CECILE AMBERT, KATJA JASSEY, LIZ THOMAS • FEBRUARY 2007

Report summary

# HIV, AIDS and urban development issues in sub-Saharan Africa

**COVER**
South African artist Churchill Madikida has focused much of his art on HIV/AIDS to intensify awareness of the disease. This painting, *Virus V*, depicts the artist's sister, who lived with HIV for more than nine years before her death in 2005.

CHURCHILL MADIKIDA, *VIRUS V*, 2005, LAMBDA PRINT. COURTESY OF THE ARTIST AND MICHAEL STEVENSON GALLERY, CAPE TOWN.

# Urban poverty and development interventions in sub-Saharan Africa

There is an urgent need for urban development actors to respond to HIV and Aids. The virus is still on the increase, and millions of people will continue to live with HIV in the urban areas of Sub-Saharan Africa for years to come.

So far, most HIV activities have been either targeted at prevention through information and behaviour change, or at the provision of Antiretroviral Therapies (ARTs), orphanages and other social safety nets. However, we must move beyond sex and medicine and look at how urban development actors can contribute. Funding for access to safe water has been on the decline for a number of years. Infrastructure projects have been replaced by institutional and capacity-building interventions. This report shows that it is absolutely critical that development financiers as well as activists for pro-poor change revisit their priorities. If all people living in slums got access to the basics of clean water and safe spaces they would not only run a lower risk of contracting HIV, but those who are already living with HIV would also become less infectious and stand a greater chance of living a long and healthy life.

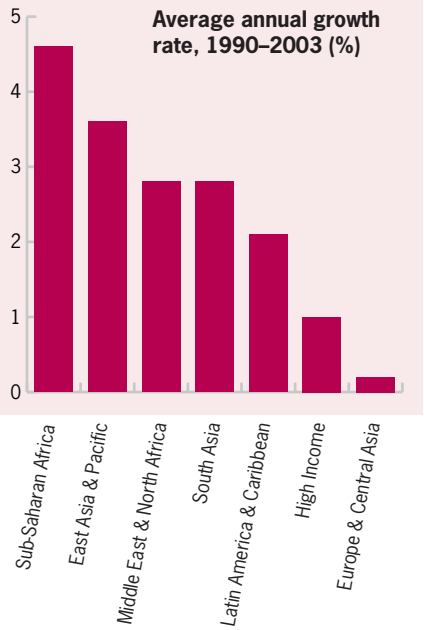
## Sub-Saharan Africa has the most rapid urbanisation in the world

Until the 1980s, development interventions in sub-Saharan Africa focused on urban areas. These had not only been the locus of colonial power and administration, but also the bed of struggle for independence and subsequently became the seat of newly independent states. Then, the realisation that the majority of the population and the concentration of poverty were rural prompted a shift in development policies' focus and funding to rural areas. Today, the region is undergoing extremely rapid urbanisation, faster in fact than on any other continent, and is already more urbanised than South Asia.

According to the World Bank, cities in sub-Saharan Africa have been the engine of economic growth in the region throughout the 1990s. However, any definite conclusions are hampered by the lack of reliable data and consistent use of how to measure 'urbanisation' or define what should be classified as an urban area. Within the next 25 years or so the majority of Africa's population will be urban, and most of this growth is taking place through informal, people-driven settlements and informal land development processes. Informal settlements, or slums as they are also referred to (terms such as slums, informal settlements, shanties, and even peri-urban areas, are used interchangeably and inconsistently in the literature), are generally places where living conditions are poor and many indicators for human development such as health and child mortality suggest that the 'urban poor' are at times worse off than the 'rural poor'.

Other indicators, such as access to 'improved' infrastructure, meaning water and sanitation, tend to suggest that the urban populations are often 'better-off' than their rural counter-

**Figure 1: Urban population growth rates**




Source: World Bank, http://devdata.worldbank.org/wdipdfs/table3_10.pdf

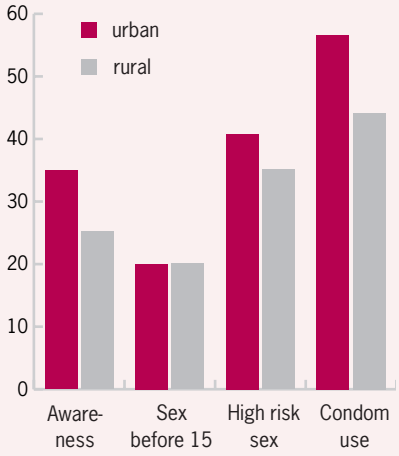
PHOTO: PEP BONET/SILVER

Khayelitsha Township, Cape Town. Luniko (right) talking to a friend. Both children are HIV positive. Housing, sanitation, safety and education issues will affect their lives for years to come.

parts. But there are severe limitations to this understanding. For a start, what constitutes 'improved' water and sanitation primarily refers to the concept that current access is notionally 'better' than previous access. They include a range of technologies that are not supportive of environmental health and safety in dense urban settlements, such as unimproved pit latrines, and do not specify appropriate qualitative aspects such as affordability, reliability, quantity or physical accessibility. Access does not measure if safe water flows when required, or how many people simply do with less because they neither have the time, energy nor money to maintain their own health and hygiene. Nor does it measure if pits and soak-aways are regularly emptied when full. Moreover, urban statistics often lack disaggregated information, for example, that differentiates slums and other areas. Hence, in many respects, while aggregated urban-wide data seem to suggest that 'improvements' are being achieved in the living conditions of the urban poor, the situation on the ground may reveal a drastically different situation.

**Figure 2: Youth profiles differ**

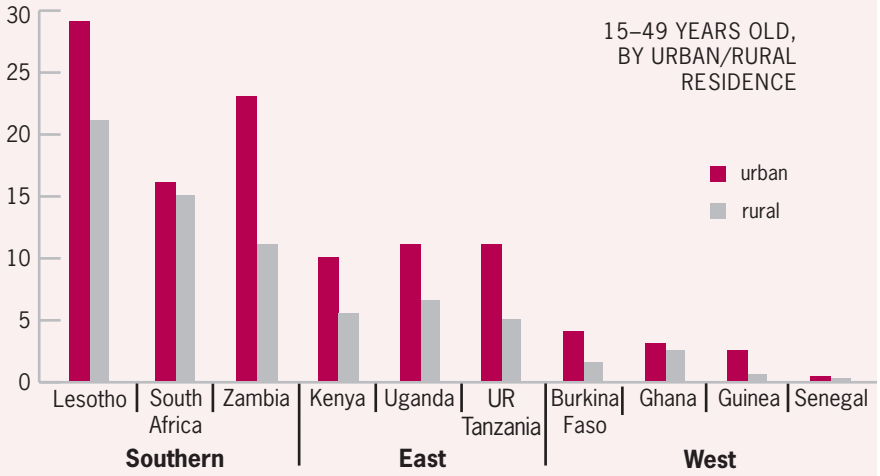
**Key aggregated differences between young people (aged 15-24) in sub-Saharan urban and rural populations.**




Source: UNAIDS, 2006, Tables 11-13

**Figure 3: HIV prevalence**

**HIV prevalence (%) by rural/urban residence for selected African countries**




Source: UNAIDS 2006, Table 2.7

Awareness – the percentage of young people with comprehensive HIV and AIDS knowledge.

Sex before 15 – the percentage of young people who have sex before the age of 15.

High risk sex – young people who have reported having sex with a non-marital, non-cohabiting partner in the last 12 months.

Condom use – the percentage of young people reporting the use of a condom the last time they had sex with a non-regular partner.

## Urban areas have the highest HIV prevalence

If poverty data suffers from lack of disaggregation, the same applies to data on the prevalence of HIV in rural and urban settings. However, where such data does exist, it indicates that HIV prevalence in urban areas is in most cases much higher than in rural areas. According to UNAIDS, HIV prevalence in the urban population is on average 1.7 times higher than among those who live in rural areas. Figure 3 above illustrates this trend.

The impact of HIV on urban areas, and in particular informal settlements, is a key concern that needs to be taken into account when discussing poverty in the African context. Living with HIV means that living costs rise substantially. HIV-infected people need to eat better in order to stay healthy, especially when taking drugs. They also need to cover the cost of transport to the clinic or hospital and for medication. Access to safe water to clean infected sores – and also to keep bed linen, clothes and other spaces clean when suffering from chronic diarrhoea – is also of increased importance.

All of this points to the necessity of urban development programmes responding to HIV and AIDS, since living with the virus often leads to increasing levels of urban poverty at both individual and societal levels.

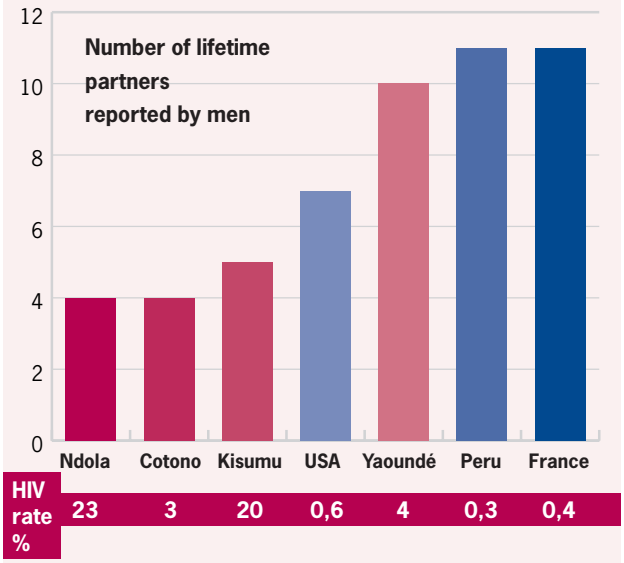
## Is individual behaviour change the only answer?

Interestingly enough, despite the higher levels of HIV in urban areas, studies seem to indicate that urban youth have higher awareness and use condoms more regularly than those in rural areas (figure 2).

Dominant curative models in public health – those focusing on curing disease rather than preventing it or ameliorating its effects – hold the disease carrier responsible for managing the risk of infecting others. It is assumed that with information and knowledge people will make rational informed choices that include restricting and changing their behaviour to avoid infecting others, or indeed to avoid infection themselves. But the findings presented above suggest that greater awareness on its own is not sufficient to support changed behaviour, or perhaps the overall awareness level (still only 35% in urban populations) has not yet reached the level where it can have an effect. In either case, this lack of correlation suggests that there may be an over-reliance on HIV prevention strategies and explanatory models that focus solely on changing individuals' behaviour.

Furthermore, most analyses of the concentration of HIV in urban settlements – especially informal ones – refer to the mobility of their residents, supposedly leading to more opportuni-

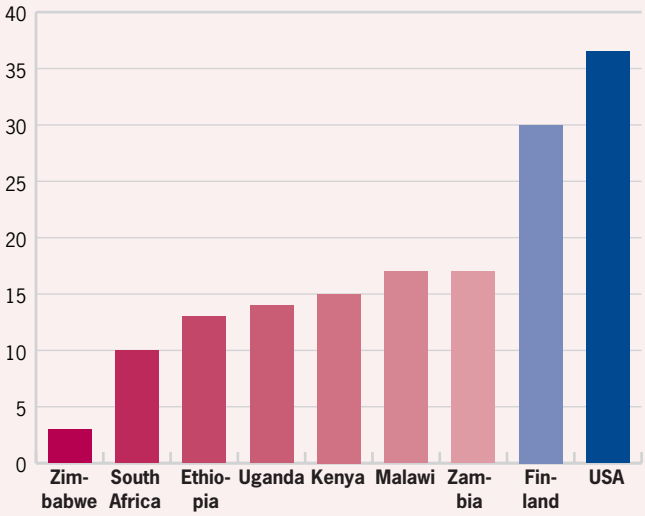
**Figure 4: Number of lifetime partners & HIV rate**




Source: Whiteside, A (2005)

**Figure 5: Sexual debut**

Percentage of girls aged 15–19 who say they had sex before their fifteenth birthday.




Source: Whiteside, A. (2005).

ties for sexual networking and elevated partner-change rates. An alternative perspective is that the higher HIV prevalence has more to do with the high concentration of poor people with serious health problems and immune systems already compromised by malnutrition. The manner in which any 'problem' is defined affects the type of response that is crafted to address it. Hence, if the HIV and AIDS 'problem' is defined primarily as one of 'risky' sexual behaviour on one hand, and poor access to medical treatment on the other, the responses are primarily about behaviour change, ART (Antiretroviral Therapy) and PMTCT (Prevention of Mother to Child Transmission) roll-out. Or as Stillwaggon (2006) proposes:

"HIV prevention policy has failed partly because it is driven by the assumption (explicitly or implicitly) that differences in sexual behaviour are sufficient to explain differences in HIV prevalence between populations… Some policymakers seem to be convinced that Africans are having more sex than Americans. They do not ask why US campuses, where rates of Chlamydia and genital herpes are as high as 30 to 40 percent, do not also have high rates of HIV."

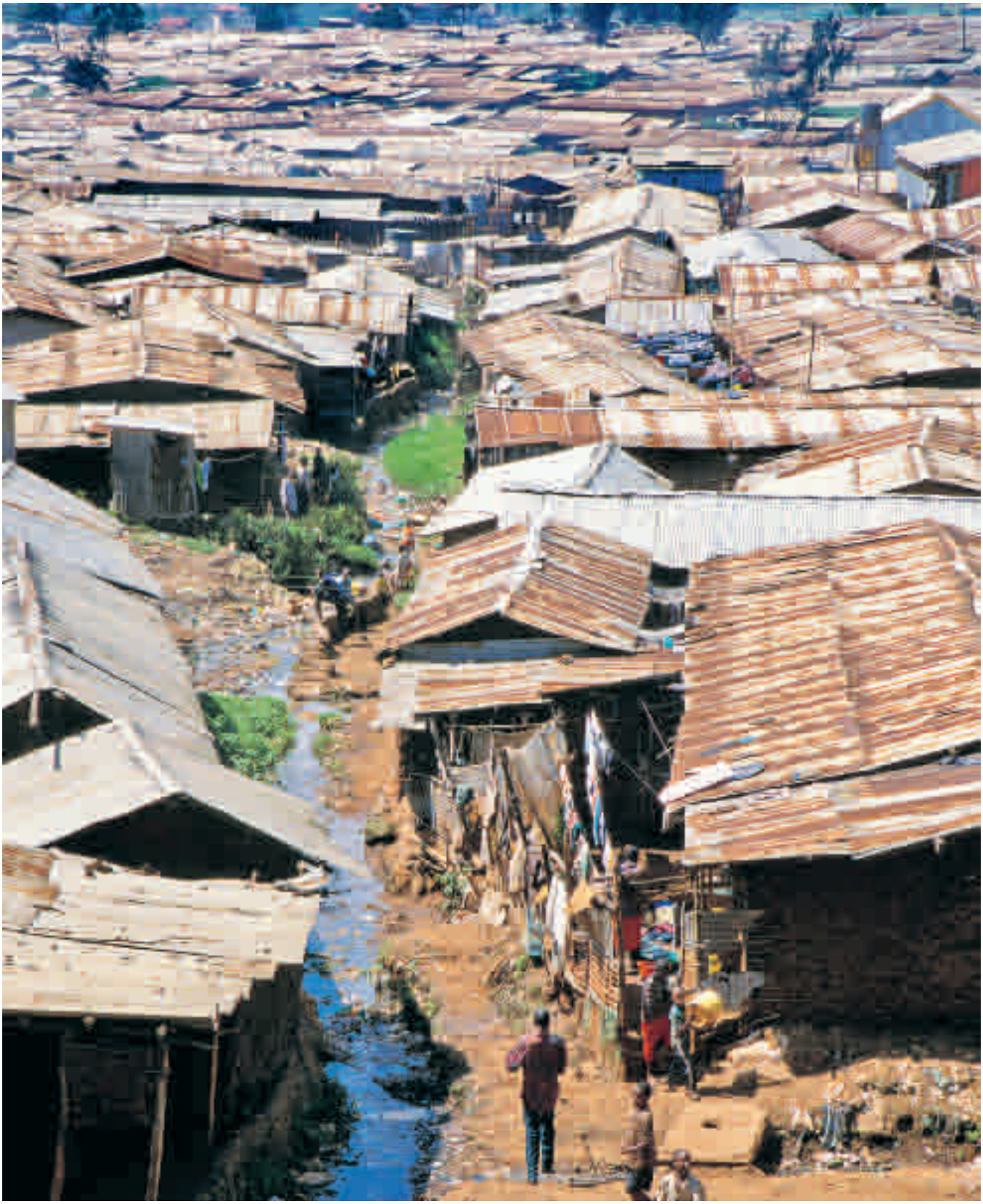
Stillwaggon's statement echoes in a number of figures presented by Whiteside (2005). According to these findings, Africans do not seem to have more sex, with more people or initiate sex earlier, than e.g. Americans; in fact it seems as if the opposite is true (see figures 4 and 5).

## How can urban development actors contribute?

Some of the commonly recognised factors related to HIV and AIDS that urban development practices can help shape – and thus need to respond to – include:

- A lack of sexual privacy is associated with a lower age of sexual debut, which has been positively correlated with a heightened risk of HIV infection. Urban households often share a single room for cooking, bathing, sleeping and simply living, including engaging in sexual activity;
- Distance to and cost of prevention, care and treatment of sexually transmitted infections and PMTCT play a determining role. Fragmented and sprawling cities are spaces where infected and affected persons face uneven access to the health-care system; and
- Most HIV programmes have begun to recognise the significance of access to water in preventing mother-to-child transmission. Most HIV programmes advise against breastfeeding when the mother is HIV-positive, but this becomes a

PHOTO: SEAN SPRAGUE/PHOENIX



The Kibera slum area of Nairobi is one of Africa's largest shantytowns. Access to safe water, waste management and public safety are intimately related to major public health issues, including HIV/AIDS.

problem where water quality is unsafe. Formula feeding then poses other risks to the infant.

- Furthermore, the support and care of people living with HIV requires access not only to sufficient amounts of water, but also to clean water for drinking, so that people with already weakened immune systems are not exposed to new infections from parasites and worms. Without sufficient water, it is impossible to ensure minimal hygiene.

## PUTTING HIV INTO THE MAINSTREAM OF YOUR CORE MANDATE

**Three types of responses to HIV and AIDS can be distinguished:**

**1) HIV mainstreaming activities:** What can you do within your core mandate to address people's susceptibility to HIV and vulnerability to AIDS?

**2) HIV programming:** What dedicated activities can you plan and implement to address people's susceptibility to HIV and vulnerability to AIDS, separately and additionally from your core mandate?

**3) Incorporating programming elements into mainstream activities:** Which 'add-on' activities can you include within your core mandate to address people's susceptibility to HIV and vulnerability to AIDS?

**Depending on the core mandate of an organisation, certain types of activity will be defined as programming activities or mainstreaming activities. Hence:**

■ A water upgrading programme in slum areas, which reduces individuals' and households' exposure to some of the parasites and pathogens that increase infectiousness, susceptibility to infection and increase the pace of progression from HIV to AIDS, clearly aligns with the mainstream role of urban development actors; and

■ Facilitating condom distribution and peer education activities aligns with the core mandate of the health sector and should therefore fall within the mainstream role of the health sector actors, while it would be an add-on activity in the water upgrading programme.

Today, most HIV funding within the urban sector is directed at add-on components such as condom distribution or awareness raising activities. There is little recognition of the valuable contribution that the expertise of urban planners of infrastructure and delivery systems could make in terms of HIV prevention as well as improving the lives of those living with HIV. Urban development actors have the potential to make a huge difference if HIV aspects are incorporated in all of their work from designing houses to providing water and electricity.

HIV and AIDS also have a bearing on the manner in which land and services are held, transacted and used. Urban development practices need to accommodate and respond to these impacts, which include:

- Increasing household fluidity and mobility – meaning that households change in size and composition, and re-locate in new ways;
- Decreasing household affordability, dissaving, borrowing, the sale of assets and changing household expenditure patterns – in other words financial resources for investment in building and improving a house are often more limited for a household affected by HIV and AIDS;
- Increasing demand for burial space.

However, what has received far less attention is the range of ways in which poor access to basic water and sanitation services affects the spread of HIV and AIDS. This factor exposes individuals to infection with parasites and pathogens such as worms, bilharzia, malaria and tuberculosis, which cause malnutrition, reduce immune resistance and increase viral load.

Worms transmitted through water, soil and food, play a critical role in HIV transmission and progression to AIDS. This relationship has created an opportunity for more rapid infection by HIV, as well as quicker progression to AIDS in the African context. People who are infected with urinary bilharzia have an increased risk of becoming infected with HIV. This is due to the sharp and irritant worm eggs which, when passed through the urogenital tract, cause lesions that bleed and are inflamed and then come into contact with potentially infected semen or vaginal fluid. These symptoms are often misdiagnosed as sexually transmitted infections.

Bilharzia, which affects women and girls disproportionately, and HIV are co-endemic in most of the region where water and sanitation systems are inadequate, moving with the infected host. Research has shown that women with bilharzia are three times more likely to be HIV-infected than women without it. In regions where malaria is endemic, open water tanks and the absence of stormwater drainage can act as breeding grounds for malaria-carrying mosquitoes. HIV-infected individuals with malaria have a significantly increased viral load, which enhances HIV transmission and accelerates disease progression. Infection with malaria makes HIV-positive individuals as much as seven times more contagious than other HIV-positive individuals.

Given these facts, there is an urgent need to re-visit urban development initiatives as well as dedicated HIV programmes to re-shape how they respond to basic sanitary require-

ments, such as clean water for drinking and stormwater drainage.

## Development actors on the urban scene

African NGOs have played a leading role in delivering services, mobilising HIV prevention and treatment access advocacy campaigns as well as linking up with community-based HIV service providers. Some of these responses – like food gardens and communal saving and borrowing schemes for income producing purposes – have clear benefits for all community members, whereas some – like neighbourhood care points – target specifically vulnerable children and orphans. Increasingly, however, African NGOs and CBOs have come to ground their interventions within the broader context of poverty, and in particular urban poverty.

National leadership has at times been extremely vocal and acted as a catalyst for the response at other levels of society, as in the often quoted examples of Uganda and Senegal. Many line ministries have created 'HIV/AIDS focal point' positions to ensure that AIDS is 'mainstreamed' into the work of government agencies. Yet, this response has generally been aligned with the behavioural and biomedical approach and has seldom moved beyond programmes. National multi-sector strategies are patently silent on the role of the urban development sector.

Where local government politicians and leaders have been mobilised to act as champions for the local response to HIV, this has seldom been about considering how they could contribute through their core mandate of service delivery at the local level. Given the historical role of local government as a planner and implementer (and more recently facilitator) of urban development, local government's response to HIV and AIDS should, at the very least, be a mainstreaming one. Remarkably, this is not necessarily what most have sought (or been urged by international organisations) to achieve. Expectations of local governments' response generally fail to reflect the implications of the intergovernmental framework for the powers, functions and concomitant capacities of local government. The mandate and responsibility for HIV and AIDS often remains at national or regional levels of health ministries.

## Funding going up for HIV and AIDS – but at the expense of other programmes

Funding for HIV and AIDS programming is on a steep increase, most of it focusing on prevention and treatment. This translates into activities such as targeted peer education programmes and more broad-based behaviour-change communication. Funding for ART roll-out and scale-up have put treatment firmly on the map of multilateral and bilateral organisations. Yet, access to treatment for opportunistic infections and home-based care programmes receive relatively little funding. Only a handful of treatment-oriented programmes actively engage with the range of living conditions and livelihood vulnerabilities that affect treatment outcomes.

Evidence suggests that the cost of HIV programming interventions alters the resources available to support other development activities. In a context of acute competition for government and donor funding, many development organisations are divesting their original mandates and roles in favour of today's cash-flush 'flavour of the month', by setting up an add-on HIV programme. This results in agricultural extension officers distributing condoms, politicians holding AIDS Day vigils, and community-based health workers focusing exclusively on bedridden individuals living with AIDS. It rarely results in, for example, urban development putting HIV considerations into the mainstream of their core mandate, such as infrastructural planning. Whether this is because urban planners simply do not consider the impacts of the HIV epidemic on settlements or because those who decide on funding for HIV and AIDS initiatives are not aware of the linkages between urban infrastructure and the epidemic could be debated. What is known, however, is that while funding for HIV and AIDS has been on a steep increase, funding for water and sanitation from both international and national sources has systematically

**REFERENCES**


Kessides, C. (2005) The Urban Transition in Sub-Saharan Africa: Implications for Economic Growth and Poverty Reduction. *Africa Region Working Paper Series: No. 97*. The World Bank: Washington

Stillwaggon, E. (2006) Reducing environmental risk to prevent HIV transmission in sub-Saharan Africa. *Africa Policy Journal: Volume 1* [Online]. Available from: http://www.ksg.harvard.edu/kssgorg/apj/issues/2006_issue/main.htm). John F. Kennedy School of Government, Harvard University. [Accessed September 2006].

UNAIDS (2006) *Report on the global AIDS epidemic*. [Online]. UNAIDS: Geneva. Available from: http://www.unAids.org/en/HIV_data/2006GlobalReport/default.asp. [Accessed June 2006].

Whiteside, A. (2005) *The Economics of HIV/AIDS*. Presentation to IDRC Discussion Panel. October 12, 2005. IDRC: Ottawa.

FOTO: STEFAN BLADH/SILVER

Young boy buying water from a local tap in Dar es Salaam, Tanzania.

# Conclusions for bilateral development cooperation

**An effective response** to HIV and AIDS requires a supportive social, economic, political and environmental infrastructure that includes strong health systems and universal access to social determinants of health. These should not be reduced to access to water, sanitation and hygiene; nevertheless, such access fundamentally affects the well-being of those who are HIV-negative and positive alike and those who may have lost relatives to AIDS-related illnesses.

## Lessons learned

- People living in slums and informal settlements are most at risk of infection and have least resources at their disposal to fend off both the short and long-term impacts of AIDS.
- Narrowly defined programmes dealing only with HIV and AIDS risk failing to respond to the range of social determinants of health that underpin people's wellbeing.
- In addition to a range of HIV and AIDS-focused components, programmes targeting residents of informal settlements should comprise basic health services including male and female reproductive and sexual health, hygiene and sanitation education, infection management of environmental pathogens and parasites, and nutritional support.
- The definition of programme scope, targets and operations must involve local level stakeholders (including local government and slum-dwellers) and must take into account the locational and spatial dynamics of resource-poor settings.
- Collaboration between HIV programming and urban development actors can ensure that the interventions that they plan and implement, and the tools they use in their respective professional roles, complement and support each other.
- In institutionally weak environments, it is important to develop flexible financial mechanisms that accommodate limited administrative capacity and minimise onerous administrative requirements.

PHOTO: STUART FREEDMAN/SILVER

50-year-old Venant Shyirambezre is told that he is HIV-positive. He is comforted by Sister Beatha Mukakaba in Kansi Health Centre, Kizibele, Rwanda.

PHOTO: CLIVE SHIRLEY/SILVER

Families in Khayelitsha township, Cape Town. Electricity lines run overhead, but the homes in the township are not connected to them.

# *Issues to consider when mainstreaming HIV and AIDS from an urban perspective*

## WATER AND SANITATION

■ **Safe water and sanitation is essential.** Some but not all water needs to be of potable quality when caring for those who are HIV-positive and HIV-negative. Water quality for formula-feeding is critical. Caring for a person in the terminal stages of AIDS requires a lot of water but not of potable quality. Still, chlorination of urban water (distributed through kiosks and private vendors) must be ensured and effectively enforced. In addition to this, the importance of enabling people to maintain basic health sanitary conditions cannot be understated. Ventilated improved pit latrines, unimproved pits and buckets can pose severe health risks, especially if not maintained or managed.

## WASTE MANAGEMENT

■ **Effective solid waste management and stormwater drainage makes a difference.** Solid waste management limits the spread of worms and parasites. Poor or non-existent stormwater management or drainage provides opportunities aplenty for malaria-vector mosquitoes to remain endemic in the community. Individuals infected by worms, for example, stand a much higher chance of contracting HIV due to lowered immune resistance, which also risks increasing their viral load to make them more infectious and the progress to AIDS more rapid. Settlement layout and design therefore need to incorporate drainage improvement measures.

## ELECTRIFICATION

■ **Electrification contributes to safety and security.** Street lights can help make spaces safe at night, especially for women. Rape is a problem all over the world and it seldom happens in well-lit public spaces. A woman who is raped stands a higher risk of contracting HIV if the perpetrator is HIV-positive due to the lesions often caused in the act. However, electrification is also important for the storage of ART and other medicine, which generally requires cool temperatures. At the very least, dispensaries and clinics require access to electricity. Alternative sources of energy for refrigeration could include battery power, gas, paraffin and wind.

Published by Sida, 2007 **DOWNLOAD:** The full report can be downloaded from www.sida.se **AUTHORS:** Cecile Ambert (Development Works, cecile@devworks.co.za) Katja Jassey (Markatta Film & Antropologi, katjajassey@yahoo.se), Dr Liz Thomas (Medical Research Council, liz.thomas@nhls.ac.za)

PHOTO: JOSEPH RODRIGUEZ/SILVER

Kitwe, Zambia. Street kids sniffing glue. No country in the world has a higher proportion of its children orphaned than Zambia. The long-term social, criminal justice, and economic implications of the phenomenon are incalculable.

PHOTO: STUART FREEDMAN/SILVER

Rwanda. Teacher Potamienne Komezusenge plays with her youngest child. She contracted HIV from her husband, who died of the disease and is buried in the back garden, under a wooden cross.

## LAND AND HOUSING

■ **Flexible and affordable land management and tenure provide stability.** Due to the household economic burden of HIV there is an increase in informal disposal of land and housing assets. This in return means that tenure registration systems can experience severe strain. Hence, past and existing efforts to grant and record individual ownership rights or individual-based tenure rights (especially in processes of slum upgrading) may become compromised. It therefore becomes increasingly important to consider group-based systems of land planning and tenure forms. Group-based systems have the potential to accommodate the fluidity of informal settlement processes, avoid the upfront planning costs of releasing land on a freehold basis and act as platforms for the provision of services that are particularly important in a context of HIV and AIDS, including municipal infrastructure, health and social services.

## URBAN CEMETERIES

■ **Managing urban cemeteries relieves pressure on the environment.** HIV and AIDS mean that the current mortality rate includes individuals dying earlier than would have otherwise been the case. Land is not a renewable resource. Burials are a land-extensive and a financial-resource-intensive disposal method in a context where land availability is scarce and there is competition for its use. Furthermore, environmental health concerns are particularly important. A decomposing corpse can release a leachate containing a variety of organisms. For an average adult this can be as much as 45 litres. In environments where water sources for slum-dwellers frequently include rivers and natural water, there is a serious risk of contamination by waterborne pathogens, especially for those whose immune systems are already compromised by HIV infection.

## LOCAL GOVERNMENT

■ **Local government deserves a larger role.** HIV is not a matter for the poor alone. Local governments must be encouraged to consider and proactively manage the impacts of HIV and AIDS on their workplaces, including politicians and employees as well as their agents. Human resources management strategies may need to be reviewed as operational strategies (for instance those pertaining to internal vs. external labour market) may be at odds in the context of HIV and AIDS in the workforce.

**EDITORIAL SUPPORT:** Battison & Partners **COVER ART:** *Virus V* by Churchill Madikida **GRAPHIC DESIGN & PICTURE EDITING:** Eva Vaihinen/Press Art **PRINTING:** Edita
**ART NO.** SIDA36383en

This report summary shows that urban development has much more to offer HIV prevention than merely adding an awareness-raising component or condom distribution activity to existing programmes. It is high time that this is recognised by those engaged in HIV and AIDS programming. At the same time, it is equally important that those who work towards improving the lives of those living in urban areas in sub-Saharan Africa, especially slum-dwellers, realise that their work cannot be done without taking the impact of the HIV epidemic into consideration.

*Halving poverty in the world by 2015 is possible. It calls for cooperation and sustainability. The partner countries are responsible for their own development. Sida provides resources and develops knowledge and expertise, making the world a richer place.*

Sida

SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY

SE-105 25 Stockholm
Visits: Valhallavägen 199
Phone: +46 (0)8 698 50 00
Fax: +46 (0)8 20 88 64
www.sida.se, sida@sida.se