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EXECUTIVE SUMMARY

The report looks into the status, impact and preventive actions taken by some of the partner universities and colleges in Africa of Agricultural University of Norway (NLH) against the spread of HIV/AIDS. Countries included in the study are Botswana, Ethiopia, Eritrea, Kenya, South Africa, Uganda, Malawi and Tanzania. Overall it showed that there is a growing recognition of the problem on campus, most universities have established special HIV/AIDS Committees and have information campaigns to new students. However, little is included in research and curriculum development. Neither are anyone making projections of what future losses of staff and students will mean for the university or the agricultural sector. Successful institutional and societal responses to HIV/AIDS require leadership. Universities play a role in the leadership of their communities. The key findings from the study are as follows:

Status of and impact of HIV/AIDS: No one knows the status due to the nature of the pandemic and the structure of reporting and health systems. The perceived trend points to females as a vulnerable group. The impact is felt but the magnitude is hard to know due to the fact that no one knows the status except for some universities in Kenya. Overall, the study revealed that there is an impact, in varying degrees, amongst students and staff. The impact is felt either through leave of absence, effect on teaching quality, dropping out to take care of sick relatives, or students' output being affected. Loss of skilled labour is proving to be a problem for the universities, as it would take more time to train new staff.

Assessment of Present Programs by Agricultural Universities and Colleges: Most government programs in the study are promoted by the Ministry of Health, are in the start phase, targeting mainly students, with an emphasis on the biological-medical aspect. The social and psychological aspect is currently being included through peer education. The feedback on peer education is positive in that it is a powerful tool with a more holistic approach. A critique of the available information campaigns is that it is mostly from the top and western in its approach, neglecting important cultural elements. Ethical issues came up with keywords such as: discrimination, secrecy and denial, behaviour change, gender relations, exclusion from PhD grants, access to expensive medicines etc. Another issue was the role and responsibilities of the professors are important- especially in how they treat young vulnerable female students. Most universities are officially following a non-discrimination policy and most of the countries signed the UN Convention, but in practise this is a challenge.

Based on the study we came up with the following recommendations:

Expressed Needs from Universities and Colleges: The needs expressed by most universities are curriculum development and regional networking. Due to the nature of the problem, the universities were concerned in having interdisciplinary and multilevel research. NORAD on the other hand has a key role in helping to fight the pandemic. The involvement is basically facilitating, coordination and support of current and future programs through:

- integration of HIV/AIDS dimension in institutional collaboration agreements;
- contribute to research development by facilitating an interdisciplinary collaboration between Norwegian institutions and the African counterparts;
- support curriculum development initiatives, student peer education and outreaches, maintain current university operations through filling projected decrease in staff in students
- and lastly being instrumental in creating a node in Norway that coordinates and acts as a clearinghouse for HIV/AIDS and agriculture.

1. INTRODUCTION

The impact on society and the human suffering hidden behind the dramatic and fast growing statistics of the HIV/AIDS epidemic is hard to comprehend. It becomes a bit more real for an outsider when hearing that “there is no family in Uganda that have not lost someone they love to this disease”¹. And this is not only in Uganda; the pandemic is becoming a part of people’s lives in many countries, a student representatives at a workshop in Kenya expressed: “If we are not infected we are affected”. By the end year 2000 the pandemic was estimated to have killed approximately 22 and 58 million (UNAIDS/WHO, 2000) people were living with the virus. An overwhelming 95 percent of people living with the virus live in developing countries, the majority in sub-Saharan countries. HIV/AIDS is now the prime cause of death on the continent. The impact on children and adolescents is enormous. At least 13 million children have been orphaned to the disease (UNAIDS/WHO, 2000).

In 16 African countries, more than 10 percent - in some cases over 25 percent - of the adult population are infected. Thus it is estimated that no less than 37 per cent of today’s 15 year olds are expected to die of AIDS before they reach the age of 30 (Sydnes, 2001). In Asia, HIV sero-positivity rates are still comparatively low. However, it is important to bear in mind that only a few countries in the region have sophisticated systems for monitoring the spread of the disease (FAO, 1999). Given that over half of the world’s population live in the region, small differences in rates can make a dramatic difference in the absolute numbers of people infected and on the potential impact of the HIV epidemic. In India, for example, which now has 1 billion inhabitants, HIV infection rates are still low at less than 1% of the total adult population, yet this translates into about 4 million people living with HIV. This makes India the country with the largest number of HIV infected people in the world (FAO, 1998). China is another country where today’s explosive spread will have a big impact in such a densely populated country. In Latin America, the spread of HIV has been slower than in other regions, but is well established. In fact, some Caribbean countries have the highest incidents in the world. In total, over 1.5 million people are believed to be living with HIV in Latin America and the Caribbean (ibid.).

Overall, there is a gradual emphasis and recognition that the epidemic is not only a medical matter, but also a development problem- or as also stated- a catastrophe for development², or as of June 2001 United Nations Special session on HIV/AIDS Declaration of Commitment on HIV/AIDS: *A global crisis*. It has far-reaching socio-economic consequences at all levels of society that stretch far beyond that of health. Thus to combat the spread of the disease with effective national and regional programmes all sectors of society must be involved: household and community, the public sector, health care, education and welfare sector; and the business sector. People’s livelihood and basic rights must be secured in order to tackle the spread of the pandemic.

¹ Quoted by Ugandan students interviewed and also expressed by B. Zoe, Ugandan minister of Gender and Labour, FAFO conference, (2001).

² Minister of International Development, Anne Kristin Sydnes, FAFO conference, Oslo, 26.9.01

In order to mainstream HIV/AIDS focus into the Norwegian Agency for Development Cooperation (NORAD), an internal strategy³ was developed. The aim is to support the combat of the disease by making sure that NORAD policies and practical implementation takes into account the HIV/AIDS dimension.

Many of Norway's collaborating countries are characterised by conditions that are conducive to spread of the disease such as: poverty, commercial sex-work, work-migration, gender imbalance, high sexually transmitted disease (STD) prevalence, war, conflict or post-conflict, therefore NORAD's special focus is given to the themes below:

Gender, human rights, poverty-alleviation, health service including tuberculosis and sexual productive health, war, conflict, substance (drug)-abuse, and children/youth.

The Centre for International Environment and Development Studies, Noragric, at the Agricultural University of Norway (NLH), was asked by NORAD to undertake a study about the status and impact of HIV/AIDS at Agricultural Universities in the South. This is timely given numerous institutional collaboration agreements between NLH and Universities in the South. In addition, the following points from the NORAD strategy were found to be relevant in this context, namely:

- integration of HIV/AIDS in existing collaboration agreements with partners;
- cooperation with research organisations for further analysis and documentation;
- develop programme guidelines with institutions and networks with civil society;
- identify examples of good practises;
- raise awareness, combat stigmatisation and discrimination and
- impact of gender differences etc.

1.1 RELEVANCE OF THE STUDY

Why a study on Agricultural Universities and Colleges and why is this relevant? Universities are important actors given that statistics show that around half of the people who acquire HIV become infected between the ages of 15 and 24⁴ (ADEA, 2001). What does HIV/AIDS in Agricultural Universities mean for rural communities? Is extension or research- addressing a new rural reality in the communities? Are agricultural universities and colleges addressing the role of land-use, ownership, labour intensive crops and transfer of traditional/local knowledge to the young in the context of the pandemic?

Universities play a role in disseminating information on HIV/AIDS. HIV/AIDS affects not just individuals, but organizations and systems. Successful institutional and societal responses to HIV/AIDS require leadership. Universities play such an important role in their communities. Higher education not only has a responsibility to join the fight against the HIV/AIDS pandemic, it has a responsibility to take a prominent leadership position in this fight (AWSE, 2001).

³ Intern Handlingsplan for intensivert innsats mot HIV/AIDS I NORADS virksomhet (Draft, 2001).

⁴ HIV/AIDS in Eastern and Southern Africa, *African Development Forum* 2000a, p.4.

Today there is little information on the status of HIV/AIDS at the agricultural universities and colleges that are collaborating with the NLH. To what extent are students and staff affected? What research is being developed? What are the links to agriculture? This study sets out to explore these matters. It is easy to become pessimistic and negative when studying the effects of HIV/AIDS. However, it is important to cite the success case of Uganda. The country reduced the HIV/AIDS percentage from 30% adult infection rate in 1993 to 6% in 2000⁵. This is a source of hope and inspiration for the region (Zoe, 2001). The reason attributed to this is that the leaders recognised HIV/AIDS problem at a very early stage, maybe following the Ugandan proverb that says “beat the drums when the lion enters the village” and further, the only vaccine that exists to date is that of “behavioural change” (ibid). It cannot be repeated enough that everyone has a role to play and a responsibility in combating the spread of this disease.

1. 2. PURPOSE OF THE STUDY

The purpose of this study is to report on the status, impact and preventive actions taken by some of the partner universities and colleges of the Agricultural University of Norway (NLH) against the spread of HIV/AIDS. Recommendations to NORAD will be developed based on lessons learned from this exercise that are in line with NORAD HIV/AIDS strategy.

The following questions were addressed⁶:

Investigate the status and impact:

- In what ways is HIV/AIDS affecting agricultural universities and colleges?
- What are the impact amongst students and staff?

Study preventive actions:

- How have agricultural universities responded to these problems?
- What steps are agricultural universities taking to control and limit the further spread of the disease among their students and staff?
- What HIV/AIDS related teaching, research, publications and advisory services have the universities undertaken?
- How do universities propose to anticipate and address the larger impact of HIV/AIDS on the national labour market for agricultural university graduates? Should university, including via distance learning, be consciously increased to compensate for expected national losses in skilled professional personnel?
- Do universities cooperate with other institutions (Government/ local institutions/ other NGO'S) in HIV/AIDS related projects/programs?

⁵ These figures were quoted by the Zoe (2001) in the FAFO conference in Norway.

⁶ Questions are adapted from a World Bank study, ADEA 2001.

2. METHODOLOGY

This report builds on both secondary and primary data. Secondary data consisted of review of literature, initiatives and programmes, which gave insight for making interview guidelines for surveys and interviews. E-mails and fax were used to send out the small survey -to seven universities with institutional collaboration with NLH namely Botswana, Ethiopia, Eritrea, South Africa, Uganda, Malawi and Tanzania. In addition, group interviews were carried out, based on the same interview-guideline with students (many NORAD fellows) from partner universities and colleges enrolled at the Agricultural University of Norway, NLH. The choices of countries were based on the students represented at NLH. On three occasions it was also possible to interview University administrators when NLH was visited by delegations (Uganda and South Africa) or when ourselves visiting respective universities (Tanzania). In addition two conferences were attended, "HIV and AIDS in international work environments" organized by FAFO⁷ in Norway, and "Workshop on Women in Higher Education and Science: African Universities responding to HIV/AIDS", organized by African Women in Science and Education (AWSE) in Nairobi. These meetings added valuable information to the study.

Dealing with HIV/AIDS is touching upon the private sphere of people's lives, and thus it is sensitive and not easy for researchers designing questionnaires and interviewing on the matter. This is especially reflected in countries where the issue has not been much debated and fear of stigmatisation is high. It becomes clear that it remains a challenge to those responsible for making it a matter of public debate, school or staff policy, or transforming it into a multi-sector response. HIV/AIDS is still in most places a disease attached with stigmatisation, and where there is discrimination and human rights violations this consequently affects livelihoods and the very survival of families.

This report builds on the following chapters: Chapter 3 discusses the background on factors important to HIV/AIDS in the University sector; Chapter 4 reports on how HIV/AIDS is affecting the agricultural universities and colleges; Chapter 5 consists of discussion and conclusions and lastly Chapter 6 are recommendations to NORAD.

3. BACKGROUND FACTORS IMPORTANT TO AGRICULTURAL UNIVERSITIES IN THE HIV/AIDS CONTEXT

3.1 PRIMARY AND SECONDARY SCHOOLS

In almost all countries teachers, college-lecturers, and educational managers constitute the largest occupational group. They are also a very high-risk group for HIV infection. This arises from their relative affluence in a poor society, their mobility, and the circumstances that

⁷ FAFO, Institute for Labour and Social Research.

frequently separate them from their families (ADF, 2000b). Although work in education is not classified as migratory, students, teachers and other education personnel share some of the HIV infections risks of mobile workers (ibid; Kelly, 2000)

Because AIDS-related information systems have not been developed in most education ministries and institutions of higher learning, good information on the infection and mortality of educators and university lecturers is not available. However, it is estimated by UNECA (2000) that 860,000 children in sub-Saharan Africa lost their teacher to AIDS in 1999. The same study mentions that in Kenya, the teaching service commission reported that teacher's mortality rose from 450 in 1995 to 1,500 in 1999. In the future, the demographic development scenario estimates a smaller number of pupils of school-going age than what it would otherwise have been. Thus, within a decade there will be 13 per cent less children in schools in Kenya than if there had been no AIDS, 23 percent less in Swaziland, 12 per cent less in Uganda, 20 percent less in Zambia and 24 percent less in Zimbabwe (ibid).

Resource poor orphans will unlikely find the means to pay for education. Today 18 million below the age of 15 have lost one or both parents in eastern and southern Africa (ADF, 2000a). In Mozambique, only 24 per cent of children whose parents were dead attended school in comparison to 68 per cent of those with both parents still living (ibid). Both points illustrate the consequences for future number of students at universities.

Most schools in the primary and secondary levels in East and South Africa have now adopted curriculum to include HIV/AIDS or sexual and reproductive health-education. In the majority of countries the approach is to use *Life Skills Programmes* addressing the pandemic which are primarily concerned with equipping learners with skills such as decision-making, problem solving, effective communication, assertiveness and conflict resolution.

There are also many informal educational programmes often addressing out of school youth and communities, in many cases mounted by NGOs, Community Based Organisation's or international organisations. But it is mentioned that these are diverse and there is lack of coordination among organisations. Another problem raised is that such programmes are not involving parents, teachers and the young, but are often developed in a top-down fashion, becoming a purely academic exercise of little relevance to the reality outside the classroom. Some programmes concentrate heavily on the biological part of human reproduction and the methods for HIV prevention, and are less concerned about presenting an understanding of relationships, respect for the other, and rights. The discussion of cultural beliefs, expectations, traditions and taboos are not given sufficient emphasis (or they are completely absent) in many of these programmes (ibid).

3.2 UNIVERSITIES AND COLLEGES

Secrecy, silence, denial and fear of stigmatisation and discrimination surrounding the HIV/AIDS pandemic are findings from the ADEA (2001) case studies and are confirmed by other studies (Malaney, 2000; Babcock-Walters and Whiteseed, 2000; Kelly, 2000). The lack of information from universities is attributed to inadequate records and does not capture the real situation. Part of this problem is people's fear that clinical records will not remain confidential. There is growing evidence of students and others known or assumed to be

infected being ostracised and even attacked by families and communities (Badcock-Walters and Whiteseed, 2000). The sense of shame at both personal and institutional level leads to the stigma and shame attached to the pandemic.

There are numerous accounts from various universities of AIDS deaths being concealed as tuberculosis, malaria or meningitis out of consideration for the families left behind. The lack of hard data with respect to infection rates for schools makes it difficult to identify how far the decline has accelerated (Badcock-Walters and Whiteside 2000:1). Relevant factors affecting education and making individuals vulnerable to HIV infection include gender, poverty, disabilities, population mobility, cultural understandings, being young, sexuality and certain HIV risks which may be associated with the school as an institution (UNECA, 2000).

The principal university response takes place through university health services and clinics and there is generally a disarray, inadequate understanding, piecemeal response, lack of coordination, absence of well-developed action plans, minimal policy framework and heavy reliance on a few interested and committed members of the staff (ADEA, 2000:12).

There are a number of comments regarding the content, general approach and perspective of educators on current HIV/AIDS information and education initiatives:

- Generalities and abstract presentation of themes and principles but not on sexuality, of relationships, respect for others and rights
- Making the problem as one of making sex-education part of the curriculum misses the point entirely. The issue is how to ensure that young persons are provided with the opportunity to act responsibly and not just in their sexual lives. It also means giving meaning to their lives, not just in an educational content. What is missing is a supportive economic, and social structure that addresses poverty and ensures that youth have access to employment and to sustainable livelihoods.
- The need for integration of the classroom and home environment

3.3 GENDER

Education plays a key role in addressing conditions that enhance vulnerability to HIV/AIDS. It does so by attacking poverty, gender inequalities, the disempowerment of women, and disregard for human rights. Biologically, economically, socially and culturally, women are more vulnerable to the HIV virus. HIV infection has also been reported in several cases to be considerably higher among teenage girls than boys, especially those coming from poor families. A recent study of UNAIDS/WHO (2000) shows that teenage girls are five to six times more likely to be infected by the virus than boys their age. Further, women in developing countries make up the majority (55%) of HIV/AIDS infected (Kristoffersen, 2000).

National statistics were analysed to get a general view of the scenario⁸. Table 1 below shows that for Botswana, Eritrea, Malawi and Tanzania, the number of cases reported for females

⁸ Data varies substantially from country to country and low reporting rates are common due to the weaknesses in the health care and epidemiological systems. However the present methodology used has thus far proved

was consistently higher from ages 5 to 29 years of age. It is interesting to note that the percentage was lower for women after age 29 for all the four countries. But worth noting was a big increase of reported cases for both sexes from the age range 15-19 to 20-29 years range.

Table 1. Reported AIDS cases by age and sex from 1978 in Botswana, Eritrea, Malawi and Tanzania, percent of total cases (UNAIDS, 2001).

Age groups	Botswana		Eritrea		Malawi		Tanzania	
	Male	Female	Male	Female	Male	Female	Male	Female
0-4	9.5	9.7	3.5	5.9	9.4	8.5	4.8	4.2
5-14	0.9	1.3	0.5	0.9	2.6	2.8	1.2	1.4
15 to 19	2.1	2.6	0.9	5.9	0.7	4	1.5	5.4
20 to 29	34.7	38.5	30.8	46	20.2	37.8	27.5	46.1
30-39	31.1	31.1	37.2	26	40.3	33.1	38.9	30.6
40-49	15.1	11.1	17	11.5	18.9	10.5	17.5	7.8
50>	6.6	5.8	9.9	3.3	8.1	3.3	6.2	2.1

Note: Ethiopia, South Africa and Uganda do not have information on AIDS cases by age and sex.

Why are women more vulnerable to HIV infection? There are several reasons cited as to why:

Biologically women have larger mucousal surface, micro lesions can occur, there are more virus in sperms than in vaginal secretions, the presence of untreated STD is a risk factors for HIV and coerced sex that increases the risk of micro lesions (Maleney, 2000).

Economically they are financially and materially dependent on men and many have to exchange sex for material favours for daily survival. Being economically dependent means that women have less control over their sexual life, apart from formal sex workers, exchange of sex for daily survival is often women's only way to provide for themselves and their children (WHO, 2000)

Socially and culturally, women are not expected to discuss or make decision on sex, cannot refuse sex, let alone request use of condom and they often risk abuse if suspected of infidelity. Many forms of violence against women mean that sex is often coerced which itself is a risk factor for HIV infection. For married and single men multiple partners (including sex workers) are culturally accepted and women are expected to have relations with or marry older men, who are more experienced and probably have more chance of being infected. Men seek younger and younger partners in order to avoid infection and in the belief that sex with a virgin cures AIDS and other diseases (Ibid; Malenay, 2000).

“In some countries, custom requires a man to marry his brother's widow. If her husband died of AIDS, there is a good chance she is infected. Marrying a possibly uninfected brother-in-law spreads the disease further”(Cherfas, 2001).

“When a family member is infected, the whole household is vulnerable. There is less income generated, creating more vulnerability for the children of that household. This is especially true for girls who are most likely to be taken out of school, to care of more pressing needs at home including the sick and the elderly. Furthermore, a loss is experienced with the traditional support processes, especially for the elderly who can no longer anticipate being supported by their children (UN website, 2001)

accurate in production estimates that give a good indication of the magnitude of the epidemic (UNAIDS/WHO,

Men's violence against women puts women at risk and in unsafe situations. Rape and sexual abuse can cause bleeding, increase the risk of HIV infection for women/girls- and some boys/men (both victims and perpetrator).

Legal aspects providing equal access to property, education, employment, economic opportunity is important. Rwanda recently passed a law stating that women could inherit land. However, just as important to pass laws is to make sure that the law is effectively enforced by the state as well as by society (Kristofferson, 2000). It is therefore essential that national laws be gender sensitive

War and conflict threatens all aspects of human security, and greatly increases vulnerability for contracting HIV/AIDS for all involved. Females are especially vulnerable as refugees, and victims of armed forces atrocities etc. (Working group on Gender and HIV/AIDS, 2001).

Youth often lack information and are often the age group experimenting with drink and drugs that increases risk behaviour. Young females have 5-6 times higher risk of becoming infected than their male counterparts due to little experience of negotiation of safe sex. Among other reasons for this they can be victims of female genital mutilation, early marriages, sexual abuse and myths of "sex with virgin cures AIDS" etc. (ibid)

Treatment and health care affects women in that they often have less access to treatment than men, and often need the approval of their husband and his family. Further, a lot of research previously undertaken on drug development has been tested for men (ibid).

3.4 HIV/AIDS AND AGRICULTURE

HIV/AIDS is changing the character of rural Africa and presents a challenge that will affect all development efforts. FAO estimates that AIDS has killed 7 million agricultural workers in the 25 worst affected countries in Africa since 1985; it could kill another 16 million in the next 20 years. In sub-Saharan Africa, the epidemic is now spreading in some rural areas at an alarming rate and recently the number of people living with AIDS predominates in rural areas (Webb and Paquett, 1996; Baier, 1997; Topouzis, 1998). There is the rise of female-headed households and women widowed by the epidemic (Rugalema, 1998). Nomadic pastoralists are also pointed out to be at increased risk due to their mobility, marginalisation, culture and limited access in social services (Topouzis, 1998).

Sick people often go home to the village (leaving urban centres) when sick. Rural women are extra burdened by caring for their dying family and kin. The crops suffer, and as a result the nutrition and income of the family goes down. At the same time the household needs more money to pay medical bills and funerals. Sometimes cattle or land is sold to provide for the departed (Cherfas, 2001).

HIV/AIDS affects two factors important to rural development, the *human capital base* and *land use and access* (FAO, 1996). The impact on the *human capital base* is principally in

2001:3).

terms of availability and allocation of labour and for the second factor, *land* has been reported abandoned, rented out or sold (ibid). The economic loss is substantial especially in depressed rural areas. Furthermore, the present structure makes it difficult for some groups like widows and children. Barnett (1994) notes the reluctance to let land by widows in Uganda. Inheritance laws in Ethiopia, Tanzania and Zambia make it difficult for the widows and children. In Ethiopia the 1960 civil code that is still in force is based on monarchical constitution that treats women as if they were children and disabled (Bureau of Democracy, Human Rights and Labour, 2000). In Tanzania, women lose access to land when they are divorced or widowed (Tibaijuka, 1996). The customary land systems have limitations for women in particular when widowed in Zambia (Vedeld and Larsen 1998).

Crop and plant diversity is also lost resulting in that many families can no longer keep up their farms. Agricultural knowledge and skill disappears because adults die and young children are not learning the skills or absorbing the knowledge they need to work the family farm. A study in Kenya showed that only one in 14 households headed by orphans "knew enough" to be fully productive (Cherfas, 2001).

4. IN WHAT WAYS IS HIV/AIDS HAVING IMPACTS THE AGRICULTURAL UNIVERSITIES AND COLLEGES?

In this section a brief presentation is given over the respective agricultural universities and colleges that were part of the study. Table 2 below presents the view of university/college staff regarding the issue of how HIV/AIDS is being addressed in selected universities /colleges in Africa.

Table 2 How HIV/AIDS is being addressed in selected Universities/Colleges in Africa, 2001.

<i>University</i>	It is very much an issue affecting staff and students at the University and it is addressed openly	It is an issue but is <u>not</u> addressed
<i>Botswana College of Agriculture, Botswana</i>	<i>"It does affect staff and student terribly. It is addressed openly but the individual would still not be open about their status".</i>	
<i>Mekelle University College, Ethiopia</i>		<i>"It is a serious issue, but <u>not</u> openly addressed yet".</i>
<i>Asmara University, Eritrea</i>		<i>It is <u>not</u> openly discussed in the University.</i>
<i>Bunda College of Agriculture, Malawi</i>		<i>It is an issue but is <u>not</u> addressed</i>
<i>University of Fort Hare, South Africa</i>	<i>It is very much an issue affecting staff and students at the University and it is addressed openly.</i>	
<i>Sokoine University of Agriculture, Tanzania</i>	<i>HIV/AIDS is a big issue addressed by the university but up to now people don't like to address the issue. However, now we have established a committee.</i>	
<i>Makerere University, Uganda</i>	<i>It is very much an issue affecting staff and students at the University and it is addressed openly</i>	

4.1 BOTSWANA

Population (1999):	1.6 million
Rural population (% of population):	82.8%
Estimated number of HIV infected (adult rate, 15-49):	35.8%
Orphaned children due to aids while they were under the age of 15 since the beginning of the epidemic:	66,000
<p>Status of National Strategy Against Aids: Botswana tops the percentage rate for HIV infection worldwide. It was only in 1997 that the HIV/AIDS issue was taken seriously. Still however, there is a tendency of people seeking witchdoctors and seeing it as "something else". Presently, there is National AIDS Council and the Ministry of Health spearheads the program. Awareness raising takes place through media and health services. The government supports mother to child prevention treatment, training and paying home based care providers. Educational awareness starting from the primary level to the university level is also being promoted and a multi-sectoral approach involves all government institutions. All teachers undergo workshops on how to discuss HIV/AIDS and counselling services are available in different levels of government offices and schools.</p>	

4.1.1 General information on Botswana College of Agriculture⁹

The Botswana College of Agriculture (BCA) was established in 1991. It is under the Ministry of Agriculture and is an associate institution to University of Botswana. There are currently five departments: 1) Department of Agricultural Economics, Education and Extension, 2) Agricultural Engineering and Land Planning, 3) Animal Science and Production, 4) Basic Sciences and 5) Crop Science and Production. There is also the Centre for In-service and Continuing Education (CICE). One reason for the increase of students at BCA is due to the

⁹ Information from the University was augmented by MNRSA students from University of Botswana and from <http://www.fstcu.org/activity/edutrain/colleges/bca/historic.htm>

end of obligatory military service (for males leaving secondary school). The proportion of female students also continues to increase steadily. The current level of enrolment and staff of the university is seen in the table below.

Table 3. University population by category and sex Botswana College of Agriculture, 2001

Category	Male	Female	Total
Academic staff	79	27	106
Non academic staff	89	83	172
Students	470	173	643

4.1.2 HIV/AIDS Information to new students

During orientation periods for freshmen, there are counselling services both at the university health centre and in classes. The student council provides new students with brochures on sexually transmitted disease (STD's) as well as with condoms.

4.1.3 Records of HIV/AIDS at university and the role of the health centre

The university health centre does not keep statistics on HIV/AIDS. When it comes to HIV/AIDS related illnesses, cases are usually referred to hospitals. Testing for HIV/AIDS can be done at health centres situated all over the country. At these centres, pre- and post-counselling is also available for those who undergo HIV testing. The university health centre provides condoms, and there are also condom dispensers in staff and student toilets.

4.1.4 Impact on staff and student performance

Survey results report that HIV/AIDS has a lot of impact among staff. This is reflected in the perceived increase in the number of staff absentees. However it also noted that it is very difficult to label absences due to the pandemic because the reasons for being absent may be numerous, and often the incorrect reason are given. Teaching quality is also reportedly affected due to absenteeism and eventual demise of staff. Amongst students the pandemic has considerable impact because many drop out to take care of sick family at home. There has been a decline in the student population due to student mortality.

4.1.5 University level policies and programmes

Botswana College of Agriculture has a HIV/AIDS policy that addresses awareness raising and the setting-up of support mechanisms to assist those who are affected. The university HIV/AIDS committee carries this out. There are no special programs targeting female students or staff. The current focus and approach target students but there is no conscious effort to reach out to the university staff.

Student admission is increasing, however, this is not yet as a deliberate response to the expected shortfall in future labour loss of skilled professional personnel. The University started discussing the changes in the national labour market for agricultural university graduates. Both curriculum change and changes in the national labour market are increasingly becoming important issues.

4.1.6 Other groups at University with HIV/AIDS combating initiatives

Government information campaigns are through HIV/AIDS information placed on billboards, TV, radio and during clinics and awareness raising functions. In addition, there is a student HIV/AIDS committee organising awareness-raising events. Organized prayers also take place

on a regular basis. Students interviewed recognize that volunteers do a lot of work in society to HIV/AIDS victims (i.e. assisting in home-gardens etc.)

4.1.7 Research

Currently there are no research projects undertaken. There is an interest in international collaboration in order to provide required human resources in teaching, research and training of staff at accelerated pace. However, the predominance of foreign researches/ projects has been pointed out. It is however noted that the decrease of labour force is still speculation due to many unknown numbers of infected persons.

4.2 ETHIOPIA

Population (1999):	61 million
Rural population (% of population):	82.8%
Estimated number of HIV infected (adult rate, 15-49):	10.63%
Orphaned children due to aids while they were under the age of 15 since the beginning of the epidemic:	1.2 million

Status of National Strategy Against Aids¹⁰: The Ministry of Health started in September 1987 a centrally coordinated effort to prevent and mitigate the HIV/AIDS epidemic. After five years, in 1993, activities were decentralised and were supposed to be carried out fully by regional health bureaus. The role of the Ministry of Health through AIDS/STDs Control team of the Department of Epidemiology and AIDS, is to give technical assistance, draft policies, prepare guidelines and monitor the overall HIV/AIDS activities. In 1998, the Policy on HIV/AIDS of the Federal Democratic of Ethiopia was adopted with the objective of reducing transmission of infection, associated morbidity, mortality and impact on society (Mesob, 2001). HIV/AIDS is the first priority of the present government. Thus all governmental and non-governmental body (Ministry of Health, Education, etc.) and religious body/denomination participates in the effort of awareness raising, prevention and information services.

4.2.1 General information on Mekelle University¹¹

Mekelle University College (MUC) is situated in Northern Ethiopia (around 800 km from Addis Ababa). MUC is a young institution that has its roots from the Mekelle College of Drylands Agriculture and Natural Resources (MCDANR), which was formerly housed, at the Alemanya University of Agriculture. There are two faculties operating, the Faculty of Dryland Agriculture and the Faculty of Science and Technology (Gebrehiwot & Belay, 1999). Presently the enrolments of students are rising significantly and new departments are being established. The table below shows statistics on university population by category and sex.

Table 4. University population by category and sex, Mekelle University, 2000/2001.

Category	Male	Female	Total
Academic staff	155	6	161
Non academic staff	482	184	298
Students	3,355	937	4,292

4.2.2 Information to new students

There have been awareness raising and information services to new students during the year 2000-2001, in the form of brochures on the causes for and prevention of HIV/AIDS.

¹⁰ Data from <http://www.mesob.org/hiv aids/docs/briefing.html>.

¹¹ Masters students and PhD student's interviewed augmented data from the university.

4.2.3 Records of HIV/AIDS at university and the role of the health centre

The university clinic does not have statistics on HIV/AIDS because it is the hospitals that perform HIV/AIDS tests. The role of the health centre at the university is basically to provide health services primarily to students against common diseases. Although HIV is becoming a threat, there are no personnel hired to be responsible for HIV/AIDS matters. Presently there is no facility for testing and trained personnel at the university to undertake this. Students interviewed mentioned that in general people are reluctant to submit themselves for testing in fear that their future will be placed in jeopardy by confirming that they are HIV/AIDS positive. Other services provided by the University besides providing free condoms; is counselling services (e.g. although not specifically for HIV/AIDS). Awareness raising events occur on an irregular basis and there are no organised information campaigns on HIV/AIDS.

4.2.4 Impact on staff and student performance

The survey reports that the epidemic has not affected teaching quality but that staff absences and student drop-out to take care of sick relatives is being felt to a certain degree. A general drop in efficiency levels has been cited. It has been pointed out that there are no diagnostic results or “scientific records” thus the difficulty of coming up with an assessment of HIV/AIDS impacts in Mekelle University. However, the perceived trend is rather “frightening”.

4.2.5 University level policies and programmes

Mekelle University is part of a national and regional initiative against HIV/AIDS. Both governmental and non-governmental sectors are participating in the effort towards awareness raising, prevention and information services. There are two programmes mentioned: The student’s anti-AIDS club and a special programme for female students. The student anti-AIDS club submitted a proposal to the national and regional secretariats for implementation. The main thrust of this programme is awareness raising and information service through seminars, dramas, group discussions and posters. The special programme for female students is organised by the academic programme office and includes support in academic, social and economic matters. It has been mentioned that though the university is part of a national government and regional initiative against HIV/AIDS, the university itself has not yet adopted any specific university-level policies. It is however indicated that the seriousness of the problem will create a forum to develop new policies. The focal point of HIV/AIDS initiatives at the University is the clinic and/or the Dean of Students.

4.2.7 Research

Current areas of focus is awareness raising, counselling & voluntary HIV testing and proposals are being developed but there is no budget. Research topics that would be interesting are a) prevalence- and impact of HIV/AIDS; b) prevention and adaptation at community and household/family levels as well as adjustment to the pandemic and c) research on HIV/AIDS in rural (agricultural) areas and how this affects food (in)security and women. Curriculum development is needed, and it is mentioned an interest in psycho socio-economic studies.

It is mentioned that international collaboration would be very vital in terms of professional, technical and financial support in the effort of preventing HIV/AIDS and other related issues.

There is also an interest in undertaking an in-depth study regarding the status of the pandemic at the university, as this is essential in order to understand the situation and to suggest intervention areas and mechanisms of intervention.

4.3 ERITREA

Population (1999):	3.7 million
Rural population (% of population):	83%
Estimated number of HIV infected (adult rate, 15-49):	2.87%
Orphaned children due to aids while they were under the age of 15 since the beginning of the epidemic:	Not available

Status of National Strategy against Aids: There is a national project HAMSET (HIV, Malaria, Sexually transmitted disease and tuberculosis), which is funded by the World Bank (US \$40 mill). The HAMSET control project supports the government's strategy to minimize and eliminate easily controlled disease and enhance awareness of good health practices in order to improve workforce productivity. The Ministry of health coordinates campaigns together with the Social Marketing Group (SMG). The SMG, started in 1996/97, included school visits, lectures, distribution of brochures and condoms. The Ministry of Education includes HIV information in biology classes and this is done until the high school level.

The fact that Eritrea has been isolated for 30 years and that movement of people has been restricted is a factor mentioned as a cause for the low rate of HIV/AIDS in the country. During the interview with students, it was said that in 1988 there were only four people who were reported to have HIV nationally.

4.3.1 General Information about Asmara University

The University is part of the capital city. Housing facilities are provided to both staff and students. Asmara University was founded in 1958 as the "Holy Family" University Institute by the Missionary Congregation "Piae Matre Nigritiaell (Colomboni Sisters), with Italian as the medium of instruction. In 1975, English was adopted as the sole medium of instruction but came under the Ethiopian Commission for Higher Education in 1977. In 1991 the university resumed academic work with five faculties: Natural Sciences, Social Sciences, Agriculture, Law and Languages.¹² According to the students interviewed, there are approximately 5000 students and 107 academic staff.

4.3.2 Information to new students

No information was received from Asmara University but students interviewed noted that there was little information given on HIV/AIDS.

4.3.3 Records of HIV/AIDS at University and Role of the Health Centre

In 1999, due to the war situation, the government asked for blood-donations from university students and HIV testing was mandatory. The general testing among potential blood donors showed that around 99% were HIV negative. It is the perception amongst students interviewed that because of the war, the rate has increased in the past three years but it is only prevalent amongst those drafted in the army. The health centres offer counselling services and hands out brochures on HIV according to students. Condoms are reportedly cheap and easily accessible.

¹² Information from http://www.eritrea.org/EIB/Educationa/ASM_UNI.HTML.

4.3.4 Impact on staff and student performance

Little data.

4.3.5 University level policies and programmes

There was no official response from Asmara University and students mentioned that HIV/AIDS is not a problem in the University yet.

4.3.6 Other groups at University with HIV/AIDS combating initiatives-

There are no programs at the university level according to available information.

4.3.7 Research

There is some experience with difficulties of carrying out research on this topic. Apparently there was a disagreement between the government and the university that led to a planned study being dropped.

4.4 MALAWI

Population (1999):	10.64 million
Rural population (% of population):	86%
Estimated number of HIV infected (adult rate, 15-49):	15.96%
Orphaned children due to aids while they were under the age of 15 since the beginning of the epidemic:	390,000
Status of National Strategy against Aids: NEED INFO. The Ministry of Health offers testing for HIV and provides condoms for free to the University through the AIDS secretariat. There are also radio programs that give advice. A government agency called Macro offers free testing and counselling but there are no medicines offered. Though the price of retroviral has substantially decreased, it is still not affordable for the average Malawian.	

4.4.1 General Information about Bunda College of Agriculture:

Bunda College is a rural campus located 30 km from Lilongwe. Student enrolment has increased and today there are 517 students in comparison to only 300 in 1990. Both academic as well as non-academic staff has risen accordingly.

Table 5 University population by category and sex, Bunda College, Malawi, 2000/2001

Category	Male	Female	Total
Academic staff	57	12	69
Non academic staff	1981	30	2011*
Students	428	89	517

* This number is high due to the agricultural activity of the College

The university grants students stipend to cover accommodation and food. There are sufficient books available in the library. Students pay for clothes and transportation expenses to go home.

Both student representative and nursing sister at Bunda College report that although HIV/AIDS is an issue, it is not addressed directly at the university (i.e. it is not included in the curriculum). Anti HIV/AIDS student club was sponsored by UNICEF in 1994, but later folded up. Presently, another AIDS club has been formed by students and receives support from the EU (European Union). A lecturer from the Family Planning departments, who is the

College clinic officer, is the patron and adviser of the Clubs' Outreach Programme. The club uses clinic facilities as site of presentations or video/workshops, conducts counselling workshop and source of condom. The College clinic staff also assists the Club writing proposals for funding of the club activities. The University administration gives financial support for transport of the Club's Outreach Programme.

4.4.2 Information given to new students

The College health clinic provides information to freshmen on HIV/AIDS. Information given includes: the abstinence, use of condoms, to refrain from making razors as a public item, and avoid borrowing things- i.e. like toothbrush even among girl-boy friends¹³. However, the college itself has no information campaign or brochures on the virus. Available HIV brochures come from the Ministry of Health.

4.4.3 Records of HIV/AIDS at university and the role of the College health clinic

Like many other universities there are no official records of HIV/AIDS statistics at the health centre. When a person dies it is commonly reported as tuberculosis, malaria, diarrhoea or meningitis and it is not related to HIV/AIDS, even when this is the case. The most important function of the health centre is to:

- provide information on HIV/AIDS to both students and staff, through, for example, organizing awareness campaigns mainly through posters;
- counselling to staff and students and providing general medicines to students since Bunda is far from Lilongwe city; and
- to provide free condoms

Students also report that HIV tests (which is voluntary) can be carried out at the main hospital in Lilongwe. The general medical examinations are done at the College health clinic. Condoms are free and seemingly quite abundant at the university.

4.4.4 Effect on staff and student performance

Survey results report that absence of staff is common and teaching-quality as well as student output is affected due to HIV/AIDS. However, the impact is still rather hard to gauge, but this is also due to the uncertainties as to whether absenteeism is related to HIV/AIDS or not. It was pointed out that the signs of HIV are not visible if AIDS has not broken out. Chronic diarrhoea is a symptom mentioned. However persons infected with HIV can live healthy with a good nutritious diet for a number of years. Thus staff members could clearly perform his or her duties to the maximum even if the person is infected. Further, to replace academic staff with years of specialization and experience is very difficult. The virus creates a vacuum, and it might require years of waiting or training of another person. Sometimes one relies on part-time staff, but often they are less qualified. However, to give an accurate picture of on-going trend is very difficult as there has been no study done up to date.

4.4.5 University level programmes and policies

According to the health centre the university has no formal HIV/AIDS policies yet. There are suggestions to incorporate the issues in the curriculum, but this is yet to be done. There is no special programme targeting female students and staff. General knowledge and prevention of HIV/AIDS and similar messages are extended to staff through individual counselling.

¹³ Has not yet been proved to be a way for transfer of HIV/AIDS.

4.4.6 Student initiated programme

The HIV/AIDS student club has received EU support for three years and has around 60 members, of which 11 are females. The activities of the club are to train peer-educators, organise social weekends, sports activities, and films and distribution of brochures and free condoms. Outreach on HIV/AIDS is done to both rural and urban areas. Resource persons are invited to give lectures. Information and awareness raising is on:

- abstinence/ and the use of condoms
- the importance of testing and recognizing the probable signs of HIV
- human rights issues- importance of caring for the sick, and
- discussion of traditional and common beliefs (i.e. of psychological nature in order to counter the popular belief that if they should die then it is good to die with a bigger crowd)

4.4.7 Research

The club members are interested in looking into the reasons why females are more susceptible than males to HIV/AIDS. The need for funding current anti HIV/AIDS activities proposed research has been expressed.

4.5 SOUTH AFRICA

Population (1999):	39.9 million
Rural population (% of population):	51%
Estimated number of HIV infected (adult rate, 15-49):	19.94%
Orphaned children due to aids while they were under the age of 15 since the beginning of the epidemic:	420,000

Status of National Strategy against Aids¹⁴: There are more than 600 specialised HIV/AIDS organisations and initiatives in South Africa, which include national and provincial government departments, non-governmental organisations, community-based organisations and other initiatives. The areas of focus for the Government program include: AIDS contacts and Beyond Awareness Campaign¹⁵. Information available from the AIDS office are: 1) Key points about HIV/AIDS 2) Male condoms 3) Links between HIV/ AIDS & STDs 4) Sexually Transmitted Diseases (STDs) 5) TB & HIV/AIDS 6) Living with HIV/AIDS 7) Caring for someone with HIV/AIDS 8) HIV / AIDS Counselling 9) HIV / AIDS & Relationships 10) HIV / AIDS in the workplace 11) HIV / AIDS and Rights 12) Female condoms. The government also guaranteed treatment to all pregnant women (w/HIV), something it has struggled to fulfill (it was actually brought to court).

¹⁴ Data from CDC Global AIDS, 2001 and links.

¹⁵ This campaign has a multilingual approach in key activities including advertising in radio and print media, information materials, and a toll free AIDS help line. The belief is that communication around HIV/AIDS in a person's native language is essential. Local level prevention, care and support activities are supported by providing communications tools. The campaign has several projects: AIDS Memorial Quilt Project, Tertiary Institutions Project, AIDS Mural Project and Media workers Project. The Tertiary Institutions Project recognizes the importance of developing youth leadership in educational institutions and works in colleges and universities. The project promotes life skills programs and HIV/AIDS policies, promotes AIDS Action Days, encourages and funds community activities, and selects youth leaders to attend provincial and national youth summits. It also involves young HIV-positive individuals who live on campus and interact with students. In doing so they help to break myths, and encourage awareness of HIV/AIDS, and care and support for people living with HIV/AIDS.

4.5.1 General information on University of Fort Hare¹⁶

The University is located in the town of Alice. The university can accommodate approximately 3000 students. Staff is also provided housing on campus or in Alice on a rental basis. University of Fort Hare is one of the first historically black universities established in Africa already in 1916. Courses offered include: Art (African Studies, Communication, English, History, Political Science, Philosophy, Psychology, Sociology); Education; Sciences (Mathematics, Chemistry, Computer Science, Geography, Nursing, Physics, Plant Sciences, Statistics, Zoology); Business; Agriculture; Theology, etc. Table 5 below shows statistics on university population by category and sex. The number of students is today again significantly increasing. This is due to new faculties and departments being established as well as flexible registration fees that are able to accommodate needy and disadvantaged students.

Table 5. University population by category and sex, University of Fort Hare, South Africa. 2000/2001

Category	Male	Female	Total
Academic staff	275	210	485
Non academic staff	214	148	362
Students	1986	3310	5296

4.5.2 Information to new students

Based on the survey answers, new students avail of services from university health centre (see below).

4.5.3 Records of HIV/AIDS at university and the role of the health centre

There are no official records on HIV/AIDS at the university. There is difficulty to have a HIV/AIDS database when testing is not offered on campus. The main concern of the university health centre is to increase awareness on HIV/AIDS. The university has trained peer educators to boost their service and it is mostly students who use the health services on campus. Brochures on HIV/AIDS made by the government are distributed and in addition, the health centre provides brochures, counselling and condoms free of charge.

4.5.4. Impact on staff and student performance

The survey reports that since there is no research done on the impacts of HIV/AIDS on staff and student output it is hard to have proof of the impact of teaching quality affected, numbers of drop outs etc. Nationwide there is still a strong stigma attached to HIV/AIDS and thus the reluctance to reveal HIV status. In addition to this stigma, it was mentioned that culturally it is taboo to talk about sex. This complicates and makes public debate more difficult.

4.5.5 University level policies and programmes

At Fort Hare awareness campaigns have been running for the last three years. Now the university is in the process of proposing programs and activities for implementing a HIV/AIDS policy.

The South Africa University Vice Chancellor Association (SAUVCA) has developed a programme of action. Students are the focal point, and the programme focuses on peer

¹⁶ Information from university officials augmented by data from <http://www.unmass.edu.ipo/ftshare.html>.

education skills and runs workshops at regional level. The university collaborates with the regional government network but they do not have any other plans or agenda except for those pushed by SAUVCA. There is also a “National Aids Day” in addition to media programs. The University policy that addresses the pandemic was launched in September 2001 and it opposes any form of discrimination. This will now tested in practise, as the university has still to be confronted with such cases.

Changes in the national labour market for agricultural university graduates, increasing quotas for students and staff to compensate for expected national losses in skilled professional personnel and university distance learning programs are themes currently being discussed. These issues are being submitted for approval to the SAUVCA.

4.5.7 Research

In order to implement the HIV/AIDS university policy a series of workshops on programmes and activities on research, outreach projects etc. Fort Hare is interested and express an interest in institutional collaboration to undertake joint research, with e.g. Norway, addressing poverty issues.

4.6 TANZANIA

Population (1999):	32.8 million
Rural population (% of population):	75%
Estimated number of HIV infected (adult rate, 15-49):	8.09%
Orphaned children due to aids while they were under the age of 15 since the beginning of the epidemic:	1.1 million
Status of National Strategy against Aids: National efforts to control HIV/AIDS began immediately after the pandemic was confirmed in 1983. Presently the Tanzania Commission for Aids (TACAIDS) is the coordinator of multi-sectoral activities. The Government has encouraged all ministries and governmental institutions to form AIDS Committees. Sokoine University of Agriculture is under Ministry of Science, Technology and Higher Education and has therefore also formed a committee. Free testing for HIV AIDS is now available and some top government officials have submitted themselves to testing to encourage people to do it. An intense campaign is taking place with advertisements, television and radio, youth programs and a number of debates on HIV/AIDS. A multi-sectoral approach to the pandemic is encouraged. Training institutions is one of the high-risk groups identified.	

4.6.1 General information on Agricultural university of Sokoine:

The university is located in the small town of Morogoro 200 km from Dar es Salaam. SUA was established in 1984 and has today four academic campuses. There are around 6,000 people in the SUA community composed of students, staff and dependents. The main highway to the south passes through Morogoro, that is also mentioned as a risk factor together (disco/club, community, girls employed in informal sector).

Table 6. University population by category and sex, Agricultural University of Sokoine, Tanzania. 2000/2001

Category	Male	Female	Total
Academic staff			600
Non academic staff			
Students			2,700

4.6.2 Information given to new students

A one-week orientation course is given to new students on various themes organized by the health service unit as well as a NGO in Morogoro working with HIV/AIDS. During the course the students are presented with national HIV/AIDS statistics and given advice on preventive behaviour. In addition, a female forum targeting fresher students was initiated four years ago. This forum discusses how to go about student life taking necessary precautions, dangers of reckless dating etc. Female academic staffs participate and are important also as role models. In fact, there is a Women Development Support committee at SUA (Sokoine University of Agriculture)¹⁷. There are plans at the university to write a proposal to UNICEF for resources to hold a training programme in "Life Skills". A brochure was produced at the University by a project on agricultural research Tanzania Agricultural Research Program (TARP II). However, this brochure has been serving the project more than specifically targeting university staff and students. During interviews it has been stated that workshops are more effective than written brochures because people interact, participate and think more in depth.

4.6.3 Records of HIV/AIDS at university and the role of the health centre

It is hard to know the real status of HIV/AIDS because there are no official records at university level. The health centre does not offer counselling services nor distribute condoms. Recently a test-kit has been obtained, and more will be coming. Whether people will want to test themselves is uncertain.

4.6.4 Impact on staff and students performance

The university has lost a number of staff and students between 1994-2001. Fifty members have died, which is an approximate average of seven per year (students and staff). But it is claimed that the impact is still quite minimal- although the problem is there. It was again pointed out that although one knows that a person is sick, it is hard to know exactly the reasons for absenteeism. Often it is only possible to link the sickness to the pandemic after a person has died. Many who get infected prefer to go home and die. The general problem is when a staff member dies, those who die are probably more qualified than the ones who replaces them, and this can create a gap.

4.6.5 University level programmes and policies

Awareness raising events were proposed last year but there were no funds available. However, in August 2001 the AIDS Committee was formed at the university. The members are: the Vice Chancellor, Dean of Students, University Health Centre, and representatives from students and staff as well as the regional AIDS coordinator (appointed by the Ministry of Health). Aside from producing brochures on STD/HIV/AIDS, the university incorporated the topic in some under and graduate studies.

The committee, inaugurated in June 2001, has prepared a strategy and action plan (2000/2001). But it has still not received funding from the government as promised (the promised budget is limited of 6 million Tanzanian shillings). The objectives are:

¹⁷ The committee has performed a *Needs Assessment* of female staff and students and they are actively working to recruit and encourage female staff and students at the Agricultural University.

- to establish a body that will facilitate control of STD/HIV/AIDS at Sokoine University of Agriculture Campuses (the SUA Technical AIDS committee)
- to provide STD/HIV/AIDS Education to SUA students and workers (reduce vulnerability). This will be done through the promotion of cultural activities as well as promotion of sports and games as means of diversification of extra time from sexual oriented adventures.
- Identify, train and use peer educators who disseminate knowledge
- Promote scientific knowledge among modern health care providers on the role of traditional medicine in STD/HIV/AIDS control and management. Thus a priority is research on bio-medical-, social-, behavioural- and communication-issues, including research on psychological and emotional problems among HIV/AIDS positive students and workers as well as their interrelationship with friends and health care providers.
- Encourage workers and students living with HIV/AIDS patients
- Promotion of higher- and technical education for girls

The SUA television will be actively used to sensitise students and staff. Musical talents are being used for sensitisation shows and fundraising.

At the university there is no discrimination against people infected with the HIV/AIDS, and the university takes the government stand of no discrimination. In general, if a person is sick there are procedures to deal with this- whether of HIV/AIDS or not. The general plan of the university is to expand and increase student numbers in order to provide more skilled manpower to the country. There is no special university programme towards women.

4.6.7 Research

There is a plan to hold a stakeholders meeting to the research on ways to address this issue in the rural areas. But there is no research yet done on this although it is encouraged in the TARP II¹⁸ programme and future topics for research can be to assess labour loss/alternatives. They are interested in learning from other countries specifically South Africa.

4.7 UGANDA

Population (1999):	21.4 million
Rural population (% of population):	87%
Estimated number of HIV infected (adult rate, 15-49):	8.3% (6%)¹⁹
Orphaned children due to aids while they were under the age of 15 since the beginning of the epidemic:	1.7 million
Status of National Strategy against Aids: The nation is recognized internationally for dealing with the HIV/AIDS problem at an early stage, national committee formed in 1985. The Ministry of health is the main driving force. The approach is multi-sectoral from public health to development concern. The government and UNDP initiated the program "Straight talk". This is where youth (from 14 years) meet and exchange views and experiences on sexual issues and AIDS awareness on a monthly basis. A package of the program is available from the school libraries.	

¹⁸ Tanzanian Agricultural Research Programme, second phase.

¹⁹ The first figure (8.3%) is based from UNAIDS estimates while the second figure (6%) was quoted by Bakoko Bakoru Zoe, Ugandan Minister of Gender, Labour and Social Development in the FAFO seminar, Oslo.

4.7.1 General Information on Makerere University

Table 7. University population by category and sex, Makerere University, Uganda. 00/2001

Category	Male	Female	Total
Academic staff	700	300	1000
Non academic staff	2475	2025	4500
Students	14300	7700	22000

The university is located in the capital Kampala. The increase in the student population is due to a change in government policy allowing admission of private students that are sponsored by parents and organisations. The staff number has not increased as much as it should have, given the increased number of students. Students are given grants to cover accommodation and food. Books are available in the library.

4.7.2 Information given to new students

Earlier information campaigns, noted by students, took place in 1992-1994 and focused on the use of condoms and their free distribution. In 1995, the focus shifted to “how to take care of yourself against HIV/AIDS”. The health-personnel address the students. During the orientation period for freshmen, information is disseminated on HIV/AIDS, use of condoms as well information on as availability of counselling. In addition, there are also awareness programmes through video films and seminars. Interactions are encouraged after the film is shown. Students hear about the pandemic at least once a month because different groups visit the university. In 1996, HIV/AIDS became included in the curriculum and teachers were given a seven-week training programme. The students describe the atmosphere as generally open at all levels - from the administration, student organizations and residence level.

4.7.3 Impact on staff and student performance

The students interviewed mention the big difference of increased freedom when changing from secondary school to university. And this also influences the students’ behaviour. HIV/AIDS mortality is still serious in Uganda. Students die before they are able to complete their studies. Some move away when they discover that they have HIV in order to avoid being discovered. Students note that also among staff the problem is having impact.

4.7.4 Records of HIV/AIDS at university and the role of the health centre

There is a university hospital with four full time doctors and ten nurses. Testing for HIV/AIDS is offered at the university and is also available for the whole country. The university health-centre has records on HIV/AIDS, but numbers are not available to the public. It is difficult to keep reliable records because when people get sick, many do not avail of university health services. Despite the wide publicity about the HIV/AIDS pandemic, people still feel embarrassed to disclose that they are having this problem.

The health centre provides testing, counselling, condoms, information, and organising awareness raising events. It is expressed that the national government came out openly to the world that HIV/AIDS is a big problem in the early 1990s and as such schools of all categories joined the bandwagon of information dissemination coordinated by the Ugandan AIDS commission. Students and staff use the services provided by the health centre, but they are reluctant to test themselves.

4.7.5 University level policies and programmes

The university has no official policy on HIV/AIDS. There is an effort to take gender more into account, now there is a female scholarship initiative (funded by donor). However, there are no special programmes targeting female students. There are current discussions taking place regarding the changes of national labour market for agricultural university graduates (i.e. curriculum change) and there are university distance learning programmes.

Additional information from Makerere University at the AWSE workshop:

Starting from January 2002 in collaboration with US public health institution there will be a HIV/AIDS fellowship programme that aims to strengthen the HIV/AIDS organizations, do training, apprentice ships and short courses. Makerere is also working with the Academic Alliance of Aids Care and Prevention in Africa. This programme with also US support targets and trains 80 clinicians from different countries in hope to have a snowball effect.

4.7.6 Research

There are also several projects and studies ongoing with communities. One is in Rahai (were AIDS was first reported) where there are also community services such as counselling and testing (home based counselling) and a HIV clinic. There is also research taking place on mother/child transmission in collaboration with the US. In December 2000 the first international student conference on AIDS was organized at Makerere.

Makerere funded a study on impact of HIV/AIDS on agricultural practices. The university sees a role for international collaboration to support sharing experiences from different countries as well as supporting more research. There is a big interest in performing in-depth studies.

4.8 ETHICAL DILEMMAS RELATED TO HIV/AIDS AND UNIVERSITIES

Ethical dilemmas related to HIV/AIDS were explored in the survey. At no university or college are students or staff forced to reveal their health status. There is no mention of persons being dismissed from work; however, some are concerned that it might become an issue of the future- when people dare to disclose their status. No one mentions situations of “discrimination”²⁰. Informally some admit to probably not awarding a scholarship to those bearing the symptoms of the disease. The fear of stigmatisation is common, and therefore people give other reasons for their sickness than HIV/AIDS. It is stated that there is a big difference seeing people on TV being open and “coming out” with their HIV/AIDS status, than the reality faced for a person doing this at a local campus. Many question what the advantages are of disclosure of HIV/AIDS when there are still no free medicines for cure? WOFAK (Women Fighting Aids in Kenya) (2001)²¹ argue it that it can be a way to access medical service, protect oneself and others and not the least “a problem shared can be a problem halved”. From Uganda it is noted by students that the tolerance level is in fact increasing now due to aggressive information campaigns. Personal experiences of living with people with AIDS and also seeing how many are coping with it (if getting a nutritious diet

²⁰ Several on the HIV/AIDS UN Conference in New York raised the issue in June 2001, which discussed human right's aspects of people living with AIDS.

²¹ The WOFAK homesite is found in <http://www.wofak.or.ke>.

etc.) is supporting the growing recognition that HIV positive persons live longer and do indeed have a lot to contribute with to society. In many countries there is still a long way to go before societies understand that HIV/AIDS is a problem that we have to learn to live with and cope with.

An “environment of denial” is repeatedly raised as a reality of the HIV/AIDS problem. Secrecy, use of traditional doctors and turning a blind eye to the HIV/AIDS symptoms is common. It is mentioned that often in rural areas, people still very much believe that witchcraft can help their problems. In Ethiopia, infected patients are highly discriminated against, isolated and maltreated. Nowadays, there are discussions and efforts to reverse or at least minimise this situation. In Eritrea there are no ethical HIV/AIDS issues debated in the public at this point since the epidemic is still not widespread

Another issue brought up was the approach for advocating the use of condoms. The “condomisation” approach continues to be a sensitive issue, and does not really address the need for drastic behavioural change. To encourage the use of condoms without proper education has not been successful, and in many situations condoms are not an option. Some claim it is as important to advocate abstinence. The church influences the debate, and it is noted that, for example in Botswana, the 7th Day Adventist church does not wed people without a certificate of being HIV negative.

Other realities are the incidents in several countries when people do not want to “die alone” and therefore want to take revenge by infecting others. Less dramatic is it when those who are sick go back to their original homesteads and families in the countryside. However, as mentioned earlier this can often result in less food production in the long-run due to neglect of farming activities by other family members as they investing all their resources (physical, emotional and financial) in trying to cure and comfort the sick. Traditional burial customs is another sensitive issue. Cremation practises can put land under less pressure, and funeral practises in some countries are going through changes due to the dramatic increase in deaths. “In Botswana, traditionally people attend funerals and stay with the family for around three-four days but now it has been agreed that it is acceptable to stay just until the body is buried (if not one might be expected to attend other funeral taking place nearby). The culture is changing and people attend fewer funerals. Maybe even to the extent that they leave early in the morning from home so that they “officially” did not hear about the funeral, and therefore have an excuse for not attending.”

Confidentiality issues of voluntary AIDS testing were discussed during the workshop in Kenya. Assistants of doctors and nurses handling records are important to include in such a confidentiality awareness raising. It was also questioned whether the University health clinic-belonging to one’s employer is the best place for testing and counselling. Often, such private matters are preferred carried out by someone “unknown”.

A very important issue not discussed to a great extent in this paper is the issue of medical treatment and funds for this. Retroviral treatment is costly. Jomo Kenyatta University charge 100 shilling per visit to the health centre in order to try to cover some of the expenses going to drugs. Currently it is impossible for universities to be able to treat their sick, as medication is too expensive. What options are there? Other research institutes are testing other drugs and some of them are herbal.

4.9 PERSPECTIVES FROM THE WORKSHOP ON WOMEN IN HIGHER EDUCATION AND SCIENCE: AFRICAN UNIVERSITIES RESPONDING TO HIV/AIDS.

In December 2001 in Nairobi, African Women in Science and Higher Education (AWSE) brought together a whole range of universities and research institutions, for the above mentioned conference, namely: Egerton University (Kenya), Jomo Kenyatta University of Agriculture and Technology (Kenya), Maseno University (Kenya), NARO National Agricultural Research Organization (Uganda), Kenya Forestry Research Institute (KEFRI), Sokoine University of Agriculture (Tanzania), Makerere University (Uganda), Moi University (Kenya), Nairobi University (Kenya), Kenyatta University, Rand Afrikaans University (South Africa), as well as American Association for the Advancement of Science, Association of American Universities and Colleges, Rutgers University (USA), Beloit College (USA), Agricultural University of Norway, CGIAR Gender and Diversity Programme etc.

4.9.1. The status of HIV/AIDS at the universities

- At Jomo Kenyatta University of Technology and Agriculture in Kenya where the student population is 3000 and the staff is 10333, approximately 12 % of staff members are infected. The student-infected population is unknown. Between 1995 and August 2001, 22 staff members died of AIDS related diseases (12 were women with the average age of 31 years and 10 men of average age 38 years).
- At Egerton University, Kenya, (8000 students, 2000 staff with 800 teaching) the medical department did a blood screening and found that one in three blood samples had HIV (33%).
- Maseno Agricultural University, Kenya found the staff category that suffered most were the *unionizable* at 60%, while the senior and middle range employees had 20% infection rate each. Further categorization showed that supportive staff suffered most (74%), followed by academic staff (17%) then administrative staff at 9%. Over the last 10 years of follow-up there have been 65 deaths, averaging about 7 deaths per year.
- University of Nairobi, Kenya, loose 2 staff members per week, and the health-care system at the university have difficulties coping with the increase of chronically ill individuals.
- KEFRI (Forest Research Institute in Kenya) that has a total of 14 centres has mapped the death rate among their employees since 1989. It has exploded with 300%. Insurance and pension funds have increased the premium with 183%.

4.9.2 Impact of performance

Moi University, Kenya (campus of 10,000) report on *manifestations of infected staff members*: They have noted that there is an increase of alcohol consumption; promiscuity with college students and others, maybe due to a reaction of vengeance or desperation. Sometimes

staff develops a withdrawal (isolationist) tendency, develop temperamental behaviour, have a general poor health and regular absenteeism from duty. There is also a decrease in productivity, unexplained desertion of duty or even flight from university on discovery that one is HIV/AIDS infected. There has been an increase in mortality over the last 8-9 years (average 2 staff per month).

Student manifestation has shown to result in reckless behaviour (hyper sexual and drug abuse). In addition, there is a remarkable deterioration in study performance, unexpected absenteeism and poor health, and temperamental or withdrawn behaviour. But unlike staff members, mortality is not noticeable as it is most likely to affect the individual after they leave university. Officially only one student has died of HIV/AIDS.

4.9.3 University policies

Most universities and institutions have formed programmes or AIDS Control Boards to work with management of HIV/AIDS within and outside the university. The level of coordination and student programmes varies.

At Egerton university the Clinical Medical department gives information to all first year students. In addition, certificate-, diploma- and graduate-courses on HIV/AIDS. Biomedicine, agriculture and home economics include 10 hours on HIV/AIDS lecturing. However, it is pointed out that there is still a lack of overall coordination. The methods are slightly top-down and there is a lack of expertise of facilitators, lack of accurate date and furthermore there is denial and stigma.

At Maseno University there are several community outreach programmes. The department of home science and technology have students working with families affected by HIV/AIDS other departments work especially with women's and youth groups as well as forming partnerships with local NGOs, schools and churches. The student work through Maseno University Peer Educator Club (MUPEC) is described later.

Jomo Kenyatta University organize campaigns to increase knowledge and awareness of HIV/AIDS through seminars, workshops, develop education materials for students, peer educators etc. They give the following observations regarding the activities:

- Supportive vice chancellor an AIDS control board but full time responsibilities hinder commitments to the cause
- Lack of proper work plan
- Very poor behavioural change in the university community

Kenyatta University: Peer outreach projects and community projects are undertaken, for example, helping widows in neighbouring communities through family care and nutrition courses. The university presents the following challenges that they encounter:

- Disparity between knowledge of HIV transmission and sexual habits
- Inadequate skills by health care providers
- Attitudes beliefs, values and prejudices
- Structural and socio-economic impediments

Partnerships with local NGO's, schools and churches have proved effective in dealing with the epidemic. This partnership has increased awareness but behavioural change still presents a big challenge

4.9.3 Curriculum development and Research:

At the University of Nairobi a joint study on "*Student Unrest*" is taking place. It looks at poverty and risky income generating activities among students. Extensive unemployment among the youth is creating a feeling and sense of hopelessness.

The work with curriculum change at Maseno shows that disproportionate amount of effort has gone into prevention strategies that have mainly been confined to nutrition and health sciences, for example: Community nutrition and development; individual and family development; community partnership; population and fertility. The integration with the social sciences and pure natural sciences has been slower. The university wants to develop curricula and programmes that prepare students for a new reality- even if this means introducing new fields of study.

At both Maseno and Kenyatta University it is pointed out that HIV/AIDS research mostly takes place at an individual level. There is a lack of a coordinating strategy for both conventional and applied/action research. There is an example of a joint effort between Medical Faculty of Kenyatta University that has a joint vaccination initiative with Makerere and University of Dar es Salaam. This group is also developing care-standards for infected individuals. The Medical Faculty runs a long distance education programmes on STD and HIV (with 130 medical graduates supported by the Dutch). The HIV/AIDS work at the university also contributes towards a national policy on HIV/AIDS to assist the government.

The National Agricultural Research Organizations of Uganda (NARO) have studied issues of HIV/AIDS. The organization stresses the importance of nutritious diet. AIDS victims today often die early due to low nutritious meals. When eating healthy diet the proteins provide energy to build tissue to fight infection. With government support agriculture has developed strategy interventions for HIV/AIDS affected families. Programmes will especially focus on nutritional aspects, including the transport and processing of food, provide tools for women on how grow high value crops for food and for sale.

Kenyan Forestry Research Institute has today current research projects with the Ford Foundation on herbal remedies used by traditional communities. 15 plants species are being studied for their anti-viral/anti bacterial properties with promising results. There is also awareness raising among staff through educational programmes. Both Aids Control Unit and Pension Board were established in 2000. The goal is to reduce the staff death rate 25-30% by 2004. In their future strategy they will provide counselling for the sick and their families, increase the research on herbal medicine and disseminate information and knowledge. KEFRI stress the importance of working interdisciplinary, with tribal leaders and communities. Having an understanding of cultures is needed to maximize the opportunities to add value to traditional remedies.

4.9.4 Student Movements and Peer Education

At Egerton the "Coffee Social Hour" is a weekly student social forum to discuss topical issues. HIV/AIDS is frequently addressed. Another initiative is the "Bash hour" (a youth term

for party), which is an outreach programme to Secondary Schools and discusses HIV/AIDS, substance abuse, career choices, etc. Student ownership is important for its success.

Maseno University Peer Education Council (MUPEC) educates peers at the university, provides counselling, club magazines, works in communities and informs high schools on sexual education, HIV/AIDS as well as encouraging the forming of similar clubs. The student group also coordinates the annual AIDS Campaign Day.

Income generating activities are important for continuation of such clubs. MUPEC charges, for example, 10 shilling for video presentations, as well as a small fee for the use of the pool table. Student discussion forums at the universities are important. At the beginning of a new academic year, the “Gold rush”- is a normal occurrence. This is when the young male rush for the 1st year “clean ladies” (students). Poverty of students can lead to diverse forms of prostitution, having inconsistent student loans does not help the stability of student life. Further, drugs and alcohol is available and beer is often brewed on campus. This can result in irresponsible sexual behaviour. When such behaviour is accompanied with the widespread denial of “this cannot happen to me”-thinking, risky situations take place. What is needed is more than poster campaigns. Therefore the student clubs organize talks, beauty contests and sports activities where HIV/AIDS information is incorporated. For the future, the students suggest annual awards for extra curriculum activities of students. Using websites for an interactive forum for question is also planned.

The Peer Counselling at Kenyatta University of Technology and Agriculture addresses student pregnancies, STD’s, drugs, time management, financial stress, and HIV/AIDS awareness. Five thousands students can be reached with each semester when 50 Peer Counsellors (reaching out to 10 per week with door-to-door campaigns). Constraints that are mentioned for outreach are:

- Religion
- polygamic cultures still present
- minimal use of condoms
- HIV is sometimes seen as curse from God
- commercial sex among poor students
- a lot of students laugh when we mention abstinence
- does it help having a faithful partner? Not really, because although faithful to one, then break up and still faithful to another
- in certain areas in Tanzania, parents chase Peer Counsellors (they believe PC are promoting sex when i.e. demystifying condoms)
- issue of disposal of condoms, they can become dangerous toys for children
- the clubs lack equipment, transport, computers etc

T double A: Teen Against Aids (TAA) at Egerton University.

Using symbols are important for TAA and they are using the graphics of: a mouth, a fishnet, hands that hold, a trumpet and the sun:

The mouth represents “one voice of teens against AIDS”; the *fishnet* “to salvage a whole generation”; *hands holding* is “taking responsibility of their sexuality”, the *trumpet playing the happy song* of “call to globally join voices of teens against AIDS” and the *sun shades light* on; “the darkness of HIV/AIDS pandemic, give correct information and to take care of our grandchildren, and also informing the elderly”, i.e. people of 60. Everyone has a stake in the fight against HIV/AIDS.

TAA (started in 2000) through working with the “Bash hour”, outreach with community based organizations, set up self-help youth groups, launched a website, trained facilitators and won an international prize in July 2001 (Turkey).

5. DISCUSSION AND CONCLUSIONS

We set out to explore the status and impact of HIV/AIDS at agricultural universities and colleges as well as preventive action taken by the respective institutions in their own environment. A concern raised by partner institutions that is worthwhile shedding light on is the fact that it is often external projects (pushed by donors) that are not always internally absorbed. Equally staff initiatives may be less dynamic than donor activities. And what will happen when the donors withdraw?

5.1 THE STATUS OF HIV/AIDS AT AGRICULTURAL UNIVERSITIES AND COLLEGES

It is important to discuss the nature of the pandemic when discussing the status of HIV/AIDS. The stigma attached, the reluctance to openly admit that one is living with HIV or to relate a death to HIV/AIDS is the primary problem that must be solved, if one is to have progress in combating HIV/AIDS. Our study indicates that in the agricultural universities/colleges in Uganda, South Africa, Tanzania, Botswana and now Kenya, the pandemic is being addressed openly but this is less so in Ethiopia, Eritrea and Malawi. As long as there is no effective treatment to offer those infected, arguably there are many that do not see the benefit of full disclosure.

General statistics reveal that students, age group 15-19, are most likely to be infected. University and College students usually start their studies in this age group. We recall that in table 1., there was a big increase in infection rates for all ages and both sexes after the age of 19. Amongst students, the most vulnerable groups of students are female students. The gender issue is one of the core issues that must be addressed. Peer pressure and insufficient knowledge on transmission patterns, infection rates are high among students. Students interviewed²² referred to the following issues as contributory to high HIV infections amongst females: Sugar daddies (elderly men buying and supporting financially young women of sexual favours in exchange), male supervisors and lecturers (some instructors reportedly gave

²² Findings of ADEA (2000) study and background articles were confirmed during interviews amongst students.

more preference to young women, e.g., give good grades and material goods in exchange for sexual favours). Peer pressure to be accepted in the right crowd and to look good is another important factor. Young women coming from poor families might feel such pressure more than other women.

Amongst partner universities, there were no statistical records and the perception is that there is infected staff and students but it is hard to confirm due to lack of specific studies. However, during the AWSE workshop in Kenya, it came up that 33 percent of blood samples from staff and students at Egerton University (Kenya) are infected. In Maseno Agricultural University, the infection rate amongst academic staff is 17%, administrative 9% but the support staff rate of infection was shocking at 74%. The University of Nairobi loses two staff per week.

The actual status and direct impact at university/colleges is difficult to measure given that many infected students generally progress to AIDS after leaving university/college and considering the nature of the pandemic. This will remain unknown unless follow up is done of graduating students.

5.2 WHAT IS THE IMPACT AMONGST STUDENTS AND STAFF?

Overall, the study revealed that there is an impact, in varying degrees, amongst students and staff. The impact of HIV/AIDS cited in the mini survey are felt either through leave of absence, effect on teaching quality, dropping out to take care of sick relatives, or students' output being affected. Students were able to give anecdotal evidence. Loss of skilled labour is proving to be a problem for the universities, as it would take more time to train new staff. But because there are no scientific studies, then it is hard to prove impact assessments. This was especially true in institutions where the pandemic is not really discussed.

When infected, a university in Kenya talked about the different manifestations of the effects among students and staff. Manifestations recorded from staff were increase in alcohol consumption, promiscuity, a withdrawal (isolationist) tendency, development of temperamental behaviour, a general poor health, and regular absenteeism from duty which affects productivity. Amongst students reckless behaviour was reported.

5.3 ASSESSMENT OF PREVENTIVE ACTIONS BY AGRICULTURAL UNIVERSITIES AND COLLEGES

5.3.1 How have agricultural universities responded to these problems? What steps are agricultural universities taking to control and limit the further spread of the disease among their students and staff?

Present programmes for all universities deal mostly with information campaigns. The frequency of HIV/AIDS information given (lectures, campaigns, dramas etc.) differs. Active student committees make a big difference. Most government programs in the study, targeting mainly students, started with the medical approach. Currently the social and psychological aspect is being included in the approach through peer education. Present campaigns come in

the form of awareness raising events, information services through seminars, group discussions and the media (radio, television and video) and making condoms accessible. Common in all countries, except for Eritrea (where we lack response), is mobilisation of youth clubs and youth leaders utilized in the information campaign programs such as “peer education”.

Currently peer educators are being trained and the feedback is that this is a more powerful tool, with interactive discussions and a holistic approach. It was noted that the information generated must take into account cultural elements. Bottom up feedback mechanisms are important to success of information campaigns.

Many universities are complying with government instructions to act on HIV/AIDS and thus the organizations and/or programmes are a result of such policies. Most are still in the start phase – others have more experience and are already working with external donors and community outreach. However, the programs and policies are mostly focused on students and not the university staff.

Ethical issues are important (keywords are discrimination, secrecy and denial, behaviour change, gender relations, exclusion from PhD grants etc.). The role and responsibility of the professors are important- especially in how they treat young vulnerable female students. Most universities are officially following a non-discrimination policy and most of the countries signed the UN Convention, but in practise there will continue to be challenges. Other ethical issue include access to expensive medicines.

5.3.2 What HIV/AIDS related teaching, research, publications and advisory services have the universities undertaken?

HIV/AIDS is part of the curriculum in the primary and secondary schools but in few cases has this continued to the tertiary level. Partner universities are aware of the dearth of knowledge and are interested in conducting in-depth studies in the future. Advisory services are available in some of the health centres.

There are three things that need to be brought out in the aspect of HIV/AIDS education. To prove the importance of this, we cite a study by (Vandemoortele and Delamonic 2000: 7) noting HIV rates decline among people with primary and post-primary education even in countries where the overall HIV prevalence rate is on the rise.

The merits of peer education have been pointed out and are in place in the countries studied. Universities expressed the need for curriculum development, which should be taken seriously. Available evidence suggests that for prevention efforts to succeed, there is a need to invest in information about types and distribution of risky behaviour in the population and the prevalence of HIV infection among those with risky behaviour (Ainsworth, 1997).

Identification of new research areas was a need expressed by the colleges and universities. There is some research taking place now (often small and not coordinated) but it is important to reiterate the danger of generalising from existing research. Each country has its own origin, geographic patterns of dispersion and affects particular population groups in different ways (White *et al.* 2000:12). Before any interventions can be done, there is a need to get relevant information in every area. It was expressed that future researches done should be multi-

sectoral. Another need also is to identify research areas in the face of challenges that HIV/AIDS presents such as new technology, new approaches in agricultural education and extension. Again such researches need collaboration from regional and international partners.

5.3.3 How do universities propose to anticipate and address the larger impact of HIV/AIDS on the national labour market for agricultural university graduates? Should university access, including via distance learning, be consciously increased to compensate for expected national losses in skilled professional personnel?

There is very little done in this area at all the universities. This is a concern that must be addressed in future studies.

Do universities cooperate with other institutions (Government/ local institutions/ other NGO's) in HIV/AIDS related projects/programs?

All the countries in the study cooperate with the national government and all have formed national HIV/AIDS committee's. The Ministry of Health is the usual promoter of these campaigns and the university health centres work under this framework.

6. RECOMMENDATIONS

What can be done to support the agricultural universities and colleges in reducing negative impacts of HIV/AIDS? What is the role of partner universities – in light of recipient priorities and responsibility? What is the role of NLH in institutional collaboration agreements? And what is the role of NORAD? More than accessing funds, NORAD plays a unique role in the possibility to mainstream guidelines and policies in NORAD funded activities. In fact, many of the recommendations below are closely linked to the NORAD strategic plan for HIV/AIDS.

A. Universities and colleges recommend that they conduct an in-depth study of the HIV/AIDS situation at their institutions. Such a study will bring out themes that need further work. From this report it might be suggested that emphasis in a state of the art report should include gender aspects, ethical dilemmas (i.e. confidentiality issues of keeping records), curriculum, research needs and to address labour projections, etc.

B. Integration of HIV/AIDS dimension in institutional collaboration agreements with partner universities (i.e. scrutinize existing agreements with universities in this study). Collaboration could be on research, outreach and curriculum-development (expanded on below). Having HIV/AIDS included in formal agreements will raise the awareness of the pandemic and hopefully contribute to less stigmatisation and vulnerability among female students. Almost all universities have expressed interest in performing status of the art studies of HIV/AIDS at their own campus. Each university needs to assess how to address the decrease of professional staff (due to illness or death) at the university as well in the future professional labour market as ex-graduates might get infected. For example, what will the reality be in 5-10 –20 years? Table 8 has made an initial projection based on today's infection

rate based on UNAIDS figure. It is noted that HIV/AIDS statistics are not reliable considering that these are just based on pregnant women who allow themselves to be tested.

Table 8. Projected increase in number of staff and students needed to maintain today's level of university staffing and students based on country's infection rate (2000).

University/ College	Academic Staff			Non Academic Staff			Students		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<i>Botswana College of Agriculture</i>	28	10	38	32	30	62	168	62	230
<i>Mekelle University, Ethiopia</i>	16	1	17	51	20	71	356	100	456
<i>Asmara University, Eritrea</i>									
<i>Bunda College of Agriculture, Malawi</i>	9	2	11	316	5	321	68	14	82
<i>University of Fort Hare, South Africa</i>	54	11	97	43	30	73	396	660	1056
<i>Sokoine University of Agriculture, Tanzania</i>			48						218
<i>Makerere University, Uganda</i> ²³	42	18	60	148	121	269	858	462	1320

Partner Universities: Carry out an in depth study of own institution that can come up with practical solutions on research, curriculum development and effective teaching and training to address needs of projected loss of staff and students.

NLH: Has a role to make sure the issue is addressed in all current institutional agreements involving different institutions at NLH. NLH should also help synergy effects between partners and regions (discussed under node function below).

NORAD: Support (and guide?) in depth studies at respective universities/colleges. Make sure that the HIV/AIDS agenda is integrated in future institutional collaboration agreements, and are feasible to carry out. NORAD can also help with synergy effect between partners, regions and professionals. It is also important to link and integrated with development assistance in other fields such as: youth work, culture, education, health, research etc.

C. Contribute to research development specifically going in depth on how HIV/AIDS is affecting the agricultural sector. This is an area that the study identifies is needed to be explored. The pandemic is slowly changing the structure of African rural life. This will result in many unknown situations. Topics to be further explored should be decided upon with partner universities. Norwegian technical departments and institutes could also be part of this research from areas such as (nutrition, health, forestry, agriculture, medicine, herbal medicine, rural development and social sciences etc.). It must be stressed that HIV/AIDS crosscuts most disciplines and is a development challenge. Again, it is important to gain an overview over where there is good experiences and already ongoing research, for example, the Forestry Resource Institute in Kenya working with developing herbal medicines, etc. The comments about some current initiatives being top-down, not culturally sensitive and dominated by

²³ Computations were based on the latest HIV infection rate of 6%.

foreign initiatives and interests should be addressed in future research collaborations. However, funding of such activities will always remain an issue.

Partner Universities: Should explore mechanisms on how to build on existing networks between universities and research institutions to be able to share interesting experiences that are ongoing. Research will be important as part of foreseeing the current and future situation of the respective universities, gender issues and the gaps created in the labour market and effects on rural development. What solutions can agricultural crops contribute with? What obstacles of land tenure are there? How are women and widows affected? Are people's attitude and behaviour changing? Can regional comparisons be made? How can research link with research of Norwegian (other) institutions? Project proposals must be developed and shared.

NLH: Support and coordinate research initiatives coming from partner institutions. Provide technical help when needed. Participate in HIV/AIDS research with (some) partner institutions.

NORAD: To be an active partner and support and facilitate interdisciplinary collaboration between Norwegian institutions and the African counterparts. Funding for all activities mentioned in the recommendations are needed. How make funding effective and sustainable? Could NORAD explore their experiences on **creating endowments**? In what way is it possible to generate continuous and long lasting funding for research activities? Such ideas are worthwhile exploring.

D. Curriculum development. A few universities already have some experience in curriculum development (HIV/AIDS and agriculture), but overall this is lacking at most universities and colleges. Neither is it yet included in the Master nor PhD programmes in Development Studies related subjects at NLH. There are interesting experiences from Kenya that were exposed during the AWSE conference that many can learn from. The participating universities are developing further proposals on curriculum development, outreach and research in collaboration with AWSE and American Association for the Advancement of Science (AAAS). NORAD could follow up this process (there is also a need for other donor support in this initiative). It is important to share content as well as experiences of including HIV/AIDS into university/college curriculum. During the interviews for the report, an interest in exchange visits to see and learn from other universities were brought to light, i.e. SUA is interested in learning from Uganda and South Africa.

Partner Universities: Responsibility must be taken at top level in order to develop both a crosscutting curriculum, and to ensure that it is used in teaching and coursework. Different groups and disciplines will be interested in diverse aspects of the pandemic and its consequences. Thus, several specializations can be formed.

NLH: Develop a curriculum on HIV/AIDS at NLH in collaboration with partners for the Norwegian based master programmes (MNRSA programme and Rural Development). NLH can help facilitate visits to Ugandan and South African Universities so that partner universities can learn from "best practices".

NORAD: Support and fund curriculum development initiatives, as well as sharing experience and information on other initiatives taking place in other regions. Follow up initiatives from other agencies (i.e. AAAS on university curriculum, research and outreach).

E. Support to student peer counsellors (peer educators) working with outreach. Students are an important actor in the work with HIV/AIDS. As described in the report, many hard-working students both play the role of sensitising fellow students on campus, as well as working with community outreach. Students are often the “face” of the university in the field and have an important role through such work by being the link between academia and practical rural life. Such work is done on a voluntary basis with just minimum economic remuneration. Still many Student Outreach Programmes are not supported sufficiently by the respective university administration. Norwegian student movements could potentially also like to link up to such processes. More information on the working of such initiatives is needed.

Partner Universities: Support, guide and visualise the work of student outreach programmes. Document and share such experiences. Collaboration with NGOs can help fund activities. Explore in what ways these activities can link up with, i.e. Norwegian youth/student movements etc.

NLH: Must learn more about the work of Student Outreach Programmes in relation to HIV/AIDS and development. Involve student organisation at NLH (SAIH²⁴)?

NORAD: Facilitate student outreach programmes amongst partner universities, as well as support student exchange visits? Coordinate student outreach with other support given to youth movements and HIV/AIDS work. Is there a need for a paper on the status of Student Outreach/Student Counselling Programmes?

F. Need for a node in Norway that coordinates and act as a clearinghouse on HIV/AIDS and Agricultural Research in order to share experiences of good (and not good) practises. Results and resource people must interact with already established networks working in this field (i.e. CGIAR, FAO, other agencies). There is no one (to our knowledge) in Norway looking specifically at the link between agricultural research and HIV/AIDS. Such a node could also assess whether it would be useful to gather partner institutions to a workshop of sharing experience, knowledge as well as support and motivation. An aim could be to develop guidelines based on cases and experiences from partners. This can be developed with partner universities.

NLH: NLH can provide a coordinator for such a node working closely with HIV/AIDS development networks in Norway. This person should also work closely with NGOs and NORAD that are involved in agricultural projects/rural development where agricultural research efforts must be included.

NORAD: Experiences drawn from the Node should be included in a number of projects that NORAD administrates in partner countries.

²⁴ Studentenes Akademiske Internasjonale Hjelpfond (International Student Solidarity Group) is just an example of a campus organisation that can be involved.

Epilogue:

The main aim in all these recommendations is to translate awareness into preventive behaviour among the sexually active population. Borrowing a quote from Nelson Mandela “The time for action is now, and right now”.

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LIST OF ACRONYMS AND ABBREVIATIONS

HIV/AIDS	HUMAN IMMUNODEFICIENCY VIRUS/ ACQUIRED IMMUNE DEFICIENCY SYNDROME
UNAIDS	UNITED NATIONS AIDS ORGANISATION?
FAO	FOOD AND AGRICULTURE ORGANISATION
NORAD	NORWEGIAN AGENCY FOR DEVELOPMENT COOPERATION
NORAGRIC	CENTRE FOR INTERNATIONAL ENVIRONMENT AND DEVELOPMENT STUDIES
ADEA	ASSOCIATION FOR THE DEVELOPMENT OF EDUCATION IN AFRICA
ADF	AFRICAN DEVELOPMENT FORUM
NGO	NON GOVERNMENTAL ORGANISATION
CICE	CURRENT ISSUES IN COMPARATIVE EDUCATION
BCA	BOTSWANA COLLEGE OF AGRICULTURE
STD	SEXUALLY TRANSMITTABLE DISEASE
HAMSET	HIV, MALARIA, SEXUALLY TRANSMITTED DISEASE AND TUBERCULOSIS
UNICEF	UNITED NATIONS CHILDREN'S EDUCATION FUND
EU	EUROPEAN UNION
NACOSA	NATIONAL AIDS CONVENTION OF SOUTH AFRICA
SAUVCA	SOUTH AFRICA UNIVERSITY VICE CHANCELLOR ASSOCIATION
SUA	SOKOINE UNIVERSITY OF AGRICULTURE
UNDP	UNITED NATIONS DEVELOPMENT PROGRAMME
GNP	GROSS NATIONAL PRODUCT
PRA	PARTICIPATORY RESEARCH ASSESSMENT
CGIAR	CONSULTATIVE GROUP IN AGRICULTURAL RESEARCH (?)

APPENDIX: MIN-SURVEY FORM & GUIDE QUESTIONNAIRE

MINI-SURVEY (test) ON THE STATUS AND IMPACTS OF AIDS AT AGRICULTURAL UNIVERSITIES

Name of University	
Contact person	
Position held of contact person	
Email/fax:	

PART 1: GENERAL INFORMATION ON THE UNIVERSITY:

A. How many staff and students are there at the university? (Please give actual numbers)

	Male	Female	Total
Academic staff			
Non academic staff			
Students			

B. Have these numbers changed a lot since 1990 and 1995. Please explain reasons for increase or decrease. Do you have numbers available?

C. Where is the agricultural university located? (Please check X appropriate box)

In the Capital	
In a town (name)	
Rural campus (name)	

PART 2: STATUS OF HIV/AIDS:

A. What is the status of HIV/AIDS at your university? (Please check appropriate box.)

It is very much an issue affecting staff and students at the University and it is addressed openly	
It is an issue but is <u>not</u> addressed	
It is not considered an issue affecting staff and students	
Other	

Please describe in further detail the different criteria chosen:

B. Health Centre and Available Records:

Recent studies reveal the difficulty of knowing the exact number of HIV/AIDS prevalence due to a number of causes ranging from sensitivity of the issue, lack of records etc. Please indicate what is relevant at your university. Check appropriate boxes.

There are records of number of HIV/AIDS- affected staff and students	
There are records on HIV/AIDS related illnesses	
There are records but numbers are not available or public	
There are no records	
Other	

Please elaborate your answer with numbers (if possible) or with reasons for why there are no records.

If numbers are available do they to your knowledge correctly reflect the real situation?

C. Role and Services provided by the Health Centre on HIV/AIDS (Please check services available.)

Counselling services	
Keeping and updating HIV/AIDS records	
Provide condoms (free of charge?)	
Testing for HIV (free of charge?)	
Provide information	
Organize awareness raising events	
Other (please explain)	

Please elaborate on the answers given. Further, what does the health centre consider their most important function(s)? Are students and staff using facilities provided?

PART 3: IMPACT OF HIV/AIDS AT THE UNIVERSITY/COLLEGE:

A. In what way is HIV/AIDS affecting your university/college?

The impact of aids can be seen through leave of absence, sickness and taking care of sick relatives.

We have listed possible indicators that can reveal the impact of HIV/AIDS.

	A lot of impact	Less impacts, but exists	None
Staff: Absence of staff			
Teaching quality effected			
Students: Drop out to take care of sick			
Students output effected			
Other (please explain)			

Please explain your answer in details, are there any examples that can be given?

Are there any new trends emerging (i.e. gender differences)?

PART 4: PREVENTIVE ACTIONS

A. NATIONAL AND REGIONAL LEVEL PROGRAMS:

Existing collaborations (Please check appropriate box.)

University is part of national government initiative against HIV/AIDS	
University is part of regional initiative against HIV/AIDS	
Other (please explain)	

What is the status and nature of the national/regional programmes and University participation in them? Who are the collaborating partners (i.e. Ministries)? Who is the focal point at the University, how are the results disseminated to the others? What is the agenda that is being addressed?

B. UNIVERSITY LEVEL PROGRAMS:

1. What kind of HIV/AIDS related information is given to new students, i.e. is there an information campaign during? Do you have a brochure/leaflet you could send us?
2. Is there a special program targeting female students and staff? If yes please elaborate.
3. How does this information extend to university staff? If yes, please elaborate.

C. UNIVERSITY POLICIES

1. Are there staff and/or student policies addressing the HIV/AIDS problems on campus? If yes, what are they? If no, is there a discussion about formulating new ones?
2. Please mention if there are ethical dilemmas related to students/staff and AIDS that are being discussed (i.e. giving grants to sick students etc.)?
3. Is the following being discussed at the University?

Themes being discussed:	Yes
Changes on the national labour market for agricultural university graduates (i.e. curriculum change etc.)	
Increasing quotas for students compensate for expected national losses in skilled professional personnel?	
Increasing staff to compensate for expected national losses in skilled professional personnel	
Are there university distance learning programs	
Other	

D. RESEARCH, PUBLICATIONS AND CURRICULUM DEVELOPMENT:

1. How is the agricultural university/college addressing research in relation to HIV/AIDS?

Are agricultural/natural resource management issues being addressed in the light of HIV/AIDS impact?

Give examples of research being undertaken- who is funding, with whom are you collaborating?

2. Needs identification for future research and curriculum development:

Please indicate which of the following research related to HIV/AIDS that the University would find important to prioritise in the future?

PART 5: FUTURE RECOMMENDATIONS

How would you find international collaboration most useful in order to address HIV/AIDS issues at the University and in agricultural/natural resource management research?

Would your University be interested in undertaking an in depth study regarding the HIV/AIDS related problems at the University/college?

Please add recommendations to this questionnaire:

Date: _____