

Beyond sex and medicines: Why getting the basics right is part of the response!

HIV, Aids and urban development issues in sub-Saharan Africa



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Executive summary

In sub-Saharan Africa, HIV prevalence in the urban population is on average 1.7 times higher than among those who live in rural areas. Oft repeated reasons for higher HIV prevalence in urban areas systematically refer to the characteristics of the populations who live in them (young and sexually active) and the cultural norms that shape their interactions, especially in respect of sexual behaviour and gender dynamics. These factors are significant, yet they over-emphasise the behavioural dimensions of HIV transmission.

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 crafted are primarily about behaviour change, ART (antiretroviral therapy) and PMTCT (Prevention of Mother to Child Transmission) roll-out.

Most analyses of the concentration of HIV in urban (especially informal) settlements refer to the mobility of their residents, supposedly leading to more opportunities for sexual networking and elevated partner-change rates. An alternative perspective posits 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.

HIV and Aids are not gender neutral. Women are the worst affected and any intervention must pay special attention to the different susceptibilities and vulnerabilities of women and men. Dedicated HIV programmes acknowledge this situation. Yet, achieving sustained and meaningful gender transformation is a complex goal that continues to elude both the grasp of HIV and urban development practitioners alike.

Understanding the systemic linkages between HIV, Aids and urban development can assist urban development and HIV programming actors to frame their respective responses to HIV and Aids. Defining the HIV problem solely from the notion that people’s behaviour puts them at risk limits the realm of possible interventions. It also fails to engage appropriately with the range of co- and contextual factors that put people living in informal settlements at risk, both before and beyond sexual behaviour. Just as responses that focus on behaviour-change interventions as the only means to reverse the spread of HIV, a narrow medicalised response to HIV and Aids is unlikely to succeed unilaterally.

Most development agencies will recognise that HIV and Aids are of development concern, but there are some seldom mentioned linkages between HIV and development that need to be highlighted. Understanding these linkages can assist urban development and HIV programming actors alike to frame their respective responses to HIV and Aids. The factors driving the spread of HIV and Aids are not solely limited to structural and spatial factors. Nevertheless, these factors could heighten opportunities for sexual networking, risk of HIV infection and progression from HIV to Aids. It is these factors that urban development practices can help shape and thus need to respond to, including:

- Urban households often share a single room for cooking, bathing, sleeping and simply living, including engaging in sexual activity. 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;
- Fragmented and sprawling cities are spaces where infected and affected persons face uneven access to the healthcare system. Distance to prevention, care and treatment of sexually transmitted infections and PMTCT play a determining role;
- Both formal and informal delivery systems can play on competition for access to land and services to pit individuals and households against one another, thereby decreasing social cohesion and mobilisation and undermining community responses to HIV and Aids; and
- Most HIV programmes have begun to recognise the significance of access to water in supporting prevention of mother to child transmission, and advise against formula feeding where water

quality is unsafe, and as a means to support the health and care of people living with Aids. Without sufficient water, it is impossible to ensure minimum hygienic measures.

It is also critical to consider the range of ways in which poor access to basic services affects the spread of HIV and Aids by exposing individuals to infection with parasites and pathogens such as worms, bilharzia, malaria and tuberculosis, causing malnutrition, reduced immune resistance and increasing 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 the human immunodeficiency virus (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 because of lesions in areas of the body that come into contact with potentially infected semen and vaginal fluids. 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. In parts of the region 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.

HIV and Aids 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;
- Decreasing household affordability, dissaving, borrowing, the sale of assets and changing household expenditure patterns;
- Increasing demand for burial space.

HIV morbidity and mortality in the urban development workplaces also affect the institutional capacities and budgetary resources available to urban development actors to perform their respective roles.

This study distinguishes between three types of responses to HIV and Aids:

- **HIV mainstreaming activities:** What can you do within your core mandate that addresses people's susceptibility to HIV and vulnerability to Aids?
- **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?
- **Incorporating programming elements into mainstream activities:** What 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 can be seen to align with the core mandate of the health sector, and should therefore fall within the mainstream role of the health sector actors.

Responses to these linkages are yet to effectively shape urban development and HIV programming policies and practices. African NGOs have played a leading role in delivering services, mobilising HIV prevention and treatment access advocacy campaigns and 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 (or 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 extent to which the workplace dimensions of HIV and Aids have been mainstreamed into local government operations appears to be particularly lacking across the region. Finally, many programmes take place within the area of jurisdiction of local governments, without appropriate engagement, consultation and co-ordination.

Funding for HIV and Aids programming is on a steep increase, most of it focusing on prevention and treatment. This translates into 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 for supporting urban development. Programmes focusing exclusively on HIV and Aids interventions seldom occur within the ambit of a broader health system restructuring effort. In a context of acute competition for government and donor funding, urban 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 care of bedridden individuals living with Aids. It results in development actors pondering over how to set up orphanages, whether land delivery should in fact be prioritised when people are dying, and whether to systematically include a person living with HIV and/or Aids in water committees.

So what are the lessons for Sida?

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 emerging regarding approaches can be summarised as follows:

- 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.

- People living in slums and informal settlements are most at risk of infection and have least resources at their disposal to fend off both short and long term impacts of Aids.
- 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 locational and spatial dynamics of resource-poor settings.
- Collaboration between HIV programming and urban development actors can ensure that the interventions which 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

Urban development interventions from a mainstreaming point of view should result in:

- Access to safe, sufficient, reliable, affordable water and sanitation together with hygiene promotion;
 - Effective solid waste management and stormwater drainage;
 - Energy provision, in particular through street lighting and the electrification of clinics and dispensaries;
 - Flexible and affordable land management and tenure instruments;
 - Management of the pressures of Aids mortality on urban cemeteries; and
- Management of the implications of HIV and Aids in the local government workplace.

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1 Aim of the report

This report examines the inter-relationship between HIV, Aids and urban development. It aims to help Sida integrate HIV and Aids concerns into its urban development strategies.

As background, it is important to highlight that cities, like countries and epidemics, differ. They have different histories, contexts and contemporary dynamics. Living conditions affect susceptibility to disease and vulnerability to impacts. Living conditions differ within and between cities. Hence, an Africa-wide analysis risks over generalising and over simplifying the complex web of locality specifics underlying causal and symptomatic co-factors to the spread of HIV and AIDS.

Health outcomes, such as well-being, ill-health or premature death are the result of a complex web of causation where risks are related to individual exposure, the family, neighbourhood and community, access to sufficient and nutritious food, clean water, health facilities and services, as well as the physical, economic, political and cultural environments.

1.1 Structure of the report

The report is divided into three main chapters apart from the introduction.

Chapter 2 provides a contextual overview of HIV and Aids in Sub-Saharan Africa, considering the links between the HIV epidemic, poverty and urbanisation. We discuss the typically used health model response to HIV, based on behaviour change, and a biomedical understanding of the epidemic and the limitations of this response. This chapter explains why a contextual understanding of the underlying factors making individuals and communities susceptible to infection is necessary for prevention of further infection. This is clearly the domain of the urban development sector.

In chapter 3 we present a conceptual framework used in the study for both analysis of existing responses and the identification of potential strategies for Sida. The framework distinguishes between HIV and Aids **programming** and HIV and Aids **mainstreaming** according to the mandate of the organisation. The framework is then used to present key actors' responses.

Chapter 4 concludes the study by drawing together lessons presented throughout the report and providing recommendations for action by Sida.

1.2 Methodology

The methodology has involved the use of secondary data from a range of urban development actors working in the region. Key has been the review of research, policies and documents as well as web-based searches and reflections on personal experience, alongside formal and informal engagement with development, public health and medical practitioners as well as funding agencies.

2 HIV, Aids and urban development in sub-Saharan Africa

The HIV infection in sub-Saharan Africa has historically been perceived as a matter pertaining primarily to sexual behaviour, especially ‘risky’ sexual behaviour. The assumptions around how certain behaviour amplifies the pandemic have led to narrowly defined behavioural and/or biomedical responses to HIV and Aids in resource-poor urban settings. Instead, we propose that in urban areas more focus should be on structural and spatial factors that increase vulnerability to the impacts of HIV and Aids, for example water, sanitation and waste management.

2.1 Key characteristics of HIV prevalence in sub-Saharan Africa

- **Urban communities are most infected**

HIV prevalence in the urban population is on average 1.7 times higher than among those who live in rural areas (UNAIDS, 2006:10), see Figure 1. Notionally, the susceptibility of urban populations to HIV and Aids in terms of behaviours that either expose or protect one from HIV infection does not fully explain their higher prevalence. Data from UNAIDS (2006) shows for example that urban young people (15-24) have greater HIV and Aids knowledge than their rural counterparts and that urban young people reported using a condom more often with their last non-regular partner when compared to rural young people.

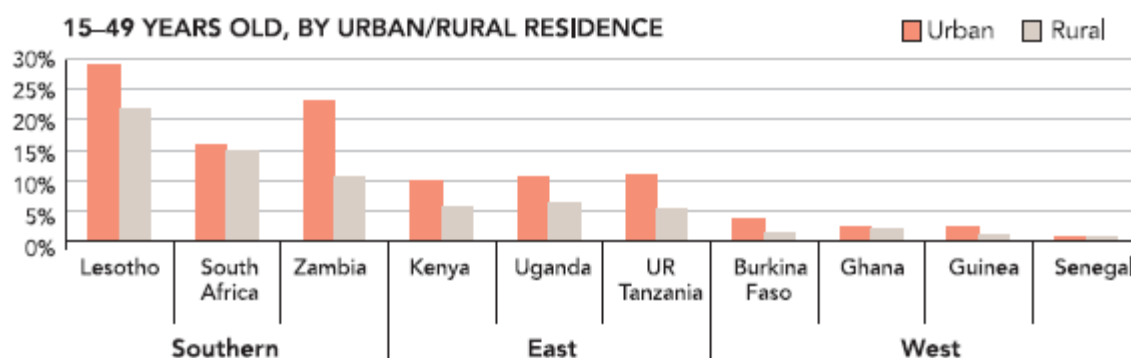


Figure 1: HIV prevalence (%) by rural/urban residence for selected African countries (UNAIDS 2006, Table 2.7)

- **Certain spatial areas such as informal settlements seem to have higher HIV prevalence**

Aggregated data pertaining to access to health services, poverty and child mortality paints a picture that suggests urban populations are better off, overall, than their rural counterparts (Sahn and Stifel, (2003).

Research has also shown significant differences in a range of health indicators within urban areas in developing countries (Harpham and Molyneux, 2001).

These intra-urban health differentials have been recorded in matters such as maternal and child mortality. There are also reasons to suspect that urban poverty is systematically underestimated in the official statistics used by governments and international agencies, as the income parameters used are generally set too low in relation to the cost of urban living (Satterthwaite, 2004). Further, where HIV-prevalence studies have disaggregated results by geotype (urban formal, urban informal, rural formal and rural informal) they also reveal that HIV infection is concentrated in specific settlement environments. One such detailed population study carried out by the HSRC/Nelson Mandela

Foundation clearly showed that HIV in South Africa is concentrated in urban informal settlements (Human Sciences Research Council, 2002, 2005).

Figure 2, below, provides an overview of HIV prevalence by geotype in South Africa in people 2 years and above (ibid.)

Locality type	HIV-positive	
	2002	2005
Urban formal	10.3% to 14%	9.1%
Urban informal	16.2% to 26.5%	17.6%
Rural informal	6.5% to 10.9%	11.6%
Rural formal	4.8% to 11.1%	9.9%

Figure2: HIV prevalence per geotype (HSRC, 2004, 2005)

These differences in prevalence were confirmed in research undertaken in 2004, 2005 and 2006 among municipal workers in three municipal workplaces, Buffalo City Metropolitan, Capricorn District and Nelson Mandela Metropolitan municipalities, respectively (Medical Research Council et al., 2004, 2006; Epicentre, 2006).

Sub-Saharan Africa is undergoing extremely rapid urbanisation - faster than on any other continent - and is already more urbanised than South Asia (Kessides, 2005). In most of the region, disaggregated data by geotype is unavailable but it is clear that most of this urban growth is taking place through informal, people-driven land development processes. Hence, by default, it is appropriate to suggest that the concentration of HIV in informal settlements identified in South Africa is indicative of the situation for the rest of the continent. This would be in line with the assertion that HIV, like other diseases, is associated with rapid urbanisation (Pimentel et al., 1998, cited in Development Works, 2005a). The range of factors behind the concentration of HIV in informal settlements is explored throughout this report.

2.2 Behavioural understanding of the higher HIV prevalence in urban slums

Reasons for higher HIV prevalence in urban areas often systematically refer to the characteristics of the populations who live in them - young and sexually active - and the cultural norms that shape their interactions, especially in respect of sexual behaviour and gender dynamics. These factors are significant, yet perhaps the behavioural dimensions of HIV transmission are over emphasised in public and professional debate.

- **Is there really a special African sexuality?**

Not only has Africa been represented as the cradle of HIV and Aids, but it has also become depicted by academics through the lens of sexual practices which are seen as abnormal, untamed and dangerous (Jarosz, 1992, cited in Jones, 2004b). The most well-known example of this is probably the demographic research of Caldwell et al., asserting that the unique pattern of HIV transmission in the region stems from the "level of sexual activity and not sexual orientation", ground in rabid sexual permissiveness and immoral promiscuity (Caldwell et al., cited in Mufune, undated). Stillwaggon (2006:38-39) states that "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". Whiteside (2005) echoes this concern referring to surveys which demonstrate that Africans do not seem to have more sex with more people, or initiate sex earlier, than western Europeans and/or North Americans; in fact the opposite seems to be the case.

The intimate connection between sex and HIV has monopolised the limelight to such an extent that researchers and development planners have stopped looking for additional and complementary causes to the dramatically higher rates in Africa compared to the rest of the world. In this report we attempt to outline these complementary causes, beyond the sexual behaviours of individuals.

- **Are women only prey?**

The specific vulnerability of women to HIV infection has been explained away almost exclusively through the lens of gender dynamics. About 59% of all adults living with HIV in the region are women. The disparity between women and men is even more dramatic among people aged 15–24 years. In this group, more than double the percentage of women are infected compared to men.¹ Age mixing plays a role in the susceptibility of girls and young women to HIV infection. Girls tend to become involved with a primary sexual partner, usually one who is older than them, at sexual debut (Luke, 2003). Explanations for the heightened susceptibility of women tend to focus on their lack of sexual and reproductive control (limiting their ability to negotiate condom use) and lack of access to and control over life-sustaining resources, forcing them into transactional sex. This understanding has led to a situation where prevention initiatives have focused on the reproductive health and rights of girls and women, by urging them to protect themselves from HIV infection, often naively leaving boys and men out of the loop.

There are economic factors that drive girls to have relationships with older men and gender and social norms that drive older men's choice of younger women as sexual partners (Ambert and Msimang, 2004; Hawkins et al., 2005). There are also historical cultural dynamics grounded in patrilineal and patriarchal access to resources and the productive value associated to a woman's body. Nevertheless reducing sexual relationships between ostensibly consensual partners to sex work or transactional sex, evades the complex range of emotional relationships that can and do establish between two individuals, where sex can be the expression of male AND female sexual need and desire, alongside emotional, economic and social transaction. This is most patent in the research findings on sero-discordant² couples in the rural Agincourt site in South Africa (Prnyk et al., cited in Singh, 2005), which have shown that not only do both men and women migrate, but also that sedentary women have multiple partners.

- **Are migrants susceptible to HIV infection only because of sexual networking?**

Migration has been identified as a factor associated with higher levels of sexually transmitted diseases. As early as the 1940s, academics in sub-Saharan Africa were pointing to the migrant labour system as the key driver of high rates of gonorrhoea and syphilis (Kark, cited in Williams and Gouws, 2001). People move because they seek to remove themselves from a difficult situation, the so-called 'push-factor', or because they are looking for a better life, the 'pull-factor'. Migration is a household strategy for diversifying livelihood opportunities. Historically, the higher prevalence of disease in urban settings has been explained by referring exclusively to the sexual behaviour of migrants.

Behaviour-only perspectives of HIV transmission have co-opted existing biases and world views pertaining to specific socio-economic or demographic groups. Emphasis is often placed on notions of sexual permissiveness arising from weaker social structures and the collapse of social and cultural norms in urban settings. Some of the factors commonly evoked include poverty and marginalisation, sexual networking opportunities, high rates of sexually transmitted disease, exposure to differing strains of HIV and contact with higher risk sex partners, such as commercial sex workers or clients (White 2003, cited in Singh, 2005). Mobile individuals may be more exposed to HIV than people who have remained in one place. A recent study in northern Tanzania found that HIV incidence in migrant women was higher than in non-migrant women due to an increase in risk behaviour during the migration period, rather than pre-existing higher-risk behaviour (Voeten, cited in Singh, 2005). Yet, it should not be assumed that this arises because of their lack of social structures or norms, as most qualitative evidence suggests that migrants in urban areas predominantly engage with people from their geographical location of origin, or with people in their new neighbourhood who are engaged in

¹ 4.6% [4.2–5.5%] of women and 1.7% [1.3–2.2%] of men were living with HIV in 2005 in SSA (UNAIDS, 2006).

² A couple where one partner is HIV-positive and the other negative.

the same kind of trade (Thorsen, personal communication, July, 2006; McCabe & McCabe, 2004; Moyer, 2005; Simone, 2004).

Although increased opportunities for sexual networking play a part in exposing slum dwellers to HIV, we would also posit that the living conditions they face during the migration period and at destination should not be overlooked as factors of heightened exposure. Most migrants, with the exception of the highly skilled and professional groups, find themselves living in the slums of the informal settlements as this is where cheap accommodation is readily available. The migration perspective of HIV and Aids tends to overlook the fact that population growth in many African towns today arises because of natural increase as well as rural-urban migration. Migration can not be construed to be the only, or even major, factor driving the concentration of HIV and Aids in urban areas and inter-alia, in informal settlements. What is more, it is also important to note that people may become mobile as a result of their HIV status.

2.3 Behaviour change and biomedical responses and their limits

Most HIV prevention strategies have focused on the individual and on changing individuals' behaviour. Access to ART is also heralded as the 'solution' to HIV infection, Aids and death. Dominant curative models in public health are based on the notion that it is the disease carrier who is held responsible for managing his or her own risk of infecting others, and the health sector's responsibility to provide treatment to a person who is suffering from illness. It is pre-supposed that with information and knowledge people will make rational (scientifically informed) choices that include restricting and changing their behaviour (Chan and Reidpath, 2003; Jones, 2004a) and that those who receive medical treatment for opportunistic infections and ART will be able to manage their condition, and live long and productive lives.

Despite massive investment in behaviour-change initiatives and biomedical responses to HIV, these have proved to be very limited in curtailing the scale of the epidemic. The lack of sustained and scaled-up success, points to the underlying factors of weak health systems as well as contextual issues such as deep and stubborn poverty.

2.3.1 The ABC and implications of mainstream HIV and Aids information

Radio programmes and posters have reached deep into rural areas, advising people to protect themselves from HIV infection especially through abstinence, faithfulness to one partner or condoms. So if the hypothesis on individuals' ability to control disease through knowledge and rational behaviour alone had been true, how could the pandemic in Africa become so wide and deep? There have been places where early management of HIV infection has been able to stem and contain the epidemic from spreading into the general population (i.e. Thailand and Senegal). Uganda has also long been heralded as a success story of reversing a generalised epidemic. Nonetheless, current prevalence figures remain unacceptably high. According to the latest HIV/AIDS Country Status report of The Uganda AIDS Commission (2006) for the year June 2004 to July 2005, the country data has shown a constant level of adult HIV prevalence of between 6 - 6.5 percent over the preceding 5 years.

ABC has been criticised by many but it is still a popular corner-stone of HIV policies and campaigns. Abstinence does not only imply that we all have equal chances to decide when to have sex and who to have sex with, but more importantly it completely overlooks the dimension of pleasure and emotions in sexual decision making. To Be faithful makes equally little sense since many people may very well be faithful, but they are equally likely to have more than one partner during their lifetime - and both men AND women can have multiple relationships. And since being faithful is the preferred option then the final solution to use Condoms becomes associated with problems in a relationship. The pressure to use the ABC approach, or even more worrying just the first two parts of it, 'abstain until marriage' and 'faithfulness' is heavily supported by the United States-based agencies (USAID and the

PEPFAR - President's [Bush] Emergency Plan for Aids Relief) and Non Governmental Organisations (NGOs).

Today, there is an emerging critique of the effectiveness as well as strategies of HIV prevention programmes that focus exclusively on using 'knowledge' to change behaviour. Beyond ABC messaging, the current drive for universal counselling and testing as a means to reduce 'risky' sexual practices is yet to show sufficient results in changing the behaviour of those testing HIV-negative (Weinhardt, 1999).

Another strand of critique focuses on the approaches themselves, such as Berger's discussion (2004) on the need to deepen understanding of sexuality through recognition of the diversity of sexual expression: accepting that women sometimes enjoy sex for the sake of it and are not simply victims of male desires and powers; that some people enjoy same-sex relationships; and that people engage in what has been termed 'dirty sex' which includes what is often defined by society as both unacceptable practices (e.g. anal sex) as well as unacceptable partners (e.g. sex workers).

2.3.2 Will access to medicine reduce HIV and Aids in the population unilaterally?

In the following section we consider how the second angle traditionally pushed as part of the response - access to medicine - also faces severe challenges, with specific reference to Prevention of Mother to Child (PMTCT) and the roll out of antiretroviral therapy (ART).

Much research and many interventions have focused on vertical transmission, where an infected mother transmits HIV to her child, either in utero, during birth or after, through breastfeeding. The mobilisation of the medical profession around this particular challenge has led to the development of PMTCT programmes. In most HIV-infected women, HIV does not cross the placenta from mother to foetus and the placenta actually protects the foetus from HIV. However, the foetus can become infected during pregnancy in certain instances, in particular where the mother has a viral, bacterial, or parasitic placental infection during pregnancy.

PMTCT programmes are a significant contribution to the reversal of vertical transmission. However, they face very real socio-economic challenges:

- Pregnant women need to attend antenatal care, yet in many resource-poor settings, women generally give birth at home;
- They may opt out of being tested for fear of discrimination; and
- Exclusive formula feeding (after six months) requires water to mix the formula to adequate consistency as well as to sterilise the bottle, teat or feeding cup and any preparation equipment.

Sustained access to ART can and does prolong life. It can restore individuals' immune systems and return them to a 'normal' productive and reproductive life, providing they change their behaviour. They need to use condoms during sex to avoid reinfection or infection with another strain of the virus, eat healthy foods and maintain hygienic conditions. Typically the requirements for these changes in behaviour may fall completely beyond the ambit of the individual. They may not be able to use condoms, afford nutritious foods or have sufficient, affordable and accessible water and sanitation to maintain hygienic conditions. They also need to adhere to a treatment regimen that evolves over time as the virus they host becomes resistant to the medicine they are taking, for the rest of their life.

ART roll-out is underway in many countries. While coverage is mostly urban-based, challenges need to be highlighted. First, access to ART is contingent on individuals knowing their status. Botswana is one of the wealthiest countries in Africa, with a good medical system and strong commitment to addressing the Aids epidemic. ART has been available free of charge in the public health system for a long time. Yet because of stigma, it has been difficult to convince people to come forward and be tested. Obstacles to treatment have included user fees for consultation (not medicine) and distance to treatment site and associated transport costs competing with the cost of feeding oneself as nutritiously as possible and delayed diagnosis. More critically, it is also important to consider what the return to a

‘normal’ life can entail for the urban poor, living in settlements with inadequate access to water, sanitation, energy and housing. Irrespective of HIV and Aids these can be places of disease, of physical duress and vulnerability. The Cholera epidemic that hit eastern South Africa in 2001, Lusaka in 2005 and Luanda in 2006 (the latter killed more than 1200 people in less than six months), the raging TB crisis, the worm and helminth infestations that debilitate both the young and adults, all bear witness to this statement. Lastly, infection with opportunistic infections and environmental pathogens (such as TB) and parasites (such as helminths) decrease treatment effectiveness or prevent individuals from initiating or continuing treatment at least periodically.

2.4 *Environmental co-factors of HIV susceptibility and vulnerability in urban areas*

Defining the HIV problem solely from the notion that people’s behaviour puts them at risk, limits the realm of possible interventions (given that sexual desire and behaviour across societies is intrinsically complex). It also fails to engage appropriately with the range of contextual and co-factors that put people living in informal settlements at risk, in addition to behaviour. To be perfectly clear, we hold both PMTCT and ART roll-out to be critical components of the response to HIV and Aids. However, just as responses that focus on behaviour-change interventions as the only means to reverse the spread of HIV, a narrow medicalised response to HIV and Aids is also unlikely to succeed unilaterally.

Historically, the notion of ‘vulnerability’ in HIV jargon has been teamed with specific socio-demographic groups, such as ‘sex workers’, ‘migrants’, ‘men who have sex with men’ and ‘women’. In this report we use the term vulnerability, as well as susceptibility, as a means to refer to living conditions. The notion of HIV susceptibility is about acknowledging that although all individuals are conceivably at risk of contracting HIV, certain living conditions (over and beyond knowledge of HIV) expose individuals to the chance of HIV infection more than others. Certain living conditions can accelerate or conversely slow down the progression from HIV to full blown Aids and eventually death. Traditionally, the conditions which weaken an HIV-positive person’s immune system and health in the face of Aids have been understood as poor nutrition, inadequate access to general and HIV and Aids-specific healthcare and social stresses (such as poverty and hunger).

Bolnick et al. (2006) suggest that a possible explanation for the higher rates of HIV infection in urban informal areas is the high concentration of poor people with serious health problems and immune systems that are already compromised by malnutrition.

A basic understanding of epidemiological considerations is necessary when considering how individual susceptibility and vulnerability are shaped by living conditions

HIV viral load refers to the quantity/concentration of HIV that is circulating in an infected person’s blood (or other body fluid); the lower the viral load, the healthier and less infectious the patient (Brentlinger, 2005). Individual transmission of HIV depends on (Whiteside, 2005):

- The characteristics of the virus;
- The characteristics of the person transmitting the virus; and
- The characteristics of the person to whom the virus is transmitted.

Anything that boosts the immune system strengthens against HIV infection.

Anything that weakens the immune system increases susceptibility to HIV infection.

Anything that increases viral shedding or viral load increases the potency of an infected person to transmit infection.

Most development agencies will recognise that HIV and Aids are of development concern, but there are some seldom mentioned linkages between HIV and development that need to be emphasised.

- **Other factors linking HIV and urban development are less well understood**

What has, to date, received extremely limited attention are the manner in which the spread of HIV and the impact of Aids are affected by land, services and space as platforms for human activity, and how the wide-ranging social, economic and demographic transformation that arises from HIV and Aids affects the use and development of land.

The factors driving the spread of HIV and Aids, and potential responses thereto are not solely limited to structural and spatial factors associated with urban development. Nevertheless, not only do these factors heighten opportunities for sexual networking and risk of HIV infection, but they also affect (1) the infectiousness of HIV-positive individuals, (2) the likelihood of sero-conversion per unprotected sexual act, (3) the rate of progression from HIV to Aids, (4) likely exposure of individuals to opportunistic infections, (5) the quality of care of persons ill with Aids-defining conditions, and (5) the well-being of those who are HIV-positive and negative alike. It is those factors that urban development practices can help shape and thus need to respond to. They include:

- Overcrowding and high densities (2.4.1);
- Inequitable spatial access and city form (2.4.2);
- Poor access to water and sanitation services and compromised environmental health (2.4.3);
- Competition over land and access to urban development resources (2.4.4);
- Pressure on environmental resources; and
- Pressure on urban development capacity and resources (2.4.5).

2.4.1 High densities and overcrowding

Informal settlements are often overcrowded. Competition for land, together with the high cost of urban living mean that households often share a single room for cooking, bathing, sleeping and simply living, including engaging in sexual activity. While there is very limited empirical information on the relationship between sexual behaviour and living conditions of slum residents, some research in South Africa shows that the age of sexual debut for young people living in informal urban areas is lower than in other settlement types (Human Sciences Research Council, 2005). This finding is supported by a qualitative study in the slums of Nairobi that suggests that slum residents initiate sex at earlier ages and have more sexual partners than other city residents (Zulu, Ezech and Nii-Amoo Dodoo, undated). The findings also identified that improving impoverished people's reproductive health status is contingent on improvements in their socio-economic circumstances (ibid). Moreover, overcrowding also means that safe spaces for sexual experimentation among the youth simply do not exist.

Organic design and layout may make patrolling and policing particularly challenging. Uncontrolled and undeveloped spaces are of particular concern. On a cadastral map or layout plan such land might be marked as 'open space' (Development Works, 2005a). Overcrowding, lack of infrastructure and services can contribute to social pathologies like violence and crime, which also express themselves in sexual behaviour (van Donk, 2002). In dense, highly populated areas, women and girls (and also men and boys) are vulnerable not only within their own homes but also in public spaces, especially poorly lit or waste areas. Other studies show that women in urban areas are much more vulnerable to rape and abuse than women in rural areas (van Donk, 2002, 2006). In crowded urban settlements, sanitation can be far more than a public health issue for a girl - it determines her privacy and dignity (Tibaijuka, 2006). Going to a public latrine in the middle of the night may also mean exposing oneself to the possibility of sexual abuse.

2.4.2 Inequitable spatial access and city form

Spatial and settlement planning form the basis on which infrastructure investment decisions are made and services delivered. Spatial planning at the city level helps determine the location of new settlements and the identification of slums for regularisation and upgrading. It therefore determines

accessibility to the services and opportunities HIV-positive and negative persons alike have at their disposal to fend off the spread and impacts of HIV and Aids (Development Works, 2005a).

The spatial location of health services, in relation to where people live and work, plays a critical role in the response to HIV and Aids. It means that infected and affected persons have uneven (and therefore unequal) access to healthcare services. Distance to prevention, care and treatment of sexually transmitted infections and PMTCT play a determining role (Development Works, 2005b). Residents of spatially alienated settlements on the periphery may not have the resources required to afford transport costs and, in turn, access to treatment and/or PMTCT services. One study in South Africa has shown that urban patients paid more in transport, clinic fees, food and lost wages than rural or peri-urban patients, in order to obtain free treatment (Rosen et al., 2006). Moreover, the spatial location of HIV- and Aids-specific care can have a bearing on drug resistance as those residing far from treatment sites cannot always afford the required transport costs (Brentlinger, 2005).

Being unplanned (in the formal sense of the term), slums are often places where demand for services (for instance primary healthcare) are seldom met by concomitant planning and timely delivery of social and basic infrastructure. They operate beyond 'formal' and legal parameters. Their residents are often viewed with suspicion and fear (hence not engaged in formal planning and delivery systems). Where efforts are made by government to extend services in a post-facto manner, supply is rapidly outstripped by demand. At the settlement level, then, resources available to improve living conditions and provide HIV and Aids-specific services do not meet demand.

2.4.3 Access to safe water, sanitation, solid waste management and energy

- **Poor quality living environments can impact on HIV infection and progression**

Most HIV programmes have begun to recognise the significance of access to water in supporting prevention of mother to child transmission, and advise against formula feeding where water quality is unsafe. In South Africa the Treatment Action Campaign (TAC) has also included lobbying for access to water as a means to support the health and care of people living with Aids. Indeed, without sufficient water, it is impossible to ensure minimum hygienic measures. What is yet to be appropriately recognised is that access to basic services affects the spread of HIV and Aids by exposing individuals to infection such as worms, bilharzia, malaria and tuberculosis, causing malnutrition, reduced immune resistance and thus increasing viral load.

Indicators of access to 'improved' infrastructures such as water and sanitation tend to suggest that urban populations are often 'better-off' than their rural counterparts. Yet, what constitutes 'improved' water and sanitation primarily refers to the concept that current access is notionally 'better' than previous access. 'Improved infrastructure' includes technologies that are not supportive of environmental health and safety in dense urban settlements, such as ventilated, improved pits. Indicators often measure the number of units implemented, not factors such as affordability, reliability, quantity, safety or physical accessibility (Tibaijuka, 2006; Medecins Sans Frontieres, 2006b). The absence or poor quality of sanitation can force people to take advantage of the night to defecate in the open (ibid.). Although aggregated urban-wide data seems to suggest that 'improvements' are being achieved in the living conditions of the urban poor, the situation experienced by the end users may reveal a drastically different situation.

Worms, bilharzia and malaria are endemic in the region and impact on HIV and Aids in urban areas. Key findings of research across different populations in the region (detailed in Annex 1) are:

Worms

Worms, transmitted through water, soil, air and food, play a critical role in HIV transmission and progression to Aids. A high prevalence of worm infection has been found in adults and children living in settlements without adequate sanitation:

- Worms impact negatively on immunity, and make individuals more susceptible to infection;
- Co-infection of HIV and worms results in faster progression to Aids;

- Worms in mothers increase the risk of HIV transmission from mothers to babies (by up to 7 times).

Bilharzia

- Large areas of the region are bilharzia endemic, and because bilharzia moves with the infected host, it can also affect parts of the region where it is not endemic (especially where safe water and sanitation access is compromised);
- Exposure to bilharzia is a result of exposure to infected water used for drinking and other domestic purposes;
- Women and girls often have higher levels of bilharzia infection;
- Bilharzia causes lesions in the urogenital tract;
- Women with genital lesions due to bilharzia are more at risk of STIs and three times more likely to be HIV infected.

Malaria

- Open water in urban areas (especially where there is no storm-water drainage) is a breeding ground for mosquitoes;
- The viral load of people co-infected with HIV and malaria is significantly increased;
- HIV-infected individuals with malaria are seven times more contagious than other HIV-positive people;
- People with malaria are more likely to become HIV-positive per contact;
- Pregnant women are more likely to be infected by malaria than any other demographic group.

Other micro-organisms

Access to solid waste management services is also critical in a context of HIV and Aids. If not disposed of properly, contaminated wastes may carry micro-organisms that can infect the people who come into contact with the waste as well as the community at large. Contaminated wastes include blood, pus, urine, stool and other body fluids, as well as items that come in contact with them, such as used dressings and sharps.

Tuberculosis

Overcrowding and poor living conditions heighten the risk of TB infection among those who are HIV-positive as well as those who are HIV-negative. Importantly, longitudinal studies show that women are also at greater risk for active disease from tuberculosis infection (Gerberding, 2004).

2.4.4 Competition over affordable land and access to urban development resources

- **Urban land demand will continue to exceed supply despite the impact of Aids**
Research has not specifically sought to project the impact of HIV and Aids on the rate of urbanisation and the demand for urban land and development interventions. In 2002, research was undertaken to consider how macro-level demographic impacts would impact on housing demand for low-income households in South Africa (Khayamandi, 2002). The research found that in absolute terms housing demand would not only increase (albeit at a slower rate than without HIV and Aids) but also that housing demand would, over time, continue to far outstrip supply. Given the rate of urbanisation in all countries in the region it is likely that this point can be generalised.

- **Adequate land needs to be set aside for burial purposes**
Irrespective of HIV and Aids, the availability of land for burials requires attention in all cities. In a study of the impact of HIV and Aids on cemetery space within the nine largest South African cities, half reported shortages and acknowledged that the expected lifespan of existing cemeteries is rapidly decreasing (Development Works, 2005a). HIV and Aids mean that the current mortality rate includes individuals dying earlier than would have otherwise been the case. In a context of rapid urbanisation, HIV and Aids is likely to aggravate pre-existing shortages. Land is not a renewable resource. Burials are a land-extensive and financial-resource-intensive disposal method in a context where land availability is scarce and there is competition for land use. Furthermore, not all land can be used for the burial of human remains. Environmental health concerns are particularly important. Decomposing

corpses release a leachate containing a variety of organisms (Council for Geoscience, cited in Development Works, 2005a). For an average adult this can be as much as 45 litres (ibid.). Where a waterborne disease such as cholera has been the cause of death, the probability of virus and bacteria transmission to groundwater supplies increases. Viruses have the longest residence time (2-3 months) and the highest degree of inter-particle waterborne mobility (ibid.). It is unclear to what extent the provision and management of cemetery services in African cities has been reviewed to consider the impact of HIV and Aids. Nevertheless, in environments where water sources for slum-dwellers frequently include rivers and natural water sources (even if they are trucked into the settlement by water tankers), the contamination of water sources with waterborne pathogens is a serious risk, especially for those whose immune systems are already compromised by HIV infection.

- **Land and housing policy needs to take into account household responses to HIV**

HIV and Aids mean that household composition and size are increasingly varied and dynamic, as affected households reconfigure themselves in many different ways. Household reconfiguration begins before death, when children who are too young to provide care are sent to live with grandparents or, if they are older, to help out a relative who needs care (Singh, 2005). Girl children in particular are sent to help with cooking and cleaning in households affected by a female death. Orphans are moved to other households in the extended family network, in both rural and urban areas. In some cases, children move to the streets and engage in various forms of child labour (ibid.).

Children are not the only mobile population. Both vulnerable children and adults tend to move to, or group around, someone with an income (in and to urban areas) or a reliable food source from agriculture (in and to rural areas). Individual (as opposed to household) mobility of HIV-positive persons arises from a context of stigma and discrimination, for privacy and independence and to get care and support. Towns and cities can provide anonymity for someone who may feel too ashamed to let his or her family know that he or she is living with HIV. Anonymity, however, does undermine the opportunity of forging new kinships with either neighbours or support groups (Obbo, 1999; Le Marcis, 2004). Migration of persons living with HIV and Aids to rural areas have also been documented in countries as diverse as Burkina Faso, Uganda, and South Africa (Garenne, 2003).

- **Chronic illness increases households' economic vulnerability and necessitates a range of responses**

The demographic reconfiguration of households through morbidity, mortality and mobility is also deeply affected by the economic impact of HIV and Aids. Chronic illness and HIV and Aids deepen the vulnerability of urban households. The impact of HIV and Aids on a household's income and expenditure arises because of the duration and chronicity of the illness, as the years during which a family experiences increasing health expenditure, asset reduction and declining incomes are prolonged. Death places an enormous drain on the financial resources of the household and extended family network. In a longitudinal study of households in the Free State, South Africa, it was found that households affected by death spend relatively more of their available resources on food, healthcare, clothing and rent, and less on education, household maintenance, transport, personal items and durables compared to households where no death had occurred in the previous six months (Boysen et al, cited in Development Works, 2003). Multiple deaths mean that changes in expenditure patterns are particularly dramatic, with rent, durables and transport costs being compromised in favour of expenditure on healthcare, food and other basic necessities (ibid.).

- **Households use a range of responses to limit the economic impact of chronic illness**

In an urban context, household financial viability is often a pre-condition for maintaining access to land, housing and urban services. Strategies to sustain financial viability in the face of a loss of income and increased expenditure find expression in increased informality, including the disposal of household assets (including land), informal rental and sub-letting, moving to backyard shacks, and expanding productive and informal trading (taverns, fruit and vegetable vending, cooked foods, etc.) (Development Works, 2003 and 2005a).

At times, maintaining urban access is no longer possible and household and individual mobility become necessary. Destination decisions are influenced by the different costs of household survival. Household maintenance expenses are likely to be lower in smaller urban centres, peri-urban areas and slums. Peri-urbanisation also offers the possibility of utilising natural resources (at no cost), such as medicinal plants, water from natural springs and firewood, for reducing the cost of living (Singh, 2005).

Illness and death can have profoundly destabilising impacts beyond the household. HIV and Aids affect the level of social and political mobilisation of communities and pose a threat to the system of democratic local governance as vulnerable individuals, households and communities have different requirements from, and abilities to engage with, governance systems and services. A household headed by a child may be left out of a slum upgrading process because they are not legally old enough to engage in contractual arrangements or secure the relevant documentation. They may be unable to engage with bureaucratic procedures, and may experience stigma and discrimination, thus preventing engagement with the existing mechanisms for political and development participation.

2.4.5 *Pressure on urban capacity and resources*

A 2001 study of the economic impact of HIV and Aids on the implementation of the housing policy in South Africa (the primary vehicle for urban development interventions in respect of land, services and housing delivery), found that not only was the supply system vulnerable to having to bear additional Aids costs of production, but most importantly that where illness and mortality (not explicitly related to HIV or Aids) affected key project role-players (for instance project managers, site foremen, or officers responsible for payments) projects could collapse in a context where the overall supply system is intrinsically weak and vulnerable to operational disruptions, regardless of HIV and Aids (Ambert, 2002)

The draining effect of HIV and Aids on resources available for urban development also manifests in HIV morbidity and mortality in the workplace. These directly affect the institutional capacities and budgetary resources available to urban development role-players to perform their roles. See Box 1 for a case study of HIV impacts in the South African housing sector.

Essentially, integrated and sustainable settlement and city development interventions require the participation and coordination of a range of delivery agents, from a variety of line-function departments, across levels of government, community members, NGOs and CBOs. All delivery agents are vulnerable to the impact of HIV and Aids on their workforce - although some more than others. Local governments' coordination roles for local governance and development mean that their function is critical to supporting and facilitating the livelihoods of productive and healthy urban populations. Prevalence studies have been undertaken in some municipal workforces in South Africa (Medical Research Council et al., 2004, 2006). Analyses of results suggest that aside from the direct costs associated with decreased productivity, HIV and Aids in the local government workplace affects the institution through officials, labourers and politicians in ways that undermine service planning, delivery and management, alongside democratic representation. It is therefore critical to consider the implications of HIV and Aids from a broader governance and delivery capacity perspective.

As illustrated throughout this report, most contemporary urban Africans live in settlements where health conditions and livelihood opportunities are poor. In many respects, the advantage held by urban areas over rural areas, in terms of various health, social and economic indicators, has been wiped out or even reversed.

Excessive focus on individual ownership in tenure regularisation processes, and formalising as a catalyst of urban development, may have detracted from the urgency of ensuring access to water and sanitation in African slums by delaying, sequentially, water and sanitation delivery until tenure regularisation has taken place. There are additional factors that have delayed the roll-out of basic sanitation and water to all residents of African cities. These have included:

- A drastic reduction in government expenditure at all levels, in both ‘hard’ (including the *basics*) and ‘soft’ infrastructure (including primary healthcare) expenditure coupled with the shedding of public sector employment, mostly in the cities, historically forming much of the economic and fiscal base of cities;
- A massive drive towards decentralisation of responsibility for delivery to the local level, as a means to foster accountability and reduce the ‘over-inflated’ fiscal burden of national government, albeit seldom matched by concomitant decentralisation of human and financial resources, or review of systems and structures of governance;
- Drastic decreases in the level of both public and donor investment to the water, and especially sanitation, sector (Water Policy International, 2001). In real terms, bilateral commitments in 2002 were at their lowest level since 1985 (OECD, 2004b);
- Over-reliance on the private sector as a funding catalyst and implementer of water and sanitation infrastructure, in the face of reluctance by private sector operators to operate in low-income settings (Budds and McGranahan, 2003); and
- The indiscriminate introduction of user-charges to achieve the ubiquitous objective of cost-recovery, in services ranging from primary health, education, transport as well as water and sanitation, without appropriate measures to ensure sustained access for the very poor.

The belt-tightening impact of the Structural Adjustment Programme (SAP) interventions of the 1980s saw drastic reductions in the levels of both hard and soft infrastructure. Since the early 1990s international funding agencies have shifted emphasis from neighbourhood investments in shelter and infrastructure to city-level policy reform, institutional development, and greater involvement of civil society in development processes (Rakodi, 1997). While the millennium development goals address the priorities of water, sanitation and slums upgrading, alongside setting targets for the turn around of HIV and Aids, there is little evidence that these ambitious targets will be met in African cities. At the macro-level, Poverty Reduction Strategies (PRSPs) have been hailed as a key mechanism through which to achieve improvements in the living conditions of the poor in developing countries. Yet, reviews of PRSPs reveal a general lack of focus on, and understanding of, urban poverty; little evidence of long term strategic planning for urban growth; insufficient attention to the institutional and financial arrangements needed for decentralisation to effectively address poverty and almost no attention to the urgency of slum upgrading (ComHabitat, undated). PRSPs are also said to neglect social determinants of health, while a WHO report in 2002 found no evidence that the PRS process was leading to significantly increased spending commitments in health and education (WHO, 2005).

3 Programming and mainstreaming – different types of responses

How has a multi-dimensional understanding of HIV and Aids been approached and handled by development organisations at different levels? In order to assess development initiatives today we have designed and used a framework that differentiates between mainstreaming and programming.

3.1 *Conceptual framework*

In the following we differentiate between three types of responses (adapted from Development Works, 2005):

- **HIV mainstreaming activities:** What can you do within your core mandate that addresses people's susceptibility to HIV and vulnerability to Aids?
- **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?
- **Incorporating programming elements into mainstream activities:** What add-on activities can you include within your core mandate to address people's susceptibility to HIV and vulnerability to Aids?

In applying this conceptual framework, it is important to highlight that 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 crafted are primarily about behaviour change, ART and PMTCT roll-out.

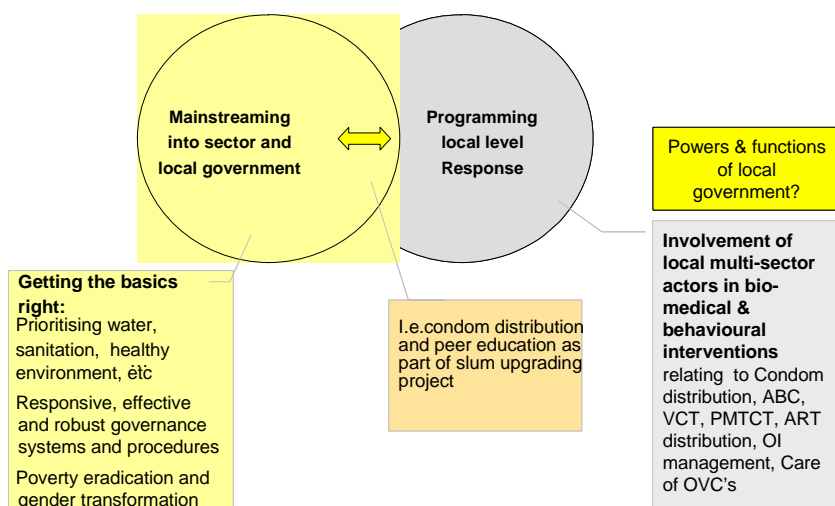
Depending on the core mandate of an organisation, certain types of activities will be defined as programming activities or mainstreaming activities. Hence, HIV mainstreaming and programming will not have the same meaning for urban development role-players as it will for health sector role-players. Integrating programming elements into urban development, for instance including condom distribution and peer education activities as part of a water upgrading programme in slum areas does not fall within the mainstream roles of urban development role-players. However:

- A water upgrading programme in slum areas, which reduces individuals' and households' exposures 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 roles of urban development role-players; and
- Facilitating condom distribution and peer education activities can be seen to align with the core mandate of the health sector, and should therefore fall within the mainstream role of the health sector role-players.

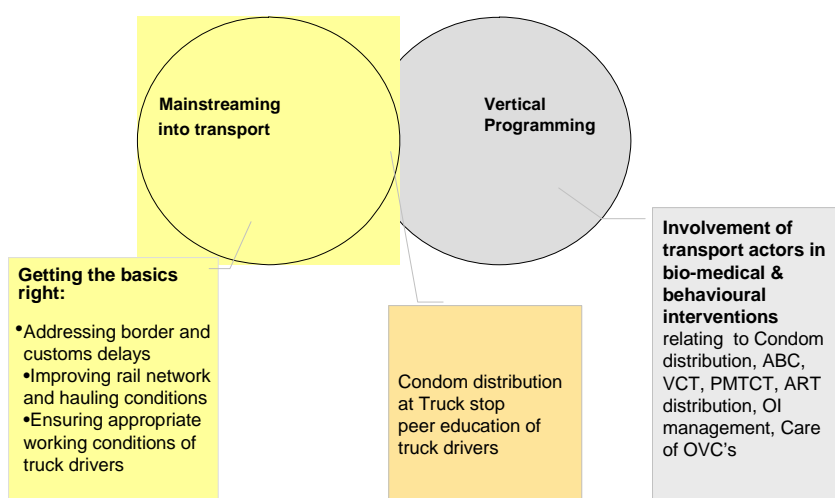
Programming at the local level is valuable but not sufficient on its own, as the factors fuelling HIV, Aids and their respective impacts are not only grounded in sexual behaviour or access to treatment conditions.

The chances of sustaining viable households and communities becomes a reality with a mainstreaming approach and when municipalities are delivering their services and making plans for the future while looking through the lens of HIV and Aids. In this respect, mainstreaming is really about 'getting the basics right'. Figure 3, below, exemplifies this conceptual framework with reference to the urban development, transport and health services sectors respectively.

Local government and urban development



Transport sector



Health sector

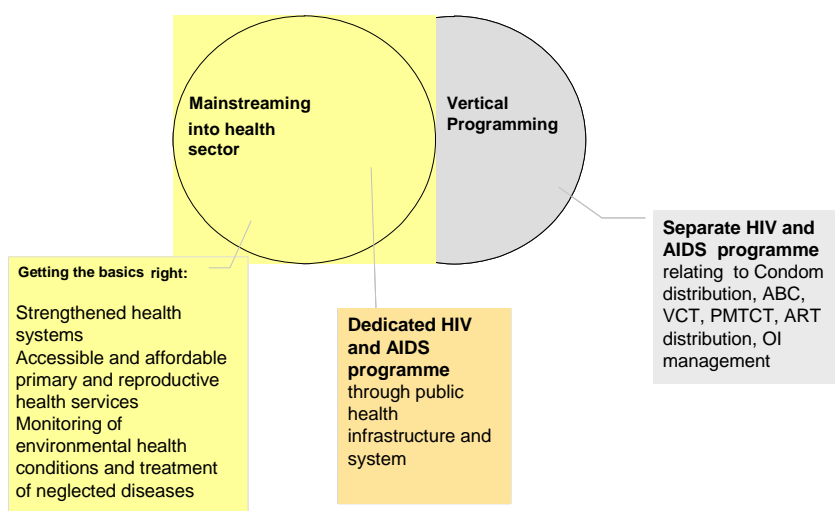


Figure 3: Application of the framework to different sectors

3.2 Findings

The country context affects whether activities undertaken by a specific level or sector of government fall within the mainstreaming or programming category, as the core mandate of different levels or sectors of government is influenced by:

- The intergovernmental governance framework (what level of government is responsible for what powers and functions);
- The intergovernmental fiscal system (affecting the resources available to local authorities (in terms of people, finance, equipment and infrastructure to give effect to these powers and functions);
- The strength and robustness of state and government institutions (what resources are available and effectively used to give effect to strategic and operational decisions at each level and between levels); and
- The level of inclusiveness of the governance system in respect of involvement of non-government role-players and stakeholders.

These aspects pertain to the extent of devolution and/or decentralisation as well as democratisation in respect to (1) strategic and operational decision-making, (2) resource mobilisation, (3) implementation and (4) monitoring respectively. Although there may be similarities between countries (especially on the basis of inherited colonial influences), differences also exist and should be acknowledged.

Role-players include, but are not limited to:

- Household members infected and affected (explored previously);
- Community-based, faith-based, non-governmental organisations (3.2.1);
- National and sub-national government structures (3.2.2);
- Private sector (not substantially dealt with here, although a key player);
- Municipal local government structures including elected representatives (3.2.3);
- International technical assistance organisations and international donors (3.2.4).

These stakeholders play different roles and have different inter-relationships depending on the setting/context in which they operate and their relative strengths.

3.2.1 *Community-based, faith-based, non-governmental organisations*

International NGOs with an African presence abound in the region; some of which have opted to programme HIV and Aids interventions into their existing activities (these include, for instance, the likes of World Vision, Habitat for Humanity). Others have broadened their existing programmes to ensure that the implications of HIV and Aids are addressed as part of their core mandate (for instance Care International).

African NGOs have played a leading role in delivering services, mobilising HIV prevention and treatment access advocacy campaigns and linking up with community-based HIV service providers. They have played a part in the policy arena. Depending on their constituencies and leadership, they have tended to target specific issues, for instance mobilising and supporting access to treatment (Treatment Action Campaign).

While several NGOs have been set up specifically to participate in the response to HIV and Aids (such as the [Society for Women and Aids in Africa](#) - a pan-African advocacy organisation dedicated to women and their families in the fight against HIV and Aids), others have begun to include HIV and Aids as part of their activities (e.g. [Southern African Regional Poverty Network](#)).

Community-based organisations develop their responses mainly through two channels. These have included:

- Mobilisation by NGOs or other role-players including governments (for instance the neighbourhood care points in Swaziland and the Jozie Ihlumele Programme of linking vulnerable households to locally-based service providers);
- Organically through the efforts of household members, neighbours and community leaders (Kwasha Mukwenu - a CINDI initiative in Lusaka, or the GROOTS network in Kenya are cases in point).

In a context where funding for HIV and Aids programming abounds and alternative livelihood or organisational funding opportunities lack, the growth of civil society involvement in the response to HIV and Aids has not always often been shaped by local context, dynamics or priorities (Kelly et al., 2005). Several urban development NGOs and CBOs have begun to include HIV education and training in their activities.

Specific local-level civil society responses have been:

- Peer education and mobilisation
- Communal saving and borrowing schemes
- Community food gardens and feeding schemes
- Neighbourhood care points for orphans and vulnerable children; and
- Home-based care (Ambert and Msimang, 2004).

Many of these programmes are run on a voluntary basis and have a significant impact on women's time, energy and psychosocial well being (ibid.). In many respects, the underlying assumptions pertaining to the value of time for the unemployed stand out as particularly problematic. In urban slums, where water and sanitation services are often grossly inadequate, volunteers not only have to spend time caring for their patients, but also fetching and sometimes purchasing water themselves.

'Specialising' in HIV and Aids runs the risk of overlooking widespread vulnerability in resource-poor contexts. 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 – specifically target vulnerable children and orphans. The tendency to 'specialise' in HIV and Aids by targeting the benefits of interventions specifically only to those living with HIV and Aids, or orphaned because of Aids (for example the Sparrow Ministry Aids Village for people living with Aids, and orphans) is problematic in a context of widespread socio-economic vulnerability. 'Qualification criteria' to access benefits (such as healthcare or food) become sero-status or orphanhood. This could be both compromising and immensely inequitable.

Increasingly, African NGOs and CBOs have had to ground their prevention, care and impact mitigation interventions within the broader context of poverty, in particular urban poverty. This has arisen both from an understanding that 'specialising' in HIV runs the risk of singling out HIV-positive individuals and more critically, because being closer to the 'ground', NGO's and CBO's members and workers are best able to see and experience the impact of living conditions and resource poverty on one's overall vulnerability to illness and trauma. Federations of slum dwellers (brought together under the aegis of Slum Dwellers International – <http://www.sdinet.org>) have critically engaged with the context of HIV and Aids. They have effectively understood that what HIV and Aids means for their core mandate lies in doing what they do, irrespective of HIV and Aids, including:

- Bringing women together through savings and enable them to share their problems, even the problems of HIV, Aids, disclosure and stigma;
- Designing, building or upgrading housing areas so that there are safe spaces for women – safe houses, illuminated streets, well managed communal toilets (when there are no services) ; and
- Giving solidarity, knowledge and self confidence to young women so that they can secure freedom of sexual choice in the home, the school, the community and in society as a whole.

3.2.2 *National and sub-national government structures*

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. Yet, this response has generally been aligned with the behavioural and biomedical approach and has seldom moved beyond programmes.

National Aids Councils or Commissions (NAC) have been established to drive Aids policy and programming. Most of these are given prominence by being located in the office of the President. Under their guidance, a number of countries have developed national Aids policies and/or national Aids strategic plans. However, NACs lack clear relationships with specific line ministries as well as the ability to hold departments accountable for non-performance. In essence, they suffer from many of the same problems as gender machineries (SG Report, 2004).

Many line ministries have created 'HIV/Aids focal point' positions to ensure that Aids is 'mainstreamed' into the work of government agencies. Aids focal points, like the gender focal points mandated to 'mainstream gender' in the 1980s and 1990s, have struggled to be effective and have tended to, at best, only integrate HIV programming activities as add-ons to the main activities of line ministries.

Most national strategies only address the behavioural and biomedical aspects of HIV prevention and treatment. Typically, little attention is given to locating the institutional responsibility for implementing these strategies and/or policies across the departments and tiers of government. Instead, the health departments are identified as champions and lead departments. Applying a health sector lens to HIV and Aids strategy and policy formulation means that the kind of programmes and projects developed in response to the spread and impacts of HIV and Aids are more often than not confined to health sector interventions and, by implication, only deal with those aspects.

Few coordinated measures have been taken by governments to support families and communities affected by HIV and Aids. Botswana, South Africa and Namibia are the notable exceptions. In South Africa the disability, foster care and child grants have been the primary mechanisms through which impact mitigation interventions have been defined. Of note in respect of the South African interventions is the fact that these have, appropriately, not been defined as special purpose HIV grants but are targeting the overall context of vulnerability. In recent years Swaziland and Lesotho - small countries with small populations - have been able to provide food parcels and some socio-economic support to orphans. Most other countries in the region have not been able to provide systematic support to people living with HIV and Aids and/or their families (before and after death).

In only a few cases national and sub-national governments made explicit the need to respond to the linkages between development conditions (especially water, sanitation and environmental health), HIV and Aids. Resources to support mainstreaming within sector departments do exist, however, either in the form of international technical assistance or guidelines and manuals. These are explored further below. Line-function departments that have mainstreamed HIV and Aids have included education, welfare, health and agriculture (van Donk, 2006). Urban development line ministries have been particularly slow to come to the party, with some notable exceptions. In Lesotho tremendous emphasis has been given to mainstreaming HIV and Aids into all line-function ministries, policies and plans. In South Africa, the new *Framework for Development and Governance Responses to HIV and Aids* of the Department of Provincial and Local Government stands out as an important mainstreaming support initiative. Similarly, the Gauteng Department of Housing's HIV and Aids strategy identifies the department's contribution to the response to HIV and Aids specifically by prioritising its activities for informal settlement upgrading and especially water and sanitation.

3.2.3 *Local governments*

Political leadership has been extremely mobilised in speaking out against stigma and discrimination.

AMICAAL, the alliance of African Mayors in the response to HIV and Aids has been incredibly supportive of horizontal mobilisation across and within countries. Mayors have acted as chairpersons of Local Aids Councils (set up as 'mini-me's' of their national counterparts and often plagued with the same shortcomings). Yet, this has not systematically translated into intensified mobilisation to upgrade slums, and provide water (and especially its less politically 'sexy' counterparts – sanitation and hygiene promotion) as part of the response to HIV and Aids.

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. Even in countries where local government has some health powers and functions, these do not necessarily comprise all the components of a functioning health services system. Secondly, the resources available to that level of government may be so limited that they effectively pit the priorities of urban development and health sectors against one another. In Zimbabwe, for example, health services functions were devolved to local councils in the late 1980s. Yet, a concurrent devolution of funding for the provision of health services has not occurred (Butcher, 2004). Where this has happened, the net outcome has generally been the degradation of health services and competition for resources.

Finally, in the absence of functional local government, where officials' salaries are paid and equipment as well as systems work, expecting local government to respond to HIV and Aids is often wishful thinking. Hence, it is hardly surprising that these strategies are not implemented. The many guides and manuals for local government responses to HIV and Aids have tended to add impetus to this programming approach at the local level (World Bank, et al 2003; HEARD, 2001; ETU, 2001).

The extent to which the workplace dimensions of HIV and Aids have been mainstreamed into local government operations appears to be particularly lacking across the region. Whereas non-discrimination policies may exist in some local governments, dedicated workplace programmes appear to be the exception. Moreover, the implications of HIV and Aids in the workplace for local government delivery and governance capacity (as it applies to officials and politicians) has generally not been mainstreamed into local government operational planning and institutional development practice.

In the region, some local level efforts to mobilise sector and municipal planners have been initiated, primarily supported by international organisations. For example the UNDP together with UN-HABITAT has undertaken the compilation of resource documents. The Cities Alliance has also supported local level use of the City Development Strategies, in some of the region's countries, which in principle could act as a platform for integrating HIV and Aids – provided the mainstreaming approach is consistently adhered to. The UMP's City Consultation methodology (supported by Sida) has been used in Kenya and Malawi at the local level, albeit to develop dedicated programmes dealing specifically with HIV and Aids.

A significant contribution is also being made to link up community-based role-players with local government role-players in respect of development issues including HIV and Aids. The Community Capacity Enhancement Programme (UNDP) is a methodology of using community conversations to develop solutions for poverty alleviation and service delivery issues in the local context. This includes, but is by no means limited to, HIV and Aids in both urban and rural areas, as well as the workplace in some instances. In many instances, these solutions in response to the social and developmental challenges of HIV and Aids require collaboration at the ward, municipal, clinic or police station level. Similarly, a Community Based Worker Programme operating in four countries (South Africa, Lesotho, Uganda and Kenya) has sought to strengthen the linkages between the community and local government on issues including HIV and Aids.

Often these particular types of ‘mainstreaming’ interventions are initiated or at least supported by external parties to the local government. An exception to this general rule is South Africa (see Box 2). On the surface, this points to a lack of ‘mainstreaming’ capacity and understanding of the relationships between urban development conditions and interventions and HIV and Aids. It also cynically suggests that the behaviour change and clinical messaging and interventions have cemented understandings about HIV and Aids in ways that prevent individuals and organisations operating ‘above’ the community level and from considering what HIV and Aids means for their core mandate, beyond condoms and ART.

In South Africa municipalities have, since 2000, been encouraged to respond to cross-cutting issues such as gender and HIV and Aids as part of the mainstream urban development and management instrument. However, integrating HIV and Aids has had only superficial outcomes, save perhaps for the addition of a dedicated HIV chapter in their plans listing projects such as ‘World Aids Day Celebration’, the ubiquitous ‘Aids Awareness Campaign’, ‘Condom Distribution to Sex Workers’, or even ‘Orphanages’ and ‘Food Parcels’ (Ambert, 2004). Efforts have been made to identify the implications of HIV and Aids for the core mandate of the municipality, in terms of prioritising access to the basic Services.

This process is being enhanced by the development of a new *Handbook for facilitators of development and governance responses to HIV and Aids*, which not only clarifies these implications further but also specifies why, how, when and by whom, should what concerns be integrated into the core systems, procedures, structures and roles of local government (Development Works, 2006). One of the tools provided in the handbook is a mechanism to help local planners to listen to the concerns and issues raised by those involved in working with HIV and Aids, and assist the latter articulate the development face of HIV and Aids issues. A further guideline makes suggestions of how the implications of HIV and Aids can inform municipal performance management instruments. Moreover, the South African Cities Network (SACN: a horizontal learning network of the nine largest municipalities) has commissioned research and strategy advice on the linkages between HIV and issues that address the core mandate of municipalities, including urban poverty.

The SACN pooled resources together with the Department of Provincial and Local Government and the South African Local Government Association to develop a *Handbook for managing HIV and Aids in the municipal workplace* (2005). Other municipal workplace interventions have included the piloting, in partnership with two municipalities, of a process for municipal workplace prevalence studies, analyses and response planning aligned to the main processes of the municipal operational systems. In this respect, it is important to note that the extent to which the workplace dimensions of HIV and Aids have been mainstreamed into local government operations appears to be particularly lacking across the region. Whereas non-discrimination policies may exist in some local governments, dedicated workplace programmes appear to be the exception.

Box 2: Comprehensive interventions to support local government responses to HIV and Aids in South Africa

Many programmes take place within the area of jurisdiction of local governments, without appropriate engagement, consultation and co-ordination.

Although some practices seek to enhance the capacity of municipal officials and politicians to respond to HIV and Aids by linking local government and civil society groups, often local government is bypassed, with resources flowing directly from regional/provincial government to ward committees. In bypassing local government these interventions risk not only undermining its legitimacy but perhaps also give rise to a situation where local government role-players simply do not know what is happening, what the lessons are from experience, and how they can complement these programming activities by delivering on their core mandate of service delivery and governance.

3.2.4 Multilateral and bilateral organisations

Most multilateral and bilateral organisations retain programming approaches. To consider the extent of mainstreaming and programming responses to HIV and Aids, we sought to understand how each organisation defined HIV and Aids³, and how this understanding defined their responses; from the narrowly defined behavioural and biomedical approach, to a more broad-based and holistic understanding of its drivers and impacts. Overall, programming responses dominate, and result in setting up dedicated, ring-fenced HIV programmes or to a lesser extent, including programming elements into the mainstream programmes across the categories of organisations.

³ By drawing on these organisations’ documented programmes and through a donor roundtable held in Johannesburg in August 2006. The contributions of S. Long and C. Moat in collating this information are gratefully acknowledged.

There are exceptions to this general finding. For instance, one of the clearest examples of actual mainstreaming, by integrating the range of factors that make individuals susceptible to HIV infection and the impact of Aids, is found in the approach taken by UNICEF where not only HIV-awareness programmes are on the agenda but also issues of strengthening schools as well as access to water and nutrition (see Annex 2). The UNDP's grounding of HIV and Aids within the broader context of governance and development transformation echoes this approach, so does the DFID's linking of HIV and Aids to livelihoods enhancement interventions. Some organisations, however, co-opt the term mainstreaming erroneously. For instance, they have begun adding HIV 'awareness raising' and condom distribution in the implementation of their mainstream programmes, or using mainstream methodologies to assist in the development of dedicated HIV and Aids programmes. There are also organisations that have approached the definition of interventions more flexibly than others. Among those, the World Bank's MAP programme (Multi-Country HIV/AIDS Programme for Africa) and its City Development Strategy hold the potential to support true mainstreaming approaches - albeit, this is contingent on the country's own approaches to HIV and Aids.

Most organisations undertake lobbying, mobilisation, advocacy and 'capacity building'. At the policy level, donors have sought to establish and disseminate standards and guidelines for laws and policies pertaining to HIV, Aids and a number of issues. For example, the ILO's *Code of Practice on HIV/Aids in the Workplace* has been adopted by SADC. In addition, donors have provided technical assistance to governments on a range of issues including many of which involve strengthening laws as they relate to non-discrimination of people living with HIV and Aids. Several have and are supporting the development of HIV and Aids strategies; a few including multi-sector strategies. Of note is the fact that coordination of activities, funding and programmes is an area of work that several organisations identify as part of their role.

Ring-fenced funding for HIV and Aids programming is on the rise. First, while trends in HIV and Aids programme funding have not been systematically recorded on a year on year basis and where rigorous analyses have been undertaken (OECD/UNAIDS, 2004a; Dunn, 2005), they suggest that funding for HIV programming is on a steep increase. Between 2000 and 2002, the largest multilateral donor was the International Development Association of the World Bank, UNAIDS and UNICEF (Dunn, 2005). The current top multilateral donors are the Global Fund, UNAIDS and the World Bank. In total 75% of all aid relating to HIV and Aids was allocated to Africa.

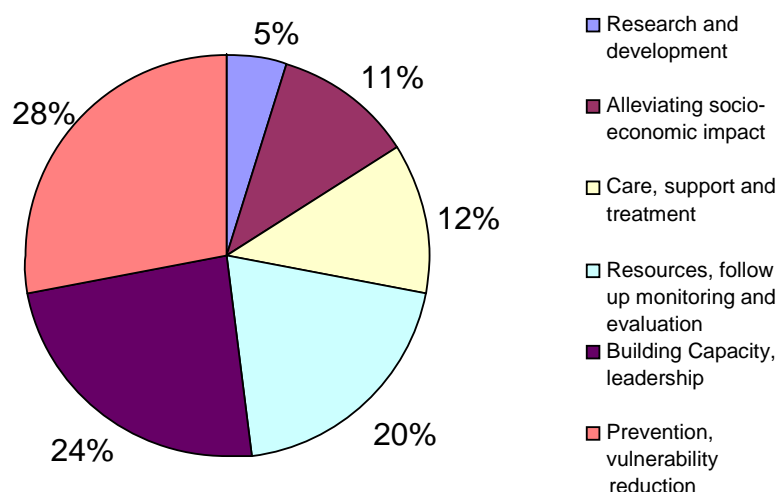


Figure 2: Budget for HIV and Aids activities of UNAIDS co-sponsor by activity area 2004-05 (Dunn, 2005)
(to be read clockwise)

Traditionally there has been a focus on IEC (information, education, communication) with token mention of links to services such as sexual and reproductive healthcare services. This is the narrowest

form of prevention and still the most common. Much of the general national-level prevention, mostly IEC and mass-media programming, is by default more appropriate for an urban context (e.g. reliance on electricity and telecommunications access). Donors have also supported the procurement of condoms and the development of condom distribution channels and have promoted peer education programmes, VCT (voluntary counselling and testing) efforts and broad-based education campaigns aimed at the general public. They have worked with governments to develop more targeted campaigns directed at ‘vulnerable groups’, but without a focus on the living conditions that make people more susceptible or vulnerable.

Today, with initiatives such as the PEFAR and the Global Fund, 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, although these offer some of the best potential for taking a broader primary healthcare and health system strengthening approach. What is more, only a handful of treatment-oriented programmes actively engage with the range of living conditions and livelihood vulnerabilities that affect treatment outcomes. As yet, there is little analysis of who is accessing services within urban areas. Free programmes are currently so small that it is actually impossible to assess whether scaled-up programmes are accessible to the general urban population. Private care is more accessible in urban areas although take-up remains limited and quality-control issues abound.

Home-based care programmes, that tend to form the bulk of community-based responses are subject to little national or regional coordination, resourcing, quality control or linkage into healthcare systems, and in turn stand to not benefit from funding and technical support.

Only a few organisations (such as Ausaid and CIDA) have made supporting community-based interventions part of their programme. A key challenge has been developing treatment and care whilst supporting basic health systems. Donors are divided on this, with primarily USAID and private foundations going for ‘vertical’ programmes while other donors, such as Sida, CIDA, DFID and the EU are looking at health systems strengthening.

Impact mitigation has received the smallest portion of the HIV budget globally. Only to a limited extent have bilateral donors financed ‘social mitigation’ activities. Although several programmes notionally mention impact mitigation activities, the extent to which this has translated into practice is unclear. Today, the primary focus is on orphans and vulnerable children at risk of poverty, ill health and violence. ‘OVC programming’ (Orphans and Vulnerable Children) has been receiving a substantial amount of funding but there is little evidence of quality programming. There is a growing discussion on social protection and social safety nets, most notably led by DFID from the donor community, which will highlight this growing need. Most livelihoods programming at this stage focuses on small-scale income generation, with decidedly limited impact.

3.3 Issues arising

- **In spite of measures put in place to ensure that the principle of additionality shapes HIV and Aids funding, the cost of HIV and Aids alters the resources available for supporting urban development and public health promotion.**

In the health services sector, hospital beds are increasingly being taken up by terminally ill patients while medical personnel and infrastructure are reoriented to provide voluntary testing and counselling services, treatment of opportunistic infections and antiretroviral treatment. This mobilisation is mostly defined through ‘vertical’ programmes, seldom occurring within the ambit of a broader health system restructuring effort. In a context where health services across the continent have, since the 1980s, undergone severe reductions in budget, including staff, infrastructure and equipment, this vertical programming approach can place severe drains on limited baseline capacity.

- **This gradual shift in resource allocation to the health sector has also affected sectors and actors that, historically, have not had a health sector role, such as urban development.**

Given the availability of dedicated funding, local-level CBOs and NGOs have often been reported to include an HIV programme focusing on HIV prevention and care (Kelly, 2005).

In a context of acute competition for government and donor funding, some urban development organisations have divested their historical interests and roles in favour of today's cash-flush 'flavour of the month'. In many respects, setting up an add-on HIV programme, often focusing on loosely defined HIV awareness and education activities, home-based care, or orphans and vulnerable children programmes, has been prominent among many local organisations. In government circles and in donor-funded programmes, this effort has seen agricultural extension officers distributing condoms, local politicians holding Aids Day vigils, community-based health workers focusing exclusively on the care of bedridden individuals living with Aids and town planners considering how to set up and mobilise funding for orphanages and hospices. 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, by giving effect to their core mandate of service delivery at the local level, they could contribute to the local response to HIV and Aids.

- **A narrowly defined understanding of impact (e.g. a person living with HIV and Aids or a child orphaned by Aids) and the prevailing context of vulnerability limit impact mitigation interventions.**

This understanding falls short of the need to acknowledge that impacts are systemic and need to be located within their broader contexts. If that context is one of prevailing vulnerability, where 'normalcy' is about living without secure shelter, sufficient and nutritious food, and safe, affordable, sufficient, accessible and reliable water and sanitation, in a polluted and overcrowded settlement, the impacts of HIV and Aids illness, death and orphanhood merely amplify existing weaknesses and vulnerabilities. In such contexts, it is improbable that narrowly defined impact mitigation interventions will be able to connect with and embed in a supportive (albeit necessary) social, economic, political and environmental infrastructure.

This point needs to be laboured, in particular by way of contrasting trends in funding for HIV and Aids programming with funding for water, sanitation and hygiene promotion in the towns and cities of the region. While the former has dramatically increased since the turn of the millennium, the latter, posited as a baseline precondition for urban wellbeing, has systematically decreased, in real terms since 1985 (OECD, 2004b). Not only is government spending on water supply and sanitation infrastructure universally very low - usually less than 1% of the national budget (Water Policy International, 2001) - but bilateral and multilateral financial aid to African governments for water and sanitation has systematically decreased. The supportive social, economic, political and environmental infrastructure referred to above 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.

In short, neglecting "the environmental and urban causes of the growing health burden on the urban poor", national governments and global society in general will simply accumulate a massive 'health debt'. This will be far more expensive to pay off, if possible at all, three decades from now, through conventional curative methods than it would be to prevent the problems now through housing, water, sanitation, and public health interventions that we know will permit us to avoid them" (Sclar, Garau and Carolini, 2005).

4 Lessons and recommendations

Successful city-level health improvement measures are systems-based and multi-sectoral, community-wide, context-specific and locally defined, as well as responsive to multiple determinants of health (WHO Secretariat of the Commission on Social Determinants of Health, 2005).

In the following section, we first highlight lessons that should be considered when programming responses to HIV and Aids in urban areas and mainstreaming HIV and Aids in urban development. Finally, we move on to recommendations for Sida.

4.1 Programming responses to HIV and Aids in urban areas

Some of the core lessons emerging from the study include:

- Narrowly defined vertical programmes dealing only with HIV and Aids risk failing to respond to the range of social determinants of health that underpin people's wellbeing.
- People living in slums and informal settlements are most at risk of infection and have least resources at their disposal to fend off the long-wave impacts of Aids.
- 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 locational and spatial dynamics of resource-poor settings.
- Collaboration between HIV programming and urban development actors can ensure that the interventions they plan and implement, and the tools that they use in their respective professional roles, complement and support each other.
- In institutionally weak environments, developing flexible financial mechanisms that accommodate limited administrative capacity and minimise onerous administrative requirements has become an imperative (evaluations of the World Bank's MAP programme in HIV programming provides valuable insights in this respect).

4.2 Mainstreaming HIV and Aids in urban development

There are practical ways in which urban development stakeholders and role-players can begin to address the range of urban development co-factors of HIV susceptibility and vulnerability to Aids, by 'getting the basics right', lessons regarding process and methodologies as well as priorities for action.

4.2.1 Integrating the voices of HIV and Aids in planning, implementation and monitoring

The growth of urban slums is primarily a people-driven process. Hence, as planners respond to this development they must provide a platform for the inclusion of people who live and work in the slums. Their in-depth knowledge of the environment is an invaluable asset to any infrastructural or service planning process. And since the prevalence of HIV is high in many of the slums it is extremely important not to forget those who live with HIV and Aids, organisations providing services to affected individuals and other advocates, including community leaders. However, it is equally important that this participation means something and does not lead to competition for resources or holding mass rallies where people are exhorted to practice ABC.

4.2.2 Outcomes of urban development processes that mainstream HIV and Aids

Because the spread and impacts of HIV and Aids in urban areas are fundamentally affected by the living conditions of the urban poor, urban development interventions that improve these living

conditions need to be understood and supported as an effective contribution to reversing the spread and impacts of HIV and Aids.

The findings of this study emphasise that the outcomes of urban development interventions should include:

Access to safe, sufficient, reliable, affordable water and sanitation together with hygiene promotion

- Safe water and sanitation is essential for the well-being of those who are HIV-positive and HIV-negative;
- A differentiated understanding of the quality required for services is also important. Water quality for formula-feeding is critical. Caring for a person in the terminal stages of Aids illness requires a lot of water. Some but not all of the water needed must be of potable quality.
- The chlorination of urban water (distributed through kiosks and private vendors) must be ensured and effectively enforced.
- The role of sanitation in basic health promotion in dense urban settlements cannot be understated. Ventilated improved pit latrines, unimproved pits and buckets can pose severe health risks, especially if not maintained or managed.
- Incorporating hygiene promotion measures in all water and sanitation interventions has been identified as a pre-condition for achieving the highest levels of health benefit associated with such interventions.

Solid waste management and stormwater drainage

- Solid waste management limits the spread of pathogens and parasites that make individuals more susceptible to HIV infection and the progress to Aids more rapid.
- Poor or non-existent stormwater management or drainage means that opportunities aplenty exist for malaria vector mosquitoes to remain endemic in the community.
- Settlement layout and design can incorporate drainage improvement measures.

Energy provision

- The storage of ART and other medicine generally requires cool temperatures.
- Alternative sources of energy for refrigeration could include battery power, gas, paraffin and wind.
- At the very least, dispensaries and clinics require access to electricity.

Flexible and affordable land management and tenure instruments

- Protecting the tenure rights of vulnerable individuals and households from arbitrary eviction and usurpation does not systematically arise from formal ownership.
- Informal disposal of land and housing assets to offset the household economic burden of HIV means that tenure registration systems can be experiencing severe strain.
- Hence, past and existing efforts to grant and record individual ownership rights or individual-based tenure rights (especially in slum upgrading processes) may become compromised.
- Group-based systems of land planning and tenure forms are particularly important as they 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 the context of HIV and Aids, including municipal infrastructure, health and social services (Development Works, 2004a).

Managing the pressures of Aids mortality on urban cemeteries

Alternatives to single grave interment which are land-extensive forms of disposal of bodily remains exist (including family graves, mausoleums, eco-interment, grave recycling, cremation, promotion, opportunity cemeteries) which can decrease the pressure on urban land (Development Works, 2005a).

- This should by no means be seen purely as a technical exercise as it involves a range of social and cultural dimensions (ibid).

Managing the impacts of HIV and Aids in the urban development workplace

- Urban development role-players, including local government, must be encouraged to consider and proactively manage the impacts of HIV and Aids on their workplaces, comprising politicians and employees as well as their agents.
- The management of occupational exposure requires attention.
- Human resources management strategies may need reviewing as operational strategies (for instance those pertaining to internal vs. external labour market) may be at odds with a context of HIV and Aids in the workforce.

4.3 Recommendations

Recommendation 1: Concepts and methods development for programming and mainstreaming

It is recommended that Sida further develops the conceptual framework outlined in this report which differentiates between programming and mainstreaming, as a means to guide strategy and practice across various sectors. To operationalise this approach, the setting up of a Sida cross-departmental team, comprising URBAN, the HIV and Aids Secretariat/team, DESA and HÄLSO is recommended. Its immediate tasks are to:

- 1) Assess the portfolio of existing and upcoming support from URBAN and related embassies with a view to identifying, formally attributing and monitoring existing and future activities as contributions to the HIV and Aids response; and
- 2) Identify and document opportunities for modifications and enhancements to strategies and practice in order to bolster this contribution to the response to HIV and Aids.

This process must be framed as an action-learning opportunity. Hence, capturing and monitoring changes alongside reflecting on the usability and benefits of the framework must be documented and disseminated within and beyond Sida to amplify its potential reach and benefits. In this respect, it will be important to target two types of potential partners:

1. Stakeholders and agencies involved in general development matters across sectors and especially urban development, in particular UN-HABITAT and the Cities' Alliance; and
2. Stakeholders and agencies involved in programming of HIV and Aids responses as well as health systems strengthening, with a view to enabling them to consider and appropriately accommodate urban development implications in their activities.

Issues to be included in urban development when taking HIV and Aids into account

Urban development interventions should prioritise development interventions that benefit those who are most vulnerable in society, especially children and women. Further, the outcomes of these interventions should result in:

- Access to safe, sufficient, reliable, affordable water and sanitation together with hygiene promotion;
- Effective solid waste management and stormwater drainage;
- Energy provision, in particular through street lighting and the electrification of clinics and dispensaries;
- Flexible and affordable land management and tenure instruments;
- Managing the pressures of Aids mortality on urban cemeteries; and
- Managing the implications of HIV and Aids in the local government workplace.

Specifically, the upgrading of urban slums should be prioritised. In this respect, innovative approaches to water and sanitation provision, which do not necessarily rely on formal tenure regularisation as a sequential pre-condition, must be emphasised.

Behaviour change and sexuality education

There is reason to question many of the behaviour change approaches' lack of responsiveness to people's varied and complex realities. These approaches tend to cement stereotypes and moralistic messages. An integrated approach to HIV prevention in slums will necessitate continued engagement with these types of 'programming' activities alongside infrastructural development. We recommend that URBAN connects with the adviser responsible for Sexual and Reproductive Health and Rights at DESO/TEMA to support the identification of partners and approaches that incorporate a positive approach to sexuality, grounded in real women's and men's sexual lives as outlined in Sweden's new policy for SRHR.

Recommendation 2: Funding mechanisms

Most bilateral donors, including Sida, are today moving away from funding 'small' projects and towards sector and budget support.

People-centred urban development planning must be localised. It needs to strengthen the involvement of local government as a core stakeholder and role-player alongside civil society organisations and local private sector. Practices aiming to strengthen the involvement of local government need to align with the specific intergovernmental framework applicable in each country, including the manner in which it defines the roles, responsibilities, resources and capacities of the various levels of government. Often, local governments are resource poor and have limited authority to shape, guide and if need be call to account higher level government, responsible for sectors and resources necessary for achieving integrated settlement development as well as health systems.

In addition, it is also important to note that the scope for Sida dialogue with government partners is increasingly becoming tied to joint donor support of national plans and strategies for poverty reduction. The latter, forming the basis for budget support allocations, seldom affords sufficient attention to analysing and responding to dimensions of urban poverty and urban development processes and outcomes. Further, although many bilaterals, including Sida, profess to be purely demand-driven and to avoid prescription, several have specific guidelines and policies that determine the nature of activities eligible for funding support.

We therefore recommend that URBAN, together with POM, examines and responds to the 'new financial architecture of aid' and the potential limitations of Sida's ability to meet its overall goal of poverty reduction (with special attention to the 'perspectives of poor'). This process would need to consider the specific challenges facing the millions of people living in slums in sub-Saharan Africa who are affected by HIV and Aids.

Recommendation 3: Development of indicators for social and environmental determinants of health

There is an urgent need to compare, align and track information on the linkages between HIV, Aids and social and environmental determinants of health. Information fields include for example density levels, access to clean water, data available on HIV prevalence and incidence as well as other diseases/infections such as TB, malaria and helminths, and also health service provision. This type of information is generally available, albeit seldom harmonised or reliable. Different sources of information include enumerations, household surveys, service availability mappings, etc. This data will help to further clarify and monitor linkages between environmental factors and HIV and has the potential to assist urban development planning contributions in the response to HIV and Aids. It will also encourage and facilitate multi-disciplinary collaboration, supportive of multi-sector interventions, between for example engineers, planners and clinical medical researchers.

URBAN should therefore initiate collaboration with HÄLSO, the HIV and Aids Secretariat/team and SAREC in order to compare the types of data available through their different existing networks/partners, and wherever necessary find ways of supporting capacity to increase collaboration between different actors.

In addition to fine-tuning and developing quantitative indicators, qualitative studies must also be undertaken in order to capture other factors and variables that are clearly visible to people living in informal settlements but not necessarily recorded or acknowledged by researchers or development actors.

Potential partners outside Sida include the WHO, local universities, national HIV/Aids commissions, UN-HABITAT, IIED and AMREF.

4.4 Research and information on co-factors such as malaria, worms and TB

This study brings to light the significant, albeit as yet untapped, potential for scaling up effective prevention efforts (beyond behaviour-only interventions) and augmenting the benefits of PMTC and ART programmes, if more efforts and resources are channelled into providing clean water and sanitation as well as improving environmental health conditions.

However, additional research on the intricate relationships between the urban development co-factors explored here and HIV would be beneficial. As a first step, a more thorough overview of existing research (across regions) could be undertaken as a lead into longitudinal studies.

It is recommended that URBAN in collaboration with SAREC initiates such research.

Given the magnitude of the HIV and Aids epidemic in SSA and given how little information and attention has been paid to co-factors outside sexual behaviour it is strongly recommended that Sida assists in making this information available to people, organisations and governments. It is a necessary complement to existing prevention strategies. In the long run, it would also help counteract existing stigmatisation, undoubtedly fuelled by the exclusive focus on individual sexual behaviour, which often acts as a barrier to HIV testing, and hence secondary prevention as well as treatment efforts. URBAN can make a significant contribution to this effort by disseminating this information through its various networks, and also to engage key actors within UN-HABITAT and the MDG campaigns. For the purpose of advocacy URBAN could seek support from INFO.

Annex 1 - Worms, Bilharzia and Malaria

Worms

A review of 109 research papers (documenting findings across the region), 76% (83/109) of which were published between 1995 and February 2002, revealed increasing evidence that this relationship may have created an opportunity for more rapid infection by the human immunodeficiency virus (HIV), as well as quicker progression to Aids (Fincham, Markus and Adams, 2003). More than 90% of the children attending 12 primary schools serving two large informal settlements in Cape Town were found to be infected with worms in 1999 (Medical Research Council, 2006). A study of worm infection in children aged 2–10 years living in ten areas described as ‘slums’ in Durban was completed in 2001. The prevalence of *Ascaris* and *Trichuris* (whipworm) was 89.2% and 71.6% respectively, which indicates that most of the children were infected with both worms. Adults are also affected by worms (ibid.). Scientists of the MRC’s Amoebiasis Research Unit have found that about 40% of adults in the informal settlement of Khayelitsha have worm eggs in their faeces, which confirms infection. Of 167 adults who responded to a questionnaire, 73% recalled being infested with worms (Pimentel et al., 1998).

Hookworms can suck out as much as 30 ml of blood from an infected person each day, gradually weakening individuals and lowering their resistance to other diseases (Hotez and Pritchard, 1995, cited in Pimentel et al., 1998). Research undertaken by the Medical Research Council suggests that not only do hookworms undermine the health of the HIV-positive and negative alike, but that infection with hookworms may make one more susceptible for HIV infection and that the risk of transmitting HIV to babies may increase when mothers have worms (Medical Research Council, 2006). One study has demonstrated that MTCT is seven times greater for helminth-infected HIV-positive women than for uninfected women in Kenya (Alcorn, 2005). Moreover, when people are co-infected with helminths and HIV, the ability of their immune to fight off HIV progression is undermined (ibid.). Persons with co-infection were found to progress more rapidly to full-blown Aids and have higher rates of morbidity and mortality. Yet, HIV programmes do not appear to systematically consider de-worming. WHO guidelines for HIV in adults, women and children do not mention worms or the benefits of routine de-worming.

Bilharzia

People who are infected with 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 – in areas of the body that come into contact with potentially infected semen and vaginal fluids (Medical Research Council, 2006). These symptoms are often misdiagnosed as sexually transmitted infections by medical practitioners (Gerberding, 2004). Bilharzia and HIV are co-endemic in most of the region where water provision systems are inadequate, in both rural areas where water is drawn directly from rivers, and urban areas where water tankers bring water to slum dwellers at considerable cost to the end-user. Women and girls are particularly affected by bilharzia in a context where they are tasked with fetching water, as well as washing dishes and clothes. In the SA province of Limpopo in 2005, 80% of school children in a study had bilharzias. In the study nearly three quarters of the girls (71%) and two thirds of the boys (63%) were often infected with both the urinary and intestinal forms of the disease (Medical Research Council, 2006). A cross-sectional study of over 500 women in Zimbabwe found that women with genital lesions due to bilharzia were three times more likely to be HIV-infected than those without (Kjetland et al., cited in Stillwagon, 2006). Consequences of bilharzia are more severe in women than in men. Female genital bilharzia can cause tumours, ulcers, and infertility and may actually increase the risk for STDs (Gerberding, 2004).

Malaria

In parts of the region where malaria is endemic, open air still water sources, such as those found in swampy areas are particularly concerning. In urban areas, open water tanks can also act as breeding grounds for malaria-carrying mosquitoes. HIV-infected individuals with malaria have a significantly

increased viral load, which might enhance the rate of HIV transmission and accelerate disease progression (Kublin et al., 2004). Infection with malaria makes HIV-positive individuals as much as seven times more contagious than other HIV-positive individuals.

By compromising a person's immune system, malaria also makes individuals more likely to sero-convert. Links between malaria and mother-to-child transmission have been acknowledged (Stillwagon, 2006). Importantly, like HIV, malaria particularly affects pregnant women; they are up to four times more likely to be infected by malaria than any other adult. Additionally, malaria is associated with vitamin A deficiency and this has been found to result in the faster progression from HIV to Aids.

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