling commodity prices and declining terms of trade. The continent's raw materials are no longer in as much demand as they were and prospects for the future appear no better: technological developments mean that raw materials may no longer be required in such large quantities as before. For example, the development of fibre optics has greatly reduced the demand for copper, while advances in plastics and ceramics will hit other raw materials. The effects of developments in biotechnology have yet to be fully felt.

Poor public-sector management has also played a major role. The State is more dominant in Africa than in much of the world. Unfortunately, much of the public sector in Africa has been characterised by gross inefficiency. This has been aided and abetted by poor advice, inappropriate aid, and foreign financing of grandiose and inappropriate investment. Linked to this have been price distortions which have favoured the ruling classes and urban populations at the expense of the productive sectors, especially the rural areas.

Finally, mention must be made of the lack of social capabilities with which much of Africa became independent. In general, populations were poorly educated and much of the education was geared to turning out black Englishmen or Frenchmen with a social science and arts education.
Unfortunately, the emphasis on non-scientific subjects and paper qualifications has persisted.\(^6\)

Africa cannot expect to see massive inflows of investment. Its share of foreign direct investment fell from a mere 3 per cent of all inflows between 1970-85 to 2 per cent between 1986-90. Aid flows are also expected to decline in real terms and as a proportion of global flows. The developed world is banding together in regional blocs. The prime examples of this are the European Union and the North American Free Trade Area but the ASEAN group are also developing closer integration. The aim of these blocs is not to assist the developing world, but rather to strengthen the power of the member countries.\(^7\)

3. THE SOCIO-ECONOMIC CAUSES OF THE HIV EPIDEMIC

The only sure way (apart from celibacy) to prevent transmission of the HIV virus is to have a mutually faithful relationship. The determinants of sexual behaviour include many factors, but undoubtedly the socio-economic factors are among the major forces at work in Africa. Before going on to look at these, a number of points must be made.


Socio-economic causes are not given; they can be changed, and identifying them should be the first step in this process. Changing the socio-economic milieu may be surprisingly simple in some circumstances, but it will generally take a long time and will be part of the development process. Socio-economic causes and consequences are closely linked and, unfortunately, in much of Africa we need to plan for the consequences. This should be linked to the prevention process.

Socio-economic causes are factors which cause or encourage people to have more than one partner or to have unprotected sex either because of lack of knowledge or because they don't have the means to purchase or obtain protection; and increase the risk of infection because of lower levels of health or the existence of sexually transmitted diseases. These causes may be broadly divided into social, economic and political factors, although it is recognised that there is a great deal of interaction between categories.

### Social Factors

#### Status of Women

The low status of women and their comparative lack of power makes behavioural change more difficult, and leaves them victims of cultural obligations. Work done in Natal found that four out of five women did not think that they had the right to insist that their partner be monogamous and, although 64 per cent wanted their partners to wear condoms regularly, 67 per cent felt they did not have the right to insist that their partner use

---

8 See, for example, Mary Bassett, "Vulnerability to HIV Infection: the Zimbabwe Experience", AIDS Analysis Africa, Southern Africa edition, 4(5), Oct/Nov 1993. She writes: "Too often, however, one reads: AIDS is a disease of poverty as a conclusion, not a starting point. Such pronouncements are more depressing than helpful" (p.8).
condoms. A major problem in South Africa is rape; one in four young women between 16 and 30 years had either been raped or knew someone who had. In Kenya, persistent reports of rape of Somali women refugees resulted in the UNHCR sending a social worker to investigate. Female circumcision and infibulation may increase the risk of HIV transmission.

High Levels of Sexually Transmitted Diseases
The incidence of STDs in a population greatly increases the probability of HIV transmission during sexual intercourse, and STD levels are high. In Swaziland in 1989 5.6 per cent of outpatient visits were for sexually transmitted diseases, while in the same year 1,078,293 episodes were reported in Zimbabwe. It is estimated that between 15 and 20 per cent of the sexually active black South African population either had or at present have a STD.

Rural-Urban Linkages
If there is movement between rural and urban areas, this will ensure a more rapid and uniform spread of HIV in a country. Davies, writing about Zimbabwe, noted: "People from all socio-economic groups retain their links with 'home areas' and travel there relatively frequently. This would tend to make the virus spread more uniformly throughout the population. In addition, the high number of workers whose wives live in rural areas will tend to increase the number of partners and thus the rate of spread". A

10 Centre for Health Policy, "Understanding the Possible : Policies for the Prevention of HIV in South Africa", University of Witwatersrand, Johannesburg (undated).
similar pattern of rural-urban contact is seen in many other countries of the region.

**Economic Factors**

**Drought and Other Disasters**
Drought and similar disasters tend to cause a large-scale movement of people in search of food and incomes. They also increase poverty and social breakdown. The movement of people to urban areas will lead to greater pressure on the urban infrastructure and job market as well as to social breakdown, thus potentially speeding the spread of HIV.

**Poverty**
Anything that reduces the effectiveness of the body's immune system and general level of health makes it easier for the HIV virus to enter the bloodstream and infect a person. These 'co-factors' include malnutrition, endemic diseases, lack of sanitation and potable water, the inability to receive or understand messages about behavioural change, and lack of resources to make the changes. Most Africans are poor and therefore at risk.

**Cross-border Migration**
The movement of people in search of employment has been going on for decades. This takes place all over Africa with the movement of Ghanaians and others to Nigeria, of many West Africans to Cote d'Ivoire, and of East and North Africans to Europe and the Gulf States. Perhaps the best-established system of migration is in Southern Africa, where it began in the late-1800s after the discovery of diamonds and gold. Here there are approximately 250,000 foreign men employed on contracts of up to two years. Most are housed in single quarters and none are able to bring their families with them. They come from, in order of importance, Lesotho,
Mozambique, Botswana, Swaziland, Namibia and Zimbabwe. In addition, apartheid legislation made millions of South Africans migrants in their own country once they crossed the ‘borders’ of the homelands. Migrants are a high-risk group: they are largely single men and are separated from their families, and they will suffer loneliness, social dislocation and anomie. They also have the potential for spreading the virus into the rural areas when they return home. Single women who migrate may be forced into sexual relations as a survival mechanism.

Political Factors

Militarisation

Armies are known to have high levels of HIV prevalence and, unless carefully targeted, contribute to the spread of the disease. In 1991, there were some 2,300,000 people in the armed forces in Africa, with every country having some form of army. This does not include the insurgent forces operating in many countries - Unita in Angola, Frelimo in Mozambique, and so on. South Africa has to address this problem in the Defence Force and paramilitary forces, the homeland armies, and the armed wings of the liberation movements.

Conflict and Civil War

As well as creating refugees, the conflicts mean that people cannot be reached by government health and education services. There is also an unwillingness to listen to messages about AIDS when issues of survival are so much more imperative. There are continuing conflicts in numerous parts of Africa with civil wars being fought in Angola and Liberia.

Refugees
According to UNHCR, on 31 December 1992 there were nearly 5,400,000 refugees in Africa. The largest number were in Malawi (with 1,058,500 Mozambicans), but there are 703,500 Ethiopians in Sudan and 25,600 Sudanese in Ethiopia. Even some small countries have a huge burden - Swaziland, with a population of only 800,000, has a refugee population of 55,600. The vast numbers of displaced people within their own countries do not appear in official statistics as refugees; however, they account for additional millions.

Denial and Lack of Leadership
In a number of African countries there is still a tendency to deny that AIDS is a problem or even that it exists. In some countries, the promotion of condoms and safe sex messages are seen as going against tradition. The reality is that millions of Africans are practising unsafe sex and thousands are being infected every day. The continent does not have the luxury of time in which to conduct a debate on the content of the message. Strong and uncompromising leadership is required, and this must begin with the Head of State. The successes in programmes in Uganda and Zambia can partly be attributed to the role played by President Museveni and ex-president Kaunda.

4. THE CONSEQUENCES OF THE HIV EPIDEMIC

This part of the paper will examine the impact of AIDS at four levels:
(i) the individual and household;
(ii) the community and firm;

(iii) sectoral and national; and
(iv) international.

The longer the epidemic is allowed to go unchecked, the more people will be affected and the greater the impact will be. Furthermore, the disease may be characterised as a long-wave disaster "because it is a disaster that is a long time in the making and in which the major effects have already begun to occur long before the magnitude of the crisis is recognised and any response is possible".16

**Individual And Household Level**

The consequences for the individual and household will be felt in three stages: first the illness; second the death; and third the longer-term consequences. The illness will be the immediate burden; often the first person to fall ill will be the breadwinner, whether in formal or informal employment in the urban area or a contributor to agricultural production. The family income (which may be in cash or kind) will fall as a result of the illness.

Not only will the family be faced with the lost labour and a fall in income, but they will also have to carry the burden of care for the patient. This may involve actual expense in paying for medical treatment, hospitalisation and drugs, and possibly visits to traditional healers. It will certainly involve time spent in caring for the patient which will be both physically and emotionally draining. If the individual is a migrant (usually a man), working away from home, then he may return to his rural roots, resulting in a double burden for poor and marginalised areas.

The death of the patient will result in the expense of a funeral. These occasions are important psychologically, but can be financially costly, representing a further drain on the family coffers. In addition, there may be further lost production while the community attends the funeral and the family has a period of mourning. If the man dies, his widow may lose the right to cultivate the land the family held. There must also be an enormous psychological strain on the remaining spouses who will realise that they, too, could be infected.

The longer-term consequence may be that the household enters into a downward spiral. This is admirably illustrated by Barnett and Blaikie\(^\text{17}\) for a notional family in Rakai district of Uganda. They show how remittances may end and the cropping pattern change as the family loses labour and money for inputs such as fertiliser. Cash crops will no longer be planted or tended, and children may have to be withdrawn from school. The impacts they identify are:

(i) loss of income-earning opportunities in both agricultural and non-agricultural sectors;
(ii) productive labour time being diverted to take care of the sick;
(iii) use of cash for medical expenses both palliative and in a fruitless search for a cure;
(iv) food reserves and cash for funeral ceremonies;
(v) withdrawal of children from school to reduce expenditure and increase labour time; and
(vi) altered patterns of consumption and production by households receiving orphans.

We need to focus increasingly on the longer-term implications of the epidemic particularly on the consequences for the next generation. AIDS

\(^{17}\) Ibid, p.104.
will result in a sizeable number of children being orphaned. What happens to surviving children?

(i) Increased mortality - the survival of children who lose one parent, especially the mother, is severely impaired. The reasons are obvious: poor nutritional status; poor hygiene; early weaning; and, of course, the vital role of the mother as provider of love and attention.

(ii) Poorer education - orphans are less likely to go to school; they may not have financial resources (if there are fees), or be unable to afford the time if they are involved in care of siblings and finding ways to survive. Even if they do go to school, they will lack the secure family background that is so important in educational attainment. They are more likely to leave school early with poor qualifications.

(iii) Less socialised - much of what we learn about how to function in society is instilled in us by our parents. Orphans do not receive this care and attention.

The effect of dislocated society on children can be seen in countries which have experienced war. Another example is the way the system of apartheid destroyed opportunities and hopes for generations of young black South Africans.

Africa's future lies in her children. We have not yet begun to count the cost of the AIDS epidemic on the next generation or, even more important, to plan ways of reducing the consequences.

**Community And Firm Level**

Communities will be greatly affected by AIDS. As the epidemic builds up momentum and deaths increase, communities will have to develop ways to cope. These coping methods have been admirably described in Barnett and
Blaikie’s work in Uganda. Unfortunately, the ability of communities to absorb the loss of productive members and cope with the consequences (such as growing numbers of orphans) is not infinite. This will be especially true in more marginalised and poorer communities where resources are limited.

The firm is the term used for a unit of production. It may be a small unit operating in the informal sector, or a large formal-sector operation. For small units, where labour and skills are the main asset, the consequence of an AIDS illness and death may be devastating. These operations cannot carry sick members, and so it is likely that many will go out of business.

The larger firms will face similar problems as the labour force is infected. This is particularly serious when they begin to lose skilled and experienced staff, and this problem has been clearly identified in Zambia by the Standard Chartered Bank. One response is to increase the number of trainees, but although this may be affordable for some institutions, for many it will be a serious problem.

Sectoral And National Level

National accounts are divided into sectors, typically agriculture; mining; manufacturing; construction; transport and communication; services (including finance, banking, tourism); trade; and government services. The last-mentioned category is a significant contributor to GDP and a very significant source of expenditure; 1991 figures show that government

---

expenditure ranged from 41.9 per cent of GNP in Botswana to 21.9 per cent in Zambia.¹⁹

Questions which need to be addressed are:
(i). will an AIDS epidemic have a different effect depending on the sector of the economy, i.e., will more people be infected and is the sector more vulnerable; and
(ii) what can be done about it?

Agriculture
There are generally two type of agriculture, namely, (i) commercial, producing cash crops, raw materials for agro-industry and exports, and generally relying on wage labour and a high level of technology, and (ii) subsistence (which is the way much of Africa’s population makes a living).

On average in low-income countries worldwide 32 per cent of GDP is from agriculture, but for 64 per cent of the population this is their living. Early indications are that HIV/AIDS has an adverse effect because of deaths and time spent caring for infected people. The effect on cropping will depend on labour demands - including seasonality; degree of labour specialisation; and interdependence of labour inputs. The effect on the national economy will depend on the importance both of peasant agriculture to the internal market and to export of cash crops.

Commercial agriculture is an under-researched area but it is very important. In Malawi, of 428 000 in paid employment, 185 000 (or 43 per cent) were in agriculture, forestry and fishing. In Swaziland in 1987, of the 58 300 paid private-sector employees, 31 per cent were in agriculture. Commercial

agriculture produces cash and export crops as well as raw materials. Evidence from Africa suggests that commercial agriculture may face major problems because it operates in closed communities with a potential for rapid spread; there is seasonal migration; skilled staff are vital but small in number; and these operations have generous employee benefit schemes.

Mining
The consequences are similar to commercial agriculture. In 1989, 68 per cent of HIV-positive individuals on the Zambian copperbelt were professionals.

Manufacturing and Construction
Of crucial importance here will be the spread among key skilled and professional employees. Most firms will be able to replace unskilled and semi-skilled employees from the large pool of unemployed and under employed people, but skilled workers may be at risk because of their income and financial status. Thus industrialists in Zimbabwe are training two people for each vacancy. Elsewhere in Africa it is estimated that to have a skilled and experienced 50 year-old, between 5-15 students will have to be trained after schooling. The alternatives are employment of expensive expatriates, or simply that vacancies will not be filled.

Services (including Transport and Communications)
Here the problem is that the employees are often particularly skilled, for example, in banking, telecommunications and electricity supply. Zambian banks have warned that they may have to close branches. We might thus expect a gradual decline in efficiency, with a major problem in the transport sector.

There is a direct effect on some service industries: insurance companies now refuse to provide life cover in areas of high HIV incidence without screening or exclusions, and in countries where government will not allow testing, companies may close; medical care and medical insurance companies may face escalating costs, and so decide to close; and tourism may be adversely affected because tourists view areas of high HIV prevalence as ones to be avoided.

**Government Services**

In general, it is argued today that governments should provide the environment for economic growth and development, and that there should be less rather than more spending. Nonetheless, government is responsible for the provision of security, health services, education and infrastructure. How will AIDS affect the provision of these services?

(i) **Security** is probably the most vulnerable area, as uniformed forces are hit first and worst. However, there is slack in the system here as many security forces could be reduced in size.

(ii) **Health** is the poor relation of the government budget, receiving between 5-10 per cent. However, in many countries the emphasis has been on curative and urban-based care. AIDS will (i) push up costs, and (ii) use resources including beds and facilities.

(iii) **Education** has many aspects that need to be addressed. What is done about teachers who fall ill and die? How are they replaced? Will there be fewer students? How do we deal with orphans - especially if school fees are required? How do we plan an education system in the face of AIDS?
(iv) Infrastructure includes development-type projects, for example the building of dams, roads, or power stations. AIDS should be a factor to be considered in each project. How will the project affect the spread of AIDS, and how will AIDS affect the project? AIDS may affect the viability of some development projects, especially ones that rely heavily on skilled labour or ones in which expanded subsistence agriculture is expected. At the same time, projects may inadvertently speed the spread of the epidemic, harming the very people they were expected to help.

Government services are particularly vulnerable to AIDS because of the very generous sick leave arrangements that exist. In Swaziland, for example, a person in the private sector may take 21 days sick leave if he is fortunate while a government employee may have six months on full pay and six months on half pay.21 We are not advocating that the ill be dismissed but rather that we should be aware that, while they are on sick leave, their work will not be done (or will be done by someone in an acting capacity), and if they are replaced, the wage bill will rise.

Macroeconomic Effects
Some work has been done on the macroeconomic effects of AIDS on African countries, for example, by the World Bank (particularly Mead Over). He looks at the impact under two variables: (a) where the expenditure is financed from savings and (b) according to the skill levels of those infected. He warns: "Under the worst of the analysed scenarios, the reduction in per capita growth rates for the average Sub-Saharan African country is projected to be approximately one third of a percentage point". Remembering that the average African country has achieved no better than

a two per cent growth rate in GDP per capita since 1960 and that average growth in recent years has been zero or even negative, a reduction of one third of a percentage point is a substantial decrease over the next 35 years. However, note that the maximum reduction in the growth rate of the ten countries with the most advanced epidemics is projected to be almost twice as large - 0.6 percentage points.\(^\text{22}\)

Looking specifically at Tanzania a second World Bank study notes: "The main results of this analysis suggest that if no new actions are taken (e.g., if no new Government measures or donor support are forthcoming), then:

- GDP would grow more slowly than it would have in the absence of AIDS. The average real GDP growth rate through the year 2010 would be 2.9-3.4 per cent, instead of 4.0 per cent if there were no AIDS. By the end of that period, the level of real GDP would be 14 to 24 per cent lower than it would have been otherwise.

- Per capita GDP would also be affected but more moderately, as the impact of slower GDP growth is offset somewhat by slower population growth. The average real per capita GDP growth rate through 2010 would be 0.3-0.7 per cent instead of 0.7 per cent in the absence of AIDS. Under some scenarios, it is possible that per capita GDP might remain unchanged, especially if the reduction in savings were small or nil.

- Capital/labour ratios would be affected slightly - possibly rising marginally more than it would have otherwise, as employers use non-labour inputs more to compensate for the losses in the numbers and productivity of workers.

Not surprisingly, the impacts start out as quite modest, but then build up over time as the prevalence, mortality, and morbidity from AIDS worsens.23

There are three key conclusions to draw from this:
(i) Preventing the spread of HIV makes economic sense, and the earlier it is done the better.
(ii) Selecting interventions - addressing the demand for skilled labour or reducing expenditure from savings - is vital.
(iii) A multi-sectoral response is essential. The impact of AIDS is diverse, and so must be the response.

International Level

AIDS is a pandemic, which means it is spreading worldwide. Since it was first recognised in the early 1980s, it has evoked a range of responses in national and international communities. However, the ability of the disease to damage the global body politic is underestimated and is an issue that needs to be addressed.

Allocation of Blame

The initial response to the disease was to allocate blame. In the west this was done on a quasi-scientific basis. A significant number of the first cases in the USA were in the Haitian community, and consequently to be Haitian was to be a member of a 'high-risk group'. In Europe, early cases were predominantly among Africans or people who had lived in Africa, which gave rise to the perception that this was an African disease. Even in 1992, the discovery of a small number of infected pregnant women in inner

London having links with Africa or the Caribbean has resulted in a resurgence of racist views.

Screening
The most visible response on a national level has been to place travel restrictions on those who are HIV-positive. Many countries require students and people wanting to stay for lengthy periods to be screened for HIV, and refuse entry to those who are positive. This discrimination is intended, first, to prevent the entrant from spreading the disease in the host country and, second, to ensure that the health services are not burdened with having to care for non-nationals.

International Competition
One of the less salutary features of the pandemic has been the undignified and unproductive scramble for academic and commercial honours. No other disease has had so much money poured into research in such a short time. The lure of a possible Nobel prize spurs researchers into working on vaccines and cures. The commercial returns will also be enormous as there is a large and growing market - Wellcome, manufacturer of zidovudine, the first drug to be used in AIDS, is said to have made nearly US$1000m in sales since it was licensed - and some leading scientists have taken up consultancies in pharmaceutical companies.

One of the results of this scientific nationalism is that there is much research duplication. Despite the need there is little evidence of cooperation. A further problem lies in the fact that the drugs or vaccines developed may not be affordable for large sectors of the world population. Already, for example, a vaccine exists against hepatitis B which causes an estimated 800,000 deaths a year in developing countries yet it is hardly accessible outside developed countries.
The rewards will not be as great for social scientists, but progress is still hindered by academic jealousy and duplication of effort. At the Dakar conference on AIDS in Africa in December 1991, Professor Peter Piot pointed out that there have been over 1000 AIDS projects in Africa with 600 active researchers in 22 different places. He told the conference that “for AIDS researchers the time for quick studies and instant results has passed”. He called for long-term commitment by aid donors and funders to long-term projects to fight a virus that is no respecter of western annual budgetary cycles and bureaucratic constraints.

**International Cooperation**

While the virus has resulted in discrimination, the allocation of blame, and competition among scientists, it has also brought unprecedented global cooperation. This has largely been led by WHO through its Global Programme on AIDS (GPA), but the organisation can only act in response to requests by its member states. The GPA has introduced AIDS control programmes throughout much of the developing world. The strategy has three broad objectives:

(i) prevention of HIV infection;
(ii) reduction of the personal and social impact of HIV infection; and
(iii) unification of national and international efforts against AIDS.

In addition, many of the international agencies both in and outside the United Nations recognise the threat of HIV, and are becoming involved.

Donors have been quick to provide support, recognising that if the epidemic is unchecked it will negate many of the gains made in health and development over the past two decades. What is alarming, however, is a tendency to identify certain countries to be targeted.

---

Finally, mention should be made of the many non-governmental organisations involved in AIDS programmes. These are frequently very effective because of their community-participation approach.

**Development and Destabilisation**

An equally important factor in development is the perception of investors. Foreign investment in productive enterprise is crucial if there is to be development in much of Africa, Asia and Latin America. Prospective investors may, and in some cases are, considering the levels of HIV incidence before deciding on whether to invest. High levels would be seen as having a negative effect on the level of manpower availability, markets and general living conditions.

There has been some speculation as to the effect of HIV on the leadership and political stability of various African countries. The hypothesis is that educated people and political leaders are among the first to be infected (largely because of their greater wealth and access to resources). As the pool of skills is so small they will be replaced by less competent people. This will have a detrimental effect on the quality of leadership, and increase the likelihood of instability as various interest groups weigh their actions in the belief that they can govern better or more profitably.

**Marginalisation of Affected Areas**

HIV is a divisive virus. In 1991 the VIIth International AIDS Conference "clearly revealed two features that have been apparent for some time to those working in the field of the downstream impact of the AIDS epidemic. These two features are concerned with two great divisions; the division between medical and social scientists and that between treatment, care and concern for the wealthy and the opposites for the poor. Each of these
divisions is to be seen on a local, national and, perhaps most worryingly of all, an international scale".  

Barnett and Blaikie argue that a real danger for Africa is that it might be seen as unclean, as it had the misfortune of being exposed to HIV before it made inroads in many other parts of the world. In the meantime, an undercurrent of opinion is beginning to suggest that AIDS is under control in Europe and North America, that it can now be seen as 'just' another tropical disease - like malaria - against which the people of Europe and North America can protect themselves by means of simple precautionary measures. Such attitudes are easy to adopt, they fit well with established prejudices along class, gender and ethnic lines. They insidiously penetrate research agendas".  

5. RESPONDING TO THE CHALLENGE

Most of what has been presented so far in this paper is not original and the references are given. The last section puts forward some ideas as to how we on the African continent should proceed.

(i) Get to grips with the magnitude of the problem: Delegates at this conference do not need persuading about the size of the epidemic. However, what they might not appreciate is the political, social and economic catastrophe this disease may bring to our continent. We need to persuade our political leaders, government officials and other key figures that the spread of HIV must be treated as a national priority. There are two important points here. First, the message

must come from the nationals of the countries concerned. If WHO, UNDP or any of the many other organisations try to convey this message, there is a danger that it will be lost as people look for hidden agendas or perceive it as a donor disease ("they are worried about it so let them take care of it").

Second, we have not yet reached the people who matter: we have been very poor advocates of our cause. The people who matter are those who make opinions and who control the resources. The media must be treated as allies, not adversaries. The government planners must be made aware of the consequences of not acting on the epidemic, and a sense of urgency must be instilled in them.

(ii) **Put the AIDS factor into all sectors and projects**: Every decision-maker should be asking: "What are the consequences of the epidemic for my operations and how should I be responding?" Knowledge is power, and if people are thinking about the consequences of the epidemic then they will be thinking about ways to reduce its impact. This is particularly important in the planning sector where we need to be planning for the consequences of the epidemic now. As stated earlier, every development project should include an AIDS impact assessment in the same way that many now include environmental impact assessments.

(iii) **See AIDS as a development issue**: The socio-economic causes of the epidemic show clearly that, if we address the poverty and lack of development of the vast majority of Africa's people, we will target some of the root causes of the epidemic. The role and status of women are crucial issues.
(iii) Prioritise the next generation: It is crucial that the question of orphans and youth be addressed now. They make up the new generation, and they must be provided with the education, care and love that will make them effective members of society. They are also becoming sexually active, and so must be targeted with prevention messages.

(iv) Look to our own resources: All over Africa there are numerous examples of African initiatives started with few resources. We must look to these and learn from them. We cannot expect foreign donors to stop this epidemic. They have a great deal to contribute and we must take what we can and learn what we can, but in the long run, we must marshal our own resources, chief of which is a resilient, hard-working and imaginative people.

There are those that postulate that AIDS started in Africa. I conclude by saying: let us show the world how it can be stopped here.