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**Social Ecology: A New Perspective to  
HIV/AIDS Susceptibility and  
Vulnerability Analysis in Mkamba  
Village, Morogoro Tanzania**

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## 1. INTRODUCTION

The HIV/AIDS pandemic has emerged as a developmental problem, having consequences going far beyond the health sector. Indeed, it has become a major crisis in many of the developing countries and in the absence of a cure or vaccine, the devastating impacts of the epidemic are far-reaching. The national HIV/AIDS Surveillance Report shows that by the end of 2004, 1.9 million individuals in Tanzania were living with HIV(URT 2005). It should be noted that these data are subject to underestimation because the National Aids Control Program(NACP) estimates that only one out of 14 cases are reported due to underutilization of health facilities, because many people are not willing to go for a HIV test and also because of delays in reporting. These figures may blur the true force of the epidemic, since HIV/AIDS impacts are not only felt by those affected, but also indirectly affect a wider segment of the population. HIV/AIDS has led to a significant orphan population. As a consequence of AIDS mortality, UNAIDS and WHO(2006) estimated that by the end of 2006 there were about 1.1 million orphans in Tanzania. Because of HIV/AIDS, the average Tanzanian life expectancy is 44 years as opposed to the projected 56 years without AIDS(World Bank 2003). The predominant mode of HIV transmission is through heterosexual contacts accounting for over 90 percent of new AIDS cases, followed by mother-to-child transmission whereby the mother passes the HIV-virus to the child during pregnancy, at time of birth or through breastfeeding(TACAIDS *et al.* 2005). Another mode of transmission is through infusion of infected blood.



The spread of HIV/AIDS has significant effects, not only on the demographic composition of the country's population but also on social and economic structures. HIV infection is unevenly distributed across geographical areas, sex, age, and socio-economic classes. The average national HIV/AIDS prevalence rate is seven percent(TACAIDS *et al.* 2005). The epidemic has struck the most economically active group of adults aged 15-49, with women having higher prevalence rates(8%) than men(6%)(TACAIDS *et al.* 2005). Despite the continuous decline in prevalence rates since 2002, some districts are still having an infection rate of more than twenty percent. In rural Tanzania, the infection rate ranges between five and thirty percent(URT 2005).

Livelihood studies differentiate between the internal and external side of vulnerability(Chambers 1989). The contexts in which people live in constitute the external side of vulnerability. These are factors that are beyond individuals'control but affect their livelihood, such as ecological changes, market trends, demographic changes, political turmoil, failing health infra-structures, and social inequality. The external dimension involves exposure to risks and shocks. According to Brons *et al.* (2007) external vulnerability is part of the societal or ecological context but influences individual vulnerability and coping behaviours. The internal side of vulnerability refers to the capacity to anticipate risk, cope with, resist and recover from the impacts of shocks, which relate to specific characteristics of a person or group of people exposed to these. These include characteristics of individuals(e.g. age, sex, health status, skills) and household characteristics(gender of household head, income, dependency ratio and assets-ownership). The internal dimension of vulnerability comprises lack of assets and entitlement failures. External ecological and socio-economic dynamics

have differential impacts on people's vulnerability and the way they cope with and adjust to stresses such as HIV/AIDS. In response to socio-economic and ecological vulnerability, people living under these conditions may work together to achieve a common goal so as to solve their problems.

Decosas(2002) contends that when it comes to AIDS research, analysis of social ecology should be standard and dominant form of inquiry. According to Barnett and Whiteside(2002), social ecology is one among the few theories that acknowledge interplay between human epidemics and their environments by positing that even fully informed persons may not make healthy choices because contextual impediments may prevent this exercise of freewill. The HIV/AIDS epidemic reflects the economic, political and cultural characteristics of society, and susceptibility and vulnerability to HIV/AIDS vary from one society to another and within society. Susceptibility is defined as those aspects of the society, which make it more or less likely that the epidemic will develop. Vulnerability refers to those aspects of a society, which make it more or less likely that the epidemic will have a serious impact on social and economic organization.

### 1.1 General HIV/AIDS situation in Morogoro Region

Morogoro region in the south-eastern part of Tanzania has not been spared by the spread of the HIV/AIDS pandemic. AIDS statistics for the region indicate that there has been a rapid increase in HIV/AIDS prevalence among blood donors ranging from zero in 1983 to 20 percent in 2004. Detailed figures for every district from 1999 to 2004



are shown in Table 1.

*Table 1 Morogoro HIV/AIDS prevalence among blood donors 1999–2004*

Year/District	HIV Prevalence Rate (%)					
	1999	2000	2001	2002	2003	2004
Kilombero	6	16	16	11.5	19	nd
Kilosa	5	16.2	10	6.1	4.7	5.3
Ulanga	6.1	6.4	18	10.6	5.3	4.2
Morogoro Rural	5	11.6	12	nd	7	20.3
Morogoro Urban	8.2	11.9	nd	nd	8.6	7.8

*nd – No data*

*Source: Regional Health Office – Morogoro*

AIDS cases increased in 2000 (Table 2), which could have been caused by a new wave of male migrants coming to work as labourers on the sugar plantations. Data on the new AIDS cases clearly show the extent of the problem in the region (Table 2).

*Table 2 Reported new AIDS cases by district Morogoro region 1998–2004*

District	Number of New AIDS cases						
	1998	1999	2000	2001	2002	2003	2004
Kilombero	818	684	793	453	nd	310	333
Ulanga	75	39	242	39	nd	177	149
Kilosa	91	78	308	142	nd	57	59
Morogoro	90	138	181	168	nd	53	176

Rural							
Morogoro	700	626	778	749	nd	394	273
Urban							
Total	1774	1565	2302	1551	nd	991	990

nd- No data

Source: Regional Health Office - Morogoro

The figures in Tables 1 and 2 indicate that Kilombero district has been greatly hit. Poverty is noted to be a main factor contributing to the spread of HIV/AIDS in Kilombero (ESRF 2005). Mobility has been associated with increasing risk to HIV infection. The concentration of male migrants isolated from their families increases the demand for commercial sex, which facilitates the spread of HIV. Kilombero attracts a so-called 'mobile population', which consists of people who stay away from home for varied periods of time during a year such as traders, migrant farmers, casual/seasonal labourers and truck drivers, who are at both risk of HIV-infection and are contributing to the spread of the virus. Their comparative wealth enables them to engage in paid sex. Since most of the people in the area are predominantly poor, engagement in transactional sex is one of the surviving strategies (ESRF 2005), and in so doing many are exposed to HIV infection. Many of the seasonal casual labourers recruited to work in sugar cane plantations come from highly affected regions in Tanzania, such as Mbeya and Iringa. If affected, their movement to Kilombero may result in further spread of HIV. They may also get infected in the area of destination. The direction of infection is not only from mobile men to local women but also vice versa. Inability to negotiate safe sex and unprotected sexual practices among mobile population



groups, involving multiple partners, make people susceptible to HIV infection. It has been found that among farm and plantation workers in Iringa and Morogoro, for example, HIV-prevalence is about 30% (cf. Tanzania national website accessed on 30/08/07) which is high compared to the general population (7%).

## 1.2 Morogoro Sugarcane plantation historical context

Migration of people within and even among countries in search for employment is of all times and is by no means a new phenomenon in Tanzania. Prior to colonisation population movements were associated with warfare, natural calamities and the search for fertile land, but this was essentially rural to rural migration (Liviga and Mekacha 1998). Migration became a common phenomenon during the German and British colonial periods in the wake of an export-oriented economy and an emphasis on urban sector development (Mwalimu 2004). Colonial economic systems of labour reserve and the settlers' plantations resulted in the movement of labour to the sisal, coffee, cotton and sugar plantations in the country. Areas where colonial regimes did not introduce cash crops plantations became sources of migratory labour. A study conducted by Lazaro (1996) found that sugar and sisal plantations in Morogoro attracted people from different parts of the country and even from other countries like Mozambique, Rwanda and Burundi. This can explain the population diversity in Mkamba village, as people also migrated to this area seeking employment in the sugar cane plantations. A decline in agricultural production in the mid-1980s resulted in declining incomes, which might also have forced people to seek



employment in areas with plantations (Mbilinyi 1997). People who have multiple 'homes', or who spend a lot of their time away from or between homes, lead lives of contingent encounters and short-term relationships, whether economic, social or sexual. This encourages high-risk sexual behaviour, including obtaining sex on a commercial basis.

### 1.3 Technological development and settlement patterns

Although technological development may be designed and implemented for good purposes, national strategies for development may place people in situations that increase their susceptibility and vulnerability to HIV/AIDS. For example, the expansion of transport systems and other infrastructure may facilitate the growth of the epidemic. There is strong evidence that better infrastructures increase the mobility of people and on the other hand increased mobility is associated with HIV spread. Mobile people with relatively wealth are more likely to engage in risky behaviours. A large influx of males into a rural area for a construction project increases the demand for sex, especially if they are far from home and lonely. Many men among mobile populations are prone to using commercial sex venues, but are also known to have casual partners, in addition to wives or other partners back home. Mobility can make people more vulnerable. Areas of transport activity such as transport corridors and stopping places demonstrate increased risky behaviours. Campbell and Mcaphil (2002) contend that migrants and migrant households are particularly at risk; so are the residents of non-migrant communities

with whom migrants interact on a daily basis. Brockerhoff and Biddlecom(1999) found that in East Africa the incidence of HIV is higher near roads, and amongst people who either had a personal migration experience or have sexual partners who are migrants.

Rural life in Tanzania has been profoundly influenced by colonial rule and post-colonial efforts to improve the lives of the people. In the late 1950s the British colonial administrators initiated what was called 'the community development approach' for rural transformation. This programme was implemented through resettlement of farmers into closely supervised communities so that extension services could easily reach them. After independent the transformation sought to radically transform agriculture through the resettlement in special schemes of pre-selected villagers who would then engage in modern farming under the supervision and direction of state officials. Under this programme people were moved from semi-arid areas to the fertile areas of Pangani/Wami basin and the Kilombero river basin. This movement may also have been a factor in the ethnic heterogeneity. It is common to find members of several different ethnic groups in one village, like in the research village. The heterogeneity is due to in-migration mainly caused by the villagization policy of the early 1970s and employment opportunities in the district. To improve the socio-economic position of many Tanzanians, and guided by the socialist ideology, people were forced to live in *Ujamaa* villages. The assumptions behind the formation of *Ujamaa* villages were based on the traditional family values of mutual respect, sharing of basic goods and services and the obligation of everybody to work. The Villagization Programme was designed to promote growth and achieve equity, but experience suggests that these objectives have not been attained. People were



moved into areas where the population density was already high, which made it difficult for them to get basic services and farming plots. People were settled on land belonging to other villagers, which led to conflicts over the existing and uncultivated lands. Community divisions in villages were historically formed along ethnic or religious lines. During that time, however, because of new relations that emerged and the inability of the government to provide for the newcomers, and economic crisis developed and sitchcraft accusations rose in most of the villages involved (Stroeken 2001, Mesaki 1994).

#### 1.4 Social ecology and HIV/AIDS

HIV/AIDS is better described in terms of social ecology, which is concerned with the relationships between human populations and their environments. Conceptual social ecology, as explained by Whiteley (1999) is based on six principles:

- identifying a phenomenon as a social problem;
- viewing the problem from multiple levels and methods of analysis;
- utilizing and apply diverse theoretical perspectives;
- recognizing human-environmental interactions as active processes;
- considering social, historical, cultural and institutional contexts; and
- understanding people's lives in an everyday sense.

Using a social ecological integration would offer more freedom in considering and addressing the epidemic's actual roots. By utilizing such a model, it could be pointed out that the solution to this epidemic does not only depend on medical solutions but also on other



community factors. This model would also force us to consider gender and other social imbalances (Decosas 2002) that many institutions are aware of, but seem not to address. The application of social ecology may provide an understanding as to why and how context differences matter for HIV Susceptibility and AIDS vulnerability. However, the elements of a social ecology framework are rarely incorporated into the questions about spread of HIV and responses to AIDS, and this has been hindered by a bias towards individualistic orientations. Hence few data are collected to characterize social, economic and cultural environments in which people are living in.

In Tanzania, HIV prevalence differs from one place to another. Although there are several broad development dynamics at play in the spread of HIV in the country such as poverty, gender inequality, population mobility, lack of access to information and essential services, especially among youth and other vulnerable groups, some areas have higher prevalence as compared to others. Why are these differences? There is also little research to help understand the forces at the local level that may lead certain communities (villages) or regions to cope constructively with AIDS impacts. While individual and household level impacts information are important to understand the extent of the problem, its assessment without linking it to the context tells us little about the most effective policy response (Stillwaggon 2006). Less is known about particular mechanisms by which broader contextual features may increase people's susceptibility and vulnerability to HIV/AIDS. According to Haddad and Gillespie (2001) livelihood-based analysis of linkages between food security and HIV/AIDS show that the impact is systemic, affecting all aspects of rural livelihoods; therefore, an effective analysis of the causes and

outcomes of HIV/AIDS requires a contextual understanding of livelihoods unique to a given area and/or social groups.

This paper argues that the historical and socio-economic contexts of an area account for differences in HIV prevalence and ability of the people to cope with AIDS impacts. The aim of the paper is to explore the unique historical context, social structures and economic activities that shape HIV susceptibility and the ability of both households and communities to respond to AIDS impacts. This paper elucidates the interaction of social, political, cultural, and economic factors with the particular features of HIV/AIDS epidemics, which gives an understanding on the most significant long-term consequences of HIV/AIDS, and thus provides the basis for new responses. Also understanding the broader context of community life allows an examination of structures, networks, and community-wide responses that may predict more resilience. The data presented were collected in a village study in Mkamba, Tanzania, during 2004-2005(Nombo 2007).

## 2. STUDY METHODS

This research used a case study method so as to get in-depth and rich understanding of how contextual factors influence susceptibility and vulnerability to HIV/AIDS. This method is used when 'how' or 'why' questions are explored and when the focus is on phenomena that are occurring within real life contexts(Yin 2003). Mkamba village in Kilombero District, Morogoro was selected as a case study based on the following criteria:



- Relatively high HIV/AIDS prevalence rates with a potential to capture the impacts of HIV/AIDS for various households. Information obtained from Morogoro Regional Hospital officials and available HIV/AIDS data at regional level, showed Kilombero District to have relatively high HIV/AIDS prevalence. Further discussions with medical and other district officials led to the choice of Mkamba.
- The village was chosen because has been influenced by migration due to various factors such as easy transport access, employment and business opportunities, as well as settlement schemes.

This case study represents the spaces in which to observe why people living in the area are highly susceptible and vulnerable to HIV/AIDS.

Within the case study, other methods were used to get information about the area and peoples' experiences. These included Focus Group Discussion(FGD) and interviews with key informants. Key informants were: government officials, informal leaders, religious leaders, leaders of community-based organizations(CBOs), elderly and influential people in the village, traditional healers, moneylenders, and local government staff in the area such as health officers, extension staff and community development workers. The interviews were conducted in Swahili to explore issues such as past and recent history and major events in the village, people's livelihoods in the village, household structures, gender relations, social relations and communal activities, HIV/AIDS situation in the village as well as ways of coping with livelihood insecurities.

Focus group discussions took advantage of the interaction between small groups of people. The FGDs involved people who represented



different groups in the village. The groups were composed of seven to eight people of varied ages. Some were mixed; others had women or men only. They were all tape-recorded and then transcribed. Translation from Swahili into English was done for the sake of further analysis. Qualitative data from the focus group discussions and key-informant interviews were interpreted and organized into different themes.

Secondary data sources consisting of records and documented reports contained useful information on the historical context, demographic facts, livelihoods and technological developments in the area were used to supplement primary data. This information was obtained from different government offices and other institutions in the area.

### 3. RESULT

#### 3.1 Case study Mkamba

Mkamba village is sandwiched between the Kilombero sugar plantations to the East and Udzungwa Mountains National park to the West, Kidatu village to the South and Kilosa district to the North. People's settlements are dense and confined by the foot slopes of the mountains and the sugar plantation plains. Both the sugar cane plantations and the hydro-electric power station are partly in Mkamba village, and the TANZANIA and ZAMBIA RAILWAY (TAZARA) line passes through it. As one old man recalled, by the year 1957 there were only 48 tax payers in Mkamba village. Now, the population has increased tremendously as a result of employment opportunities created by

industries and the greater accessibility of the village by the railway. Employment opportunities and easy accessibility to the village have brought from all corners of Tanzania, resulting in a high degree of ethnic heterogeneity in the village. The construction of the Kidatu hydro-electric power plant in 1969 and its operation to date have employed people from various parts of the country. Also the construction of the TAZARA railway line in 1971 contributed to the influx of different people from different regions of Tanzania currently living in Kilombero district villages including Mkamba.

The village counted a total population of 12,737 in 2003(Village Report 2003), compared to 6,711 people in 1978(URT 1978). The total area of the village is estimated to be 6.322 square Kilometers with a population density of 2,014 people per square Kilometers. This remarkable figure and can be attributed to the fact that many people live in rented rooms since they have no plots or houses of their own in the village. It is quite common to find more than five households living in one house. The population increases during the peak of the sugarcane harvest(May to December) when about 5,000 to 6,000 casual labourers are recruited from other regions every year. During the peak season the company draws labour from other regions in the country, mostly Mbeya and Iringa which are known to have high HIV/AIDS prevalence rates. As men migrate to work in the sugarcane plantations women are left behind to care for the household back home. While women also move into the area in order to escape economic deprivation, most of them engage in jobs such as informal trading, agricultural labour and some commercial sex work. The existence of Sugarcane Company in the area has stimulated the economy of the area by creating a ready market for food crops and other items from



the adjacent small-scale producers. On the whole the existence of the company in the area ought to have increased the choices available to the population of Mkamba. Migration of people to Mkamba village because of the employment opportunities offered by the sugar cane estates and the growing cash economy and trade opportunities resulted in increased population pressure on the land and cultural diversity. Moreover, the policies of the Sugar Company after 1998 caused unemployment and increased hardship. Some households are desperate and live in destitute conditions.

Due to in-migration, the Mkamba population is increasing rapidly. Most of the incoming population which decide to settle in the area is being squeezed in the limited public lands in the village. There is no room for extending land because the village is surrounded by sugar cane plantations and protected forest areas. Although farming employs a large percentage of village inhabitants, most of the Mkamba people do not have farming plots near the village; they farm in farms plots. During a farming season, usually from December to August households are forced to split; whereby parents and other adults in distant households move to the farms, leaving behind school-age children and young ones with no proper care. They are left with very few resources to live on, leading some of them to seeking alternative ways of survival such as engaging in transactional sex (by girls) and theft (by boys). Such strategies expose girls to the risks of pregnancy and HIV infection. Furthermore, it was found that during the time when people are in distant farms is also a period when people face severe food shortage. Therefore, households have to respond to food shortages using various means some of which increase household members' chances of contracting HIV. Participants of women focus Group



Discussion disclosed that in times of food insecurity, women may resort to paid sex to be able to buy food for their family, which increases the risk of HIV-infection, especially since they do so unprotected. According to the Village Report(2003), only 65 percent of the population has sufficient food thought the year or has a seasonal shortage; 35 percent is chronically food insecure)

Not only does migration into the area cause land shortage which contributes to food/income insecurity, but it also increases cultural diversity, which may affect the social cohesion in the community. Employment opportunities and easy accessibility to the village has brought people from all corners of Tanzania, resulting in a high degree of ethnic heterogeneity in the village. Ethnic diversity was said to be among the illustrations of the difficulty of building social networks in communities constituted through in-migration. It was reported that people tend not to trust people from other ethnic groups and interact less frequently with them. For example, women *upatu* networks did not function because some members from a particular ethnic group isolated themselves from the group, which led to the group's dissolution. Key informants noted that even those from the same ethnic group do not offer support to each other.

Apart from ethnic diversity, it was also found that witchcraft beliefs and anti-witchcraft initiatives form an important aspect of social life in the area. The most significant outcome of the proliferation of witchcraft suspicions and accusations is the negative effect on the way people relate to each other. In the study area any person may be accused of witchcraft based on suspicion alone or general dislike and jealousy, anti-social behaviour, dreams, or divination. In such a situation people may change their behaviour in ways that minimize the

chances of sparking off suspicion, to avoid being accused of witchcraft. Witchcraft suspicions and accusations reflect deteriorating trust among neighbours and friends as stated by a village woman key informant:

Even if I know my neighbours do not have food, I cannot provide them with food for fear of being accused of witchcraft in case a member of that household gets sick.

Lack of trust affects the viability of social networks, necessary for building social capital, one of the assets necessary for helping households cope with problems. Witchcraft accusations damage intra-community relations by eroding trust, which is the glue that holds communities together.

Kinship relations are important for household's livelihood but also as sources of support in times of need such as coping with AIDS impacts. It was found that the kinship support system has been greatly undermined by changing social and economic conditions and cannot be relied upon to provide support for its members. Moral obligations towards kin are less acknowledged. Even though the justification for reciprocal obligations between members of a family is still recognized, implementation is obstructed by economic hardship and self-interest. The breakdown of the traditional family and community means that there are fewer support systems in place to help people and their families when they run into difficulties. From informal interviews and focus group discussions it became evident that assistance from community is nowadays very minimal. As an old man said:

It is not that the sense of brotherhood is dying but the big problem is poor living and economic conditions for many of the



families. Life has become very difficult. Even if your relative is sick, you are unable to assist because of the lack of income.

This statement shows that despite the importance of kinship, economic constraints make it difficult to maintain relations with the kin and other community members. Although the general opinion is that relatives should provide support, a reduced reliance on kinship support can be observed as a participant of FGD said:

What is noted here is that people have become more self-centred, in such a way that helping somebody is like a burden and that support to others could erode your resources. Others say they have developed European culture - not helping others except for immediate family members. We are now living an urban life.

While migration enabled household members to earn income elsewhere, it also negatively affected kinship ties. Growing mobility has caused the geographic dispersal of the members of kinship networks, leading to loosened social ties and weakened responsibilities and reciprocity within families. Remittances from those who have migrated are not guaranteed.

At the community level, the coping ability of HIV/AIDS-affected households very much depends on the community's attitude towards helping needy households, the general availability of resources and the level of community spirit and shared vision but these were found to be unavailable in Mkamba village. Apart from awareness programs there were no other initiatives initiated by the community to assist vulnerable households, especially those affected by HIV/AIDS in contrast to the nearby village. Some groups assist their members but



assistance is not guaranteed on regular basis. Solving domestic problems such as care for the sick and food provision is generally perceived to be the household's responsibility (especially of women or close relatives). One of the village hamlet leaders said:

Even if we give assistance to affected or vulnerable households, which is not easy these days anyway, it is still the household's responsibility to care for its members; no one will leave her/his family to care for others.

With increased infections in the area many households experience HIV/AIDS impacts and find them themselves unable to give their time and resources to the community.

Community support is no longer effective to meet the multitude of needs resulting from the HIV/AIDS epidemic and other socio-economic problems in the area. Economic stress and hardships seem to affect the community in two nearly opposite ways. As individuals and households struggle to make ends meet, they have little time for group and communal activities and concerns. People's preoccupation with everyday life activities is dominated by 'getting by'. Support from the community is not readily available as one lady said:

Who is there to give you food and money these days? Everyone has to strive for her/his family (Kila mtu anakufa kivyake).

As people struggle to get their daily needs little time is left for social interaction and mutual help. In a situation of geographical dispersion of extended family members, the relations with friends and neighbours become an important alternative source of social support.

However, the findings of this study indicate that people's relations with friends and neighbours are often unreliable and minimal. Widespread poverty, ethnic diversity and witchcraft beliefs affect people's relations and the way they try to cope with the various problems. Most of the HIV/AIDS-affected households experience economic difficulties that threaten their daily subsistence.

#### 4. DISCUSSION

HIV/AIDS susceptibility, vulnerability, and coping processes are context-dependent. Historical context of an area has an influence on the fastest growing HIV epidemic. Mkamba case clearly illustrates how socio-economic contexts help shape the dynamics of HIV transmission, as well as its impact and the response to it. Geographic factors included proximity to sugarcane plantations and related employment opportunities that attract migrant workers. People entering the area because of easy transport access or to work on sugar plantations, if infected and having sex with residents; represent two of many potential modes of entry of infections into the area.

Poverty and the lack of economic opportunity make it more likely that both women and men will migrate in search of income and employment, which can destabilize and disrupt stable social and familial relationships and expose them to increased risk of infection and inability to cope with AIDS impacts. Although the places they migrate to seem to promise better livelihood opportunities but the environment in which these people find themselves living in make



them vulnerable to poverty such that many may opt for risky strategies to make their livelihood hence increase chances of HIV infection. People migrate to the plantation areas where people are already crowded and where land and other infrastructures have not kept up with the population increase. In these areas widespread poverty impose constraints on people's choices and their ability to avoid risk. The situations they face such as poverty and separation from families and partners put them at risk. Strong links between short-term residence labour migration and elevated HIV prevalence have been recognized by many studies, especially when migrants move for a time to more concentrated areas of population such as cities and trading centres(Williams *et al.* 2002).

With migration comes the breakdown of social structures especially important in creating conditions by which HIV/AIDS spreads(Bloom *et al.* 2002). Separated from their familiar social structures and from shared norms and values, language and social support, they are more likely to engage in risky behaviour. As found in this study, new environment often lacks strong community cohesiveness, thus increasing the risk of HIV infection and the people's ability to mitigate the impacts of AIDS. Lack of support structures make them unable to cope with the AIDS impacts(Nombo and Niehof 2008). Because of widespread poverty and lack of support structures in the village, families are often too burdened with their own problems to be of much help to others. Added to these factors, the acute gender bias that is widespread in the area makes women especially susceptible and vulnerable.

Another factor that emerged from our qualitative data was the ability of people to work collectively towards a common goal. A lack of



community competence was seen in Mkamba village where people are not rooted in the area and had few resources available to them. It was also found that ethnic diversity in the community is among factors that limit interpersonal trust, making it difficult for the people to work on a common agenda. Positive examples were seen from other research findings from Kagera, a region widely studied to investigate HIV/AIDS impacts in Tanzania, which show that AIDS has facilitated community-based support networks that enhance community cohesion, but a note of caution is expressed about the possibility of weakened cohesion if the epidemic continues to strike (Tibaijuka 1997, Rugalema 1999, Lwihula 1998). Trust is a prominent component of the socio-environment system, touching on all of its factors. The ability to act collectively requires trust among community members, but trust was found to be generally lacking in Mkamba. Ethnic diversity in a migrant community like Mkamba seems to negatively affect trust and social interaction. People's mobility brings in people who are not rooted in the area and who are unlikely to trust each other without strong motives to work for the common good. Similar to what Zak and Knack(2001) and Alasina and La Ferrara(2000) found, different forms of heterogeneity such as ethnic diversity are associated with low trust and participation in community activities. This finding corroborates the results of a large-scale investigation into migration-induced ethnic diversity and community cohesion by Robert Putnam. Putnam(2007: 149) concludes: "[Ethnic] diversity seems to trigger *not in-group/out-group division, but anomie or social isolation*"(*italics in the original*). The findings of this study suggest that it is difficult to mobilize community action in a situation characterized by multiple socio-economic problems and lack of trust. Poor relational skills and

dishonesty undermine community cohesion. Community cohesion suffers when people or places suffer from a series of problems, e.g. unemployment, low income, ill health and family breakdown.

## 5. CONCLUSION

Much of the policies have been almost exclusively concerned with individual factors associated with the spread, prevention and coping with AIDS impacts. This study has demonstrated that there are factors other than characteristics of individuals that affect HIV/AIDS susceptibility and vulnerability. HIV/AIDS susceptibility could be influenced by historical, economical and social factors such as high levels of migration, wide spread poverty, spread of prostitution as a means of survival as well as lack of community cohesion characterized by ethnic diversity and distrust. The study found that social support networks were not providing much support to AIDS-affected individuals and households to cope with AIDS impacts in the community composed of many immigrant who are experiencing wide spread poverty.)

While HIV/AIDS is commonly understood to be a medical or public health problem, this study has shown that both its causes and its consequences are deeply embedded in the social, political, and economic processes that shape the communities. Persuading individuals to change behaviour, without due regard for the social, cultural and economic contexts in which behaviour is shaped will yield little results. The findings of this study highlight the need to take into account the

history of the community concerned and its distinctive features when assessing susceptibility and vulnerability to HIV/AIDS and also when designing community-based mitigation interventions. Reduction of HIV susceptibility requires attacking the underlying causes and not just short-term programmes. The programmes should gear towards addressing economic, social and ecological settings that promote the epidemic. Therefore, policies and interventions should be holistic and not just address the immediate effects but also take into account important contextual circumstances and underlying causes to HIV/AIDS susceptibility and vulnerability. The findings of this study suggest an ecological approach to future HIV/AIDS risks and impacts studies.



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