

Spatial Planning, Land Development and Land Use Management in a Context of HIV and AIDS

Prepared for:



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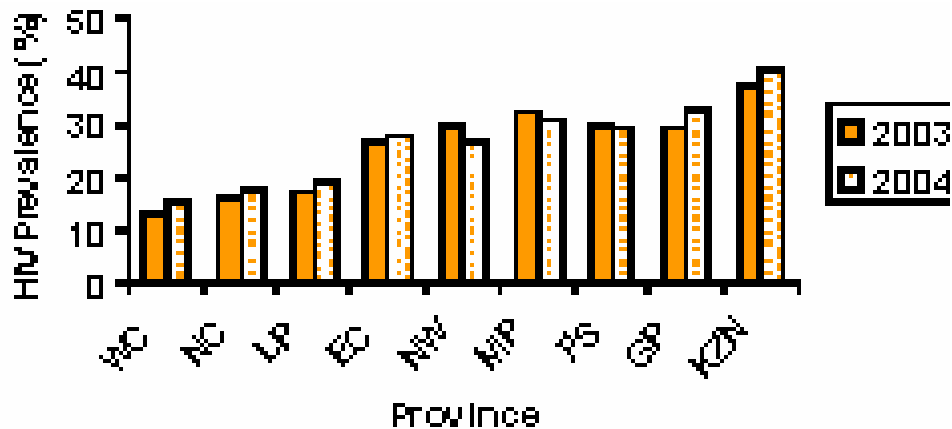
1. Introduction

- Scope of the study
 - Define the issues and develop approaches and strategies for land planning, development and management practices in cities, that:
 - Contribute to decreasing the rate of HIV infection;
 - Contribute to mitigating opportunistic infections and AIDS defining conditions;
 - Respond to shifts in demographic and socio-economic dynamics arising from the impacts of HIV and AIDS in society, and in turn demand and use of land;
 - Respond to the increase in the rate of morbidity resulting from AIDS; and
 - Respond to the impacts of HIV and AIDS on the supply-side of land development and management.

- Methodology:
 - Literature review;
 - Primary research with:
 - Environmental health as well as parks and cemeteries officials in the cities;
 - Anthropology and sociology researchers, religious leaders and traditional healers;
 - Engagement with the teams responsible for two complementary studies (i.e. HIV and migration, and HIV and poverty); and
 - Team worksessions to analyse the research findings and develop strategies and responses.

2. Space, land use and development and HIV & AIDS

- Roll out of prevention, care and treatment interventions will help but biomedical approaches to disease control in individuals, when acting in isolation, often fail to achieve sustainable health gains at the level of populations
- HIV and AIDS are a symptom of rapid urbanisation and concentrated in urban formal and informal settlements.



Locality type	HIV positive
Total	10% to 12.7%
Urban formal	10.3% to 14%
Urban informal	16.2% to 26.5%
Tribal	6.5% to 10.9%
Farms	4.8% to 11.1%

2.1 Impacts of spatial form, structural factors, land development and land use on HIV and AIDS

- **Structural and spatial factors:**
 - Heighten the probability of sexual networking and risk of HIV infection
 - Affect the rate of progression from HIV to AIDS and then death
 - Affect ability of those affected to cope
- **Include both planned and unplanned**

- High densities and sexual networking (**cities and dense settlements!**)
- Free-standing and infill informal settlements, backyards, overcrowded formal housing, hostel accommodation:
 - Overcrowding , sexual privacy and TB (**households sharing single room!**)
 - Access to water, sanitation energy and environmental health and TB & worms (**households without access to basic services!**)
 - Management of contaminated medical waste (HBC) present risks (**settlements with inappropriate waste management services!**)
 - Informal settlements and housing conditions are “unplanned” and people-driven responses to urbanisation: failure of the planning system and practices to proactively respond to the processes of urbanisation and migration, and resulting settlement, housing and economic informality.

- Fragmented, sprawling cities and the spatial legacy of apartheid aggravate the spread of HIV and the impact of AIDS by hindering access to prevention, care and treatment (**city form!: multiple base/commuting, new RDP settlements**)
- Settlement processes and types not conducive to strong social asset formation (**migration reception areas! RDP settlements!**) and where spatial form facilitates gender based abuse (**uncontrolled open spaces!**)
- **Land uses:**
 - Number of formal and informal establishments where alcohol is sold
 - Proximity to mine and hostels as a proxy for single and wage earning populations
 - Proximity to trading centres and break of bulk points in the goods, services and transport industries
 - Proximity to primary and secondary roads

2.2 Impacts of HIV and AIDS on land and spatial development

- Macro-demographic level: HIV does not mean that demand for residential land use will be alleviated
- Micro-demographic level challenge planning assumptions about household size and settlement practices over time (**esp housing subsidy instruments!**):
 - HIV introduces greater diversity and fluidity of the demand.
 - Household composition and size are increasingly varied and dynamic
 - Many different manners in which households reconfigure themselves
 - New patterns and intensified mobility
- Household and settlement-level economic impacts of HIV and AIDS increase economic and settlement informality as a survival strategy (**fit with land use management practices re zoning, etc...!**)

3. The burden of extra AIDS mortality on land

- Commonly defined as a shortage of grave sites to accommodate mounting numbers of burial... but **irrespective of HIV and AIDS the availability of land for burials requires attention** :
 - In SA & abroad **urbanisation** means pressure on land and attention to alternatives
 - In SA, apartheid meant **pent-up and under-catered demand for urban burial land**
 - Strictly speaking, it is the **rate of demand, rather than the demand itself that is increasing**
 - HIV and AIDS decrease fertility levels + phenomenon of people returning “home to die”
 - **In 2005, AIDS is causing twice as many deaths than would otherwise be the case**
- **Interment a spatial planning issue:**
 - Not all types of land and spatial locations can be used for cemetery space
 - Pressures on use of urban land re competing uses for the well-being of the living

	Shortage of sites reported
Buffalo City	Yes , but depends on sites in the municipal area of jurisdiction.
Cape Town	Yes , Guguletu, Goedehoop and Gordon's Bay (in the Helderberg) and Mfuleni. Khayelitsha will also start experiencing problems within 12 months.
Ekhuruleni	Unclear
Ethekwini	Yes , only two sites have fresh graves, major townships have very high pressure
Johannesburg	No , estimating that the lifespan of existing cemeteries is 40 years
Mangaung	No , enough capacity and land available in municipal area of jurisdiction
Msunduzi	Yes , limited lifespan of existing cemeteries is of concern
Nelson Mandela	No, but expected lifespan of current cemeteries is 32 years
Tshwane	No, but decrease in life span on cemeteries from 70 years to 35 years

Unpacking trends

- Key shift in mortality trends:
 - Increase in the proportion of persons in the younger age cohorts (from 25 to 40) who are dying
 - Causes: HIV and AIDS, urbanisation
- Weak monitoring practices re method of disposal of human remains (**indicators and knowledge management!**):
 - Secondary interments (approx 15% of all interments);
 - Cremation more popular among all race groups;
 - Both indigent and paupers burials increasing disproportionately
- Suggesting that there is some room for changing the demand for services, interviewees ascribed these trends to two factors:
 - Increases in the cost of interment
 - Social marketing

- Cities investigating technical alternatives to single grave, horizontal interment:
 - Alternative interment methods:
 - Grave recycling, double, triple interment
 - Vertical & crouching interment
 - Opportunity cemeteries
 - Eco-interment
 - Cremation;
 - Mausoleums;
 - Promation; and
 - Catacombs.

	Single grave burial	Recyc le *2	Recyc le *3	Recyc le *4	Recyc le *5	Crema tion or proma tion witho ut interm ent or holdin g of ashes	Mauso leum low densit y	Mauso leum high densit y
Square meter per person require d	2.5	1.25	0.833	0.625	0.5	0	0.252	0.263

	National	Cities
Percentage of national population *	100%	36%
Additional deaths due to AIDS 2000	139,009	50,043
Additional deaths due to AIDS 2005	510,079	183,628
Additional deaths due to AIDS 2010	779,098	280,475

Scenario		Total additional land in meters 2	Total additional hectares in cities
Scenario 1: Current practices	Additional land required 2005	399162.3	40
	Additional land required 2010	609683.1	61
Scenario 2: Change to pursue 2nd and 3rd recycling and sharing	Additional land required 2005	330531.2	33
	Additional land required 2010	504855.5	50
Scenario 3: pursue greater levels of cremation	Additional land required 2005	321349.8	32
	Additional land required 2010	490831.7	49
Scenario 4: pursue combined approach of diversification	Additional land required 2005	267026.4	27
	Additional land required 2010	407857.8	41
Scenario 5: Introduce mausoleums	Additional land required 2005	337740.0	34
	Additional land required 2010	515866.3	52
Scenario 6: tri-combination approach including mausoleums	Additional land required 2005	224502.5	22
	Additional land required 2005	342906.6	34

- Legal framework affects the feasibility of different land use optimisation strategies (**new nation-wide by-laws!**)
- Local landscape of HIV, cultural factors and available space will affect local demand- need to model per city
- Ignoring or dismissing social, cultural and religion prescripts in respect of funerary rites is not an appropriate response for municipalities. However, these prescripts are not immutable.
- Social marketing efforts to promote alternatives are a worthwhile but long-term investment
- Pricing strategies can be effective in the short-term but:
 - Pricing not always transparent or comprehensive (opportunity cost of land re alternative uses)
 - If pricing excessive can lead to:
 - Increase in number of indigent & paupers burials
 - Informal and illegal interment

4. HIV, AIDS and institutional capacity of local governance

- The supply system for land planning, delivery and management involves a set of inter-dependent delivery agents
- Irrespective of HIV and AIDS, supply-side delivery agents are particularly vulnerable to disruption and institutional weakness
- HIV infection levels among professionals and technicians on site are set to rise from below 9% in 2002 to 12% in 2006 and just under 15% in 2010
- Will increase costs of providing and developing land
- The demographic impact of HIV and AIDS is likely to aggravate a situation where skills and capacities are already limited
- SALGA/DPLG/SACN engaged in HIV and AIDS workplace management process... but assume that delivery, management and enforcement capacity will be disrupted (**HR intensive systems, procedures and mechanisms?**)

5. Strategic recommendations

- 1. Rapid release and development of well located land and spatially integration**
 - Enable rapid land release on a proactive basis
 - Co-opt and accommodate informal settlement processes
 - Achieve city compaction
 - Enable multi-sector interventions and integration by using space as a platform for co-ordination (link with IDP and SDF)

2. Processes and outcomes of settlement planning and land development need to encourage community building and development

- Support the development of communities through appropriate participation processes
- Move away from individualised tenure, services and housing benefits towards group-based benefits to accommodate household fluidity and diversity and support to development of communities

- ### **3. Considering space and structural factors' impact on vulnerability and accommodate informality as a critical survival strategy**
- Accommodate and manage informality as an expression of vulnerable households' survival strategies
 - Avoid and manage uncontrolled open space
 - Make spatial planning and land use management tools available to support HIV and AIDS interventions

4. Addressing the implications of AIDS mortality

- Prioritise municipal investment that improves the wellbeing of the living
- Consider the range of costs of various methods of disposal of human remains
- Diversify the types of funerary services and optimising current services:
- Combine increased levels of grave recycling (through setting up family graves in particular and encouraging exhumation and relocation), cremation and the introduction of mausoleums
- Apply and broaden concept of opportunity cemeteries
- Systematise practices of social marketing in respect of alternative methods
- Generate knowledge on mortality and funerary preferences and trends
- Locate AIDS mortality on the agenda of international processes and organisations pertaining to urban development