

# THE RESPONSE OF HIGHER EDUCATION INSTITUTIONS IN AFRICA TO THE HIV and AIDS EPIDEMIC

A synthesis of four sub-regional surveys in Sub-Saharan Africa



Association of African Universities

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## **ABBREVIATIONS AND ACRONYMS**

AAU	Association of African Universities
AIDS	Acquired Immuno Deficiency Syndrome
COREVIP	Conference of Rectors, Vice-Chancellors and Presidents of African Universities
CROUS	Centre Regional des Œuvres Universitaires de Saint Louis (student services départements in Francophone universities)
HIV	Human Immuno Deficiency Virus
IEC	Information, Education and Communication
NGO	Non-Governmental Organisation
PLWHIVA	Persons Living with HIV and AIDS
UNAAB	University of Agriculture, Abeokuta (Nigeria)
VCT	Voluntary Counselling and Testing

## FOREWORD

The threat of HIV continues to be one of the most dreaded development challenges in the world. Its potential to wipe out entire population especially in highly affected countries has, since its first known and documented cases in the 1980s, led to a continuous upscale of international responses that call for the coordinated efforts of all stakeholders - development partners, the state, private sector, civil service organisations, etc - to help reduce the rate and impact of the epidemic.

Africa accounts for one-tenth of the world's population, yet it is home to two-thirds of the world's HIV infection. The geographic variation between and within countries and sub-regions, increasing evidence of infection among men having sex with men and injecting drug users, as well as changing patterns of infection on the continent call for further research and understanding on the core drivers of the epidemic for the appropriate mitigating measures to be applied.

With the youth, aged 15 to 49, accounting for the highest HIV infection rates in the world, higher education institutions, which harbour a large number of young adults at their peak years of sexual activity invariably become potential fertile breeding ground for HIV infection. Increasing student absenteeism and high attrition among staff are indications that HIV is beginning to have an impact on higher education. Against these odds, education, formal or informal, is seen as the social vaccine that can not only be used for HIV prevention but also in the care and management of those infected or affected by the disease.

Whereas there is no standard set of interventions to be applied holistically to every countries affected by HIV and AIDS, it is pertinent to initiate appropriate responses and determine how the constituents are coping with and managing the realities of the pandemic. These responses should be well coordinated, with adequate capacity to enforcing them. The Association of African Universities (AAU), representing over 230 higher education institutions in Africa, has, since 2002, responded to the threat and management of HIV and AIDS in higher education institutions in Africa through its HIV Programme. Through continuous funding from its development partners, particularly the Swedish/Norwegian Regional HIV/AIDS Team for Africa, based in Lusaka, Zambia, the AAU has financed a number of institutions to develop institutional HIV policies as well as others to integrate HIV into their curricula. The Association has also commissioned a number of studies on the effect of the pandemic on higher education institutions in Africa.

This recent survey follows a 2007 commissioned study on the review of best practices in HIV models and trends in higher education institutions in Africa, and it is the hope that the findings in this report would provide the needed impetus to scale up the response to the pandemic by our universities and other tertiary institutions.

Goolam Mohamedbhai  
(AAU Secretary-General)

## ACKNOWLEDGEMENTS

The AAU uses this opportunity to express its profound gratitude to the Swedish/Norwegian Regional HIV/AIDS Team for Africa of the Embassy of Sweden based in Lusaka, Zambia, for the continuous support to the AAU HIV Programme since 2005 and in particular for wholly financing the four surveys and subsequent synthesis report of the responses of higher education institutions in sub-Saharan Africa to the HIV epidemic.

We are particularly grateful to our survey consultants, PAI Obanya, Barnabas Otaala, Patrick Kayembe and Ntambwe Malangu for their dedication and timely submission of the reports that enabled its presentation at the 12<sup>th</sup> AAU General Conference in Abuja, Nigeria in May, 2009. We commend, most especially, the author of the survey synthesis report, Prof. PAI Obanya for his professionalism, quality of output and timely delivery.

Association of African Universities (AAU)  
Accra, Ghana  
February, 2010

## EXECUTIVE SUMMARY

The Association of African Universities (AAU) runs an HIV and AIDS Programme dubbed 'African Universities Responding to HIV and AIDS' which aims at ensuring that the higher education community in Africa uses all available means to prevent the spread, mitigate the impact and manage the HIV and AIDS epidemic.

The Programme commissioned four impact assessment surveys in universities in sub-Saharan Africa in 2008/2009 to examine the extent to which HIV and AIDS issues have been mainstreamed into institutional programmes.

The HIV and AIDS pandemic poses serious developmental challenges and undermine broad progress in development. Globally, more than 33 million people worldwide were estimated to be living with HIV in 2008, with sub-Saharan Africa (SAA) accounting for some 22.4 million of this total. The core drivers of the epidemics in this region has been placed under five broad headings, namely, (a) biological and physiological, (b) sexual factors, (c) socio-cultural, (d) economic and (e) political.

The effect of the epidemic on the education sector is well documented. It has been argued that the education sector could be fortified to become a country's strongest weapon against the threats of HIV and AIDS, a notion that led to the development of the AAU's HIV and AIDS Programme.

Findings of a commissioned study by the HIV Programme titled "*HIV and AIDS and Higher Education in Africa: A Review of Best Practice Models and Trends*" saw the initial response to HIV and AIDS by African higher education institutions as 1<sup>st</sup> *Generation Responses*, with a consensus developed around the need for:

- Strong leadership, policy and management commitment.
- Putting in place effective prevention and education programmes.
- Care and support in an environment that recognized the needs of infected and affected people.
- Curriculum reform to develop the new skills needed by graduates in an AIDS affected society.
- Knowledge generation that would improve society's understanding of the epidemic, set new standards and contribute to better programming interventions.
- Community engagement that makes institutions responsive and accessible to the communities in which they work.

A further study, following the presentation of the *Best Practices* report to the AAU's Conference of Rectors, Vice-Chancellors and Presidents of African Universities (COREVIP) in Tripoli in October 2007 was commissioned in 2008/2009 and the surveys covered 35 institutions in 19 countries in sub-Saharan Africa zoned into four groups as follows:

- Anglophone Western Africa
- Francophone Western and Central Africa

- Eastern Africa
- Southern Africa

Titled '*The Response of Higher Education Institutions in Africa to The HIV and AIDS Epidemic*' the exercises surveyed the place of HIV and AIDS in institutional strategic plans (including the existence of an institutional policies on the epidemic); the integration of HIV and AIDS concerns into formal and informal university curricula; the extent to which HIV and AIDS related activities have influenced individual behaviour as well as systems and processes within the institutions concerned; and the impact of AAU support for HIV-related programmes and activities in African tertiary institutions.

The key findings of the surveys are categorised as follows:

#### HIV and AIDS as major institutional concern

Three issues were examined here, namely the development of Institutional HIV and AIDS Policies; Integration of HIV and AIDS into Institutional Strategic Plans, and Management and Funding of HIV and AIDS-related Activities.

##### *Institutional HIV and AIDS Policies*

Eighty percent (80 %) of institutions surveyed have policies to respond to the pandemic. The rest are either in draft forms awaiting approval by the authorities or are still in the process of development.

Whether supported by the AAU or not, all the Southern Africa institutions have policies on HIV and AIDS and reported 'actively implementing' them. In Eastern Africa, all surveyed institutions except the University of Burundi, which has no AAU programme support, have developed policies, with some of them even under revision. West Africa has the bulk of no-policy and policy-in-the pipeline institutions.

##### *Integration of HIV and AIDS into Institutional Strategic Plans*

Just like the lack of institutional HIV and AIDS policies, Anglophone West Africa and Francophone Western and Central Africa higher education institutions do not have evidence of HIV and AIDS integration into their Strategic Plans except for Université Gaston Berger which was drafting a Strategic at the time of the survey.

Eighty percent (80%) of the ten institutions in Eastern African sub-region have HIV issues in their Strategic Plans, the only exceptions being Makerere and Kyambogo universities in Uganda, which are non-beneficiaries of AAU support. For Southern Africa, due, perhaps, to the high prevalence of the epidemic in the sub-region, there is therefore no clear-cut evidence of beneficiaries or 'test group' institutions having any edge over 'control group' institutions in the inclusion of HIV in their official documents.

##### *Management and Funding of HIV and AIDS-related Activities*

While both Anglophone Western Africa and Francophone Western and Central African institutions tend to have ad hoc 'committees' managing the pandemic, there was no clear evidence annual budgetary allocations from the universities. Funding come only in trickles, mainly from AAU and donor agencies.



In Eastern Africa, functional HIV and AIDS units in most of the institutions are headed by senior level personnel, with dedicated budget lines for advocacy, counselling and training activities. The exceptions are the universities of Burundi, Makerere and Kyambogo, which have not then benefited from any AAU HIV programme support. Similarly, all Southern African surveyed institutions that had received AAU support have management of HIV and AIDS entrusted to high powered units within the institutions with budgetary provisions for executing planned activities. The exceptions, like in Eastern Africa, are those who have not had programme support yet from the AAU, namely, the University of Antsirananana (Madagascar), the University of Zambia, and the National University of Science and Technology in Zimbabwe.

### HIV and AIDS in the formal curriculum

Formally taught and examined either 'stand-alone' HIV and AIDS full course or HIV and AIDS integrated into 'carrier' disciplines, the surveys show that an 48% of tertiary institutions is in the process of developing stand-alone courses on HIV and AIDS, 39% offer HIV and AIDS as a full course in designated disciplines (mainly medical/health/biological/social sciences) and only a handful of the institutions (13 %) have HIV and AIDS as full, stand-alone and compulsory courses.

### HIV and AIDS in the implicit curriculum

Not consciously programmed but existing and constituting mainly 'caught', rather than 'taught' curriculum are activities on technical and social knowledge of HIV and AIDS that aims at value re-orientation, attitude change and behaviour modification in higher education institutions. In the sampled institutions in the survey, two distinguishable implicit curricula on HIV and AIDS are identified. The first is more or less formalised and designed as part of concerted institutional action against the pandemic. The second is made up of 'incidental activities' - capitalizing on major events within the institution to propagate 'preventive messages' on HIV and AIDS.

Implicit curricula are quite universal in most of the institutions surveyed. In Eastern Africa for instance, implicit curricula take the form of three main institutionalized activities: Voluntary Counselling and Testing (VCT) services, annual HIV and AIDS enlightenment activities, and special services to Persons Living with HIV and AIDS. In Southern Africa, VCT for HIV infection is relatively wide spread, while Information, Education and Communication (IEC) activities are a regular feature of campus life. University of Dschang in Cameroon in the Francophone Western and Central African zone has a VCT centre established in November 2007 and staffed with 2 assistant nurses and a social worker appointed by the Ministry of Health.

### Observable influence of institutional efforts on HIV and AIDS awareness

The surveys focused on emerging changes in behaviour as a result of improved awareness of the threat of the pandemic. Trends analysed were students and staff behaviour, students and staff research and graduate job placement.

### *Staff and Student Behaviour*

Both staff and students are noted to be involved in HIV and AIDS activities in the institutions in their institutions, the teachers mostly through the implementation of the formal curricula. Through implicit activities such as orientation of new students, there is increasing awareness of HIV in the institutions surveyed. This report notes the increased tendency to discuss HIV and AIDS in class, even in cases in which the subject has not been formally integrated into the curriculum.

Peer education activities as well as student outreach in the communities were also on the increase in some of the institutions surveyed and distribution of condoms in public places (e.g. bars and toilets) and in wireless centres is observable mostly in Southern African institutions.

### *Staff and Student Research*

While HIV and AIDS research is ongoing, it often takes a conference on an apparently un-related theme for research efforts on the pandemic to emerge to the fore. In the Francophone Western and Central Africa, research on HIV and AIDS is said to be 'sporadic' and 'uncoordinated' while Western Africa reports of an upsurge in research efforts on the pandemic. Some institutions in Eastern and Southern Africa are developing and trial-testing HIV vaccines, though these efforts were not captured by the surveys.

### *Graduate Job Placement*

There are no systematic records of what has become of students who graduated with some knowledge of HIV and AIDS.

### Performance of test and control group institutions

Institutions in the test and control groups were particularly observed on four features in Southern Africa. The first shows no observable influence of AAU's intervention as both groups in the sub-region have well developed institutional HIV and AIDS policies.

The second feature, the integration of HIV and AIDS into institutional strategic plans, shows that this has been done by an equal number of test and control group universities.

The third feature showed that all the three institutions (National University for Science and Technology, Zimbabwe; Université d' Antsiranana, Madagascar; and University of Zambia) that did not have dedicated budgets for HIV and AIDS activities are in the test group category.

The fourth feature, which was on the move towards the development of HIV and AIDS stand-alone, compulsory courses, has all seven institutions in the test group either having or developing such initiatives while only two of the five institutions in the control group HIV and AIDS issues as compulsory in specific fields of study.

## Summary of major findings, challenges and future directions

The key findings of the surveys are:

1. While, institutional HIV and AIDS policies are 80% of the surveyed institutions, a good number of them have omission such as a monitoring mechanism.
2. HIV and AIDS does not seem to feature in the Strategic Plans of the institutions in Western Africa and Cameroun.
3. Budgeting for HIV and AIDS programmes is more normal in most of the Eastern and Southern African institutions surveyed.
4. HIV and AIDS is not fully integrated into the formal curriculum of many tertiary institutions but teachers inventing their own approaches is widely practised.
5. Implicit curricula on HIV and AIDS keep the response to the pandemic alive.
6. While the instrumentality of 'carrier' disciplines seem to have endless possibilities, HIV and AIDS messages can be conveyed through virtually any academic discipline.
7. Though impact of HIV and AIDS-related activities on the behaviour of students and teachers would require more detailed study, the flurry of activities, shows increased awareness of the threat of the pandemic.
8. Institutions in Southern Africa that have not benefitted from AAU programmes of funding are virtually at comparable levels of preparedness as those that have enjoyed AAU technical and financial support.
9. Even though progressively becoming a field of scientific inquiry in the institutions surveyed, HIV and AIDS research is either uncoordinated or fragmentary.
10. Despite progress universities are still a long way to 'total response', as envisaged by AAU.

### *Moving the Process Forward*

Institutions are categorised into three levels: level one for the fast-moving ones; level two for the slow-moving institutions; and the third level for those foot-dragging. Achieving a total response would require *a differentiated assistance strategy* that should move level three institutions to level two and fast-tracking them to the next level, moving those in level two to level one, and assisting level one institutions to consolidate on their current gains.

# Chapter One

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## INTRODUCTION

**T**he HIV and AIDS programme of the Association of African Universities (AAU) initiated in 2002 dubbed ‘African Universities Responding to HIV and AIDS’ aims at

*Ensuring that the African higher education community uses all available means within the institutions and through partnerships with the international community to prevent the spread, mitigate the impact and manage the epidemic through proactive sustainable programs of action.*

In 2008/2009, the Association commissioned four impact assessment surveys in universities in Sub-Saharan Africa to examine the extent to which HIV and AIDS concerns have become a major aspect of institutional policies; the extent to which these concerns have been integrated into formal curricular and other student-teacher activities; the extent to which advocacy and awareness programmes on the pandemic have become normal institutional activities; and the extent to which all these have impacted on student and teacher behaviour.

The surveys were conducted in four geographical/linguistic zones in Sub-Saharan Africa by the following consultants:

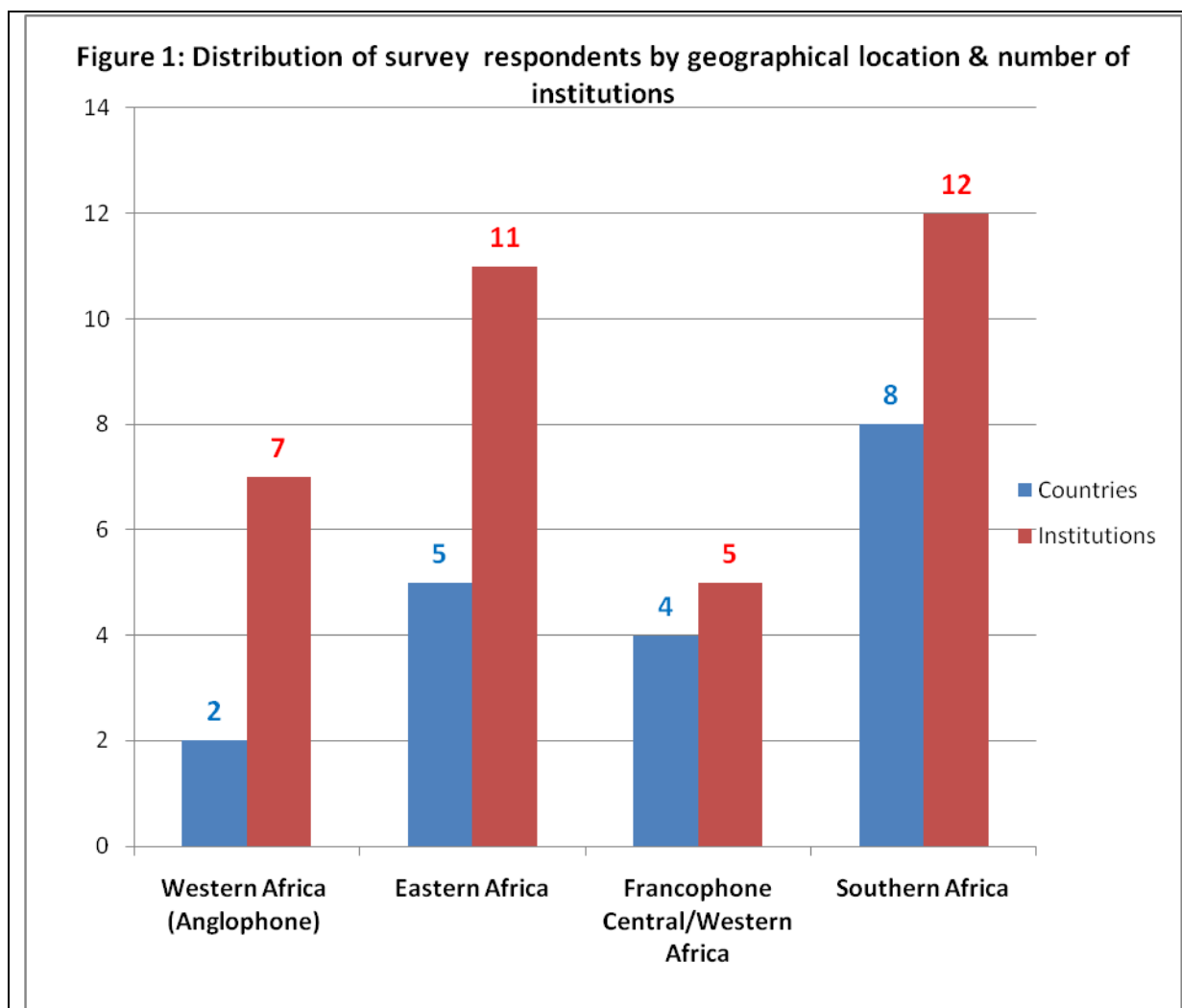
1. Pai Obanya Impact for Western Africa;
2. Barnabas Otaala for Eastern Africa;
3. Patrick Kayembe for Francophone Western and Central Africa; and
4. Ntambwe Malangu for Southern Africa.

## Coverage

The survey covered two perspectives, namely, subject-matter and geographical coverage. The first refers to the specifics of institutional policies as well as programmes and activities investigated by the four studies. In broad terms, these covered:

1. Policy issues - the place of HIV and AIDS in institutional strategic plans, the existence of an institutional policy in response to the pandemic, and the management of the response process;
2. Curriculum Integration Issues - the place of HIV and AIDS concerns in the Curriculum, formally taught and/or implicitly conveyed through out-of-class activities;
3. Institutional Culture Issues - the extent to which HIV and AIDS related activities have influenced individual behaviour as well as systems and processes within the institutions concerned.

The second perspective concerns the number of countries and institutions in which the studies were carried out i.e. 35 tertiary institutions in 19 countries (see [Annex One](#) for the list of institutions).



## Methodology

The consultants employed three main approaches, as follows:

1. Analysis of documents from the Association of African Universities focussing on earlier studies on the subject. The web sites of the sampled institutions (where available and where possible) were also valuable sources of information
2. Correspondence both by electronic mails and telephone conversations; and
3. Field visits to the sampled institutions for interviews with key informants (led by HIV and AIDS activities focal person), focus group discussions and collection and verification of relevant documents pertaining to the objectives of the surveys.

The surveys also aimed to assess the impact of technical/financial assistance from AAU (using such recipients as the test group against those that did not receive any such assistance as the control group). The list of institutions in the control group is presented in Annex 2.

## **Structure of the Report**

This report is presented along thematic lines, with illustrative quotations from the four sub-regional reports, where necessary. Chapter two deals with an updated situational analysis of HIV and AIDS in Africa and the response of the continent's higher education institutions to the pandemic, as summarised in the AAU's 5-year HIV and AIDS Strategic Framework (2009 - 2013). Chapter three presents the outcomes of the four surveys while Chapter four summarises the major findings, challenges and future directions to respond further to the threat of HIV and AIDS in higher education institutions in Africa.

# Chapter 2

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## SITUATION ANALYSIS

### HIV and AIDS Prevalence

**A**lmost three decades after the first cases were reported, AIDS has become one of the most devastating diseases the world has ever faced. As of 2008, more than 33 million people worldwide were estimated to be living with HIV. Half of them were women and 2.1 million were children under 15 years of age. About 2.7 people were newly infected with the virus in 2008 about 2 million died from AIDS-related causes in the same year (UNAIDS/WHO, 2009). Despite medical progress in treatment, there is no hope for a cure or vaccine in the near future.

Sub-Saharan Africa still remains the most affected region with some 22.4 million people living with HIV in 2008 compared to 19.7 million in 2007. The region also accounted for 72% of the world's AIDS-related deaths in 2008 and new infections in that year were 1.9 million, out of which 390,000 were children. The scale and trends of the epidemics in the region vary considerably. Heterosexual exposure is the primary mode of transmission in sub-Saharan Africa. In Swaziland, for instance, transmission during heterosexual contact (including sex within stable couples, casual sex and sex work) is estimated to account for 94% of incident infections (UNAIDS/WHO, 2009). Data on the sub-regions are as follows:

### Southern Africa

This sub-region remains the most heavily affected by the epidemic. The nine countries with the highest HIV prevalence worldwide are all located in the sub-region, with each of these countries experiencing adult HIV prevalence greater than 10% (UNAIDS/WHO, 2009). As of 2007, Swaziland (26%), Botswana (24%), and Lesotho (23.3% in 2008) accounted for the highest prevalent rates in Southern Africa, though South Africa was home to the world's largest population of people living with HIV. While the incidence appears to have peaked in the sub-region in the mid 1990s, on the whole, HIV prevalence in most countries has stabilized at extremely high levels.

### East Africa

In most of the countries in East Africa, adult HIV prevalence is either stable or declining slightly. Uganda has a worrying increase in sexually risky behaviours, while in Kenya, interpretation of reported increasing HIV prevalence is attributed to either a decline in HIV-related mortality stemming from rapid treatment scale-up or an increase in risky sexual behaviour especially among rural men.

### West and Central Africa

Despite its lower prevalence rate, compared to Southern Africa, this sub-region is home to several serious national epidemics. Cote d'Ivoire has about 3.9% adult prevalence rate, while Ghana had 1.9% and Cape Verde, Niger and Senegal all had

prevalence below 1%. According to UNESCO/WHO (2009), ‘some further favourable signs are apparent in the sub-region. Multiple household surveys have detected declining HIV prevalence in Mali (from 1.7% in 2001 to 1.2% in 2006) and Niger (from 0.9% in 2002 to 0.7% in 2006)’.

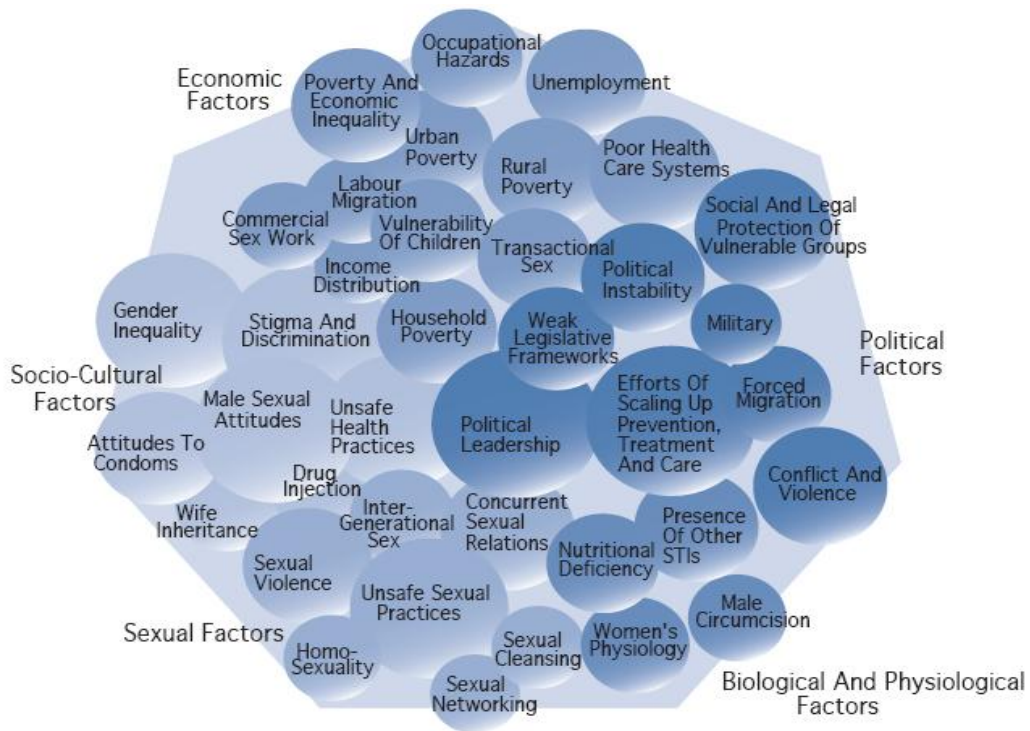
### **Core Drivers of Sub-Saharan Africa’s HIV and AIDS Epidemic**

The variations in the patterns of HIV and AIDS in sub-Saharan Africa cannot be adequately explained by the different stages at which the virus was introduced into different countries. National HIV prevalence has stayed stable (and, in some cases, at low levels) in several countries with the oldest epidemics, while it exploded in other countries with later epidemic onset. A favoured explanation for the high prevalence in Southern Africa is specific sexual behaviour patterns, namely high levels of concurrent partnerships by both men and women. This explanation has been criticized on the grounds that concurrency is common elsewhere in Africa and outside the continent, in populations that have not experienced such extremely high prevalence of HIV. Taken alone, this factor cannot account for the differences in HIV prevalence in various parts of Sub-Saharan Africa (Craiel, 1995), and it is necessary to consider a range of factors interacting with one another (Buvé and others, 2001). These factors include unsafe sex, the presence of other sexually transmitted infections, and young age at first sexual intercourse for girls, as well as concurrent partnering.

Overall, however, the precise reasons for these varying epidemiological patterns in Africa remain poorly understood but the core drivers of Africa’s AIDS epidemics can be placed under five broad headings: (a) biological and physiological, (b) sexual factors, (c) socio-cultural, (d) economic and (e) political. Two words of caution, however. First, none of these factors operates alone. Each is linked to others, and all are enmeshed in political, economic and social dynamics and structures. Second, the evidence is quite mixed on the weight of each group of factors in the spread and entrenchment of the epidemic ([Figure 2](#)).

**Figure 21: Factors fuelling HIV epidemics**





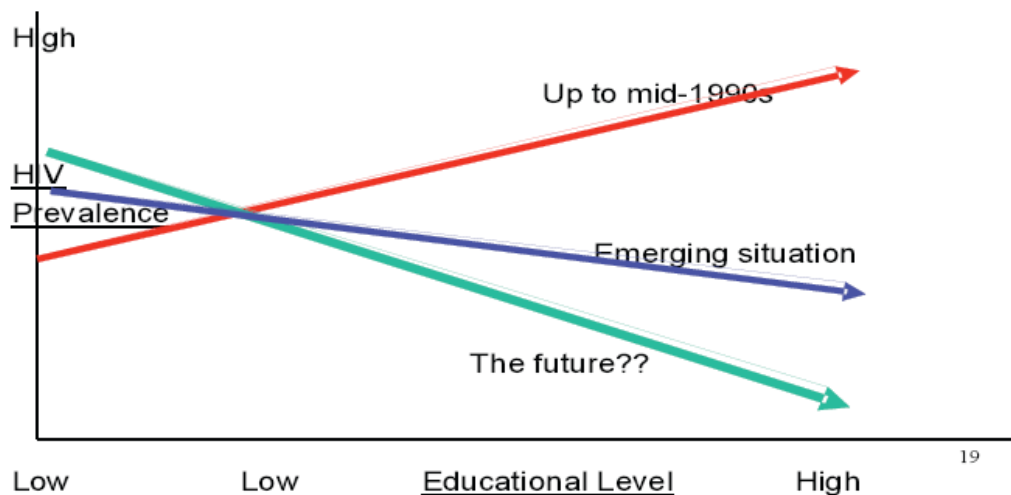
## HIGHER EDUCATION INSTITUTIONS AND HIV & AIDS

That the AIDS pandemic poses serious challenges in undermining broad progress in development, poverty reduction and respect for basic human rights cannot be over-emphasised. The United Nations Millennium Summit in September 2000 identified a number of Millennium Development Goals (MDGs), including goals of specific relevance to education, gender equality and HIV & AIDS. However, recent MDG progress reports highlight the many ways in which the continued progression of HIV and AIDS impacts countries' capacities to reach these targets (UN, 2007).

The World Bank reminds us that higher education is not just the capstone of the traditional education pyramid but also a critical pillar of human development worldwide. It trains teachers, doctors, nurses, civil servants engineers, humanists, entrepreneurs, scientists, social scientists and myriad personnel to develop the capacity and analytical skills that drive local economies, support civil society, teach children, lead effective governments, and make important decisions which affect entire societies (World Bank, 2002).

Kelly (2006) pointed to the positive contribution of education in mitigating the impact of the HIV epidemic, noting the dampening effect of education on HIV prevalence ([Figure 3](#)).

**Figure 3: Changing relationship between HIV prevalence and level of education**



Source: Kelly, 2006

Higher education institutions also have an important role to play in the area of research. Several universities in Africa are generating HIV and AIDS-related research that has added considerably to the international understanding of HIV and AIDS. The research covers all areas – scientific, medical, social and communication – and frequently extends to include community outreach and advisory/consultancy activities. However, the dominant state of affairs dictated research on HIV/AIDS to be accidental rather than systematic, individual rather than institutional and externally induced rather than internally initiated. According to Chetty (2000) and Kelly (2001), information on AIDS research and related services, however, was not well shared within or between universities. Kelly noted that most of the research done was commissioned and carried out by individuals and the findings have been more extensively disseminated internationally at HIV/AIDS conferences and in international journals than nationally (Kelly, 2001). Very little seems to have changed in this area during the last three years as Abebe (2004) noted that there were few innovative initiatives to institutionalize research on HIV/AIDS.

To varying degrees, the process of change within higher education reflects the way in which HIV and AIDS has affected the mission of social institutions in a world affected by HIV and AIDS. Firstly, the external and internal pressures generated a *community of ideas*. Institutional leaders were compelled to learn and respond to issues which were previously marginal to their core tasks of teaching, research and community engagement. Secondly, as the response has grown, *networks* have flourished, which represent a *community of interest*. The Association of African Universities supported this thrust through its membership. East Africa now has a network of institutions supported through Kenyatta University; Central Africa's network is supported through the National University of Rwanda; West Africa's network is coordinated by the University of Port Harcourt and in Southern Africa, the University of Limpopo (MEDUNSA Campus) is the hub for another major network. Thirdly, at institutional level (in health centres, peer education programmes, student activist groups and employee welfare societies), a *community of practice* has emerged which deserves recognition for its increasing sophistication, innovation and commitment. Amongst these are examples which fully merit recognition as models of best practice.

Whereas there are no standard sets of interventions that can be applied holistically to every community affected by HIV and AIDS, it is pertinent for programme implementers to initiate responses and determine how the constituents are coping with and managing the realities of the pandemic.

In an AAU commissioned survey in 2007 titled *"HIV and AIDS and Higher Education in Africa: A Review of Best Practice Models and Trends"* presented at the Association's biannual COREVIP in Tripoli, Libya in October 2007, the report categorised the initial response to HIV and AIDS by African higher education institutions as *1<sup>st</sup> Generation Responses*, driven by certain imperatives at the international level, which were subsequently adopted by many countries and institutions. A consensus developed around the need for:

- Strong leadership, policy and management commitment.
- Putting in place effective prevention and education programmes.
- Care and support in an environment that recognized the needs of infected and affected people.
- Curriculum reform to develop the new skills needed by graduates in an AIDS affected society.
- Knowledge generation that would improve society's understanding of the epidemic, set new standards and contribute to better programming interventions.
- Community engagement that makes institutions responsive and accessible to the communities in which they work.

**Figure 4: 1<sup>st</sup> Generation Responses to the HIV and AIDS epidemic**



Over the past few years, these *Responses* have tended to make universities a *safer space for affected and infected people* due to their provision of better access to education, services, care and support programmes and an environment which protects human rights - particularly of people living with HIV.

The COREVIP participants recommended the following to the AAU for its members:

- Attention to improve adherence to Greater Involvement of People Living with HIV (GIPA) principles;
- Need for greater commitment of institutional leaders to develop and enforce policies that ensures that students undertake HIV and AIDS education at least once a year;
- Need to improved peer education programmes and promote the uptake of voluntary counselling and testing (VCT);
- Improvement in research and strengthening of research centres in the sub-regions as centres of excellence for the collation and provision of institutional data on HIV in HEIs;
- Need for enhanced partnerships between higher education institutions and their respective National AIDS Commissions; and
- Need for African home-grown research agenda into vaccine development.
- Putting in place effective prevention and education programmes; and
- Care and support in an environment that recognized the needs of infected and affected people.

These recommendations, together with other reports on the African higher education's response to the HIV pandemic informed the commissioned of another survey, *The Response of Higher Education Institutions in Africa to the HIV and AIDS Epidemic*, whose findings are presented in the next section.

## Chapter 3

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The findings of the survey, *The Response of Higher Education Institutions in Africa to the HIV and AIDS Epidemic* has been categorised into five main sub-headings as follows:

1. HIV and AIDS AS MAJOR INSTITUTIONAL CONCERN
2. HIV and AIDS IN THE FORMAL CURRICULUM
3. HIV and AIDS IN THE IMPLICIT CURRICULUM
4. OBSERVABLE INFLUENCE OF INSTITUTIONAL EFFORTS ON HIV and AIDS AWARENESS
5. PERFORMANCE OF TEST AND CONTROL GROUP INSTITUTIONS

### HIV and AIDS AS MAJOR INSTITUTIONAL CONCERN

Three distinct patterns are observable and have been categorised as follows:

#### A. Institutional HIV and AIDS Policies

Twenty-eight of the institutions surveyed (80 %) have policies to respond to the challenge of the pandemic; four of them have draft policies awaiting formal approval by the authorities of the institutions, while three others are still in the process of developing a policy. These are designated as Categories 1, 2 and 3 in Table One.

All the Southern Africa institutions have policies on HIV and AIDS and reported they are ‘actively implementing’ them. All but one of the Eastern African institutions (the only exception being the University of Burundi, a member of the control group) have developed such policies. Some of them even reported having reviewed and revised their policies, after a couple of years of operation based on lessons learned in the course of implementation. West Africa (both Anglophone and Francophone countries) has the bulk of no-policy and policy-in-the pipeline institutions.

*Table 1: State of HIV and AIDS Policies in Institutions Covered by the Survey*

Sub-Region	Category 1 (policies in place)	Category 2 (policies awaiting formal approval)	Category 3 (policy development in process)
Western Africa (Anglophone)	<ul style="list-style-type: none"> <li>▪ University of Ibadan</li> <li>▪ University of Ilorin</li> <li>▪ University of Agriculture, Abeokuta</li> <li>▪ University of Education, Winneba</li> </ul>	<ul style="list-style-type: none"> <li>▪ University of Ghana, Legon</li> <li>▪ Kwame Nkrumah University of Science and technology, Kumasi</li> <li>▪ University of Port</li> </ul>	

		Harcourt	
Eastern Africa	<ul style="list-style-type: none"> <li>▪ Daystar University</li> <li>▪ Highridge Teachers' College</li> <li>▪ Kenyatta University</li> <li>▪ Mombasa polytechnic</li> <li>▪ Kigali Institute of Science and Technology</li> <li>▪ National University of Rwanda</li> <li>▪ University of Dar es Salaam</li> <li>▪ Nkumba university</li> <li>▪ Makerere University</li> <li>▪ Kyambongo University</li> </ul>		<ul style="list-style-type: none"> <li>▪ University of Burundi</li> </ul>
Western/Central Africa (Francophone)	<ul style="list-style-type: none"> <li>▪ University of Dschang</li> <li>▪ Université de Ouagadougou</li> </ul>	<ul style="list-style-type: none"> <li>▪ Université de Cocody</li> </ul>	<ul style="list-style-type: none"> <li>▪ Université d'Abobo-Adjaame</li> <li>▪ Université Gaston Berger</li> </ul>
Southern Africa	<p>A. <u>TEST GROUP</u></p> <ul style="list-style-type: none"> <li>▪ University of Botswana</li> <li>▪ Copperbelt University</li> <li>▪ University of Zambia</li> <li>▪ University of Namibia</li> <li>▪ National University of Science And Technology of Zimbabwe</li> <li>▪ Université d'Antsiranana</li> </ul> <p>B. <u>CONTROL GROUP</u></p> <ul style="list-style-type: none"> <li>▪ National University of Lesotho</li> <li>▪ University of Malawi</li> <li>▪ University of Cape Town</li> <li>▪ University of Kwazulu-Natal</li> <li>▪ University of Limpopo</li> <li>▪ University of Zimbabwe</li> </ul>		

*The control group in Southern Africa (i.e. institutions that have not benefitted from direct assistance from AAU and have not participated in HIV and AIDS-related activities of the Association) have also all developed policies for meeting the challenge of the pandemic.*

### **B. Integration of HIV and AIDS into Institutional Strategic Plans**

There is no evidence of attempts at integrating HIV and AIDS concerns into the Strategic Plans of the seven institutions surveyed in the Anglophone Western African sub-region - three in Ghana and four in Nigeria. The situation is almost the same in the West-Central African Francophone zone, where the institutions have no Strategic Plans that feature HIV and AIDS. The only exception here is the report by Université Gaston Berger which indicated that a Strategic Plan was being drafted at the time of the survey (early 2009).

In the Eastern African sub-region, eight of the ten institutions surveyed have developed Strategic Plans following the 'total response' concept of AAU. The only exceptions here are Makerere and Kyambongo universities in Uganda (which are members of the control group).

In the Southern Africa sub-region, the situation is as follows:

- For the test group (institutions that have benefitted from AAU initiated HIV and AIDS sensitization, workshops, seminars and project funding activities since 2005), HIV and AIDS had been integrated into institutional Strategic Plans in
  - National University of Science and Technology in Zimbabwe
  - University Of Botswana
  - University of Zimbabwe
  - University of Namibia
- For the control group: (institutions that have not benefitted directly, in the recent past from AAU initiated activities on HIV and AIDS), HIV and AIDS had been integrated into the strategic plans of the following institutions
  - University of Cape Town
  - University of Limpopo
  - National University of Lesotho
  - University of Malawi

Due, perhaps, to the high prevalence of the epidemic in the Southern African sub-region, there was a spontaneous response from both national and institutional bodies to the pandemic hence there is therefore no clear-cut evidence of ‘test group’ institutions having any edge over ‘control group’ institutions in this sub-region.

### **C. Management and Funding of HIV and AIDS-related Activities**

In Western Africa, the Ghanaian and Nigerian institutions tend to have a more or less temporary structure for managing responses to the challenges of the pandemic. The ‘committees’ have suffered from frequent turnover of personnel. HIV and AIDS is yet to feature prominently in annual budgets. Funding for advocacy and training activities come only in trickles, mainly from AAU and donor agencies.

In Francophone West-Central institutions the situation is similar. The University of Dschang has no coordinating unit, even though HIV and AIDS-related activities are ongoing. In Cote d’Ivoire and Senegal, activities related to the pandemic are supervised by committees that receive ‘occasional financial donations’ from within the university and from external sources.

The Eastern African region has more cheering news. There are functional HIV and AIDS units in most of the institutions, headed by senior level personnel. University Vice-Chancellors have also been known to take direct leadership of the coordination of institutional responses to the pandemic. Dedicated budget lines are in place for the funding of advocacy, counselling and training activities in seven of the institutions surveyed in the sub-region, the only exceptions being the universities of Burundi, Makerere and Kyambogo (all members of the ‘control group’).

In the Southern African sub-region, management of HIV and AIDS programme is entrusted to a high powered unit in the institutions surveyed and budgetary provisions for executing institutional policy/plan on the pandemic and its challenges is a normal annual activity. There are however no budgets at all in the

University of Antsiranana (Madagascar), the University of Zambia, and the National University of Science and Technology in Zimbabwe (all of the test group).

## HIV and AIDS IN THE FORMAL CURRICULUM

‘Formal Curriculum’, in this context, refers to courses that are formally taught and examined. These can be either ‘stand-alone HIV and AIDS as a full course in its own right or HIV and AIDS integrated into ‘carrier’ disciplines (conveyed through some well established area of study).

### HIV and AIDS as Compulsory Stand-alone Course

Three distinct patterns are discernible from field evidence and available reports.

1. HIV and AIDS as a compulsory course, part of the general studies programmes of higher institutions;
2. HIV and AIDS in some units of the institution, but not yet general, institutional practice; and
3. Curriculum on HIV and AIDS in various stages of preparation.

These are labelled as levels 1, 2 and 3 respectively in Table Two. Of the 31 institutions listed in the table, an overwhelming proportion (48%) is still in the process of developing stand-alone courses on HIV and AIDS, 12 institutions (39%) offer HIV and AIDS as a full course in designated disciplines (mainly medical/health/biological/social sciences), while only a handful of the institutions (13 %) have HIV and AIDS as full, stand-alone and compulsory courses.

*Table 2: HIV and AIDS in the as ‘Stand-alone’ Discipline in the Formal Curricula of Sampled Higher Education Institutions*

Sub-Region	Level 1 (generalized, compulsory course)	Level 2 (compulsory course only in specific fields of study)	Level 3 (still in the pipeline)
Western Africa (Anglophone )	<ul style="list-style-type: none"> <li>• University of Ibadan (a compulsory course for first-year undergraduates)</li> </ul>	<ul style="list-style-type: none"> <li>• University of Ghana, Legon (Institute of Adult Education)</li> </ul>	<ul style="list-style-type: none"> <li>• Kwame Nkrumah University of Science and Technology, Kumasi</li> <li>• University of Education, Winneba</li> <li>• University of Agriculture, Abeokuta</li> <li>• University of Ilorin</li> <li>• University of Port Harcourt</li> </ul>
Eastern Africa	<ul style="list-style-type: none"> <li>• Kenyatta University</li> <li>• National University of Rwanda</li> </ul>	<ul style="list-style-type: none"> <li>• University of Dar es Salaam (health sciences)</li> <li>• Nkumba University, Uganda (social sciences)</li> </ul>	<ul style="list-style-type: none"> <li>• University of Burundi</li> <li>• Daystar University</li> <li>• Maseno University</li> <li>• Kigali Institute of Science and Technology</li> <li>• Kyambogo University</li> <li>• Makerere University</li> </ul>
Francophone West-Central		<ul style="list-style-type: none"> <li>• Université de Cocody (medicine and dentistry)</li> </ul>	<ul style="list-style-type: none"> <li>• University of Dschang</li> <li>• Université d’Abobo-</li> </ul>



Africa		<ul style="list-style-type: none"> <li>• Université de Ouagadougou (Biological and Medical Sciences)</li> <li>• Université Gaston Berger (social sciences)</li> </ul>	Adjame
Southern Africa	<ul style="list-style-type: none"> <li>• University of Namibia</li> </ul>	<ul style="list-style-type: none"> <li>• University of Botswana</li> <li>• University of Zambia</li> <li>• University of Cape Town</li> <li>• University of Limpopo</li> <li>• University of Zimbabwe</li> <li>• National University of Science and Technology of Zimbabwe</li> </ul>	<ul style="list-style-type: none"> <li>• University of Antisranana</li> <li>• Copperbelt University</li> </ul>

### HIV and AIDS in Selected ‘Carrier’ Disciplines

This refers to situations in which scientific, social and technical knowledge on HIV and AIDS are integrated into (or carried by) other well established disciplines. Data from the survey show two main strategies here, namely, official programmes (approved by institutional authorities) and ad-hoc arrangements (based on the personal interests of individual lecturers).

Conveying HIV and AIDS knowledge, issues and concerns through other disciplines is common practice in all the institutions sampled. Even though there is a stronger tendency to use medical and scientific disciplines for teaching HIV and AIDS, evidence shows that the choice of disciplines is unlimited. The choice ranges from languages, through the social/health/natural sciences, to technical and engineering subjects, as well as agricultural science, nutrition and management studies. The example of Kwame Nkrumah University of Science and Technology in Ghana is illustrative of this trend

‘Since 2007-2008 some efforts have been made to incorporate HIV and AIDS into the teaching and research programmes of a number of academic units of the University, namely

- Nutrition
- Physical Sciences
- Biological sciences
- Engineering
- Mathematics
- The Social Sciences
- Medicine (Surgery, Maternal and Child Health, Community Health, etc)’

Another illustrative example is that of the University of Ghana, Legon

‘Various academic units of the University are known to have taken initiatives in including HIV and AIDS issues in their courses at different levels, sub-degree, undergraduate, and graduate levels. These include

1. Sociology
2. Social Work
3. Economics
4. Medicine
5. Nursing
6. Psychology
7. Food and Nutrition
8. The Institute of Adult Education'

The example of the University of Education, Winneba in Ghana is yet another variant of this trend. Specific entry points have been created within sub-disciplines for HIV and AIDS

'Efforts are on all over the University geared towards incorporating HIV and AIDS concerns into various university disciplines, as exemplified in the following:

- The course on MIGRATION in Social Studies
- Courses on Families in Crisis, Resource Management and Relationships in HOME ECONOMICS.
- In NUTRITION there is a course on Planning Meals for Persons Living with HIV and AIDS
- In CLOTHING, there is a theme titled Clothing the AIDS Patient'

The ad-hoc model is wide spread and is known to be fast gaining ground. In every higher institution, individual teachers (having gained improved awareness of the magnitude of the threat of the epidemic) are introducing HIV and AIDS issues into their courses. What is needed is for this unconscious energy to be fully harnessed and harmonized for systematic development of formal HIV and AIDS curricula in higher institutions.

## HIV and AIDS IN THE IMPLICIT CURRICULUM

The bulk of what constitutes the curriculum for an educational programme is in fact imperceptible, but its impact on the learner (positive or negative) can be long-lasting. Most of it is not consciously programmed, but they do exist and constitute that aspect of a curriculum that is mainly 'caught', rather than 'taught'. Box One is a capsule-type presentation of this important dimension of curriculum.

### *Box 1: Coverage Areas of 'Implicit Curriculum'*

1. **Definition:** Non-codified, non-examinable, relatively unstructured, institutionally-engineered, relatively non-formal learning opportunities offered to the student and the entire community of an educational institution
2. **Rationale/Goal:** To complement the development of general knowledge and personality development through guided social inter-learning
3. **Coverage:** A wide variety of choices, to address all-round development and widening of students' horizons
  1. Academic/intellectual support activities (e.g. subject-based clubs and societies)
  2. Enhancing physical/psycho-social development (e.g. sports and games)
  3. Promoting civic responsibility and community service (e.g. voluntary service organisations)

4. Enhancing creativity (art/drama/dance/music/, etc)
5. Spiritual concerns and pastoral care (religious activities)
6. Leadership development and character formation (e.g. student active involvement in institutional governance)
7. Culture promotion
8. Entrepreneurial activities (closely related to some formal curriculum areas or to elements of community service)
9. Regulatory issues (e.g. dress codes, general code of conduct guides ,etc)

Scientific, technical and social knowledge of HIV and AIDS, to be of real help to the student, must lead to value re-orientation, attitude change and behaviour modification. This can only happen if HIV and AIDS awareness penetrates all aspects of institutional culture. That is the main reason that formal curriculum activities (that which is consciously taught) must be complemented by informal curriculum that which is ‘caught’ through intensive, interactive exposure). In the institutions sampled in the AAU survey, two approaches to implicit curriculum on HIV and AIDS are distinguishable. The first is more or less formalized, in the form of institutional activities (outside the lecture room and the laboratory) designed as part of concerted institutional action against the pandemic. The second is made up of ‘incidental activities’ - capitalizing on major events within the institution to propagate ‘preventive messages’ on HIV and AIDS.

### **Major Highlights**

Implicit curricula have in fact kept work on HIV and AIDS awareness and prevention alive in most of the institutions surveyed. For institutions in Ghana and Nigeria,

With special reference to HIV and AIDS concerns, incidental curricula are a strong point in virtually all the seven universities studied. In nearly all of them, students are on their own organising AIDS awareness activities. The authorities of each university have built HIV and AIDS into the annual orientation programmes for new students. Most of them have also been marking the annual World AIDS Day of the United Nations. Billboards, posters, pamphlets and books have been produced to support a variety of incidental curricula efforts of the institutions.

These products have also served as materials for the formal curricula on HIV and AIDS. It would be worthwhile to develop such pursue incidental curricula efforts relentlessly, as reinforcement to formal curricula. Incidental learning has the advantage of not being examinations-bound.

In the East African sub-region, implicit curriculum takes the form of three main institutionalized activities: Voluntary Counselling and Testing (VCT) facilities and services, annual HIV and AIDS enlightenment activities, and special services to PLWHIVA (Persons Living with HIV and AIDS). The report on the sub-region elaborates this point further:

A number of institutions (e.g. National University of Rwanda, Kigali Institute of Science and Technology, University of Dar es Salaam and Maseno University) have VCT facilities on campus; others refer VCT to government centres; and others not yet; while a few others have facilities jointly arranged by government and the institution and provide VCT treatment, care and support both for the public and the community around the campus, including PLWA (Persons Living With AIDS).

Universities also conduct annual activities, particularly targeted to mark important days, such as World AIDS Day. During these days they conduct VCT, and the numbers coming forward for VCT during these days (e.g. in the case of Kenyatta University and the National

University of Rwanda) has been rising significantly, despite the fears about stigmatization and cultural beliefs.

The Francophone West-Central Africa sub-region has a number of interesting cases of activities related to implicit curriculum on HIV and AIDS, as well illustrated in the report of the survey.

#### A. Cameroun

- In Cameroon a ministerial decree sets forth that the fight against HIV within the universities is to be coordinated by Rectors/Presidents of universities. This was the case at the University of Dschang where HIV and AIDS related matters are coordinated by the Rector. A VCT center was established in November 2007. The centre is staffed with 2 assistant nurses and a social worker appointed by the Ministry of Health.
- The centre experiences stock out in HIV diagnostic tests. At the time of the visit, HIV infection tests could not be performed because of the lack of diagnostic tests. Since its inception, the centre has tested 1986 clients among whom 12 tested positive (0.6%). Statistics on the socio-demographic characteristics of persons who attend the centre and the reason for seeking the test were not available. A support group exists within the university to provide moral and social support to those in need.

#### B. Cote d'Ivoire

- Students in the Université de Cocody are organized in students' associations such as the group "Campus contre le SIDA", "le Messi". Those groups run some small shops (kiosks that sell condoms and do have on display posters conveying HIV messages. Student organizations sporadically get some financial support from the University.

#### C. Burkina Faso

- At the Université de Ouagadougou, once a year VCT is organized on campus. The last campaign has shown that 1.5% of those who took the test were HIV positive. Females accept more VCT compared to males.

#### D. Senegal

- Université Gaston Berger has also a service of student affairs (CROUS) which has a medical center and a laboratory that is equipped to perform HIV testing. VCT is offered to students, staff and the surrounding community. On theory treatment for HIV infection is free. Since the inception, none of the students who volunteered to be tested was HIV positive. Only one administrative staff has tested positive.
- Education campaigns targeting students and staff are organized. During sessions videos are shown. Condoms are also distributed during education sessions and in students' residences. VCT is promoted from time to time to boost the demand

In Southern Africa, VCT for HIV infection is relatively wide spread, while Information, Education and Communication (IEC) activities are a regular feature of campus life. The report on the survey in the sub-region summarises implicit curriculum on HIV and AIDS in the following words.

'With regard to VCT, in the test group, apart from the University of Antsiranana in Madagascar and the National University of Science and Technology in Zimbabwe, the other four institutions have VCT facilities.

With regard to information, education, and communication (IEC) activities, most universities conduct debates and distribute flyers. The production of flyers has been funded by external institutions at Copperbelt University in Zambia and the University of Namibia. In these two universities, the process usually begins with film shows that serve as introduction to scheduled debates during lunch times. Among the institutions in the control group, only University of Zambia does not have VCT services, the other five run these services’.

## **OBSERVABLE INFLUENCE OF INSTITUTIONAL EFFORTS ON HIV and AIDS AWARENESS**

The surveys sought evidence on the impact that HIV and AIDS knowledge, awareness and sensitisation programmes have had on the life of higher institutions. Since it is perhaps too early to talk of impact, the researchers limited their enquiries to emerging changes in behaviour (resulting from improved awareness of the threat of the pandemic), the extent to which research is beginning to focus on the subject, and evidence as to whether the promotion of ‘HIV and AIDS knowledge and skills’ have given rise to job opportunities in fields related to the global response to the pandemic.

### **Staff and Student Behaviour**

Staff and students were involved to varying degrees in the development of HIV and AIDS activities in the institutions surveyed. As had been noted earlier in this chapter, teachers have been implementing curricula on the subject in different forms (stand-alone courses, integration into existing courses, individual lecturer initiatives to bring in HIV and AIDS concerns into their teaching). Official and incidental activities on campuses have also given rise to implicit curricula on HIV and AIDS. To what extent are all these contributing to promoting the ultimate goals of all HIV and AIDS awareness promotion efforts - value re-orientation, attitude change, and behaviour modification?

The University of Agriculture, Abeokuta-Nigeria (UNAAB) provides some evidence of a systematic research effort to address this question.

The post project survey carried out by HIV and AIDS AWARENESS WORKING GROUP indicated an increase in the awareness level of UNAAB staff and students from about 50% to about 95%. The findings also showed that the community now has a different opinion about caring for people living with HIV. Over 90% of the population now knows how to take care of people living with HIV. The awareness programme was also found to have made significant behavioural changes in the life of many UNAAB students. About 40% of the population, especially the singles, will want to abstain from sex. About 60% would employ condom as protective measures while 77.4% would stick to one sex partner.

Evidence however abounds of a flurry of activities that indicate improved awareness, attitude and behaviour change, and commitment to advocacy, as in the following examples.

1. Orientation activities for new students have succeeded in passing on the correct messages and have positively influenced perception of the pandemic and attitudes towards PLWHIVA, as reported by Université de Dschang.

2. There is a prevailing atmosphere of BE CAREFUL on most campuses, since AIDS is real
3. Increased tendency to discuss HIV and AIDS in class, even in cases in which the subject has not been formally integrated into the curriculum
4. Students organise awareness rallies on their own
5. The conduct of 'outreach' activities by students - carrying the HIV and AIDS awareness message regularly to neighbouring communities
6. Peer education, which is particularly well developed in Kenyatta and Maseno universities in Kenya and which is fast gaining ground at the Kwame Nkrumah University of Science and Technology in Ghana
7. Support groups 'to provide counselling and moral/psychological support to those in need' (as exemplified by the students of Dschang University in Cameroun)
8. Regular public debates, lectures, and distribution of flyers on HIV and AIDS, a regular feature in southern African institutions
9. Distribution of condoms in clinics, public places (e.g. bars and toilets) and in wireless centres - mostly in Southern African institutions
10. Organisation of strong campus HIV and AIDS awareness and advocacy groups - very active in institutions in Cote d'Ivoire
11. The emergence of HIV and AIDS as focus of student and staff research in a wide variety of disciplines.

The major challenge here is sustainability. If the advocacy and awareness raising activities remain spontaneous, they are not likely to outlive the student life time of their promoters. There is therefore the need to integrate these initiatives fully into the formal and implicit curricula of higher institutions. That in itself is best facilitated in situations in which appropriate plans, policies and structures on response to HIV and AIDS are firmly in place.

### **Staff and Student Research**

The emergence of HIV and AIDS as a focus area for systematic research is well captured by the Ghanaian example in Box Two. In many higher education institutions, work on the pandemic is going on, and it often takes the occasion of a conference on an apparently un-related theme for research efforts to emerge from their academic enclaves.

*Box 2: HIV and AIDS Research Emerging from their Enclaves*

A conference on 'Improving the Health of Ghanaians' organized by the College of Health Sciences in August 2008 was an eye opener as it enabled researchers working on various aspects of AIDS in the medical sciences to know who is doing what. As the book of abstracts of the conference confirms, 'various individuals have been engaged in some form of research even before the emergence of University coordinating body on the pandemic. The following nine papers presented at the conference represent contributions from a variety of disciplines - computer science, the physical sciences, engineering, pharmacy, biological sciences, clinical microbiology, community health, and ENT (Ear, Nose and Throat).

1. The Role of Herbal Medicine in the Management of HIV and AIDS
2. University Students and HIV and AIDS: Who is at Risk?
3. Ear, Nose and Throat manifestations in HIV Patients in Kumasi-Ghana
4. HIV type-2 infected Persons' Response to anti-retroviral Therapy at the Komfo Anokye Teaching Hospital in the Atwima Nwabiaya District - A review of Performance
5. Time-Series Forecast of new HIV cases in the Ashanti Region
6. Evaluation of HIV-Tuberculosis Co-infection among Patients in Sunyani-Ghana
7. SAVVY (C31G) gel for Prevention of HIV Infection in Women: A Phase 3, Double-Blind Randomized Placebo-Controlled Trial in Ghana
8. Mapping HIV and AIDS Prevalence and Facilities
9. Combating HIV and AIDS in Ghana through Education and Research: A case against Scientific Imperialism

Universities in Eastern Africa are reported to have 'made efforts to integrate HIV and AIDS into their research and publications, while there is a definite growth in the number of disciplines in which HIV and AIDS research appear.' Some institutions in Eastern and Southern Africa are in fact known to be developing and trial-testing HIV vaccines, though these efforts were not captured by the surveys under review.

In the Francophone West-Central sub-region, research on HIV and AIDS is said to be 'sporadic' and 'uncoordinated'. In all the sub-regions, there is a general feeling that 'more can still be done'. Nigerian and Ghanaian institutions however reported an upsurge in research efforts on the pandemic. The same is true (particularly with regards to students' projects) of the National University of Rwanda. The issue here is really not one of absence of research; it is rather that of identifying and collecting what is available. A 'what is available' list is appended to this report (see [Annex Two](#)).

### **Graduate Job Placement**

All the institutions surveyed felt that this issue was premature to determine. There are no systematic records of what has become of students who graduated with some knowledge of HIV and AIDS. The University of Education, Winneba in Ghana believes that the exposure that its graduates have had would stand them in good stead in the basic and secondary schools in which they would be working, since HIV and AIDS is now a 'hot issue' in education. The University of Ghana has information (but no verifiable records) of masters' degree graduates who have taken courses on HIV and AIDS being 'engaged by relevant Non-Governmental Organisations.

## PERFORMANCE OF TEST AND CONTROL GROUP INSTITUTIONS

The two groups, the test and control groups, were compared on four features that were specifically highlighted in the study on institutions in the Southern Africa sub-region. The first feature is the development of HIV and AIDS policies. Here, the reported situation is that institutions belonging to the two categories have developed the requisite institutional policies, as follows

### TEST GROUP

- University of Botswana
- Copperbelt University
- University of Zambia
- University of Namibia
- National University of Science And Technology of Zimbabwe
- Université d’Antsiranana
- University of Zimbabwe

### CONTROL GROUP

- National University of Lesotho
- University of Malawi
- University of Cape Town
- University of Kwazulu-Natal
- University of Limpopo

The second feature is the integration of HIV and AIDS into institutional strategic plans. Table 3 shows that this has been done by an equal number of test and control group universities.

*Table 3: Southern African Institutions Integrating HIV and AIDS into Their Strategic Plans*

	TEST GROUP	CONTROL GROUP
HIV and AIDS Integrated into Institutional Plans	<ul style="list-style-type: none"> <li>• University of Namibia</li> <li>• University of Botswana</li> <li>• University of Zimbabwe</li> <li>• National University of Science and Technology (Zimbabwe)</li> </ul>	<ul style="list-style-type: none"> <li>• University of Cape Town</li> <li>• University of Limpopo</li> <li>• University of Malawi</li> <li>• National University of Lesotho</li> </ul>

The third feature is the availability of dedicated budgets for HIV and AIDS activities. All the three institutions that have not attained that level belong to the test group category. These are:

- I. National University for Science and Technology (Zimbabwe)
- II. Université d’ Antsiranana (Madagascar), and
- III. University of Zambia

The fourth feature is the move towards the development of HIV and AIDS concerns as stand-alone, compulsory course, the result of which is presented in Table 4.



*Table 4: HIV and AIDS as Stand-Alone Discipline (Test and Control Group Institutions)*

<b>Category</b>	<b>Test Group</b>	<b>Control Group</b>
A. Generalized and Compulsory	<ul style="list-style-type: none"> <li>• University of Namibia</li> </ul>	
B. Compulsory only in specific fields of study	<ul style="list-style-type: none"> <li>• University of Botswana</li> <li>• University of Zambia</li> <li>• National University of Science and Technology (Zimbabwe)</li> <li>• University of Zimbabwe</li> </ul>	<ul style="list-style-type: none"> <li>• University of Cape Town</li> <li>• University of Limpopo</li> </ul>
C. Still in the pipeline	<ul style="list-style-type: none"> <li>• Université d’Antsirana (Madagascar)</li> <li>• Copperbelt University (Zambia)</li> </ul>	

One conclusion here is that test group institutions are making moves to evolve a total response to the challenge of HIV and AIDS. A second implication is that there is no clear indication that control group institutions are faring any worse in responding to the challenges of the pandemic. A possible explanation is that both types of institutions were selected from a high prevalence sub-region, where international, national and NGO intensive activities in promoting HIV and AIDS awareness and related social, psychological and scientific activities in developing total response strategies are going on. What is perhaps the most important implication for the work of AAU is that SUPPORT TO AFRICAN HIGHER EDUCATIONAL INSTITUTIONS SHOULD CONTINUE, possibly along differentiated lines, as described in the next section of this report.

# Chapter 4

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## SUMMARY OF MAJOR FINDINGS, CHALLENGES AND FUTURE DIRECTIONS

### A Summary of the findings of the four surveys

The findings of the surveys can be captured in ten main highlights, as follows:

1. Policies in response to HIV and AIDS are in place in 80% of the institutions. There are however still some imperfections in a good number of them, especially the omission of a monitoring mechanism.
2. HIV and AIDS does not seem to feature in the Strategic Plans of the institutions in West Africa and Cameroun.
3. Budgeting for HIV and AIDS programme activities seem to have become normal practice in most of the Eastern and Southern African institutions surveyed, with the exception of National University for Science and Technology (Zimbabwe), Université d'Antsirana (Madagascar) and the University of Zambia. Generally, institutions in Southern and Eastern Africa sub-regions seem far ahead of their counterparts in West Africa in level of preparedness, as well as in terms of the existence of HIV plans, policies and dedicated budgets.
4. In terms of integration into the formal curriculum of tertiary institutions,
  - a. HIV and AIDS is a stand-alone course in only four institutions,
  - b. It is integrated in one way or another in 12 cases, and
  - c. Integration is still in the pipeline in 16 cases.

The adhoc model of curriculum integration (teachers inventing their own approaches) is widely practised.

5. Implicit curricula on HIV and AIDS are present everywhere and they help to keep the response to the pandemic alive.
6. HIV and AIDS through the instrumentality of 'carrier' disciplines seem to have endless possibilities; the reports in fact show that the 'HIV and AIDS message' can be conveyed through virtually any academic discipline.
7. The possible impact of HIV and AIDS-related activities on the behaviour of students and teachers would require more detailed study; however, there is everywhere a flurry of activities, showing increased awareness of the threat of the pandemic.
8. Institutions in Southern Africa that have not benefitted from AAU programmes of funding are virtually at comparable levels of preparedness as those that have enjoyed AAU technical and financial support.

9. HIV and AIDS is progressively become a field of scientific inquiry in the institutions surveyed, but research is yet to be effectively co-ordinated, while in the Francophone institutions, in particular, it is still fragmentary.
10. On the whole, while notable progress has been recorded, it is still a long way to 'total response', as envisaged by AAU.

### **Persistent Challenges**

Tardiness in integrating HIV and AIDS into tertiary education curricula is itself a major obstacle to total response to the challenge of HIV and AIDS. The slow pace of Institutional bureaucracy is the major cause of this. In the Francophone institutions, strict adherence to regulations (the relative lack of institutional autonomy) is the problem.

Poor coordination of efforts in all domains, implicit curricula, research and advocacy activities, etc expose on-going efforts to the threat of lack of sustainability. This is tied to the challenge of poor institutional backing, and addressing that challenge should be the starting point.

Hard facts are not always easily accessible, as record-keeping seems to be quite a bane in the context in which these surveys were carried out. Respondents would talk about efforts being made, but written reports and detailed information were hard to come by. The situation was compounded by the fact that lectures were not in session in most places at the time the surveys were carried out.

### **Moving the Process Forward**

One good summary of the situation of HIV and AIDS response programmes as revealed by the four studies is that the institutions concerned are at three different points on the road leading to total response. The fast-moving institutions occupy level one position in Table Two. Slow-moving institutions are on level two in that table, while foot-dragging institutions occupy the level three position.

The task ahead would require *a differentiated assistance strategy* that should move level three institutions to level two and fast-tracking them to the next level, moving those in level two to level one, and assisting level one institutions to consolidate on their current gains.

*A peer-education methodology* could be a useful tool here. Through study tours and intensive exchanges among institutions, managers of institutional HIV and AIDS response programmes progressively learn how their counterparts 'managed to get there' in order to apply the lessons to their own institutions.

## ANNEXES

### Annex One: Geographical and Institutional Spread of the Surveys

Sub-Region	Countries	Institutions
Western Africa (Anglophone)	Ghana	1. Kwame Nkrumah University of Science and Technology, Kumasi 2. University of Education, Winneba 3. University of Ghana, Legon
	Nigeria	4. University of Agriculture, Abeokuta 5. University of Ibadan, Ibadan 6. University of Ilorin, Ilorin 7. University of Port Harcourt, Port Harcourt
Eastern Africa	Burundi	8. University of Burundi
	Kenya	9. Daystar University 10. Highridge Teachers' College 11. Kenyatta University 12. Maseno University
	Rwanda	13. Kigali Institute of Science and Technology 14. National University of Rwanda
	Tanzania	15. University of Dar es Salaam
	Uganda	16. Nkumba university 17. Makerere University 18. Kyambongo University
Central/Western Africa (Francophone)	Cameroun	19. University of Dschang
	Cote d'Ivoire	20. Université de Cocody 21. Université d'Abobo-Adjame
	Burkina-Faso	22. Université de Ouagadougou
	Senegal	23. Université Gaston Berger de St. Louis
Southern Africa	Botswana	24. University of Botswana
	Lesotho	25. National University of Lesotho
	Madagascar	26. Université d'Antsiranana
	Malawi	27. University of Malawi
	Namibia	28. University of Namibia
	South Africa	29. University of Cape Town 30. University of Kwazulu-Natal 31. University of Limpopo
	Zambia	32. Copperbelt University 33. University of Zambia
	Zimbabwe	34. National University of Science and Technology 35. University of Zimbabwe

## Annex Two: What is available in terms of HIV and AIDS-related research and publications

### A. STUDENT RESEARCH

#### UNIVERSITY OF GHANA, LEGON

- Knowledge, attitude and practice towards voluntary testing among undergraduate students (Adjo-Samuel et.al.- 2008)
- Knowledge, attitude and Practice of HIV/AIDS prevention among female porters (Gborglover, Innocentia et. Al. - 2008)
- Voluntary counselling and testing behaviour among men (Oduro-Akim et. Al. - 2008)
- Knowledge, attitude and perception of university of Ghana students towards VCT in the prevention of HIV and AIDS (Inkoom, Josephine et. Al. -2006)
- Knowledge and Attitude of Nurses Towards VCT (Carl-Spencer, R and Opong, G. - 2006)
- Expectant Mothers Knowledge and Attitude Towards VCT (Aryee and Abraham - 2005)
- A comparative study of care giving to people living with AIDS in urban and rural communities (Boakye-Yiadom and Adutwumwaa - 2005)

#### UNIVERSITY OF AGRICULTURE, ABEOKUTA-NIGERIA

- Effect of community-based care for PLWHA (People living with HIV/AIDS) on Agricultural livelihoods in Benue State, Nigeria by Ilebami, O.A., M. Agric. Agricultural Extension and Rural Development Department, University of Agriculture, Abeokuta

#### UNIVERSITY OF ILORIN, NIGERIA

- Effects of rational emotive behaviour and reality therapies on HIV risk behaviour among adolescents in Ogun State, Nigeria (a Ph. D Thesis completed in August 2008)
- HIV/AIDS awareness and behavioural change among senior secondary school students in some Yoruba speaking States of Nigeria (Undergraduate research project)
- Knowledge and risk behaviours about HIV/AIDS among selected secondary school students in Atiba Local Government Area of Oyo State(Undergraduate research project)
- Risk behaviours on HIV/AIDS among female undergraduate students in Faculty of Education, University of Ilorin, Nigeria

#### UNIVERSITY OF IBADAN, NIGERIA

- Cultural Practices As Correlates Of The Spread Of HIV/AIDS Among Women In Akwa Ibom State, Nigeria --- Elizabeth Amos Etukeno

- Application Of Moral Value Clarification And Alternative Thinking Strategy In Enhancing Sexual Abstinence Behaviour Among Early Adolscents In Ibadan, Nigeria --- Onyebuchi Boniface Oparah
- Impact Of Spontaneous Collaborative Group Approach And Reflect On Primary School Pupils' Achievement In, And Attitude To HIV and AIDS Education --- Sopekan Oludola Sarah

#### UNIVERSITY OF PORT HARCOURT, NIGERIA

- Knowledge and Behaviour of a Commercial Sex Worker Towards HIVand AIDS/STDs in Oil Producing Communities in Brass Local Government Area of Bayelsa State -- Johnson O. Agnes
- Hepatitis B. Virus (HBV) & Hepatitis C Virus (HCV) Among HIV Patients at the University of Port Harcourt Teaching Hospital (UPTH) -- Chileke, Francis Kelechi

#### RWANDA

- Gahungu, G Emmanuel (2002): Etudes des connaissances, attitudes et comportement des jeunes eleves des etablissements secondaires relatives a l'infection par le VIH/SIDA en prefecture de Butare
- Karambizi Francois (2001): Connaissances et attitudes des femmes en age de procreer face au despitage volontiers du VIH/SIDA du district sanitaire de Kibilizi
- Murara, Jerome (2001): Etude sur le depistage volontiers du VIH/SIDA chez les femmes enceintes du district sanitaire de Gitwe
- Namutungane, Bernedette (2001): Conaissaances, attitudes et pratiques des jeunes de la prefecture de Butareen matiere du VIH/SIDA : cas des orphelins des orphelinats publics de cette prefecture
- Ndimubera, Joseph (2001): Connaissances, attitudes et pratiques sur l'utilisation du preservatif chez les etudiants de l'Universite nationale du Rwanda
- Zilimwanbagabo, John (2001): Etudes des connaissances, attitudes, croyances et pratiques des etudiants des instituts d'enseignement superieur

#### SOUTH AFRICA

- Akpo , M U (2005): Identification of Barriers to Safe Sexual Practices among Students at the Main Campus of Tar University of Namibia , MPA thesis, University of Limpopo

#### B. STAFF RESEARCH

##### UNIVERSITY OF EDUCATION, WINNEBA-GHANA

- J. Osei-Agyekum: *Behaviours that place JSS students at risk for HIV and AIDS infection*. Ghana AIDS Commission (2004)
- J.Osei-Agyekum: *HIV and AIDS in Teacher education*, National Teacher Education Forum. (May 2004,)

- J. Osei-Agyekum: *Family violence and battered wives: Implications for family Households*. The Social Educator, Journal of the Department of Social Studies UEW Vol. 1

#### UNIVERSITY OF AGRICULTURE, ABEOKUTA-NIGERIA

- Presidential Emergency Plan for AIDS Relief (PEPFAR) HIV and AIDS awareness project in Nigerian Universities. Final report submitted by University of Agriculture, Abeokuta (UNAAB) to United States Embassy, Abuja, April 2006. Compiled and edited by: (Drs.) Grace Sokoya and Eniola Fabusoro

#### UNIVERSITY OF ILORIN, NIGERIA

- Olasehinde-Willaims, O., Adegboro, B., Adegoke, A. A.Owolabi, H.O., and Agbede, J. (2006). *Awareness and Prevalence of HIV and AIDS among University of Ilorin Students: A Needs Assessment Survey*. (A report submitted to AAU.)

#### UNIVERSITY OF PORT HARCOURT, NIGERIA

- Achalu, E. I. (1999). The Spread of Aids in Africa: Health and Social Consequences *Journal of Education in Developing Areas*. 12(1), 12-17.
- Achalu, E. I. (1999) Sexually Transmitted Diseases and Reproductive Health *Nigerian Journal of Professional Studies in Education (NJPSE)*. 7(1), 7-12

#### KENYATTA UNIVERSITY, KENYA

- Owino, P O: -ed. (2006): The Socio-Economic Impact of HIV and AIDS among Kenyatta University students: Baseline Survey, Nairobi, Printpoint Suppliers

#### UNIVERSITY OF NAMIBIA

- Otaala, B (2001): Impact of HIV and AIDS on the university of Mamibia and the University's Response

#### UNIVERSITY OF EDUCATION, WINNEBA-GHANA

- J. Osei-Agyekum: *Behaviours that place JSS students at risk for HIV and AIDS infection*. Ghana AIDS Commission (2004)
- J.Osei-Agyekum: *HIV and AIDS in Teacher education*, National Teacher Education Forum. (May 2004,)
- J. Osei-Agyekum: *Family violence and battered wives: Implications for family Households*. The Social Educator, Journal of the Department of Social Studies UEW Vol. 1

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- Olasehinde-Willaims, O., Adegboro, B., Adegoke, A. A. Owolabi, H.O., and Agbede, J. (2006). *Awareness and Prevalence of HIV and AIDS Among University of Ilorin Students: A Needs Assessment Survey.* (A report submitted to AAU.)

#### UNIVERSITY OF PORT HARCOURT, NIGERIA

- Achalu, E. I. (1999). The Spread of Aids in Africa: Health and Social Consequences *Journal of Education in Developing Areas.* 12(1), 12-17.
- Achalu, E. I. (1999) Sexually Transmitted Diseases and Reproductive Health *Nigerian Journal of Professional Studies in Education (NJPSE).* 7(1), 7-12

#### KENYATTA UNIVERSITY, KENYA

- Owino, P O: -ed. (2006): The Socio-Economic Impact of HIV and AIDS among Kenyatta University students: Baseline Survey, Nairobi, Printpoint Suppliers

#### UNIVERSITY OF NAMIBIA

- Otaala, B (2001): Impact of HIV and AIDS on the University of Namibia and the University's Response



### Annex Three: Distribution of Test and Control Group Institutions

SUB REGION	TEST GROUP	CONTROL GROUP
Western Africa (Anglophone)	<ol style="list-style-type: none"> <li>1. University of Agriculture, Abeokuta</li> <li>2. University of Ibadan</li> <li>3. University of Ilorin</li> <li>4. University of Port Harcourt</li> <li>5. University of Ghana, Legon</li> <li>6. University of Education Winneba</li> <li>7. Kwame Nkrumah University of Science and Technology</li> </ol>	NONE
Francophone Western-Central Africa	<ol style="list-style-type: none"> <li>8. University of Dschang</li> <li>9. Université de Cocody</li> <li>10. Université d'Abobo-Adjame</li> <li>11. Université Gaston Berger de St Louis</li> </ol>	NONE
Eastern Africa	<ol style="list-style-type: none"> <li>12. Highridge Teachers' College</li> <li>13. Kenyatta University, Kenya</li> <li>14. University of Dar es Salaam</li> <li>15. Daystar University</li> <li>16. Kigali Institute of Science and Technology</li> <li>17. National University of Rwanda</li> <li>18. Nkumba University, Uganda</li> <li>19. Maseno University, Kisumu-Kenya</li> </ol>	<ol style="list-style-type: none"> <li>1. University of Burundi</li> <li>2. Makerere University</li> <li>3. Kyambongo University</li> </ol>
Southern Africa	<ol style="list-style-type: none"> <li>20. Université d'Antsiranana</li> <li>21. National University of Science and Technology (Zimbabwe)</li> <li>22. University of Botswana</li> <li>23. Copperbelt University</li> <li>24. University of Zambia</li> <li>25. University of Namibia</li> <li>26. Copperbelt University, Zambia</li> </ol>	<ol style="list-style-type: none"> <li>4. University of Cape Town (South Africa)</li> <li>5. University of Limpopo (South Africa)</li> <li>6. National University of Lesotho</li> <li>7. University of Malawi</li> <li>8. University of Zimbabwe</li> <li>9. University of Kwazulu-Natal (South Africa)</li> </ol>

## REFERENCES

1. Abebe, H.G., 2004. "African Universities' Response to HIV/AIDS in the Global AIDS Initiative Countries: A Synthesis of Country Reports."
2. ActionAid. 2007. *Making the Grade: A Model National Policy for the Prevention, Management and Elimination of Violence against Girls in School*. London, ActionAid. (Available at: [http://www.actionaid.org/assets/pdfpercent5CModel\\_policy\\_educ.pdf](http://www.actionaid.org/assets/pdfpercent5CModel_policy_educ.pdf)).
3. Buvé, A. Weiss HA, Laga M, Van Dyck E, Musonda R, Zekeng L, Kahindo M, Anagonou S, Morison L, Robinson N.J., Hayes RJ, 2001. "The Epidemiology of Gonorrhoea, Chlamydial Infection and Syphilis in Four African Cities." *AIDS* 15 (suppl 4):S79-S88.
4. Chetty, D., 2000. "Institutionalizing the Response to HIV/AIDS in the South African University Sector: A SAUVCA Analysis." Pretoria, SAUVCA.
5. Chilisa, B., Bennell, P. and Hyde, K., 2001. "The Impact of HIV/AIDS on the University of Botswana: developing a comprehensive strategic response" IDS, Sussex.
6. Fortson, J.G., 2007. *The Effect of HIV & AIDS on Educational Attainment*. Paper Commissioned by the UNAIDS/World Bank Economics Reference Group. (Available at: <http://www.ukzn.ac.za/heard/ERG/EffectonEducationalAttainment.pdf>).
7. Kelly, M., 2006. "Education and AIDS: Are we too optimistic?", Paper presented at the regional workshop on good practices in education sector responses to HIV and AIDS in Africa, Johannesburg, South Africa, 12-14 September 2006-2010.
8. Kelly, M. J., 2000. "Planning for Education in the Context of HIV/AIDS." UNESCO, International Institute for Educational Planning". Paris, France.
9. Kelly, M.J., 2001. *Challenging the Challenger: Understanding and Expanding the Response of Universities in Africa to HIV/AIDS*. Washington, D.C. The World Bank.
10. The World Bank, 2002. *Education and HIV/AIDS: A Window of Hope*. The International Bank for Reconstruction and Development / The World Bank.
11. UN (United Nations), 2007. *The Millennium Development Goals Report*. New York, UN. (Available online at: [http://mdgs.un.org/unsd/mdg/Resources/Static/Products/Progress2007/UNSD\\_MDG\\_Report\\_2007e.pdf](http://mdgs.un.org/unsd/mdg/Resources/Static/Products/Progress2007/UNSD_MDG_Report_2007e.pdf)).
12. UNAIDS/WHO (Joint United Nations Programme on HIV/AIDS /World Health Organization), 2009. *AIDS Epidemic Update*: Geneva. December 2009.