Effects of the HIV/AIDS Pandemic on Rural Communities in ACP Countries –

A Reader[1]

compiled by

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for

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[1] Most text in this reader is taken directly from the original documents or websites. The opinions expressed are those of the authors and do not necessarily reflect the position of CTA.

Content

Acronyms

ACP	African, Caribbean and Pacific (Group of States)
AIDS	Acquired Immune Deficiency Virus
AVR	Antiretroviral (drugs)
CD-ROM	Compact Disc Read Only Memory
CIDA	Canadian International Development Agency
CSO	Civil society organization
CTA	Technical Centre for Agricultural and Rural Cooperation ACP-EC
EC	European Commission
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
HIV	Human Immunodeficiency Virus
ICT	Information and Communication Technologies
NEPAD	New Partnership for African Development
NGO	Non governmental organization
PDA	Personal Data Assistant
PLWHA	People Living With HIV/AIDS
PMTCT	Prevention of Mother to Child Transmission
SPC	Secretariat of the Pacific Community
STD	Sexually Transmitted Disease
TB	Tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Childrens Fund
VCT	Voluntary Counselling and Testing
WHO	World Health Organisation

HIV/AIDS and the Millenium Development Goals

Goal 6: Combat HIV/AIDS, malaria and other diseases

Target 7	**Have halted by 2015 and begun to reverse the spread of HIV/AIDS**
Indicator 18	HIV prevalence among 15-24-year-old pregnant women
Indicator 19	Condom use rate of the contraceptive prevalence rate
Indicator 20	Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14
Target 8	**Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases**
Indicator 21	Prevalence and death rates associated with malaria
Indicator 22	Proportion of population in malaria risk areas using effective malaria prevention and treatment measures
Indicator 23	Prevalence and death rates associated with tuberculosis
Indicator 24	Proportion of tuberculosis cases detected and cured under DOTS (Directly Observed Treatment Short Course)

HIV/AIDS and the Cotonou Agreement

ARTICLE 25

Social sector development

1. Cooperation shall support ACP States' efforts at developing general and sectoral policies and reforms which improve the coverage, quality of and access to basic social infrastructure and services and take account of local needs and specific demands of the most vulnerable and disadvantaged, thus reducing the inequalities of access to these services. Special attention shall be paid to ensuring adequate levels of public spending in the social sectors. In this context, cooperation shall aim at:

a. improving education and training, and building technical capacity and skills;

b. improving health systems and nutrition, eliminating hunger and malnutrition, ensuring adequate food supply and security;

c. integrating population issues into development strategies in order to improve reproductive health, primary health care, family planning; and prevention of female genital mutilation;

d. promoting the fight against HIV/AIDS;

e. increasing the security of household water and improving access to safe water and adequate sanitation;

f. improving the availability of affordable and adequate shelter for all through supporting low-cost and low-income housing programs and improving urban development; and

g. encouraging the promotion of participatory methods of social dialogue as well as respect for basic social rights.

1. Introduction

(Main source: UNAIDS/WHO 2003. AIDS epidemic update)

The global AIDS epidemic shows no signs of abating. In 2003, five million people became infected with HIV worldwide and 3 million died this year alone – the highest number ever.

Close to 28 million people have died from AIDS since the epidemic first began, and millions more are becoming ill and dying every year. According to a new UNAIDS/WHO report, an estimated 40 (between 34 and 46) million people are living with HIV worldwide, including 2.5 (between 2.1 and 2.9) million children under the age of 15. Globally, an estimated 5 (4.2-5.8) million people were newly infected and 3 (2.5-3.5) million people died of AIDS in 2003. Every day in 2003 an estimated 14,000 people were newly infected with HIV.

The pandemic is shifting from cities to rural areas. In its earlier stages, the HIV/AIDS epidemic was predominantly an urban problem, affecting more men than women, and those with relatively higher incomes. Now the epidemic has rapidly moved into the rural areas, hitting those who are least equipped to deal with its consequences. Today, 95% of people living with - and dying of - HIV/AIDS are in developing countries. The overwhelming majority are the rural poor, and among them women figure disproportionately (http://www.fao.org/hivaids/).

2. What is HIV/AIDS? [2]

HIV: Human Immuno-Deficiency Virus: virus that causes AIDS. It attacks the white blood cells, which protect the body from diseases. As a result of cells destroyed by HIV, a person develops AIDS.

AIDS: Acquired Immune Deficiency Syndrome: is a disease of the human immune system, opening the body to multiple infections.

Symptoms of AIDS:

- Extreme tiredness; headaches and fevers; swollen glands in the neck, armpits or groin; cough or shortness of breath.
- opportunistic infections: pneumonia, tuberculosis, skin problems, diarrhea, stomachaches.

HIV/AIDS is spread through the exchange of HIV-infected body fluids: sexual intercourse, transfusion of HIV-infected blood, sharing or re-using skin piercing instruments (circumcision, scarification, manicure, piercing, razor, toothbrush), from an infected mother to her baby during pregnancy or breast-feeding. It takes from 6 months to 10 years after an HIV infection for the symptoms of AIDS to appear. However, a person infected with HIV can pass the virus on to others even before he/she is showing symptoms, a threat which is exacerbated by the potentially long period between catching HIV and developing AIDS. There is no cure for the disease. While antiretroviral drugs can inhibit the replication of HIV and thereby improve survival and quality of life, the drug regimes required are costly and difficult to manage.

[2] FAO's definition

3. Current Situation of the Epidemic in ACP Countries[3]

Table 1: Regional HIV/AIDS statistics and features, end of 2003

Region	Adults and children living with HIV/AIDS	Adults and children newly infected with HIV	Adult prevalence (%)*	Adult & child deaths due to AIDS
Sub-Saharan Africa	25.0 – 28.2 million	3.0 – 3.4 million	7.5 – 8.5	2.2 – 2.4 million
North Africa & Middle East	470 000 – 730 000	43 000 – 67 000	0.2 – 0.4	35 000 – 50 000
South & South-East Asia	4.6 – 8.2 million	610 000 – 1.1 million	0.4 – 0.8	330 000 – 590 000
East Asia & Pacific	700 000 – 1.3 million	150 000 – 270 000	0.1 – 0.1	32 000 – 58 000
Latin America	1.3 – 1.9 million	120 000 – 180 000	0.5 – 0.7	49 000 – 70 000
Caribbean	350 000 – 590 000	45 000 – 80 000	1.9 – 3.1	30 000 – 50 000
Eastern Europe & Central Asia	1.2 – 1.8 million	180 000 – 280 000	0.5 – 0.9	23 000 – 37 000
Western Europe	520 000 – 680 000	30 000 – 40 000	0.3 – 0.3	2 600 – 3 400
North America	790 000 – 1.2 million	36 000 – 54 000	0.5 – 0.7	12 000 – 18 000
Australia & New Zealand	12 000 – 18 000	700 – 1 000	0.1 – 0.1	<100
TOTAL	**40 million (34 – 46 million)**	**5 million (4.2 – 5.8 million)**	**1.1% (0.9 – 1.3%)**	**3 million (2.5 – 3.5 million)**

* The proportion of adults (15 to 49 years of age) living with HIV/AIDS in 2003, using 2003 population numbers.

The ranges around the estimates in this table define the boundaries within which the actual numbers lie, based on the best available information. These ranges are more precise than those of previous years, and work is under way to increase even further the precision of the estimates that will be published mid-2004.

Source: http://www.unaids.org/wad/2003/Epiupdate2003_en/Epi03_03_en.htm#TopOfPage

3.1 Sub-Saharan Africa

AIDS Maintains a Stranglehold in Africa, Hitting Women Disproportionately

Sub-Saharan Africa is the region of the world that is most affected by HIV/AIDS. An estimated 26.6 million people are living with HIV/AIDS and approximately 3.2 million new infections occurred in Sub-Saharan Africa in 2003. In just the past year the epidemic has claimed the lives of an estimated 2.3 million Africans. Ten million young people (aged 15-24) and almost 3 million children under 15 are living with HIV. An estimated eleven million children have been orphaned by AIDS in Sub-Saharan Africa. (http://www.avert.org/aafrica.htm). While infection rates across sub-Saharan Africa vary widely, from less than 1% in Mauritania to almost 40% in Botswana and Swaziland, the breadth of the epidemic indicates that HIV/AIDS now has a firm hold on most countries in the region (see Annex 3).

[3] For an explanation on how estimates of HIV prevalence are developed see Annex 2.

Southern Africa[4]

Southern Africa is the most affected sub-region of the world. An area that has less than 2% of the world's population is home to about 30% of people living with HIV/AIDS worldwide. This is equivalent to one in five adults, the highest rate since the beginning of the epidemic. In 2001, 0, 5 million people died of AIDS, leaving 2,5 million orphans.

The *Republic of South Africa* alone was home to an estimated 5.3 million people with HIV at the end of 2002 — more than any other country in the world.

In four neighbouring countries – *Botswana, Lesotho, Namibia* and *Swaziland* – the epidemic has assumed devastating proportions. There, HIV prevalence has reached extremely high levels without signs of levelling off. In 2002, national HIV prevalence in Swaziland matched that found in Botswana: almost 39%. Just a decade earlier, it had stood at 4%. Other severely affected countries in Southern Africa with prevalence rates over twenty percent are Namibia, Zambia and South Africa; and over ten percent in Malawi and Mozambique. Regionally, Botswana has the highest population percentage of infections (38.8 percent of the population), but South Africa has the highest numbers of infected people in absolute terms and what was until recently the fastest growing epidemic.

In *Mozambique*, median HIV prevalence varied from 8% among pregnant women in the north, to 15% and 17%, respectively, in the centre and south. In the southern part of the country, labour has always been scarce because a significant proportion of the young men look for work in South Africa, Swaziland or Maputo city. On top of this the rural population in the interior districts is facing a second year of drought. Several reports have pointed out that HIV/AIDS also significantly reduces the ability of rural households to recover from natural disasters such as the current drought in Southern Mozambique.

Angola gives cause for concern despite the comparatively low HIV levels detected to date. After almost four decades of war, huge population movements are under way. Millions of people have been able to leave the cities and towns they had been trapped in, internal and cross-border trading movements are resuming, and an estimated 450,000 refugees are returning (many from neighbouring countries with high HIV prevalence rates).Such conditions could prime a sudden eruption of the epidemic (UNAIDS/WHO 2003).

There have been troubling increases in Angola among pregnant women attending antenatal clinics in Luanda. This is a serious concern given that Luanda is a refuge for tens of thousands of people displaced by war in the region. War significantly increases vulnerability to infection by its massive displacement of people and disruption of social and governance systems. There is therefore cause to fear a similar trend in the countries of the Great Lakes region, including Burundi, the Democratic Republic of Congo and Rwanda (Forman, 2003).

[4] CTA has organised a regional workshop with the EU, Irish Cooperation, Austrian Development Cooperation on the "Effects of HIV/AIDS pandemic on rural communities and on agricultural productivity in Southern Africa" in Maputo, Mozambique, 3-7 November 2003

Eastern and Central Africa

In East Africa, the infection rate is highest in *Kenya* (15%) and over five percent in Uganda, Ethiopia, Tanzania, Congo, Burundi and Rwanda. A distinct picture emerges in *Uganda*, where HIV prevalence continues to recede. It fell to 8% in Kampala in 2002 —a remarkable feat, considering that HIV prevalence among pregnant women in two urban antenatal clinics in the city stood at 30% a decade ago. Similar declines echo this accomplishment across Uganda, where double-digit prevalence rates have now become rare (UNAIDS/WHO 2003).

To date, no other country has matched this achievement – at least, not nationally. But the proportion of pregnant women found to be HIV-positive in antenatal clinic sites has fallen to 13% in the *Rwandan* capital, Kigali (from a high of almost 35% in 1993). However, given the massive population movements after the 1994 genocide, comparisons over time in Rwanda should be drawn with caution. In *Ethiopia*'s capital Addis Ababa, among 15-24-year-old pregnant women, HIV prevalence has dropped almost as sharply – down to about 11% in 2003 after having peaked at approximately 24% in 1995. This could mark a significant development, given that the country's epidemic is largely concentrated in its cities (with HIV prevalence less than 2% in Ethiopia's rural pregnant women).

West and Central Africa

Although epidemics in West and Central Africa are comparatively less severe, they are still extremely high, and continue to grow. Rates in Cote D'Ivoire, Sierra Leone, and Burkina Faso are over five percent, and in Cameroon and Central African Republic, rates are over ten percent. There is also evidence of recent rapid HIV spread in *Nigeria*, which is the most populous country in Africa, and has the third largest African epidemic. Nigeria's epidemic is projected to grow to 15 million people—more than one quarter of the adult population—by 2010. (Forman, 2003)

Still paying off is *Senegal* 's decision early in its epidemic to invest massively in HIV-prevention- and-awareness programmes in the 1980s (when HIV infection rates were still very low). Sustained programme efforts have stabilized HIV prevalence levels among pregnant women at around 1% since 1990, with these levels holding fast through 2002, but HIV prevalence among sex workers has increased slowly over the past decade. In Dakar, prevalence among sex workers rose from 5% in 1992 to 14% in 2002, while, in the city of Kaolack, it increased from 8% in 1992 to 23% in 2002. Population- based and other surveys suggest that adult HIV prevalence levels remain relatively low in other countries of the Sahel —around 2% in Mali, and 1% or lower in Gambia, Mauritania and Niger. Like Burkina Faso, Ghana shows stable trends. In the latter case, median HIV prevalence among pregnant women attending antenatal clinics has fluctuated between 2% and just over 3% since 1994 (and barely exceeding 4% in the capital, Accra, in 2002).

The situation is graver in Côte d'Ivoire, which is still saddled with the highest HIV prevalence in West Africa. More than 1 in 10 pregnant women have HIV infections in some of the country's regions, although, in 2002, HIV prevalence among pregnant women in Abidjan dropped to its lowest level (7%) for a decade. Nigeria's most recent surveillance data (2001) suggest an anomaly, with the country's major cities having a lower HIV prevalence (below 5%, in fact) than several smaller cities classified as rural-most noticeably in the south.

No turning point reached in sub-Saharan Africa

Despite widespread improvements across Africa in recent years, the coverage of HIV surveillance systems in a few countries remains too sparse to provide data that capture the epidemic's actual spread and trends. In most cases, war and conflict have been the main culprits-notably in Angola, the Democratic Republic of the Congo, Liberia and Somalia, where surveillance data remain scant.

It is now clear that across most of sub-Saharan Africa (including parts of Southern Africa), HIV prevalence among pregnant women visiting antenatal clinics has been roughly level for several years-albeit at very high levels in Southern Africa. This apparent `levelling off' of HIV prevalence has been interpreted by some observers as an indication that the HIV/AIDS epidemic might have reached a turning point in sub-Saharan Africa. Unfortunately, available evidence does not offer grounds for such conclusions.

Two factors are causing the apparent stabilization of prevalence rates observed in much of the region: AIDS mortality rates and HIV incidence. The combination of high (and, in some countries, rising) rates of AIDS mortality and continuing high HIV incidence has caused HIV prevalence to remain roughly level. In Zambia, for example, national HIV prevalence appears to have stayed relatively stable for the past 8-10 years. Since it is estimated that close to 80,000 people living in Zambia have been newly infected annually over that period, overall prevalence has remained steady because AIDS has killed as many people each year. HIV prevalence might therefore appear stable, but it hides the fact that the persistently high number of annual, new HIV infections is matching the equally high number of AIDS deaths.

We are not, therefore, witnessing a decline in this region's epidemic. There is no cause for complacency. In the absence of effective interventions, the epidemic will continue to wreak havoc in these countries.

The region's epidemics are varied and diverse, which means that the driving factors-along with the circumstances and interventions that might inhibit HIV spread-must be better understood. This seems particularly true for Southern Africa, where structural factors-including socioeconomic and sociocultural inequalities-appear to be bedevilling effective responses.

National reports tracking progress towards implementation of targets established in the Declaration of Commitment on HIV/AIDS (agreed to at the United Nations General Assembly Special Session in June 2001) show that a large number of countries have no national orphan policies in place, voluntary counselling and testing coverage is threadbare, and prevention of mother-to-child transmission is virtually non-existent in many of the hardest-hit countries. Over 70% of countries reporting from Africa on efforts to reduce HIV transmission to infants and young children have virtually no programmes to administer prophylactic antiretroviral therapy to women during childbirth and to newborns. Almost half the African countries reporting have not adopted legislation to prevent discrimination against people living with HIV/AIDS, and only one in four countries report that at least 50% of patients with other sexually transmitted infections (co-factors for HIV infection) are being diagnosed, counselled and treated. Although treatment coverage remains low (with only an estimated 50,000 people having access to antiretroviral drugs in 2002 – see Annex 4), some countries, such as Botswana, Cameroon, Eritrea, Nigeria and Uganda have made serious efforts to increase access to antiretroviral drugs through both the public and private sectors.

But the past two-to-three years have also seen an upsurge of political support, stronger policy formulation, boosted funding, and moves towards cushioning societies against the impact of the epidemic-a momentum that has to be maintained if the epidemic is to be reversed.

3.2 The Caribbean

HIV/AIDS is well entrenched in this region, with a national HIV prevalence of at least 1% in 12 countries. The most recent national estimates showed HIV prevalence among pregnant women reaching or exceeding 2% in six of them: the Bahamas, Belize, the Dominican Republic, Guyana, Haiti, and Trinidad and Tobago.

Two of the region's most serious epidemics are on Hispaniola Island-in Haiti and the Dominican Republic. Stricken with the lowest health and other development indicators in the entire region, Haitians' woes are being aggravated dramatically by the AIDS epidemic, which is claiming an estimated 30,000 lives a year and has left some 200,000 children orphaned by AIDS. Haiti's national HIV prevalence levels have remained at 5-6% since the late 1980s. The factors contributing to this apparent levelling off of national HIV prevalence are unclear, although it must be noted that sentinel surveillance has shown that HIV prevalence levels vary dramatically (from as high as 13% in the north-west to 2-3% in the south along the border with the Dominican Republic). There are regions within Haiti with rates of up to 17%. Haiti also has 200.000 of the total of 250.000 orphans due to HIV/AIDS in the Caribbean. With about 60% of the population under 24 years of age, much scope exists for renewed growth in Haiti's mainly heterosexually-transmitted epidemic. Condom use is very low among young people, despite evidence that HIV/AIDS knowledge is comparatively strong (though more so among men than women).

Further east, in the Dominican Republic, prevention efforts in recent years appear to have stabilized HIV prevalence among 15-24-year-olds in the capital of Santo Domingo. Having climbed to 3% in 1995, HIV prevalence among pregnant women in that age group in the capital has fallen to less than 1%. Increased condom use and fewer sexual partners appear to have been factors. However, the situation appears different in some other cities, where HIV prevalence as high as 12% has been measured among female sex workers, pointing to the need to expand and sustain prevention efforts. In addition, little is known about HIV patterns among men who have sex with men-a potentially important facet of the country's epidemic.

In addition to Haiti and the Dominican Republic, Guyana, the Bahamas, Belize, and Trinidad and Tobago have the highest rates of adult people living with HIV, and are all at epidemic levels (over 1% infected).

Transmission pathways and hidden realities

In the Caribbean, AIDS is mainly caused by heterosexual unprotected sex, mixing of ages which puts at risk young women especially (in Trinidad and Tobago, women of 15-19 years old are at a risk for infection five times higher than males of these ages). In specific cases (Puerto Rico), sharing of needles for drug injection is named as the main cause of the spreading of AIDS.

The epidemics will not be vanquished until countries come to terms with the hidden but widespread realities of injecting drug use and male-to-male sex. Stigmatizing and denying such behaviour can only fuel the silent epidemics that are under way in this region. Absent currently is sufficient information about vulnerable groups that can inform better HIV/AIDS programming. Better epidemiological and behavioural

surveillance data, coupled with stronger social and political mobilization around AIDS, can boost responses to match the realities of the epidemic.

The response in this region has intensified over the past year, especially in the most affected countries. The proportion of patients who need and receive antiretroviral treatment in the region varies enormously, with some countries having coverage of less than 25% while others have more than 75%. Overall it has been estimated that antiretroviral treatment is provided to about half of the patients in the region who need it. But several subregional initiatives are raising the prospect of increased access in some countries, including the Bahamas and Barbados.

Several countries have boosted their national HIV/AIDS budgets, while Central American and Caribbean countries have seen an almost four-fold increase in external resources for AIDS, compared to three years ago. Partnerships are also being consolidated, including those mustered under the mantle of the Pan-Caribbean Partnership.

Stigma and discrimination remain a major obstacle, however. A recent analysis of national expenditure on AIDS (performed by the SIDALAC project, with UNAIDS support), for example, has shown that investment in prevention and care activities for the most vulnerable populations (such as men who have sex with men, and sex workers) still does not match their prominence in the epidemic. Discrimination appears to be the chief cause of this pattern.

3.3 The Pacific

HIV/AIDS is still considered a low level epidemic in the Pacific, except for Papua-New Guinea. Nevertheless, the region has rates of sexually transmitted diseases (STDs) which are very alarming (up to 30% of one particular infection on some islands). As the activities and behaviours that spread HIV/AIDS are the same as for other STDs, it is at great risk to spread.

In Papua New Guinea, only 15% of female sex workers report consistent condom use, and HIV prevalence among sex workers has reached 17%. Indeed, Papua New Guinea now has the highest reported rate of HIV infection in the Pacific, with an estimated HIV prevalence of almost 1% among pregnant women attending antenatal clinics in Port Moresby. 7036 people were reported to be infected in March 2003, but the WHO estimates a total of 15.000-20.000 people living with HIV/AIDS. A significant fact is also that in this last year, HIV/AIDS has spread to all the provinces, whereas before, some regions remained free of cases.

Papua New Guinea has had a national HIV/AIDS policy since 1989, but these recent developments point to a pressing need to strengthen prevention efforts. Government response has been slow, and a specific National AIDS Council Act took 3 years to be finally passed in 1997.

In Fiji, the Government commitment is much higher, even though drugs are only available to newborn and medical workers. In Kiribati, a parliamentary committee on HIV/AIDS was formed late in 2003, which gives hope for financial commitment.

In the Pacific region in general, seafarers are a high risk group, in part because of the long periods they spend away from home. The Secretariat of the Pacific Community (SPC) is a partner to several maritime colleges which have incorporated a compulsory section on HIV/AIDS into their curricula. Their activities include peer education, resource production and training the trainers.

4. The Effects of HIV-AIDS in the Agricultural Sector

Although the focus of HIV/AIDS has often concentrated upon the health sector, the disease has had a tremendous impact upon the agricultural sector in developing countries. Up to 80% of the people in the most affected countries rely upon agriculture for their subsistence. HIV/AIDS predominantly affects the productive labour force, depleting the affected regions of their food producers and farmers and decimating the agricultural sector for generations to come (http://www.fao.org/sd/2003/PE07023_en.htm).

Besides the human suffering, AIDS threatens sustainable agriculture and rural development. At the household level this translates into loss of adult farm labour, as adults fall sick and die, resulting in a decline in productivity, loss of assets and income, increase in household expenditures to meet medical bills and funeral expenses, and a rise in the number of dependents relying on a smaller number of productive family members (du Guerny, 2000).

HIV/AIDS negatively affects agricultural production by reducing the labour force and disrupting traditional social security mechanisms. It results in the forced disposal of productive assets, the loss of indigenous farming methods, and may necessitate a switch to less labour-intensive crop production - often leading in turn to declining levels of nutrition.

On the other hand, strategies to solve or to alleviate these effects need to consider the agricultural sector, which can provide key response to HIV/AIDS at three levels:

- **Prevention** (strengthening food and livelihood security)
- **Care** (nutritionally balanced diet)
- **Mitigation** (key role of agriculture in food security and nutrition; adaptation of agricultural practices to changed circumstances)

Current strategies are focused more on prevention and care and less on research on mitigation. This last part should also be a priority.

4.1 Poverty and Loss of Assets

Poverty, which is widespread in rural areas, leads to poor nutrition and poor health, which make a person more vulnerable to HIV infection. Poor health can also shorten the incubation period of the virus, causing symptoms to appear sooner. This situation is especially severe for the rural poor, who have the least access to medical care.

Poverty also makes education and access to mass media and other sources of information more difficult. The poor are less able to equip themselves with the knowledge to prevent the risk of transmission.

Poverty and mobility are critical dimensions of the HIV/AIDS epidemic. The main driving force behind rural migratory movements is poverty and the lack of livelihood opportunities in rural areas. Migrant workers who are away from home for extended periods of time are more likely to engage in unprotected casual or commercial sex, thus increasing their risk of exposure to HIV transmission.

The agriculture sector plays an important role in influencing migratory patterns. For example, infrastructure projects may pave the way for increased agricultural production and marketing but may also encourage high levels of labour mobility and temporary migration. Those less mobile groups who remain in rural areas have to

manage the impacts of the HIV epidemic with a dwindling resource base. At the same time, as an increasing number of HIV-infected urban dwellers return to their rural communities for care, survival strategies become stretched, food security threatened and poverty increases. (http://www.fao.org/hivaids/impacts/poverty_en.htm)

HIV/AIDS causes a sharp increase in poverty, especially rural poverty, as people sell productive assets (land, livestock, tools and machinery) to pay for health and funeral costs. Land tenure systems which exclude women, leave families with no land to farm, and those who have land cannot afford to buy inputs (seeds, chemicals, fertiliser).

Little is known about the extent to which AIDS affected households may be excluded from resources critical to their survival such as common property grazing lands, forests or fisheries. This may due to labour scarcity and/or stigma.

Increase in property grabbing is especially difficult for women and children. In Namibia, 44% of the widows reported to have lost cattle, 28% had lost small livestock and 41% had lost farm equipment to relatives after the household's male head had died.

4.2 Labour and Productivity

As HIV is predominantly a sexually transmitted disease, the largest number of people infected are those of reproductive age. Thus, the HIV epidemic not only reduces the total number of people, but the age and sex composition changes, with a population dominated by the elderly and the youth.

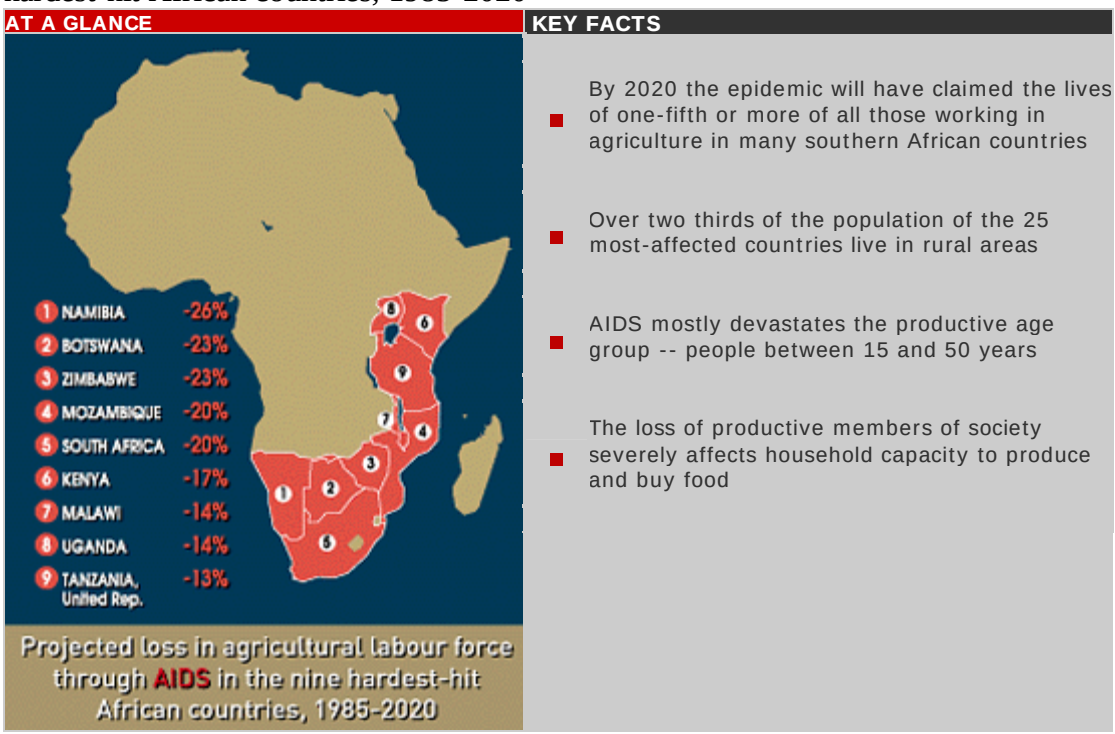
The reproductive age group is also the most productive. When a person is sick, the household not only has to manage without his or her labour contribution, but also with the loss of labour from those who have to care for the sick family member.

AIDS is characterized by recurrent periods of sickness, and consequently a recurrent loss of labour. This eventually erodes agricultural production and food security. Much of rural agricultural production is highly labour-dependent. In some agro-ecological zones, labour demands are concentrated in specific and critical periods of the year. In those areas sickness or funeral attendance may mean that the planting season is missed, and with it a full crop.

The infection rates being higher among women, the agricultural work is even more affected (women have little resources to hire labour) and the high number of female-headed households with orphans have relatively fewer productive assets such as land (about 30% less than other households), ploughs, ox charts, cattle, goats and chicken. Loss of assets and shift from labour-intensive crops to subsistence crops with less work reduces incomes and affects the economy of the country (decrease in exports).

FAO estimates that 7 millions agricultural workers have been killed by the pandemic and 16 million more could die by 2020. In the 9 most affected African countries, it has been projected that AIDS will reduce the agricultural workforce for the period 1985-2020 by the following proportions: Namibia (26%), Bostwana (23%), Zimbabwe (23%), Mozambique (20%), South Africa (20%), Kenya (17%), Malawi (14%), Uganda (14%), Tanzania (13%) (see Figure 1).

Figure 1: Projected loss in agricultural labour force through AIDS in the nine hardest-hit African countries, 1985-2020



Source: http://www.fao.org/hivaids/

In Zimbabwe in 2003, 23 percent of labour losses among farming communities were due to HIV/AIDS. As a result, the total area cropped in Zimbabwe had declined by about 39 percent. "Crop yield has declined by 59 percent, and marketed output declines of 66 percent could be experienced in Zimbabwe's agricultural sector due to the HIV/AIDS pandemic," the UN Relief and Recovery Unit said.

The impact of HIV/AIDS on agriculture has seen both "labour quantity and quality compromised through incapacitation and deaths". This included the "loss of agricultural extension workers through death, illness and discharge on medical grounds", while a "significant amount of man-hours have been lost [through] increased absenteeism because of illness, caring for the sick or attending funerals".

http://www.reliefweb.int/w/rwb.nsf/0/a736e98aba9f996685256dff006a5aae?OpenDocument

4.3. Food Security

HIV/AIDS takes its toll on food security in a number of ways. For example:

- HIV increases fatigue and decreases work productivity, which means less food on the table. In households coping with sick family members, food consumption generally decreases. As adults fall ill, families face increasing medical and health care costs, thus reducing the possibility for them to purchase the food that they can no longer produce.
- While the number of productive family members decline, the number of dependants grows, as households lose adults and take in orphans of dead relatives, further threatening household food security.

- Rural communities face a greater burden of care as many sick urban dwellers and migrant labourers return to their village homes. As more household members die, families face declining productivity, loss of knowledge of indigenous farming methods and the continual depletion of assets.
- Research in Tanzania showed that per capita food consumption in the poorest households decreased by 15 percent when an adult died. A study carried out in Uganda showed that food insecurity and malnutrition were foremost among the immediate problems faced by female-headed, AIDS-affected households.

In addition to household food security, national food production is also affected by the loss of agricultural workers, especially in countries where agriculture forms a large part of the gross domestic product.

(http://www.fao.org/hivaids/impacts/food_en.htm)

4.4 Nutrition

HIV/AIDS has direct impacts on nutrition, particularly for people living with HIV/AIDS and for nutritionally vulnerable members in HIV/AIDS-affected households.

People living with HIV face a vicious cycle in which repeated episodes of illness caused by HIV lead to malnutrition, and malnutrition in turn further accelerates the onset of AIDS. HIV damages a person's immune system, and the repeated illness that ensues reduces appetite; moreover, nutrients are lost from vomiting and diarrhoea, and the use of certain medications. Infections also interfere with the body's ability to absorb and use nutrients, which are needed to fight off HIV. This has serious consequences for the poor, who are more likely to be malnourished even before they become infected.

Malnutrition in itself also leads to the suppression of the immune system, giving rise to more frequent illnesses and accelerating the development of AIDS. It may also be associated with increased risk of HIV transmission from mother to child.

The recurring bouts of sickness of those living with HIV places an enormous workload on those who care for them and those who foster orphans. Female-headed and orphan-headed households are most at risk. Moreover, the costs of health care and the labour constraints gradually drain the household of its means to make a living. This further exacerbates poverty, food insecurity, malnutrition and disease. Food-insecure households are more likely to turn to livelihoods that put them at greater risk of infection, such as migration and prostitution.

(http://www.fao.org/hivaids/impacts/nutrition_en.htm)

4.5 Agricultural Knowledge

The loss of farm labour has a visible impact on agricultural production, but there are less tangible losses associated with the death of a family member - indigenous knowledge, for instance.

Rural farming systems depend upon a wealth of local agricultural and biodiversity knowledge that is essential for maintaining production. The loss of reproductive generations takes with it the channel for passing livelihood skills and agricultural knowledge from generation to generation. The result? A young population ill-

equipped to manage the impacts of the epidemic and to maintain successful agricultural production.

Other types of community knowledge, such as maintaining local genetic diversity, is often passed orally from generation to generation and are fundamental for nurturing and preserving cultural identity. The death of a generation means a break in the chain, and with it a disruption of the oral tradition.

(http://www.fao.org/hivaids/impacts/knowledge_en.htm)

4.6 The Environment and Natural Resources

Where labour is scarce and assets have been lost, it is increasingly difficult to make sustainable use of natural resources (which often means forgoing consumption now in return for more consumption in the future). Long-term considerations give way to more pressing immediate concerns, with the resulting negative consequences for the environment and the natural resource base.

Less labour means that

- less land can be cultivated => the abandoned land reverts to bush
- land management practices decrease => loss of soil fertility, more erosion
- diversity in farming systems declines (preference for crops with low labour requirements) => loss of biodiversity and genetic resources; increase in crop losses due to pests and diseases
- less time is available for on-farm conservation and irrigation practices
- gathering of wild plants increases => depletion of the resource base
- wood extraction in sensitive areas increases due to lack of time / fewer controls and increase in needs of coffins for people who have died from AIDS => deforestation with all its negative consequences (soil erosion, watershed damage, etc.)
- water resources are less well maintained => deterioration in water quality

5. Cross-cutting Issues: Gender and Youth

5.1 Gender

Gender inequality is one of the driving forces behind the spread of HIV. In many places, HIV infection rates are three to five times higher among young women than young men.

This disparity can be partly explained by biological factors, which make women more vulnerable to HIV, especially in youth and adolescence. However, it also reflects a number of prevailing cultural factors: men are more dominant, they tend to choose younger women, and tradition and social pressures limit women's ability to express their wishes regarding their sexuality, their choice of sexual partners and their ability to demand protected intercourse. Taken together, these factors increase women's risk of contracting HIV. Poverty is another risk factor for women, forcing many into sex-work, placing them at high risk of contracting HIV and transmitting it to partners. In several countries with generalized HIV epidemics, such as Cameroon, Central African Republic, Equatorial Guinea, Lesotho and Sierra Leone, more than eighty percent of

young women aged fifteen to twenty four do not have sufficient knowledge about HIV.

Sexual Domination, Homophobia, and Violence Against Women

Notions of masculinity that emphasize sexual domination over women as a defining characteristic of manhood contribute to homophobia and the stigmatization of men who have sex with men. The stigma and fear that result compel men who have sex with men to keep their sexual behaviour secret and deny their sexual risk, thereby increasing their own risk as well as the risk of their partners, female or male.

Another disturbing out-come of the emphasis on sexual and physical domination of women as central to masculinity is violence against women. In population-based studies conducted in a wide range of countries worldwide,10 to over 50%of women report physical assault by an intimate partner. One-third to one-half of physically abused women also report sexual coercion. Research conducted in a wide range of countries, including Guatemala, Haiti, India, Jamaica and Papua New Guinea found that violence against women contributes both directly and indirectly to women 's vulnerability to HIV. Most obviously, violent sexual acts such as rape are likely to result in vaginal tearing or lacerations, thus dramatically increasing the risk of contracting an STI or HIV from the rapist. Additionally, fear of violence or abandonment often prevents women from discussing fidelity with their partners or asking their partners to wear a condom.

(http://whqlibdoc.who.int/publications/2003/9241590394.pdf)

Sex as a Marketable Commodity

Studies from across the developing world indicate that poverty is overwhelmingly the root cause of women bartering sex for economic gain or survival. When sex 'buys' food, shelter, or safety, it is very difficult to follow prevention messages that call for a reduction in the number of sexual partners. Although commercial sex work is the most well-known way for women to exchange sex for money, there is a range of other types of 'transactional 'sexual partnerships that women use as a rational means to make ends meet. For example, in Haiti, faced with trying to balance the multiple demands of family and economic survival, single mothers often enter into a series of sexual relationships, called plasaj ,in order to obtain food and housing for themselves and their children. Alarmingly, research has shown that women in this setting who entered a sexual relationship out of economic necessity had increased odds of having syphilis and HIV infection.

(http://whqlibdoc.who.int/publications/2003/9241590394.pdf)

Women, War and HIV/AIDS

Today's wars are more likely to be fought within borders rather than against invading forces or across borders. The often-cited percentage of women and children who make up refugee and internally displaced populations is from 70 to 80 percent of the estimated forty to fifty million uprooted. Two African countries, Rwanda and Sierra Leone, illustrate how war affects men and women differently. More men die in battle than women. But women and girls are deliberately targeted for rape, torture, sexual slavery, trafficking, and forced marriages and pregnancies.

Rwandan women on both sides of the conflict were beaten, raped and tortured. The violence did not end when the women arrived at the refugee camps. Rapes occurred frequently in and around the refugee camps. Women without adult men in their

households were the most vulnerable. A number of women became pregnant as a result of rape during the conflict or in flight. Those who gave birth in the camps became pariahs. With no one to stand up for them, the unmarried mothers were easy targets for sexual abuse. They reported that men walked into their huts at will, raped them and left.

In many respects internally displaced persons (IDPs), such as in Sierra Leone, are more at risk than refugees because they are not protected under the mandate of a specific UN agency. In addition to the protection of the UN High Commissioner for Refugees (UNHCR), refugees also have legal recourse under International refugee law. Women in IDP camps face the same problems refugees do. Male food distributors cheat women on their food allocations and demand sexual favors in exchange for entitlements of food. Male hegemony prevails in camps through the UN system of appointing men leaders and decision-makers. Even though a few women leaders may attend meetings, the power is decidedly in the hands of men. The gender imbalance—significantly fewer women employed by the UN and NGOs—perpetuates the disempowerment of refugee and displaced women and provides few opportunities for their voices to be heard.

Gender violence in the camps, including domestic violence within households, is a major problem. The rebels and other military units inflict brutalities on civilians in their paths. The rebels destroy villages and capture young people. Boys are forced to fight and are given drugs that induce them to commit atrocities. If they refuse they are killed. Girls become sexual slaves or servants to the combatants and sometimes fighters.

(http://www.worldbank.org/html/prmge/womensmonth/benjamin.doc)

Gender inequalities also make women more vulnerable to the effects of the HIV/AIDS epidemic. Rural women's domestic workloads tend to increase, as they are often the care providers when household members are sick. In addition, access to productive resources, including land, credit, training and technology, frequently favour men.

As the household asset base dwindles and more members become sick, women's access to scarce resources is further diminished. Moreover, following the death of a spouse, a widow may lose access to household and productive resources such as land, resulting in further impoverishment.

(http://www.fao.org/hivaids/impacts/gender_en.htm)

5.2 Youth

One-third of all currently infected individuals are young –ages 15 to 24- and half of all new infections occur among young people. About 1.7 million of new infections of adolescents occur in Sub-Saharan Africa. Experts estimate that half a million African youth will die from AIDS by 2005. This vulnerability is founded in risky sexual behaviour and a lack of access to HIV information and preventive services. Despite the generalized nature of the epidemic in countries across Sub-Saharan Africa, many young people in the region still do not know how to protect themselves from HIV. Reports on levels of accurate information among youth about HIV/AIDS are startling:

half of the teenage girls in sub-Saharan Africa do not realize that a healthy-looking person can be living with HIV/AIDS (Forman, 2003).

Surveys from forty countries indicate that more than fifty per cent of young people aged fifteen to twenty four harbour serious misconceptions about how HIV/AIDS is transmitted. Such misconceptions vary from one culture to another, regarding how HIV is spread (by mosquito bites or witchcraft, for example) and on how it can be avoided (by eating a certain fish, for example, or having sex with a virgin). 'Virgin rape' is a particularly abhorrent offshoot of these myths and misinformation, with increasing reports of rape of young boys and girls, and even infants (Forman, 2003)

Inadequate sexual health information and limited access to health care are obstacles to lowering adolescent HIV/STD infection rates. African adolescents cite lack of knowledge, inaccessibility, and safety concerns as primary reasons for not using contraception. For example, one study showed that less than 50 percent of youth in Madagascar and Nigeria know about contraception. Limited resources also make contraceptive use lower in Africa than in other world regions.

Many health services workers feel it is inappropriate to provide contraceptives to adolescents, often making it difficult or impossible for youth to obtain condoms and other contraception. For example, a study in Kenya found that three-fourths of family planning workers were unwilling to provide contraceptives to young women who had not given birth.

Sexual Health Attitudes and Behaviors Greatly Affect Adolescents' Risk of Infection

In sub-Saharan Africa, as in other regions of the world, a culture of silence surrounds most reproductive health issues. Many adults are uncomfortable talking about sexuality with their children. Others lack accurate sexual health knowledge.

Many people feel unable to discuss sexuality across perceived barriers of gender and age differences. Many are also reluctant to provide sexually active adolescents with condoms.

In several African countries, some people believe that men are biologically programmed to need sexual intercourse with more than one woman. Polygamy is a central, social institution that reinforces this belief. Moreover, some men believe that this "biologically programmed need" makes high-risk sex unavoidable.

In some impoverished communities, high HIV infection rates may be partly explained by early sexual initiation, consensual or coerced. For example, in a survey of 1,600 urban Zambian youth, over 25 percent of 10-year-old children and 60 percent of 14-year-old youth reported already having sexual intercourse.

One study of adolescents in 17 African countries showed that those with more education were far more likely to experience casual sex and to use condoms for casual sex when compared to less educated youth.

(http://www.advocatesforyouth.org/publications/factsheet/fshivaidsaf.htm#2)

6. Stigma and Discrimination

From the moment scientists identified HIV and AIDS, social responses of fear, denial, stigma and discrimination have accompanied the epidemic. Discrimination has spread rapidly, fuelling anxiety and prejudice against the groups most affected, as well as

those living with HIV or AIDS. It goes without saying that HIV and AIDS are as much about social phenomena as they are about biological and medical concerns. Across the world the global epidemic of HIV/AIDS has shown itself capable of triggering responses of compassion, solidarity and support, bringing out the best in people, their families and communities. But the disease is also associated with stigma, repression and discrimination, as individuals affected (or believed to be affected) by HIV have been rejected by their families, their loved ones and their communities. This rejection holds as true in the rich countries of the north as it does in the poorer countries of the south.

Stigma is a powerful tool of social control. Stigma can be used to marginalize, exclude and exercise power over individuals who show certain characteristics. While the societal rejection of certain social groups (e.g. 'homosexuals, injecting drug users, sex workers') may predate HIV/AIDS, the disease has, in many cases, reinforced this stigma. By blaming certain individuals or groups, society can excuse itself from the responsibility of caring for and looking after such populations. This is seen not only in the manner in which 'outsider' groups are often blamed for bringing HIV into a country, but also in how such groups are denied access to the services and treatment they need.

In many societies people living with HIV and AIDS are often seen as shameful. In some societies the infection is associated with minority groups or behaviours, for example, homosexuality. In some cases HIV/AIDS may be linked to 'perversion' and those infected will be punished. Also, in some societies HIV/AIDS is seen as the result of personal irresponsibility. Sometimes, HIV and AIDS are believed to bring shame upon the family or community. And whilst negative responses to HIV/AIDS unfortunately widely exist, they often feed upon and reinforce dominant ideas of good and bad with respect to sex and illness, and proper and improper behaviours.

Factors which contribute to HIV/AIDS -related stigma:

- HIV/AIDS is a life-threatening disease
- People are scared of contracting HIV
- The disease's association with behaviours (such as sex between men and injecting drug-use) that are already stigmatised in many societies
- People living with HIV/AIDS are often thought of as being responsible for becoming infected

Religious or moral beliefs that lead some people to believe that having HIV/AIDS is the result of moral fault (such as promiscuity or 'deviant sex') that deserves to be punished.

Sexually transmitted diseases are well known for triggering strong responses and reactions. In the past, in some epidemics, for example TB, the real or supposed contagiousness of the disease has resulted in the isolation and exclusion of infected people. From early in the AIDS epidemic a series of powerful images were used that reinforced and legitimised stigmatisation.

- HIV/AIDS as punishment (e.g. for immoral behaviour)
- HIV/AIDS as a crime (e.g. in relation to innocent and guilty victims)
- HIV/AIDS as war (e.g. in relation to a virus which need to be fought)

- HIV/AIDS as horror (e.g. in which infected people are demonised and feared)
- HIV/AIDS as otherness (in which the disease is an affliction of those set apart)

Together with the widespread belief that HIV/AIDS is shameful, these images represent 'ready-made' but inaccurate explanations that provide a powerful basis for both stigma and discrimination. These stereotypes also enable some people to deny that they personally are likely to be infected or affected.

Stigma and discrimination can arise from community-level responses to HIV and AIDS. The harassing of individuals suspected of being infected or of belonging to a particular group has been widely reported. It is often motivated by the need to blame and punish and in extreme circumstances can extend to acts of violence and murder. Attacks on men who are assumed gay have increased in many parts of the world, and HIV and AIDS related murders have been reported in countries as diverse as Brazil, Colombia, Ethiopia, India, South Africa and Thailand. In December 1998, Gugu Dhlamini was stoned and beaten to death by neighbours in her township near Durban, South Africa, after speaking out openly on World AIDS Day about her HIV status.

HIV-related stigma and discrimination remains an enormous barrier to effectively fighting the HIV and AIDS epidemic. Fear of discrimination often prevents people from seeking treatment for AIDS or from admitting their HIV status publicly. People with or suspected of having HIV may be turned away from healthcare services, employment, refused entry to foreign country. In some cases, they may be evicted from home by their families and rejected by their friends and colleagues. The stigma attached to HIV/AIDS can extend into the next generation, placing an emotional burden on those left behind.

Denial goes hand in hand with discrimination, with many people continuing to deny that HIV exists in their communities. Today, HIV/AIDS threatens the welfare and well being of people throughout the world. At the end of the year 2003, 40 million people were living with HIV or AIDS and during the year 3 million died from AIDS-related illness. Combating the stigma and discrimination against people who are affected by HIV/AIDS is as important as developing the medical cures in the process of preventing and controlling the global epidemic.

So how can progress be made in overcoming this stigma and discrimination? How can we change people attitudes to AIDS? A certain amount can be achieved through the legal process. In some countries people who are living with HIV or AIDS lack knowledge of their rights in society. They need to be educated, so they are able to challenge the discrimination, stigma and denial that they meet in society. Institutional and other monitoring mechanisms can enforce the rights of people living with HIV or AIDS and provide powerful means of mitigating the worst effects of discrimination and stigma.

However, no policy or law can alone combat HIV/AIDS related discrimination. The fear and prejudice that lies at the core of the HIV/AIDS discrimination needs to be tackled at the community and national levels. A more enabling environment needs to be created to increase the visibility of people with HIV/AIDS as a 'normal' part of any society. In the future, the task is to confront the fear based messages and biased social attitudes, in order to reduce the discrimination and stigma of people who are living with HIV or AIDS.

(http://www.avert.org/aidsstigma.htm)

7. Possible Responses and Mitigation Strategies

The impact of HIV/AIDS on food security and rural livelihoods is devastating. A comprehensive, long-term perspective is essential if the agriculture sector is to be successful in addressing the HIV pandemic.

Preventing HIV/AIDS and mitigating its consequences must be seen as mutually supportive activities. The agriculture sector is faced with a dual challenge: supporting rural livelihoods and reducing the vulnerability of farm households to the impacts of HIV/AIDS; and satisfying national economic objectives, in which agriculture often has a key role to play.

There is thus a need to integrate HIV/AIDS concerns into multi-sectoral vulnerability assessments, food security analyses and early-warning systems, based on a number of general principles:

- Supporting diversity, gender equality and human rights;
- Reducing the stigma that accompanies HIV/AIDS; and
- Building partnerships and developing creative synergies with other sectors.

The challenge lies in the development of systemic and coordinated interventions, which take the agricultural sector and its capacity into consideration both to reduce the vulnerability to acquire the disease and to live with it, through improved food security.

7.1 Introducing Labour-saving Technologies

The labour shortage caused by the illness or death of household members is one of the most pervasive and well documented consequences of HIV/AIDS.

Therefore, the use of labour-saving technologies represents an important mitigation strategy. Technologies are needed that reduce the time spent on agricultural and household tasks and that can be used efficiently by youth and the elderly.

Recommendations include: low-input agriculture, lighter ploughs and tools that can be used by older children, women and the elderly; improved seed varieties that require less labour for weeding, intercropping; minimum tillage; access to potable water; and fuel-efficient stoves that can free women for more economically productive activities.

Labour can be saved indirectly through improved storage facilities, which can help reduce post-harvest losses and increase food security.

Home gardens with a variety of nutritious food crops could contribute towards household food production. Although home gardens can be labour-intensive, the distribution of labour over the production cycle is regular and does not depend strictly on planting times.

Small ruminants can also provide high-protein foods. Moreover, they can be kept close to the house and require minimal care.

(http://www.fao.org/hivaids/responses/labour_en.htm)

7.2 Preserving Knowledge Transmission

Most AIDS-related deaths occur in the reproductive age group. This generational loss can result in a corresponding loss of agricultural knowledge, practices and skills that are passed from one generation to the next.

Recommendations on how to preserve knowledge and transmit it across gender and generations are: informal and formal community institutions, such as extension services and schools, that are reoriented to meet the information needs of households that have lost an adult. Local knowledge, including biodiversity and gender-specific skills, must be preserved.

Orphan and female-headed households, as well as widowers, need information to be able to maintain agricultural production. Moreover, households without an adult need to be able to draw up cropping plans, maintain animal husbandry practices, store grain, market agricultural production, and be knowledgeable about gender-specific production practices. Effective initiatives need to be designed, implemented, and evaluated in order to meet the informational needs of these households.

(http://www.fao.org/hivaids/responses/knowledge_en.htm) (see also section 8: Information and Communication Strategies)

7.3 Strengthening Rural Institutions

Mitigation strategies to cope with the epidemic need to be directed not only to individuals and households, but also to community organizations and institutions, which also suffer from the loss of staff, implementation capacity and institutional knowledge due to AIDS deaths. Rural service providers of all types -- for education, health, agricultural extension, credit and finance; women's associations; nutrition groups; irrigation committees; and terrace maintenance associations -- need to be supported.

Staffs need to be equipped with knowledge of the impact that HIV/AIDS has on rural livelihoods and how to incorporate AIDS-sensitive strategies into their work. Some communities have been extremely responsive to the epidemic, and institutions have been strengthened to be able to deal with a variety of problems created by increased morbidity and mortality. Social support groups, savings clubs and credit associations, self-help groups, community-based organizations, income-generating projects and exchange of labour are all essential in supporting rural livelihoods.

An agriculture-sector strategy must not overlook these institutions and their initiatives. External support from donors, NGOs, religious organizations or other groups should be directed towards strengthening these kinds of community-based initiatives rather than replacing them. As most assistance provided to AIDS-affected households comes from family, neighbours and local informal community institutions, it is important that the lessons from these initiatives be documented, shared and built upon.

(http://www.fao.org/hivaids/responses/rural_en.htm)

7.4 Enhancing Nutrition

Two major responses can address nutrition issues in the HIV/AIDS context: improving the nutrition status of people living with HIV/AIDS; and protecting the food security and nutrition in HIV/AIDS-affected households.

Good nutrition helps those who are infected to extend the period during which they are socially and economically active and able to support other family members. Maintaining or improving nutrition means: having a balanced and varied diet;

maintaining weight and eating regularly; staying active and taking sufficient rest; and stimulating the appetite and thus the immune system.

For HIV/AIDS-affected households, strengthening their livelihoods has a direct impact on the nutrition status of orphans, vulnerable children and people living with HIV/AIDS. Two important elements must be addressed, including strengthening the capacity of local institutions to address the impact of HIV/AIDS on household food security and nutrition, and providing assistance to HIV/AIDS-affected communities and households. This assistance can take several forms: livelihood support; strengthening community-level care systems; and providing nutritional care for parents, caretakers and children with HIV/AIDS.

The well-being of the children must also be addressed by increasing their access to basic education, life skills and vocational training opportunities through a mix of formal and informal education. This is not only important to their short-term survival, but also to their long-term prospects of food, nutrition and livelihood security.

(http://www.fao.org/hivaids/responses/nutrition_en.htm)

7.5 Promoting Gender Equality

Although gender equality is an issue that is not specific to the agricultural sector, it is so integral to the HIV/AIDS epidemic and its social and economic consequences that it should be a part of any agriculture strategy designed to alleviate the impacts of the epidemic.

Not only are women physically more vulnerable to HIV infection than men, they are also more vulnerable to negative social and economic outcomes as a result of HIV/AIDS because of the inequalities in their access to land, credit, employment, education and information.

In some countries, legislation has been passed providing women with equal inheritance rights to land when their husband dies. While this is an important legal precedent, the enforcement of this law over local customary practices is equally critical. In this regard, the capacity of local officials needs to be supported so they are able to negotiate this delicate process.

Many of the persistent gender issues are "structural" concerns of societies and require a re-negotiation of gender relationships. Re-negotiating often means challenging existing power structures, not only at the local level but through policy and legislation at national and regional levels.

The agriculture sector needs to actively promote gender equality in the areas of its competence, with an emphasis on access to and control over productive resources, including land, credit, knowledge, agricultural inputs and technology.

(http://www.fao.org/hivaids/responses/gender_en.htm)

7.6 Safety Nets

Communities have developed a range of strategies to assist their members in surviving the impacts of HIV/AIDS, as well as other threats to their livelihoods and food security.

Most of these strategies are traditionally based and coupled with extended family support. They account for the vast majority of assistance provided to AIDS-affected households.

Social support groups, savings clubs and credit associations, self-help groups, community based organizations, income generating projects and exchange of labour are all essential in supporting rural livelihoods.

Community support through labour sharing and food sharing from communal plots are fundamental to households affected by HIV/AIDS. External support from donors, NGOs, religious organizations or other groups should be directed towards strengthening these kinds of community-based initiatives rather than replacing them.

(http://www.fao.org/hivaids/responses/safety_en.htm)

7.7 Creating Monitoring Systems

Response strategies need to be monitored and evaluated to assist in the design and implementation of more effective programmes to alleviate the impacts of HIV/AIDS on rural livelihoods and food security. A preliminary analysis of vulnerable groups such as people living with HIV/AIDS and their families and orphans at the outset of any activity is essential. This will enhance understanding not only of the impacts of HIV/AIDS but also the underlying dynamics of poverty and empowerment in the local community, thus enabling projects to be responsive to the problems posed by HIV/AIDS.

In addition, participatory monitoring systems should be developed so that the people themselves can measure progress. A number of international tools to measure vulnerability already exist. These systems need to systematically incorporate HIV/AIDS indicators into regular data collection.

To achieve this, new indicators and appropriate methodologies need to be developed. Local mapping and the production of vulnerability profiles of regions and countries are of the highest importance. Differentiated profiles will allow interventions to be adapted to the needs and capacities of HIV/AIDS-affected communities and build on existing response strategies.

Although general patterns of the impact of HIV/AIDS on the agricultural sector are widely known, there is limited regional knowledge or more specific knowledge on the impact on fishing communities, pastoralists, trading communities, farming systems and the commercial sector. This knowledge is essential to design appropriate responses.

The risk of not understanding the complex dynamics between HIV/AIDS and poverty is that interventions can exacerbate existing problems. The situation of widows, orphans and young people are principal areas of concern. As these groups are particularly vulnerable to the impacts of HIV/AIDS, all interventions aimed at poverty alleviation should ensure that resources are invested in addressing their needs.

(http://www.fao.org/hivaids/responses/monitor_en.htm)

7.8 Mainstreaming HIV/AIDS in Development

Mainstreaming HIV/AIDS in development is not an easy task. It requires that the epidemic be addressed at macro and micro levels, from the region to the district, and

that all the issues are understood, so that HIV/AIDS becomes a common concern that affects everyone.

Experience across all sectors and from all partners must be exchanged and built upon in order to develop an effective agricultural response. Efforts must be made to incorporate systematically AIDS considerations in agriculture interventions, while at the same time incorporating agriculture considerations in AIDS programmes. Those working to mainstream HIV/AIDS in development can also learn a lot from the work carried out over last 15 years to mainstream gender.

Of course, the extent to which HIV/AIDS can be mainstreamed greatly depends on the political commitment from key agriculture-sector stakeholders and the allocation of funds and resources. Multilateral organizations can play significant role in advocating for the mainstreaming of HIV/AIDS throughout all sectors, increasing political commitment and influencing national policies.

(http://www.fao.org/hivaids/responses/mainstream_en.htm)

7.9 Preparing an Emergency Response

Emergency food aid or food for work programmes could represent short-term answers to the problem of acute food insecurity associated with the HIV/AIDS epidemic. However, determining which individuals, households and communities should receive such assistance is an extremely delicate process as it can lead to further stigmatization or marginalization.

One targeting strategy could be to include orphan-headed and foster households or those that have lost one or more family members. However, even this strategy requires flexible criteria.

Another emergency response could be to provide food rations to school children - one ration while they are at school and another to take home with them. In this way, they are encouraged to attend school and their nutritional needs are met. This response has been developed by the World Food Programme.

Whatever the emergency response, the longer-term view must not be overlooked. Longer-term mitigation strategies must seek to influence one or more of the livelihood assets -- such as labour-saving technologies or seed distribution - so that households can re-establish their agricultural base and have a safety net as they are coping with, or recovering from, the crisis.

(http://www.fao.org/hivaids/responses/emergency_en.htm)

8. Information and Communication Strategies

(Main source: Forman, L. 2003. HIV/AIDS, Information and Communication in Africa. APC Theme Discussion Paper, 2003.)

8.1 Silence equals Death

During the eighties, American AIDS advocates co-opted the phrase ‘silence equals death’ from the environmental movement, to describe the danger of a lack of information and communication around HIV/AIDS. The African AIDS epidemic embodies and amplifies the continuing truth of this statement. Here, a lack of information and a lack of voice continue to be primary causes of infection among the worst affected groups of women and the youth.

More effective communication about the disease, and greater flows of information are central to the success of AIDS strategies, and for reducing the vulnerability that flows to and from HIV infection. Information and communication are sources of power in an epidemic characterized by its lack—they confer the power to protect against infection, to influence decision makers, and to live lives of dignity and equality once infected. In a region often characterized by resource limitations and fragmented infrastructures, information and communication are two of the most critical and abundant resources available in the fight against HIV/AIDS. They are both the prerequisites and enablers of an effective response.

8.2 The Status of ICTs in Africa

The technological advancement at the heart of the information society has largely bypassed Africa, and this inequity in access to the opportunities presented by the digital revolution has become known as the digital divide. The reasons for the African digital divide are diverse. The NEPAD initiative sums them up as follows: "poor infrastructure, combined with weak policy and regulatory frameworks and limited human resources, has resulted in inadequate access to affordable telephones, broadcasting, computers and the Internet."

Of the approximately 816 million people in Africa, it is estimated that only:

- 1 in 4 have a radio: 205 million.
- 1 in 13 have a television: 62 million
- 1 in 130 have a computer: 5.9 million
- 1 in 160 use the Internet: 5 million.

The broadcasting technologies of radio and television are the most prevalent forms of ICT in Africa, and are the primary vehicles for transmitting information about both prevention and treatment services to large sectors of the population, and in reducing the silence, stigma, myths and misconceptions associated with the disease. Personal computers, Internet access and email have very low prevalence in most of Africa, but offer extremely valuable tools of education, communication, and expansive access to relevant information and knowledge. The Internet, CD-ROMS, digital libraries and electronic databases offer access to unlimited sources of information and repositories of knowledge, with particular benefits for health care workers, AIDS advocates and national decision makers. People living with HIV/AIDS (PLWHA), communities and ASO are important enablers of information and communication, particularly where technology and infrastructures are limited.

8.3 Information and Communication in the Fight against HIV/AIDS

Information and communication, technogically enabled or not, are clearly at the heart of effective AIDS programs. While information is the basic component of safer sex messages, effective prevention relies as critically on overcoming obstacles posed by misinformation and myths about the disease; silence, denial, stigma and discrimination; and limited knowledge about HIV/AIDS prevention services including voluntary counseling and testing (VCT) and prevention of mother to child transmission (PMTCT).

Information and communication facilitate the empowerment and reduction of vulnerability of PLWHA, women and other susceptible groups that form fundamental

parts of the fight against AIDS. Reducing vulnerability includes providing an enabling and protective legal environment, which protects people's (and especially women's) rights to equality and non-discrimination.

Yet the need for more effective flows of information and communication about HIV/AIDS extends to all facets of the disease and appropriate responses to it, enabling treatment care and support; epidemiological and health research and reduction of vulnerability to and from infection. The intimate connection between health and access to information is reflected in international human rights law, which views access to health related information and education as an underlying determinant of health.

Information and communication are also powerful tools for AIDS service organizations, human rights advocates, and PWLHA organizations, to enable advocacy, mobilization, networking and capacity building. They play critical roles in addressing some of the political factors that limit effective responses, by facilitating greater transparency and monitoring of government through civil society and mass media reporting, and increased democratic participation. They offer valuable tools to hold countries to their political and legal commitments to HIV/AIDS, expressed internationally, regionally and nationally. Legally protected freedoms of expression and privacy are therefore critical instruments for informational accessibility and free communication in a society. In this regard, ICT offer a freedom of informational access and expression that may exceed permissible social, political and legal boundaries. The Internet, email, discussion groups and chat rooms offer users free expression and communication on topics otherwise taboo, and for people otherwise silenced. This is borne out by an independent gender assessment study conducted in schools in Senegal, Mauritania, Uganda and Ghana which found that school girls primarily used the Internet to research for information that is banned or taboo in their cultures. The Internet was seen as a "safe partner" that could provide "the information we need to adapt to this modern world." ICT like the Internet also offer alternative methods of communication in repressive regimes that limit free speech. As one Zimbabwean delegate to a UN Commission for Africa meeting indicated: "ICT means government cannot monopolise information on governance … there is more oppression of journalists in my country. But the authorities cannot shut down every Internet user."

There are considerable examples from across the African continent of the innovative use of information and communication and their technologies in various aspects of the fight against HIV/AIDS. The following section elaborates how information and communication, and ICT are being used in various aspects of the HIV/AIDS epidemic including prevention; health care; population research and epidemiology; advocacy and mobilization, and particularly treatment access; networking and empowerment of AIDS NGOs and PLWHA; and increased governance and accountability.

8.3.1 Prevention

There are particularly troubling indications that current HIV/AIDS programs are failing amongst the highest risk groups in the epidemic. UNICEF reports that more than one-half of all young people age fifteen to twenty four in more than a dozen primarily African countries have never heard of AIDS or have serious misconceptions about how HIV is transmitted. Only eight percent of out-of-school youth and a little more than one third of in-school youth have access to prevention programs. The

remainder of prevention priorities are being met in similarly limited fashions: fewer than one in twelve sex workers and their clients are currently targeted by behavioural programs; only fourteen percent of people in need of STD services can obtain them; and only six percent of people who want VCT have access to it.

This section focuses on school based education and mass media campaigns as two primary mechanisms for effectively using information and communication, and ICT.

School-based education
Education and life-skills training in schools is a fundamental part of effecting appropriate behavioural changes among youth. UNAIDS global best practices indicate that national AIDS programmes should aim to provide one hundred per cent of schoolchildren with AIDS education addressing effective prevention, care and support for people with HIV/AIDS, and non-discrimination.70 This has been shown to help young people to delay sex, and when they become sexually active, to avoid risk behaviour.

UNAIDS indicates that maximum effectiveness requires partnerships between policy-makers, religious and community leaders, parents, and teachers in formulating sound policies on AIDS education; using curricula adapted to local culture and circumstances, focused on life skills rather than biomedical information; teaching primary and secondary students to analyse and respond to social norms, including understanding which ones are potentially harmful and which ones protect their health and well-being; and training of teachers and peer educators. UNAIDS also recommends that HIV prevention and health promotion programmes should be started for children at the earliest possible age, and before the initiation of sexual activity—ideally with age appropriate programs at the primary school level.

Mass media campaigns
Mass media and social marketing, using popular culture, and especially popular youth culture are able to convey important information about how to protect against HIV/AIDS, as well as to dispel myths and stigma. Mass media campaigns use television, radio, Internet websites, online discussion groups, print media, and school and other youth based education for maximum effect.

The relative prevalence of radio and television in Africa makes these key technologies for disseminating information on reducing vulnerability to AIDS. Experience from South Africa, where media penetration of radio and television is extremely high, shows that social marketing using mass media is a highly effective means of disseminating HIV/AIDS information. The case of mass media campaigns in Uganda and Senegal speak for themselves.

8.3.2 Population Research and Epidemiology

African countries face challenges in securing accurate information on HIV/AIDS from the field, especially when they have inadequate or fragmented health systems that limit their ability to “conduct effective epidemiological work and other basic research contributing to evidence-based decision making.” ICT offer “access to information, applications to analyse data and tools to communicate,” which can help overcome some of these limitations.

PASEi is a CIDA funded project aimed at improving integrated epidemiological surveillance in West Africa. The project is integrated into the Nationwide Health

Information Systems of six West African countries: Benin, Burkina Faso, Côte d'Ivoire, Guinea, Mali and Niger. It is aimed at improving popular health conditions through sustainable and efficient reinforcement of West African epidemic control mechanisms, and strengthening their institutional capability in regard to epidemiological surveillance. Its aims include skill and ability improvement of professionals on all levels of the epidemiological plan, and "reinforcing acquired knowledge and experience through continued use of new information technology solutions and the creation of a Website allowing data exchange."

Epidemiological information using ICT is also being gathered from the private sector. AngloGold, a massive South African mining corporation, is rolling out a comprehensive AIDS reporting tool, using a health care information system to analyse the impact of AIDS on health care costs, giving information on disease profiles and medical and facilities usage, and thereby enabling the mining group to estimate the cost impacts of AIDS and allowing it to project future cost impacts.

8.3.3 Education of Health Care Workers

Information and communication ownership and technologies enable various aspects of AIDS related health care, including training health care workers to deal with HIV/AIDS in a knowledgeable and non-discriminatory fashion. ICT are being used to improve access to information, education and communication for health workers, especially in community and rural settings, using CD-ROMs, Internet, email discussion groups and distance learning technologies.

The Internet offers almost unlimited access to journals and databases, information sharing with other health care professionals, as well as access to information with relevant local content and language. Websites and CD-ROMS also enable access to information from conferences, major projects and collections of documents in clearing-houses. There is a tremendous amount of online information for HIV/AIDS related health care. General as well as medical information is available on AIDS specific websites like UNAIDS, the Africa HIV/AIDS Research Database, or The Body. A key medical online resource is the Physicians Research Network, which provides the latest information on research, diagnosis and management of HIV and AIDS. It provides summaries of clinical presentations by leading researchers and clinicians, as well as featured reports on major clinical and scientific meetings in the USA and, when possible, internationally. *The PRN Notebook* is distributed free of charge to interested healthcare providers and researchers worldwide.

While Internet and distance learning technologies may be costly or require infrastructure where there are none, computers and CD-ROMS are a "cost effective way to get journals, guidelines, education and training material in a manner less dependent on a weak infrastructure." CD-ROMS are relatively cheap and accessible, and offer solutions to the education and improved information access of health care workers in community and rural facilities with limited resources and connectivity. Teaching-AIDS at Low Cost (TALC) is a scheme that seeks to facilitate the training of health care professionals using cheap ICT, including through the provision of urgently needed free health information to developing countries using CD-ROMS.

Similarly, handheld computers are proving to be a useful and viable technology in rural health settings, for data collection, information dissemination, and access to medical reference materials. An appraisal of a Satellife PDA project in Ghana, Kenya

and Uganda illustrates that handheld computers offer enormous potential for improving service delivery, and offer specific utility in rural healthcare settings.

8.3.4 Information and Communication as Critical Elements of Advocacy: the Treatment Access Struggle

The Internet, email, discussion groups, and mass media are proving to be crucial tools for national and international advocacy, as exemplified in the treatment access campaigns waged in African countries and internationally. They enable the large-scale social mobilization that has played a key role in these campaigns, as well as effective communication of key legal and political battles.

The Internet serves multiple functions for organizations fighting for human rights, including "email lobbying of elected representatives, public officials, and policy elites; networking with related associations and organizations; mobilizing organizers, activists and members using action alerts, newsletters and emails; raising funds and recruiting supporters; and communicating their message to the public via the traditional news media."

Mass media in particular has played an important role through the negative publicity which actions obstructing developing country access to medicines has garnered. Media coverage backed by broad civil society protests has decisively altered the outcomes of several of these disputes. This was evidenced when the US government placed South Africa on its trade watch list (a step preceding sanctions) for its amendment of its Medicines Act in 1997 and AIDS activists staged public protests against then Vice President Gore during his campaigns for the US presidency. The adverse media attention, and its feared impact on Gore's political future, led to the withdrawal of South Africa from the list, as well as an official change in US policy regarding Sub-Saharan African country efforts to access HIV/AIDS drugs.

Similarly, when thirty-nine pharmaceutical companies sued the South African government to prevent the promulgation of the same Medicines Act, intensive international media attention was focused on the case, and the extensive public protests conducted around the world. With negative publicity mounting, and their public profile plummeting, the pharmaceutical companies withdrew their case.

These instances illustrate the capacity for public opinion expressed through demonstrations, media coverage and the Internet, to alter the behaviour of key decision actors, both public and private, towards more favourable outcomes for developing countries. This relies on publicizing the actions of those who seek to limit developing country access to medicines, and ICT like discussion groups and email newsletters play critical roles in this regard. They have enabled African AIDS groups to ensure that on the ground information about government intransigence or legal and political actions of foreign governments or pharmaceutical companies have a wide global audience throughdiscussion groups, email newsletters and the mass media.

8.3.5 Networking and Capacity Building for AIDS Groups

As the treatment access movement exemplifies, information and communication ownership and technologies are primary mechanisms for the networking at the heart of effective mobilization. ICT offer unprecedented opportunities for national and international networking, connecting communities and NGOs around the world to enable information-sharing, education, and skills transfers. ICT are also excellent means of building the capacity of AIDS NGOs across the African continent. They

enable the 'twinning' of African organizations with AIDS and human rights organizations elsewhere in the world, "to enhance skills in human rights fact finding and documentation, share practical prevention materials and innovative prevention strategies, … [and] learn more about publicity and media work, campaigning, mobilizing legal support and reporting for domestic and international audiences."

8.3.6 Governance and Accountability on AIDS

Free flows of information and communication offer greater transparency in national policy and decision-making on AIDS, as well as more effective governance. This association is described as follows: "good governance depends on the availability of adequate knowledge and information resources. Decision makers need this to make good decisions. The general public needs this to participate in the decision-making process and follow the implementation of agreed decisions." ICT are enabling even remote NGOS and communities to widely publicise human rights violations, and national or local policy and program failures, increasing accountability. ICT also offer "empowerment of stakeholders through consultation and bottom up inputs into policy formulation." For example, the Nigeria AIDS e-forum is holding a six month long open electronic conference on key HIV issues in Nigeria, intended to mobilize stakeholders' input into the national response to the HIV/AIDS epidemic in Nigeria. The discussions are intended to guide the National Action Committee on AIDS (NACA) as well as various other stakeholders in the implementation of the Nigerian government's HIV/AIDS Emergency Action Plan. In addition, key issues discussed and solutions proffered will be summarized and published in book format for dissemination to wider audiences.

8.3.7 Challenges and Opportunities for Civil Society: Limited Connectivity; Rural Accessibility; and Gender Inequality

Information and communication accessibility in Africa is limited by the dearth of ICT connectivity throughout Africa, which is greatest in rural areas within even relatively well-resourced countries throughout the continent. This is a major obstacle to comprehensive dissemination of HIV/AIDS related information, and mutual communication to and from rural areas of pressing needs and problems. Structural obstacles to access are also posed by gender inequality. While overcoming these obstacles requires sustained long term developmental, social and law reform projects, interim measures using innovative and strategic approaches can overcome the more pressing informational and communicational needs. Opportunities for increasing access must also be maximised by all sectors.

Interim Responses to Limited Connectivity and Rural Inaccessibility

Greater connectivity in Africa is clearly a critical need requiring serious and sustained efforts. However the need for access to information and communication within the epidemic cannot wait upon this progressive development. Interim measures using innovative strategies and targeted interventions should be implemented to ensure greater access to ICT and other information and communication resources and mechanisms. As the data on African connectivity suggests, several features of ICT usage in Africa present alternative forms of access. Public ICT access holds the potential to significantly broaden Internet access in Africa, seen in the growing numbers of telecentres that act as vital hubs of communication. Telecentres are also key sites for HIV/AIDS information and communication in the form of print media, or access to HIV/AIDS related telephone help-lines, and the latter has been shown to be

a key source of HIV/AIDS related information in South Africa. This is illustrated by the SIDAREC telecentre in Kenya, which is a popular cyber café and social and educational forum for youth, to engage in discussion about health issues affecting them, including HIV/AIDS.

Communal connectivity hubs in libraries, hospitals and universities offer additional important access to online resources and services, albeit to smaller and more specialized populations.

A key challenge is in reaching rural areas that have limited or no infrastructures for ICT. There are both technological and non-technological solutions to this problem. Technologies like digital and satellite broadcasting, mobile telephones and handheld computers have enormous potential to reach rural and hard to reach communities. However given resource constraints and infrastructural limits on the continent, such ICT do not necessarily present comprehensive solutions. Their utility however remains high for targeted usage. In the interim, the mainstay of efforts to reach rural communities will have to largely rely on non-technological mechanisms like print media, peer-to-peer outreach, community efforts and training to ensure greater dissemination and penetration of relevant information and communication around HIV/AIDS in rural areas. As examples from the field illustrate, vans, trains or buses can ensure that relevant information reach outlying areas.

An example of resource sharing and capacity building comes from the NGO sector, and the practice of twinning NGOS in developed countries with those in developing countries, or within countries twinning urban NGOS with rural. A survey of AIDS NGOs (thirty four percent of which were African) confirms that many grassroots community groups do not have access to, and cannot be accessed directly through email, Internet, telephone or fax. This lack of informational and communicational access is a serious impediment to effective performance by AIDS service and advocacy NGOs, who fulfil critical needs within the epidemic.

The survey illustrates simple and effective shortcuts to informational sharing and accessibility that can be immediately employed in this and other sector**s.** Thus while connectivity cannot be assured in the immediate term for all parts of Africa, it is possible to bridge "the 'last mile of connectivity' by "providing outreach to those who have access to ICT and contact with those who do not." The survey found that there are significant numbers of organizations using these tools almost everywhere and much higher numbers who want to be able to use them or find ways to access information from them.

This kind of organizational sharing and support would enable respondents to share a broad range of information, skills and experiences, including building networks and coalitions, would allow advocacy against stigma and for access to care and treatment, as well as prevention in rural agricultural settings, and partnering with the media.

Resource sharing could take the form of "collecting information during meetings, printing and distributing materials and CD-ROMS, doing simple online research for local organizations, or making sure localized perspectives and experience were being collected and shared through the ICT tools."

Several features in the African context suggest that a community oriented approach holds great promise for bridging gaps in HIV/AIDS information and communication. This is especially so since the primary and largest contribution towards the response to HIV/AIDS is said to come from individuals, families and communities confronted

with HIV, rather than from national and international efforts. There is also broad consensus that an effective response relies on community mobilization and active participation in all aspects of the epidemic. Given resource constraints and the absolutely overwhelming needs within the epidemic, "while Government has a role to play in promoting and expanding the opportunity for access to information by its citizens, intermediary organizations such as churches, schools and civil society are key community links for the flow of trusted information within the community." This is especially so in Africa, where "community and oral traditions are very strong," and where community activists and church leaders often have greater influence than health care workers.

This tradition of individual responsibility for communal well-being is evident in the continent's governing human rights treaty, which in addition to the customary human rights contained in human rights treaties, also entrenches a range of human duties, including towards one's family and society.

A study illustrates that community-level application of ICT to support informational initiatives are proving the most effective approach, and where "communication most affects the knowledge and understanding of HIV/AIDS by individuals and groups."

The survey found that this approach is reliant on more common broadcast technologies, such as radio, television and video, and CD-ROMs and printed material.

Gender Inequality

While many in Africa lack access to ICT, this lack of access is greatest for women, because of lower levels of education among females than men in many countries, the tendency for males to receive technical education more often than females, and the disproportionate representation of males in technology-intensive workplaces. This indicates that ICT programs should ensure that gender inequalities are not unwittingly reinforced through policies that fail to account for women and girls' more limited access to ICT. ICT policies and initiative on HIV/AIDS should therefore be gender-sensitive, and take specific and targeted steps to ensure that women and girls enjoy the equal benefits of programs.

This seems a critical aspect of the use of ICT in relation to HIV/AIDS in Africa, given the dramatic impact that gender inequality has on increasing women's and girl's disproportionate susceptibility to HIV infection. This suggests that both ICT and AIDS civil society organizations should prioritise the targeting of women and girls for education and training in both AIDS information and ICT usage as one strategy towards increasing their empowerment.

That gender inequality replicates in ICT access is borne out by a gender assessment study, which shows that in many places, girls do not enjoy equitable access to school based computer labs. The reasons for this included high student to computer ratios and first come first serve policies in circumstances where girls were typically outnumbered by boys at the secondary level; girls typically had earlier curfew times and domestic responsibilities which limited their access time; and local patriarchal beliefs tended to allow boys to dominate the computer laboratory environment.

The study reported that seventy percent of girls in Mauritania emphasized that the Internet provided freedom to them as women since they no longer needed to limit themselves to the controlled information given by their society and families. Girls also reported increased self-esteem and autonomy from the education, information and online access gained through the World Links program.

Since ICT can be effective tools of empowerment for women (and men) by enabling their participation in economic and civic life, and helping to move them out of poverty, their use in HIV/AIDS programs offers compound benefits for all users.

Regional and International Opportunities for Funding

There are a diverse range of international, regional and national initiatives to increase connectivity and access to ICT in Africa, which could provide funding for national and local initiatives or to AIDS NGOs. Some of these include ACACIA, the G8 Dot Force, NEPAD, international initiatives like Satellife focused on health professionals, and regional ones like Kabissa, focused on the African non-profit sector. These organizations increasingly recognize the important role of information and communication ownership and technologies in the African AIDS epidemic. These are alternative funding sources to enable ICT and HIV/AIDS initiatives and programs across the continent, and are important facilitators in this realm.

9. Conclusions and Further Urgent Actions

(Main source: Forman, L. 2003. HIV/AIDS, Information and Communication in Africa. APC Theme Discussion Paper, 2003.)

There is now considerable consensus that an effective response to the epidemic is a comprehensive one, requiring prevention, treatment, mitigation, and the protection of human rights. These elements are part of a continuum, with prevention enhance by the availability of treatment, which in turn reduces the stigma of an illness perceived to be a death sentence. Mitigation helps those affected by the epidemic to improve their situation, an attempt for communities and households to break out of the vicious cycle of poverty => infection => greater poverty => more infection. Effective prevention also relies on the reduction of vulnerability to infection in high-risk groups like women and youth, including through the protection of human rights.

The impact of the pandemic requires large-scale response and strategies to integrate HIV/AIDS concerns into multi-sectoral vulnerability assessments, food security analysis and early-warning systems. Systemic and coordinated interventions, in emergency and development situations, should take the agricultural sector into consideration to reduce the vulnerability to acquire the disease and to live longer with it through improved food security. The need to identify sustainable initiatives to assist rural communities to mitigate the diverse effects of HIV/AIDS as well as to strengthen multi-sectoral partnerships is both crucial.

Information and communication are central threads running throughout this response, providing both form and content to prevention, treatment and care, and vulnerability reduction. In general terms, information and communication, technological or not, are inextricable and key components of the fight against HIV/AIDS. ICT offer considerable instrumental value to this fight, facilitating various key aspects of an effective response to HIV/AIDS, including prevention, treatment and care, and vulnerability reduction, as well as advocacy, mobilization and networking. ICT also have direct and indirect intrinsic value in their capacity to empower users through skills building, and to ultimately increase connectivity and therefore economic development and growth. The human and non-technological enablers of communication and information are equally critical, and by contrast, abundant resources in the fight against the epidemic. The participation of PLWHA and of communities is critical to the success of AIDS strategies in Africa. Some guiding principles for initiatives on ICT and HIV/AIDS are as follows:

- First, the choice and location of ICT and HIV/AIDS initiatives should be informed by the key elements of an effective response to HIV/AIDS (viz. prevention, care and treatment and vulnerability reduction measures including human rights protections), and especially by the gaps and deficiencies in national and international strategies.
- Second, initiatives should favour targeted approaches: To high risk populations like women, youth, sex workers, men who have sex with men, refugees and truck drivers. To the social and economic determinants of vulnerability, including poverty, gender inequality, stigma and discrimination. To the key workers of the epidemic, including health care workers, AIDS NGOs, educators and people living with HIV/AIDS.
- Third, local content must play a central role in project formulations, accounting for varying social and cultural practices, and languages.
- Fourth, capacity building of both intermediaries and end users of initiatives should be a key focus of any such initiatives.
- Fifth, community participation should be a key focus and outcome of initiatives, holding as it does such powerful effectiveness for HIV/AIDS strategies. Rural and rural proximate communities in particular appear to hold much promise in overcoming some of the challenges to the comprehensiveness of HIV/AIDS prevention and treatment campaigns, as well as the challenges of limited connectivity in reaching outlying areas. They are the human connections in places where technology is absent or limited.

A number of key actions that civil society organizations (CSOs) can take with regard to information and communications ownership and technologies to assist in the fight against HIV/AIDS are as follows:

9.1 Targeted Interventions

a) Prevention

The glaring inadequacies and gaps in prevention messages and services suggest the need for more, and more effective programs, strategies and initiatives. General information indicates severe gaps especially in youth focused programs, in programs for sex workers and their clients, in prevention services like VCT and PMTCT, and in mass media campaigns. This general information should be supplemented nationally, and civil society organizations could play a key role in identifying deficiencies in national prevention strategies, and recommending how to bridge them. Possible strategies include independent audits of national prevention programs. Similar audits could also be done of NGO initiatives, with a view to finding solutions to problems identified in the coverage, content and methodologies of programs assessed. The statistics suggest targeted interventions for other high prevalence groups like women, sex workers, pregnant women and truck drivers using ICT, print media, and education. Possible interventions using ICT include safer sex messages transmitted to CB radios used by truck drivers along commercial routes, or transmitted as SMS messages to cell phones, print media in antenatal clinics, and sex worker education and condom availability.

b) Treatment

CSO can play vital roles in advocacy for increasing treatment access, publicizing government action or inaction, as well as pharmaceutical company actions. Community participation is a critical part of ensuring access, as well as of ensuring drug adherence, and AIDS NGOs should act as intermediaries and participants within communities and in national programs.

c) Stigma, Discrimination, and Enabling Legal Environments

CSO initiatives should target AIDS related stigma and discrimination wherever possible. This should be done by correcting myths about the disease, by presenting positive information about the capacity for productive and happy lives once infected, and by promoting knowledge of legal protections against discrimination. Similarly, to the extent that legal protections for PLWHA remain inadequate, AIDS NGOs and PLWHA should engage in advocacy for greater legal protections, including against discrimination in employment, insurance, and health care. CSOs in both HIV/AIDS and ICT should also advocate for enabling legal and policy environments to facilitate free communication and information access generally as well as through ICT. Strategies to promote and protect privacy rights and freedom of expression should be incorporated into advocacy by ICT and AIDS NGOs alike.

9.2 Targeting Increased Access to ICT: AIDS NGOs, Health Care Workers and Educators

National and international bodies should target increased use and access to ICT for the workers of the epidemic given their valuable utility as tools for advocacy, education and improved health care service provision. This suggests at a minimum, targeting access for AIDS NGOs and PLWHA organizations, healthcare workers and educators.

9.3. Investigating National, Regional and International Bodies and Initiatives for Funding

CSOs should consider conducting audits of available funding and sponsorship from international, regional and national initiatives in particular to fund civil society organizations like AIDS NGOs to access sponsored connectivity and facilities wherever possible. International initiatives and interested bodies include the G8 Dot Force, Acacia, the International Development Research Centre, United Nations bodies (including the International Telecommunications Union and the United Nations Development Program), the World Bank World Links Program, the Organization for Economic Cooperation and Development, the African Information Society Initiative, and regional initiatives under NEPAD that aim to promote and accelerate existing projects to connect schools and youth centres. Other regional initiatives under the Southern African Development Community, the Economic Community of West African States, and the African Union should be audited for their potential to sponsor and facilitate information and communication initiatives on HIV/AIDS. Sponsored access and facilities should also be sought from the private sector, including national and regional internet service providers, computer manufacturers, and telephone service providers.

9.4. Education and Resource Sharing

African NGOs with resources and ICT facilities should consider 'twinning' themselves to PLWHA and AIDS NGOs in their own or other African countries in order to educate on ICT use, share informational resources, document human rights violations in outer lying areas, and conduct training in advocacy, mobilization, and use of media campaigns. Where possible PLWHA organizations should empower their own members through training and use of ICT. These initiatives should aim at enabling AIDS NGOs to document their experiences and make these available electronically for researchers, policy makers and PLWHA elsewhere in Africa or internationally.

9.5. Gender Inequality

AIDS NGOs as well as gender and ICT NGOs should place high priority on initiatives aimed at empowering women and girls through education, ICT use or any other available means. In particular, such initiatives should ensure that social and economic barriers to access experienced by women and girls do not pose obstacles to their access to ICT or HIV/AIDS educational measures. Gender and ICT NGOs should link with AIDS NGOs to strategize on more effective use of ICT for women and girls in increased education and empowerment. Gender should be mainstreamed into all initiatives on both AIDS and ICT.

9.6. Effective use of existing ICT CSOs for an HIV/AIDS Response

Civil society should promote the 'mainstreaming' of AIDS into ICT policy and initiatives in high prevalence countries. Effective use for HIV/AIDS communication and information should be made of existing information and communication CSOs such as telecentres, schoolnets, libraries and Internet companies. Print media and posters in telecentres could alert Internet users to relevant Internet resources, and direct telephone users to AIDS and health information hotlines. Similar AIDS contact information or prevention messages could be carried on Internet banners by Internet service provider sites.

9.7. Monitoring Accountability

To the extent possible, civil society groups should consider how to use ICT to monitor the compliance of governments with political commitments under Abuja and UNGASS, using ICT to gather and publicize 'shadow' reports on government compliance. Similarly, state compliance with national and international legal obligations on HIV/AIDS should be monitored and widely publicized.

9.8. Community Focus

ICT and HIV/AIDS initiatives should aim at incorporating community-based activities into programs, and at involving various elements of communities, including community leaders, neighbourhood health communities, community health care workers, traditional birth attendants and community condom distributors. Community radio should be targeted as a valuable mechanism for disseminating important information on HIV/AIDS, and empowering communities.

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Annex 1: Additional Resources (to be completed!)

E-mail discussion groups

AFRO-NETS (http://www.afronets.org/)
The electronic conference for the 'African Networks for Health Research & Development' (AFRO-NETS) was established in 1997 to facilitate exchange of information among different networks active in Health Research for Development in Anglophone Africa, and to facilitate collaboration in the fields of capacity building, planning, and research.

Topics for discussion include advocacy for health research & development; priority setting; capacity building; resource mobilization; evaluation; dissemination of results; utilisation of research findings; networking; use of Information Technology for the health sector; announcement of meetings, training courses and other events of interest to our subscribers; HIV-AIDS issues

Health and Development Networks (http://www.hdnet.org/home2.htm)

Health & Development Networks(HDN) is a non-profit organisation with substantial experience in managing and moderating electronic discussion forums and providing communication support to conferencesHDN is helping to mobilize a more effective response to AIDS and other health- and development-related issues by improving information, communication and the quality of debate.

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HDN is organizing e-forums on

Gender and AIDS (http://archives.healthdev.net/gender-aids/)

Stigma and AIDS (http://eforums.healthdev.org/read/?forum=stigma-aids)

Sex work and AIDS (http://archives.healthdev.net/sex-work/)

and other AIDS-related topics.

Web Pages

The Development Gateway (www.developmentgateway.org)

The Development Gateway HIV/AIDS Page

(http://www.developmentgateway.org/node/130640/)

The HIV/AIDS Page is geared to providing needed information and services to those most effected and involved in fighting the AIDS pandemic in developing countries: persons living with HIV, NGO activists, health professionals, donor agency workers, and researchers

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The Development Gateway Gender Page

(http://www.developmentgateway.org/node/130625/?)

Out of 33 highlights published since August 2002, 4 were devoted to issues directly related to HIV/AIDS. Each highlight consists of a short summary of the issues and a number of links to other relevant websites.

Gender-based Violence and HIV/AIDS (February 6, 2004)

(http://www.developmentgateway.org/node/130625/dg-highlights/highlight?high_id=7587)

A growing number of studies by the World Health Organization and UNAIDS have documented the disproportionately high HIV infection rate among girls and young women in Sub-Saharan Africa. The risk for girls is compounded by sexual violence, early marriages, older sexual partners, prostitution, genital mutilation using poorly sterilized equipment and armed conflict. In addition, the dangerous myth that sex with a virgin can cure AIDS has exacerbated the situation. Gender-based violence makes women vulnerable to infection with HIV/AIDS, and women living with HIV/AIDS are vulnerable to gender-based violence.

Men and HIV/AIDS in Sub-Saharan Africa (February 11, 2003)

(http://www.developmentgateway.org/node/130625/dg-highlights/highlight?high_id=2628)

Although studies show that HIV/AIDS infection rates for women have overtaken men in Sub-Saharan Africa, men play an essential role in addressing the AIDS pandemic. Social structures, power relations, and culturally engendered behaviors all impact the spread of the epidemic in this region.

"Men and HIV/AIDS" is a conference organized by Regional AIDS Initiative for Southern Africa (RAISA) from February 11 to 14. The meeting is aimed at initiatives for men in fighting HIV/AIDS and to sensitizing boys to risk-taking sexual behavior. The conference will bring together a range of different actors from Southern Africa to spread understanding about AIDS.

Widowhood & Poverty: The Social Impact of Cultural Practice, Armed Conflict, HIV/AIDS (January 28, 2003)

(http://www.developmentgateway.org/node/130625/dg-highlights/highlight?high_id=2385)

Widowhood is an important indicator of poverty for women in the developing world. With breadearner husbands lost to circumstances, old age, armed conflict, and increasingly HIV/AIDS, widows are often forced into poverty by lack of education and unsupportive social systems, condemned in some cases to lifetimes of shame and abuse. Empowering Widows in Development, a UK-based non-profit, addressed these issues in its 2001 “Widows Without Rights” conference.

Armed conflict rapidly increases the numbers of widows, fatherless children and displaced women. Women comprised 70% of the post-war population in Bosnia. War Widows International Peace Alliance is an organization whose work is based on the documentary film "Regret to Inform." Using the stories of widows from all sides of armed conflicts as a force for peace, its website posts personal accounts of war widows from around the world.

World AIDS Day: 'Feminization' of HIV/AIDS Epidemic Confirmed in 2002 AIDS Epidemic Update (November 30, 2002)

(http://www.developmentgateway.org/node/130625/dg-highlights/highlight?high_id=1546)

The "feminization" of the HIV/AIDS epidemic was confirmed on November 26 when the UN and the World Health Organization jointly announced that just under half of the people infected with the AIDS virus worldwide are now women. Sub-Saharan Africa, where women have made up the majority of new infections for several years, is now joined by growing concern about the spread of the epidemic in Eastern Europe and Latin America, as well as India and China where the greatest future growth of the epidemic is projected.

The high ratio of women with AIDS is also driving famine-related destabilization in Africa since female subsistence farmers are either ill or caring for the ill, communities are less resilient, and seed is not being planted for when Africa's drought ends. However, the report had some good news. AIDS prevention campaigns for women, such as the one advocated by UNIFEM, have helped decrease AIDS infections in Thailand, Uganda and South Africa.

UNIFEM Portal on Gender and HIV/AIDS (http://www.genderandaids.org/)

UNIFEM, in collaboration with UNAIDS, has developed this comprehensive gender and HIV/AIDS web portal to provide up-to-date information on the gender dimensions of the HIV/AIDS epidemic. The site aims to promote understanding, knowledge sharing, and action on HIV/AIDS as a gender and human rights issue.

UNIFEM Portal on Women, Peace & Security – HIV/AIDS, Gender and Conflict (http://www.womenwarpeace.org/issues/hiv.htm)

During armed conflicts, civilians and combatants suffer torture, wounds and injuries requiring medical treatment. If they are exposed to infected blood, or if they receive medical care with contaminated instruments or get transfusions of unscreened blood, then their risks are magnified. In many war zones, the damage to health systems results in inabilities to maintain even basic 'universal precautions' of sterilizing instruments or cleaning hospital linen. Equipment and supplies for screening blood may be destroyed or unavailable at the same time that the need for transfusions increases dramatically. Sexual violence and exploitation, all too common in conflict and post-conflict settings, contributes to transmission as well. Rape by an infected man directly exposes women to the virus, and the abrasions or tearing of vaginal tissues which may result increase the risk of infection dramatically. Tragically and most cruelly, in some conflicts (such as Rwanda), the planned and purposeful HIV infection of women has been a tool of ethnic warfare. Even as conflicts subside, extremely difficult economic and social conditions often leave many people unemployed and unable to resume their normal community or family lives. Where AIDS and opportunistic infections are already a problem, women bear the largest burden of care for family members.

This web page contains a fact sheet with links to a number of other relevant documents.

HIV/AIDS in Africa from Avert (http://www.avert.org/aidsinafrica.htm)

AVERT is an international HIV and AIDS charity based in the UK, with the aim of AVERTing HIV and AIDS worldwide. AVERT has a number of overseas projects, helping with the problem of HIV/AIDS in countries where there is a particularly high rate of infection, such as South Africa, or where there is a rapidly increasing rate of infection such as

in the Russian Federation. And through our highly successful web site, www.avert.org , we take education and information to people in almost every country in the world.

POPulation information onLINE (http://db.jhuccp.org/popinform/aboutpl.html)

POPLINE®(POPulation information onLINE), the world's largest database on reproductive health, provides more than 300,000 citations with abstracts to scientific articles, reports, books, and unpublished reports in the field of population, family planning, and related health issues.

ICT against HIV/AIDS Coalition (http://www.sdnp.undp.org/ictaids/index.html**)**

HIV/AIDS is not just a health issue for developing countries. Its spread has development dimensions. In turn, HIV/AIDS has had a devastating impact, putting at peril not only the development gains of recent decades but also the capacity to respond to the pandemic. Information and Communication Technologies (ICT) have the potential to deliver new and creative solutions for development. ICT can enhance the way in which prevention, treatment and care as well as the over-all policy, institutional mechanisms and socio- economic dimensions are addressed.

The coalition maintains an ICT against AIDS Projects Database.

Using ICTs to improve sexual and reproductive health (http://www.it-can.org/)

ITCAN - Information and Communication Technology Capacity Building for Asia Network - is a new initiative dedicated to building the capacities of South and Southeast Asian civil society organisations (CSOs) working in the field of HIV/AIDS.

ITCAN builds the ICT capacities of South and Southeast Asian non-governmental organisations working in the field of HIV/AIDS through a combination of online-based and real training activities. These activities include distance learning courses, face-to-face training workshops and written guides and manuals. ITCAN also provides these same organisations with a communication platform where they can share best practices and lessons learned with regard to their newly-acquired skills as well as their experiences of using ICTs in their work.

This website forms the focal point of the ITCAN project. It acts as the central portal for ITCAN member organisations, as well as a source for resources, events and news for stakeholders interests in ICTs for development, especially **HIV/AIDS**.

ITCAN activities are being implemented in 17 countries and territories in South and Southeast Asia: Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia, East Timor, India, Indonesia, Lao PDR, Malaysia, Maldives, Nepal, Pakistan, Philippines, Sri Lanka, Thailand and Vietnam.

Africa Pulse (http://www.africapulse.org)

Africa Pulse is an information portal for the Civil Society sector in the Southern African Development Community. It uses state-of-the-art technology to allow organisations throughout the region to publish content directly to the site, whether it be news of the arrest of a journalist in Zambia, the HIV/Aids crisis in South Africa, a profile of an organisation's work in Tanzania, the devastation caused by a flood in Mozambique, an analysis of the war against Unita, or an election update from Harare.

The section on health and social security deals with HIV/AIDS issues in Africa.

One World TV on HIV/AIDS: http://tv.oneworld.net/tapestry?cluster=2

By using OneWorld TV, film makers get their most controversial work shown without censorship. NGOs get to put a face on their issues and their issues aired. Video journalists have an established platform. Documentary makers promote their work and themselves. Partner organisations – other media networks – share best practices and increase their membership. It's a public space for innovative video projects and together we provide a rich alternative to mainstream media.

IRIN Plus News (http://www.plusnews.org/)

PlusNews is an e-mail and Internet-based HIV/AIDS information service for sub-Saharan Africa, run by the Integrated Regional Information Network (IRIN), a news service that forms part of the UN Office for the Coordination of Humanitarian Affairs (OCHA).

PlusNews was set up in 2001 to provide news, information and analysis on the struggle being waged against HIV/AIDS across Africa, including coverage of the wealth of community-based activities, government initiatives and donor programmes targeting the pandemic.

The Communication Initiative - HIV-AIDS Window: http://www.comminit.com/hivaids/index.html

UNDP, Sustainable Development Networking Programme. *ICT Against HIV/AIDS Coalition*: http://www.sdnp.undp.org/ictaids/add.html

FAO webpage on HIV/AIDS and Food Security: http://www.fao.org/hivaids/

Reports

1. On Agriculture and Food Security

HIV/AIDS and agriculture
This report summarizes the results of HIV/AIDS impact studies conducted in Namibia, Uganda and Zambia. The report illustrates how different aspects of the epidemic affect rural livelihoods, and looks at the implications for the policy environment.
http://www.fao.org/sd/ip/resources/ip_publications.htm

Transcending Boundaries to Improve Food Security of AIDS-affected Households in Rural Uganda
In most of sub-Saharan Africa, the HIV/AIDS epidemic is crippling the livelihood systems of households, jeopardizing income flow, and threatening food security. The International Center for Research on Women (ICRW), the National Agricultural Research Organization (NARO), and The AIDS Support Organization (TASO), with support from the HORIZONS Program, have launched a new project to improve household food security in rural Ugandan communities affected by HIV/AIDS. The project will strengthen partnerships between communities and HIV/AIDS, agriculture, and nutrition specialists to improve the ability of households to meet their food security needs. The project is based on the premise that a new partnership is needed because: (1) agriculture and nutrition specialists recognize the food and nutritional needs of AIDS-affected households, but may be unsure how to address new obstacles that HIV/AIDS poses to household food security and (2) HIV/AIDS institutions know food availability and food quality is a primary concern of their clients, yet do not know how to respond to these concerns. The central role of gender in household food security will be addressed in the design of all interventions.
http://www.icrw.org/projects/hivfoodsecurity/hivfoodsecurity.htm

2. On Stigma and Discrimination

Disentangling HIV and AIDS Stigma in Ethiopia, Tanzania and Zambia
Stigma poses one of the most significant challenges to our response to the HIV/AIDS epidemic. Yet, we have struggled with a poor understanding of stigma's complexities and a dearth of stigma-reduction tools. A ground-breaking study conducted by the International Center for Research on Women (ICRW) and partners responds to these needs. People with HIV often are isolated and the targets of gossip and name-calling. They can lose status and decision-making power in the household and community, many are shunned by family and friends, and they frequently lose access to housing, healthcare, and means of livelihood. Stigma affects men and women differently, with women being more vulnerable. 3 causes of stigma are: (1)inadequate depth of knowledge about HIV and AIDS; (2) people often don't recognize the stigmatizing nature of their actions; (3) social and religious values around the perceived sexually "immoral" ways in which HIV is transmitted. A new ICRW report discusses these and other findings, based on a 3-year study of the causes and manifestations of HIV/AIDS-related stigma in Ethiopia, Tanzania, and Zambia.
http://www.icrw.org/projects/hivrelatedstigma/hivdisentanglingstigma.htm

3. On Gender

Power in Sexual Relationships: An Opening Dialogue Among Reproductive Health Professionals
Highlights from a March 2001 meeting hosted by the Population Council and the USAID Interagency Gender Working Group's Men and Reproductive Health Subcommittee. Discusses contraception, HIV/AIDS, and other aspects of gender-based power.
http://www.popcouncil.org/pdfs/power.pdf

Some Considerations on Sexuality and Gender
Gender has become a major conceptual tool for understanding the HIV/AIDS global pandemic. Gender provides a way to see the structure of relations between men and women as central to any epidemic and adds to an understanding of HIV as more than an individual experience. This paper argues that there are four central issues central for understanding the HIV pandemic moves and develops that are not necessarily best understood through gender analysis alone - women's vulnerability, men's culpability, young people's sexual interests and marginalised sexual cultures. The author proposes to use sexuality as a framework for analysing these issues. By Gary W Dowsett. Reproductive Health Matters, 2003.
http://www.rhmjournal.org.uk/PDFs/22_Dowsett.pdf

The Synergy Project Releases USAID's "Men and Reproductive Health Programs: Influencing Gender Norms"
This review highlights programs designed to change social norms related to entrenched gender roles. It explains the methodologies each program employed to achieve this goal and presents findings from evaluations conducted to assess their efficacy. Some of the programmatic models described were presented at a four-day conference held in the Washington D.C. area in September 2003 that brought together program implementers, researchers, evaluators, and donors to learn about men and reproductive health programs around the world that have challenged gender norms. The complete report may be accessed at: www.synergyaids.com/SynergyPublications/Gender_Norms.pdf
http://www.synergyaids.com/SynergyPublications/Gender_Norms.pdf

World Health Organization: Violence Against Women and HIV/AIDS
This report was the result of WHO consultative expert session on "Violence Against Women and HIV/AIDS: Setting the Research Agenda" from 23-25 October 2000. This report adds to the international recognition that the rapid spread of the HIV epidemic is linked to the high prevalence of int8mate partners and domestic violence, as well as inability of women to negotiate the circumstances in which intercourse takes place.
http://www.who.int/gender/violence/VAWhiv.pdf

UNIFEM Gender and HIV/AIDS Portal: Violence and HIV/AIDS
UNIFEM, in collaboration with UNAIDS, has developed this comprehensive gender and HIV/AIDS web portal to provide up-to-date information on the gender dimensions of the HIV/AIDS epidemic. The site aims to promote understanding, knowledge sharing, and action on HIV/AIDS as a gender and human rights issue. This page features selection of articles and research studies on the linkages of HIV/AIDS epidemic and gender-based violence.
http://www.genderandaids.org/modules.php?name=News&new_topic=9

Gender-Based Violence and HIV/AIDS in South Africa: A Bibliography
This Bibliography lists the articles, reports and other publications used for a literature review prepared by the Center for AIDS Development, Research and Evaluation (CADRE) for the South African Department of Health. The bibliography and associated literature review address gender-related issues pertaining to human rights, violence, HIV/AIDS, reproductive health, trafficking etc.
http://www.cadre.org.za/pdf/VAWA%20biblio.pdf

Domestic Violence and Women's Vulnerability to HIV in Uganda
This Human Rights Watch report paper argues that women are becoming infected with HIV because the state is failing to protect them from domestic violence. It bases the report on 120 interviews with Ugandan women. The paper argues that many women are victims of marital rape. Women were also powerless to protect themselves from infection and are unable to access HIV/AIDS services because their husbands physically attacked, threatened, and intimidated them, and did so with impunity. Most women saw domestic violence as innate to marriage, and viewed sex with their husbands as a marital obligation. Despite a rhetorical commitment to women's rights, the Ugandan government has failed in any meaningful way to criminalise, condemn, or prosecute violence against women in the home.
http://www.hrw.org/reports/2003/uganda0803/

4. On ICTs

Evaluation of the SATELLIFE PDA Project: Testing the use of handheld computers for heathcare in Ghana, Uganda, and Kenya
This evaluation looks at a project led by Massachusetts-based organisation SATELLIFE, to test the use of PDAs in healthcare environments in three African countries. The project put PDAs into the hands of physicians, medical officers, and medical students in different settings in order to demonstrate their viability and usefulness, especially for the collection of health data and dissemination of medical information. The project was conducted in Ghana, Uganda, and Kenya during December 2001-December 2002. Bridges.org was engaged as an outside consultant to conduct an independent evaluation of the PDA trial. The main finding of this evaluation is that the SATELLIFE project in Ghana, Uganda and Kenya has validated the use of handheld computers in healthcare environments in Africa. Bridges.org, February, 2003. (PDF, 113 pages.)
http://www.bridges.org/satellife/evaluation_pda_project_28_February_2003.pdf

Private Partnership Brings HIV/AIDS TV Drama to West and Central Africa
Population Services International (PSI) is leveraging corporate funds to further the health impact and reach of the third season of its television drama SIDA dans la Cité (SDLC), or "AIDS in the City." The broadcast of the sixteen-episode series in ten western and central African nations was made possible by the Coca Cola Africa Foundation and enables millions of people to learn about important issues related to HIV/AIDS. The series was produced by PSI/Côte d'Ivoire and its four separate stories promote responsible behavior change amongst the sexually active, motivate increased demand for and use of voluntary counseling and HIV testing services and aim to reduce stigmatization of people living with HIV/AIDS.
http://www.psi.org/news/0304b.html

5. On Orphans

Africa's orphaned generations
This report, produced by UNICEF HIV/AIDS (2003, presents information and analysis on the situation of children in Sub-Saharan Africa orphaned by the HIV/AIDS epidemic.
http://www.unicef.org/publications/africas_orphans.pdf

6. On HIV/AIDS and Conflict

HIV/AIDS in Conflict: A review of action in Rwanda, Burundi, and Eastern DRC
This is a brief summary of a research done in Rwanda, Burundi and Eastern DRC, to describe the response of humanitarian organisations to HIV/AIDS in conflict situations. The full report is available in electronic format on the internet (http://cerebellum.tiscaliweb.nl/my_project/First_page.htm).

Annex 2: Improving the Accuracy of HIV Estimates

National estimates of HIV prevalence in countries with generalized epidemics are based on data generated by surveillance systems that focus on pregnant women who attend a selected number of sentinel antenatal clinics. UNAIDS and WHO, in close consultation with countries, employ a six-step method to obtain estimates of HIV prevalence for men and women, and an increasing number of countries have adopted these methods to develop national estimates.

This method assumes that HIV prevalence among pregnant women is a good approximation of prevalence among the adult population (aged 15-49). Studies conducted at subnational level in a number of African countries have provided the evidence for this assumption (by directly comparing HIV prevalence among pregnant women at antenatal clinics to that detected among the adult population in the same community).

Recently, several African countries have conducted national population-based surveys that included voluntary HIV testing. The results have been compared to estimates of adult prevalence of HIV based on sentinel surveillance systems. A comparison of data from the 2001 national survey in Zambia with data from the surveillance system has confirmed the assumption that HIV prevalence among pregnant women is roughly equivalent to the prevalence among the adult population, in both urban and rural areas.

Both sources of data have advantages and disadvantages. On the one hand, national population-based surveys capture a much wider representation of the general population than do antenatal clinics (and can yield information on HIV prevalence among men and non-pregnant women). They also provide better coverage of rural populations than antenatal clinic-based surveillance. On the other hand, the fact that some respondents refuse to participate or are absent from the household adds considerable uncertainty to survey-based HIV estimates (with non-response rates ranging from 24% to 42% in the recent surveys carried out in African countries). The estimates can be adjusted if the basic characteristics of the non-responders can be discerned. But there is still an important blind spot: the survey cannot measure the possible association between a person's absence or refusal to participate and increased HIV prevalence. The upshot is that population-based surveys are likely to underestimate true HIV prevalence in most cases (to varying extents, depending on the country).

But how accurate are HIV estimates derived from antenatal clinic data? Those are based on a set of assumptions that may not apply equally well to all countries and at all stages of the epidemic. In addition, most antenatal clinic-based surveillance systems have limited geographical coverage, which can lead to wide variations in the quality of the national estimate of HIV prevalence across countries.

There is no gold standard for HIV surveillance. All HIV estimates need to be assessed critically-whether they are based on a national survey or on sentinel surveillance data. Antenatal clinic-based data are especially useful for gauging HIV trends. National surveys help fill out our picture of the epidemic. Conducted at three-to-five-year intervals, such surveys can serve as valuable components of surveillance systems and can help improve estimates of the levels and trends in HIV prevalence.

(WHO 2003)

Annex 3: Estimated Adults and Children Living with HIV/AIDS and Estimated AIDS Deaths in Africa in 2001

Country	Men living with HIV/AIDS	Women living with HIV/AIDS	Percentage of total adult population*	Children	Total adults & children living with HIV/AIDS	Adults & Children AIDS Deaths
Angola	130,000	190,000	5.5	37,000	350,000	24,000
Benn	43,000	67,000	3.6	12,000	120,000	8,100
Botswana	130,000	170,000	38.8	28,000	330,000	26,000
Burkina Faso	160,000	220,000	6.5	61,000	440,000	44,000
Burundi	140,000	190,000	8.3	55,000	390,000	40,000
Cameroon	360,000	500,000	11.8	69,000	920,000	53,000
Central African Republic	90,000	130,000	12.9	25,000	250,000	22,000
Chad	54,000	76,000	3.6	18,000	150,000	14,000
Comoros						
Congo	40,000	59,000	7.2	15,000	110,000	11,000
Cote d'Ivoire	29,000	400,000	9.7	84,000	770,000	75,000
Dem. Republic of Congo	430,000	670,000	4.9	170,000	130,0000	120,000
Djibouti						
Equatorial Guinea	2,500	3,000	3.4	420	5,900	370
Eritrea	19,000	30,000	2.8	4,000	55,000	350
Ethiopia	800,000	1,100,000	6.4	230,000	2,100,000	160,000
Gabon						
Gambia	3,500	4,400	1.6	460	8,400	4,000
Ghana	160,000	170,000	3.0	34,000	360,000	28,000
Guinea						
Guinea-Bissau	6,700	9,300	2.8	1,500	17,000	1,200
Kenya	900,000	1,400,000	15.0	220,000	250,000	190,000
Lesotho	150,000	180,000	18.0	27,000	360,000	25,000
Liberia						
Madagascar	9,000	12,000	0.3	1,000	22,000	
Malawi	340,000	440,000	15.0	65,000	850,000	80,000

Mali	46,000	54,000	1.7	13,000	110,000	11,000
Mauritania						
Mauritius	350	350	0.1	<100	700	
Mozambique	370,000	630,000	13.0	80,000	1,100,000	80,000
Namibia	90,000	110,000	22.5	30,000	230,000	13,000
Niger						
Nigeria	1,500,000	1,700,000	5.8	270,000	3,500,000	170,000
Rwanda	180,000	250,000	8.9	65,000	500,000	49,000
Senegal	10,000	14,000	0.5	2,900	27,000	2,500
Sierra Leone	60,000	90,000	7.0	16,000	170,000	11,000
Somalia					43,000	
South Africa	2,000,000	2,700,000	20.1	250,000	5,000,000	360,000
Swaziland	61,000	89,000	33.4	14,000	170,000	12,000
Togo	54,000	76,000	6.0	15,000	150,000	12,000
Uganda	230,000	280,000	5.0	110,000	600,000	84,000
United Rep. Of Tanzania	550,000	750,000	7.8	170,000	1,500,000	140,000
Zambia	410,000	590,000	21.5	150,000	1,200,000	120,00
Zimbabwe	800,000	1,200,000	33.7	240,000	2,300,000	200,000
Total	**11,000,000**	**15,000,000**	**9.0**	**2,600,000**	**28,500,000**	**2.2 Million**

Source: http://www.avert.org/subaadults.htm

The figures in the table above are figures from at the end of 2001. New updated figures for individual African countries will be published in July 2004 by UNAIDS.

Adults in this report are defined as men and women aged 15-49. This age range captures those in their most sexually active years. While the risk of HIV infection continues beyond the age of 50, the vast majority of people with substantial risk behaviour are likely to have become infected by this age. Since population structures differ greatly from one country to another, especially for children and the upper adult ages, the restriction of 'adults' to 15-49 has the advantage of making different populations more comparable.

Children in this report are defined as under the age of 15 at the end of 2001.

Annex 4: Providing Drug Treatment for Millions

What has already happened?

Globally, only 7% of people who need treatment are receiving it. In December 2003, there were only 400,000 people in developing countries accessing antiretroviral (ARV) therapy, and in just the past year the epidemic has claimed the lives of an estimated 2.3 million people in Africa alone.

In sub-Saharan Africa, HIV prevalence has remained steadily at high levels for the past few years. This does not mean that new infections are decreasing and drugs are keeping people alive longer - it means that there is a very high infection rate and a similarly high mortality rate. Some countries - Botswana, for example - have been starting to provide treatment, although they still have a long way to go before they can provide treatment for all their infected population.

Asia seems to have been hit by the main force of the epidemic more recently than Africa, and some Asian countries have reacted rapidly - Thailand, for example, although their prevalence rates are still high. The epidemic in Asia is very diverse, and in some areas the severity is not measurable due to lack of testing and reporting facilities. In many Asian countries the health care facilities are not in place to support a rollout of testing or medication.

Latin America & the Caribbean have very poor medical facilities in some countries, whereas others have responded well to the impact of HIV. Brazil, for example, reacted early to the threat in the 1980s, engaging in an aggressive media campaign to educate the public. They have further reduced the impact of the virus by producing and providing free, generic medication and promoting condom usage. Countries such as Argentina, Costa Rica, Cuba and Uruguay now guarantee free and universal access to generic antiretroviral drugs through the public sector, and drugs have become much cheaper in Honduras and Panama. Drug prices do still vary, however, in this region and access to medication remains unequal. In the Caribbean area, however, poor healthcare infrastructure means that the spread of HIV in many countries cannot even be effectively monitored, and this area may be the second worst affected in the world.

The Clinton Presidential Foundation has achieved some measurable success by acting as a go-between for various low-income countries and the pharmaceutical multinationals. It has persuaded various drugs manufacturing companies to reduce the prices of their drugs, or to hand over patents and allow cheap generic versions of the drugs to be made.

To a certain extent, the pharmaceutical multinationals are themselves helping by allowing generics companies to produce patented medicines for a fraction of the price, and in some cases giving up the intellectual property rights to a drug. This, however, usually happens only with drugs which have now been replaced in Western countries by newer products

What promises have been made?

We are now in a situation where treatment for AIDS and opportunistic infections (OIs) has been promised to people in low-income, high HIV-prevalence countries.

In December 2003 the World Health Organisation (WHO) published a policy document outlining a plan to bring ARV treatment to 3 million people in developing countries by 2005. This document, the *3 by 5 Strategy*, outlines how the WHO intend to work with other governments and groups to get treatment to where it is most urgently needed. The WHO will not themselves supply any money or medicines, but will provide technical assistance, upgrade health-care infrastructure and training, and help to co-ordinate efforts to scale up treatment.

Stephen Lewis, the UN's Special Envoy on AIDS said in February 2004 "Virtually every African country with medium to high prevalence rates has a treatment plan in place. Many of the countries have some money from the Global Fund, or the World Bank, or the Clinton Foundation, or the Gates Foundation or the United Nations family or bilateral donors. . . what they need is exactly what the World Health Organisation can provide: the capacity to give overall co-ordination and direction so that the treatment regimens succeed. . ."

The WHO needs $200 million for 2004 and 2005 to put this plan into effect, and it currently has massive funding shortfalls and a shortage of donors.

The United States has committed itself to reducing mother-to-child transmission of HIV by 20% by 2005 and by 50% by 2010. They also aim to provide anti-retroviral medication, with the targets of treating 500,000 people by October 2005, one million people by October 2006, and two million people by the end of 2007.

By 2003 commitments had been made to help, the Global Fund to fight AIDS, TB and Malaria had been set up, and US President Bush, Bill Gates and others had promised large sums of money to combat the spread of the epidemic.

At this stage it is impossible to say what the costs will be of tackling the HIV epidemic in developing countries, partly because the exact numbers of people infected can only be roughly estimated. A range of organisations will contribute towards the costs of helping these people, including :

- Industrialised countries
- Individual philanthropists
- Multinational companies
- Major funding bodies - Global fund, etc.
- The affected countries, themselves.

The question that needs to be answered is whether these promises can be kept, and what is needed to fulfil them?

What is needed to set up an HIV treatment and care program?

An HIV / AIDS treatment and care program needs more than just antiretroviral (ARV) drugs.

Voluntary HIV counselling and testing (VCT) plays a key part in HIV-related treatment and care. It is particularly important as a starting point for the access of other HIV/AIDS-related services. If a person does not know they are infected, they cannot get any treatment or care. It is widely recognised that knowledge of their HIV

infection can help a person to stay healthy for longer as well as preventing new infections. In too many places people are diagnosed with HIV when they are seriously ill. At this point, there are fewer opportunities for cost-effective interventions, which can improve their quality of life.

In order to begin to treat people who are HIV positive, they first need to be able to be tested in order to find out their HIV status. This initial test is an **antibody** test. These tests do not necessarily require laboratory facilities or highly trained staff. If people are found to be positive, a counselling program needs to be in place to give support and to educate people against transmitting the virus onwards.

Travel may be an issue in remote areas. Many people living in rural or not easily-accessed locations may have considerable difficulty in getting to healthcare facilities, which may be a long distance away. This means that a large number of people in rural areas may not even be able to access HIV testing facilities.

Food is a crucial requirement. Adequate nutrition is a crucial part of care for people with HIV, particularly in the time before they show symptoms. In some resource-poor countries people do not have sufficient food supplies, let alone antiretroviral medication, and it has been shown that a person who has HIV can remain healthy for a greater length of time if they have an ample and nutritious diet. Without a good standard of nutrition a person is at risk of developing opportunistic infections. Furthermore, even if this person is fortunate enough to have access to ARV medication, many of these drugs should be taken on a full stomach.

To provide an ARV treatment program it is not always necessary to have access to laboratory or hospital facilities but it is, however, necessary to have some facilities. Volunteers and nurses can function as counselling staff and perform initial tests and counselling, but they require some training. The administration of HIV/AIDS treatment programs requires professional medical staff. This can be a challenging requirement, particularly in areas where a very high prevalence rate has lead to the deaths of many doctors.

Deciding when to begin **ARV treatment** is not easy. The decision can be made either on the basis of a test called the CD4 test, or because a person has certain symptoms. In many places the CD4 test is not available, as it requires a laboratory, expensive equipment and trained technicians. Also, of course, an uninterrupted supply of cheap, good quality ARV medication is essential.

The drugs themselves are also needed. Unfortunately, the problems involved in providing the correct medication to people do not end when the money is found to pay for it. There are a number of different drugs involved in treating AIDS, and the rights to these drugs are owned by different companies.

The antiretroviral drugs.

Antiretroviral treatment is the main type of treatment for HIV or AIDS. It is not a cure, but it can stop people from becoming ill for many years.

In successful antiretroviral treatment, a person needs to take at least two and preferably three drugs at the same time. The reason for this is that if only one drug is taken, it will just be a short time before the drug will stop working and the person becomes resistant to the drug. If several drugs are taken together, and if the drugs are from more than one group, then it generally takes longer before someone becomes resistant.

When someone starts treatment, the combination of drugs that they begin by taking is known as 'first-line treatment'. In many low-income countries, there is only one choice of antiretroviral combination therapy, if it is available at all. WHO recommends that a standard combination of drugs is chosen to be provided for everyone to take when they start treatment. They suggest that generally a first line regime should consist of two drugs from the nucleoside (NRTI) group and one from the non-nucleoside (NNRTI) group.

In general the five drugs that will be needed are :

D4T (stavudine)
3TC (Lamivudine)
NVP (nevirapine)
AZT (zidovudine)
EFZ (efavirenz)

It is preferable if these drugs are available as fixed dose combinations (FDC). A co-blister pack is when two or more pills, capsules or tablets are packaged together in one unit of use of a plastic or aluminium blister pack. In contrast, a fixed dose combination (FDC) is when two or more drugs are combined together in one pill, capsule or tablet.

FDCs reduce the number of pills or tablets to be taken. Also the person taking the pills cannot leave out, forget or sell one of their drugs by not taking some of the pills. This improves the ability of people to take the drugs correctly (known as adherence) and it limits the emergence of resistance. Co-blister packs help people to take the pills at the correct time by packaging them together, but the drugs can still be separated, and co-blister packs do not reduce the number of pills or tablets to be taken.

A very large number of these 5 drugs are going to be needed, preferably packaged as various FDCs.

What issues are involved in providing the drugs?

In order for the drugs to be made available, there are several factors to consider.

The numbers of drugs

The actual process of providing medication isn't as simple as just buying drugs and giving them to patients who require them. Initially, the drugs have to be manufactured. If a person has to take a capsule or tablet twice a day, this amounts to 730 tablets each year. For ten million positive people in the developing world, this requires 7,300,000,000 tablets to be made available. This is assuming that multi-drug combination tablets are being manufactured which contain three different drugs in one tablet. If this is not the case then the amount of medication needing to be produced, shipped and made available to patients will be three times the number above.

This number of drugs may not be very significant if they are being made, for example, in the north of England and distributed to various UK cities. However, these drugs may be manufactured in India for eventual use in a rural African Village.

Drug Pricing

The companies who manufacture these drugs have generally charged prices for them which put the medicines out of the budget-range of many countries. In response to legal action and public disgust as what was seen as profiteering from the epidemic, some of these drugs are now being made available at more affordable prices, and in

some cases the patents are being released so that the drugs can be produced cheaply by other companies as generic copies.

In this way the pharmaceutical companies are helping to make medication more affordable and available to people in resource-poor communities. There is, however, clearly a significant need for further change.

The cost of the actual process of manufacturing these tablets in large quantities is very low, but the amount of money required for the development and testing of new drugs is much higher. Pharmaceutical companies use this to justify the high (and regionally variable) prices for some of their medications, but it is also true that if the drugs are sold cheaply in large numbers they will make a similar profit to that realised if they are sold for a higher price in smaller numbers.

Making FDCs

The antiretroviral drugs used in more developed countries, are manufactured by a number of different companies. There have been difficulties with these companies working sufficiently together to produce, in one tablet or pill, drugs patented by different companies. Generally, it is only generic copies of these drugs which are currently available in FDC form.

Why people shouldn't have to pay for the drugs themselves

Aside from the fact that many people are unable to afford the medication they need, some can sometimes afford medication and sometimes not, as their financial position fluctuates. The consequences of interrupting a course of medication can be worse than not taking it at all. If high enough levels of the drug are not maintained in the body, then HIV is given the opportunity to replicate. Often, the new virus that is replicated is a little different from the parent virus, and the new virus can develop immunity to the drugs which are being used. If, however, the drugs are freely available through public health systems then, as long as the public health systems receive an uninterrupted supply of medication, there will be no reason for people to be unable regularly to take the medication that they need.

Transport & supply problems

It is crucial that people have access to an uninterrupted supply of medication, which, in very remote areas, can be challenging. Local production of medication can significantly increase the ability of people to access the drugs they need. In some cases the drugs need to be kept refrigerated until they are used, which presents obvious difficulties for transport to isolated areas - trucks with refrigeration units would be needed. Then, when the drugs reach their destination, they will need to be kept refrigerated until use. Whilst this is certainly not impossible, many resource-poor areas do not have the infrastructure needed to deal with this transport and refrigeration.

Political and military upheaval can also present major problems in the delivery of medication. When a country has closed it's borders, it becomes increasingly difficult for medication to be imported. This is yet another factor which suggests that local production of medication is advantageous. War and social upheaval also has destructive effects on healthcare infrastructure.

Are there enough drugs to go round?

Currently there are not enough drugs for everyone and what is available is not always getting to the people who need to access treatment. The WHO support the use of cheaper generic copies of medications, which the US opposes.

Both the World Bank and the WHO feel that it is best if ARVs can be produced as locally as possible in order to make transport problems easier to tackle, to maintain patients with an uninterrupted supply of medication, and thus to prevent resistant strains of HIV from spreading. Setting up factories to produce ARVs is complicated and requires expensive equipment, but already some countries, such as Cuba and Brazil, are doing this. They may now be in a position to offer advice and help to African countries who need to begin this process. Indeed, both countries have already made such offers. Patented AIDS treatments from official manufacturers can cost between $10,000 and $15,000 per patient per year, far beyond the reach of a huge majority of positive people. By comparison, generic treatments can cost as little as $1 per person per day. Furthermore, these countries are producing the medicines in Fixed Dose Combination form.7

Who gets the drugs first?

Even when ARV medication does begin to arrive where it's needed, initially there will not be sufficient drugs for everyone who needs them. This leaves medical staff in the difficult position of having to decide who lives and who dies. Some groups have suggested that it should be decided on the basis of 'first come, first served', others say that mothers should be treated so that they can look after their children, that wage-earners should be treated so that they can feed their families, or that medical staff should be treated so that the damage to health-care infrastructure does not become even worse. Whichever way the drugs are apportioned, at the moment demand is much greater than supply, and there are going to be inequalities in resource-poor areas, and all the anger and resentment that inequality brings.

Quality control

If cheaper generic drugs are to be used, they must be of a good quality, and neither poorly manufactured or fake. Counterfeit drugs have been sold on occasions, which, if used, can have terminal effects or can cause resistance to develop when the genuine drugs are used again. The WHO has started a quality and sourcing project intended to ensure that medication is tested and reliable. In 2003 the FDA in the United States estimates that 10% of drugs sold in both industralised and developing countries were counterfeit. The WHO and MCC has assessed Indian generics as being of good quality.

Language issues and instructions

If a generic drug is manufactured in India, it must be comprehensible for a HIV positive person and medical staff in Africa. This means that the drugs must either be packaged at their source, with the packaging and instructions in the language of the area in which it will be taken, or that they must be packaged at their destination with the instructions printed locally and the drugs produced elsewhere. This necessitates good communication between source and recipient areas, and is one of the reasons that the WHO has recommended that generic antiretrovirals be produced locally.

Conclusion

It is currently not feasible to install a treatment program to 'reasonable standards' - including CD4 testing and other clinically demanding services - many of the areas most desperately in need do not have the medical infrastructure in place. Currently, in this crisis situation, it seems better to go with whatever is 'good enough'. In this situation there will still be preventable deaths, but less than there otherwise would be. Resistance and poor adherence in unsupervised situations is always a risk, so in this situation there has to be even more of an emphasis on teaching people to take the drugs properly.

Antiretroviral medications are powerful and can have unwanted side-effects, some of which can be life-threatening. Some countries can now or will soon be able to access medication but have poor healthcare infrastructure and an inadequate number of trained staff. In this situation one possible choice will be delaying the provision of medication until a support structure can be put in place, by which time many people will have died preventable deaths. The other choice will be to provide the medication without the ideal monitoring facilities, in which case a few people may be harmed or even killed by drug-failure or toxicity. The second choice would lead to a much smaller number of deaths.

Clearly, there are major challenges involved in organising provision of medication in resource-poor countries, but it is very positive that an attempt is finally being made. Over the next two years, a few hundred thousand lives should be saved, and although this is a fraction of those who might be helped, we are now in a situation where some progress could be made, given the political motivation. Unfortunately, by early 2004, the WHO "*3 by 5 Initiative*" to bring ARV treatment to 3 million people in developing countries by 2005 appeared to have stalled due to insufficient political motivation to provide the necessary funding. The UN's Special Envoy on AIDS, Stephen Lewis, said that only three countries - Spain, Sweden and the UK - have shown any willingness to provide financing to the WHO to carry out it's "*3 by 5 Initiative*". The WHO needs $200 million over 2004 and 2005 to carry out it's work, and so far, in spite of it's best efforts, has not received it. The WHO may be forced to put in an application to the Global Fund, itself dangerously underfunded.

AIDS killed 3 million people during 2003, and this is not a figure that looks likely to be reduced in 2004, in spite of the good intentions of wealthier countries and the promises that have been made. If this shocking and preventable death rate is to be reduced then promises must be turned into action, money must be released to the agencies who need it, and these agencies must work together deliver the drugs, care and education to the people to whom they have been promised.

Stephen Lewis, Special Envoy for HIV/AIDS in Africa, said in February 2004 that urgent action was needed, now more than ever.

'If 3 by 5 fails, as it surely will without the dollars, then there are no excuses left, no rationalisations to hide behind, no murky slanders to justify indifference.

There will only be the mass graves of the betrayed.'

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http://www.avert.org/aidsdrugsafrica.htm