IMPACT OF HIV/AIDS EPIDEMIC ON FOOD SECURITY AND RURAL DEVELOPMENT IN SUB- SAHARAN AFRICA

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ABSTRACT

HIV/ AIDS epidemic is real and continues to evolve. It is estimated that over 90 percent of the close to 40 million people who are thought to have been infected world wide with the virus since the start of the epidemic live in developing countries, especially in sub- Saharan Africa. With around 15 million HIV/AIDS infected adults and children, sub- Saharan African is the region hardest hit. This represents more than 65 percent of the world total. Of the more than 9000 new infections that occurs daily world wide, 50 percent are in sub- Saharan Africa. It is estimated that around 7 million adults and 1.4 million children worldwide have already died since the start of this deadly disease. The scourge has a disproportionate effect on food security situation of rural house holds, communities and livelihoods. It damages the rural livelihood assets of rural dwellers who depend on agriculture. It also erodes the rural institutions which provide a vital social safety net in African societies; it disrupts smooth operation of poverty alleviation programmers and capacity of informal institutions. The scourge erodes rural development programmes of a community and renders affected population hopeless. This paper thus aims to describe the ways in which HIV/AIDS epidemic negatively influence food and livelihood security, and its impact on the food and nutrition security of millions as well as rural development policy programmes.
Keywords: HIV/AIDS, food security, rural development, poverty policy, sub- Saharan Africa.

INTRODUCTION

It has been largely accepted that AIDS should be seen as a development issue rather than just a health problem. Looking at the epidemic as a long wave disaster, one can distinguish four waves that follow on to each other and even overlap (Barnett, 2002). First, the wave of HIV infection without any signs of illness, second, the wave of TB infection, despite, progress in treatment of TB, one sees an increase in TB prevalence in countries where HIV\AIDS is highly prevalent in many of the sub-Saharan Africa countries, it takes only 4-5 years before the third wave of full-blown AIDS illness and opportunistic inflections arrives. Finally, the fourth wave of impact which includes household poverty, orphaning, and changes to farming systems, impacts the flow of development, reduces economic growth and leads to a breakdown of formal and informal institutions and culture.

Although it is not only poor people that become infected by HIV, the poverty – Aids inter-linkage is extremely strong and works both ways. On the one hand, poor people are driven into risky behaviours such as commercial sex as a survival strategy, and are therefore more at risk of becoming infected. On the other hand, AIDS may lead people into poverty, because they lose income, jobs, need to sell assets, buy expensive medicines or spend money on traditional healers and finally the expenses for the funeral ceremonies (Van Liere, 2002).

The weight of the AIDs epidemic on the health sector for example is enormous. Hospital beds are mainly occupied by patients with TB or other AIDS illnesses, treatment is too expensive, medical staff are affected themselves, and the burden of care becomes too heavy for those remaining. The health system of many of the sub- Saharan countries is not able to absorb these extra costs, or it will be at the expense of other health priorities. But also the agricultural sector is heavily affected, over 70% of the population in sub- Saharan Africa consists of farmers and other rural occupations. The FAO has estimated that in the 27 most affected countries in Africa, 7 million agricultural workers have died from AIDS since 1985 and 16 million more deaths are likely in the next two decades. Several studies have shown reduction in production and shifts in faming systems (Kwaramba, 1997; Rugalema, 1999). Another group working in the informal sector consists of small enterprises and traders. One person, together with paid or unpaid family members often runs the small- scale enterprise. When they fall ill due to AIDS or when they have to take care of ill family members, their operations may stop. In general there is no insurance against loss of income no rights to payment of medical expenses. These people also risk loosing their place in the market or their clients with any interruption of their business (Van Liere, 2002). In terms of human resources management, training costs may increase because a larger number of new employees need to be trained due to the high turnover. Other costs related to the payroll will also increase, since more people may be recruited as a reaction to absenteeism, but also because skilled workers may become scarcer and will demand higher wages (Dieleman, 2001).

It is widely recognized that, beyond the physical and psychological impact at the infected individual level, HIV/AIDS also has significant indirect impact at the household, community, and institutional and societal levels. Direct impacts includes loss of labour, medical and funeral expenses leading to delayed agricultural activities and depletion of any of the household's reserves. Although the title of this paper reads HIV/ AIDS and food security, it is difficult to discuss food security independently of wider livelihood and poverty considerations. Household livelihood security is defined as adequate and sustainable access to income and resources to meek basic needs including access to food, potable water, health facilities, educational opportunities, housing, time for community participation and social integration (Frankenberger and Mccaston, 1998). All or most of these are indirectly threatened by the HIV/ AIDS epidemic. Impact on households, communities and societies can be analyzed from a livelihood perspective, looking at access to resources or assets. A distinction is made between human, financial, social physical and natural capital, each of which will be discussed in more detail below.

HUMAN CAPITAL

First of all, HIV/ AIDS leads to loss of labour of the infected person but eventually time allocation of his or her caretakers and those attending the funerals will be shifted away from productive labour. As over 70% of Africa populations are engaged in agriculture, impact will first be felt in the agriculture sector. Examples from Tanzania and Zimbabwe, tell the story of reduced crop production and shifts toeless labour- intensive cropping system (Rugalema, 1999, Kwaramba, 1997).

Human capital is not only about manual labour but also about knowledge and skills. Illness and death of parents prevents the transfer of knowledge to their children on land preparation, crop cultivation, handicrafts, cultural beliefs and traditions. Illness and death of trained professionals erode the capacity of institutions such as extension services, schools and universities, health clinics and hospitals. The estimated percentage of the workforce that will be lost to AIDS by the year 2005 and beyond varies between 30% for countries as Botswana and Zimbabwe, and above 5- 10% for countries as Nigeria, Togo and Cameroon.

FINANCIAL CAPITAL

Direct expenses for the infected individual concern not only medical and transport expenses, and also funeral expenses. Loss of income of the infected person and also of the caretaker may have serious consequences. More indirectly, access to credit or savings becomes difficult as affected households are often less credit- worthy. Sales of asset such as equipment and jewellery to pay for treatment, care, or hired labour strips of their last means of insurance.
A simulation model developed based on data from Cote d'ivoire shows a significant difference in monthly income, consumption and savings per capital between the general population and families living with AIDS (Bechu et al, 1997).

SOCIAL CAPITAL

The lost generation of orphans constitutes an important loss of social capital. Without access to formal or informal training, or access to resources (land, credit, information), their opportunities to build up a safe and adequate livelihood are minimized. Dropped out of school, pushed of their parents' farmland, and forced into commercial sex work they may constitute a burden to the community instead of an asset as future productive labourers (Van Liere, 2002). Social networks often provide safety nets for those having problems. Yet the stigma attached to HIV/AIDS may lead to exclusion from social networks from those needing social support. Feared stigma may prevent people to acknowledge their status, whereas enacted stigma may lead to avoidance by the social environment. Erosion of assets because families have to pay medical or other expenses may lead to poverty. Furthermore, poor families have less access to social networks as these are build upon the concept of mutual assistance (Van Liere, 2002).

With an increasing epidemic, the strains on social networks become too high and the safety net may collapse, for example, when the absorption capacity of the extended family and neighbours to take in orphans has been reached. Although sometimes mentioned separately, political capital (i.e. participation in decision making) can be interpreted as some sort of social capital. The access or right to participate in decision- making processes may be reduced because of enacted stigma. Cultural norms and values are changing in an unprecedented way as communities are learning to cope with HIV/ AIDS. A good example is the observation of reduction in number of days of mourning (Van Liere, 2002). Community coping responses often build upon existing grass roots or local organizations such as social support groups or saving clubs and formal community based organizations. The continuity of some of these groups is endangered because of HIV/ AIDS, whereas others will come into existence.

PHYSICAL AND NATURAL CAPITAL

HIV/AIDS may also lead to the neglect of infrastructure (maintenance of wells, housing). Lack of labour leads to reduced terrace maintenance, reduced maintenance of soil fertility or irrigation channels. Many of these activities are labour intensive and have implications for long term natural resource maintenance. As mentioned in the beginning, the reduction in capital will lead to insecurity of livelihoods and thus food insecurity. Food insecurity will lead to reduced food consumption, either in quantity or quality, as some crops that are rich in (micro) nutrients are replaced by those of lower nutritional quality because they are easier to grow. At the individual level this may eventually have consequences for the nutritional status. Increased care for the ill person in the household may reduce time available for childcare and also negatively influence nutritional status of the child.

HIV/AIDS AND RURAL DEVELOPMENT

The HIV/ AIDS epidemic is more than a health problem. Its spread and impact are determined by poverty, social and gender inequality discrimination and poor social services. While it spreads invisibly during he early stages of an epidemic. HIV/AIDS eventually has profoundly negative effects on the economic conditions of individuals' households, communities, countries, regions and whole continents. As HIV/ AIDS affects people in their most productive years of life, including the poor and the illiterate as much as the elites, crucial government officials and skilled labourers. It erodes the very fundament for capacity development and development cooperation (Muller, 2004). This means that HIV/ AIDS threatens sustainable development, not just in regions that are already seriously affected, but also in those where it is spreading fast right now.

HIV/AIDS CAN AGGRAVATE FOOD INSECURITY

The countries most affected by the HIV/AIDS pandemic rely most heavily on small- scale agriculture; over 70% of their population depends on it for their livelihoods. In many parts of Africa, AIDS is intensifying chronic food shortages in countries where large numbers of people are already undernourished. Malnutrition in turn increases both the susceptibility to HIV infection and the vulnerability to its various impacts. (PGTZ, 2005).

Since the AIDS pandemic strikes particularly the economically active age group, it can have a dramatic impact on agricultural production, rural livelihoods and food security. In high-prevalence countries, all dimension of food security are affected availability, access to and utilization of food. The range of health knock-on affects on the food security of affected communities. When household members are incapacitated for longer period of time, the farming circle is disrupted. As more and more productive adults die, the food security of rural communities gradually collapses. In this way, the chronic food insecurity of many households in affected rural regions has been further aggravated by HIV/AIDS and the local capacity to overcome this crisis gradually weakens (Jayne, et al, 2004).

HIV/AIDS FUELS RURAL POVERTY CYCLE

According to FAO estimates HIV/AIDS has already killed several millions agricultural workers since 1985 in the 25 hardest- hit countries in Africa, and the mortality for this group

continues to rise. In macro- economic terms, an increase in adult mortality and morbility will inevitably lead to a decline in agricultural productivity. Not just subsistence farmers but also large- scale commercial agriculture, the back bone of most African economics, is experiencing decline in productivity due to the lack or skilled and unskilled agricultural labour overall, the sector suffers from the reduction in smallholder agricultural production, a decline in marketing of surplus production, decrease inter generational transfer of knowledge and specialized skills and practices and therefore the loss of indigenous farming methods (ACT, 2004)

In regions where the epidemic is at the stage at which a considerable proportion of adults are sick or has died, family's income and food are severally reduced and their saving and assets are depleted to meet health care, living and funeral costs. The traditional systems of mutual assistance that rural communities depend upon are no longer able to cope with the high number of deaths and of people needing care.

HIV/ AIDS UNDERMINES INSTITUTIONAL CAPACITIES

In the more affected countries in Africa, formal and informal rural institutions are affected by the loss of human capital resulting from the rising scale of staff mobility and mortality. Last not least, the operations of Ministries of agriculture (MoA) are severely affected. Their capacity is undermined by reduce staff productivity; increasing ministerial expenditures due costs related to HIV/AIDS absenteeism, medical and burial costs, recruitment and replacement cost. Increase staff donors; and a gradual erosion of MoA knowledge, skills and experience. Moreover, HIV/ AIDS disrupt MoA operations through its impact on the agricultural extension service. When agricultural extension services at a time when due to the aids – crisis, they need them most (GTZ, 2005).

HIV/AIDS disproportionately affects rural women who contribute to over 50% of food production in sub- Saharan Africa and Asia and carry out the most labour intensive forming activities. And yet, deep- rooted gender inequalities in access to land, credit, employment, education and information render women more vulnerable of the harmful effects of the epidemic (GTZ, Pilgram, 2004). Poor female- headed households caring for AIDS orphans in rural contexts have very few coping capacities to re-establish self- sustaining livelihoods. The responses adopted, such as the sale of productive assets and the removal of children from school, increasing household poverty in the long term, and thus exacerbate the "feminization" of poverty in the affected regions.

RURAL DEVELOPMENT POLICY AND PROGRAMME FOCUS AREAS POVERTY ALLEVIATION

Poverty directly exacerbates HIV transmission through commercial sex work and through poor health care, particularly the lack of treatment for sexually transmitted diseases. Poverty indirectly exacerbates HIV transmission by in creasing migrant labour family break landlessness, overcrowding and homelessness. This places people at greater risk of having multiple causal partners. Poor people are less likely to be able to take seriously on infection that is fatal years hence, if they are struggling with daily survival poverty tends to affect

women most, with girls the first to be withdrawn from school and women increasingly marginalized from formal employment. Their economic dependency on men in marriage is thus increased. Education and empowering women is strong linked with effective family planning and improved health care (Jackson, 1992). Poverty makes AIDS education difficult as there are high levels of illiteracy and little access to the mass media and likely to able to protect themselves from infected husbands. They tend to be poorly informed on health matters and have little power to control any aspect of sexual relations- even necessity may force them to acquiesce in an unsafe sexual relationship (Topouzis, 1998).

At the programme level formal rural institutions engaged in poverty alleviation need to respond to HIV, as the viability of on- going poverty alleviation programmes may be undermined. For instance, rural credit programs (a key instrument of poverty alleviation) may be at risk as a result of HIV/ AIDS for three reasons (a) increase mortality may raise the number of defaults (AIDS – affected families may be forced to liquidate their assets in order to repay the loans or use have their assets seized, thereby ending up worse off than before they inquired the loan, and (c) AIDS- affected families may have to spend part of all of the credit to finance medical cares of family members suffering from AIDS. Rural credit institutions need to assess whether HIV is affecting credit schemes in a particular area by inquiring if demand for loan is on the risk or not.

INFRASTRUCTURE

Rural physical infrastructure can be either public road, ports dams, etc as well as schools, heath facilities, market place for private housing. Infrastructure is essential or improving access to services (health, education, agricultural extension, credit,) and marketing trading and raising rural incomes, and more generally, for strengthening rural- urban linkages (Topouzis, 1998). Yet, while infrastructure programmes are central to the revitalization the rural economy, they can also help spread HIV. Rural workers involved in construction, repair or maintenance of infrastructure are separated from their families over prolonged period of time and have disposable incomers to spend at their place of work. The community in which the infrastructure programme is being constructed, and particularly the women who come to work in the hotels, bars and restaurants created to services these workers, often end up as casual or semi- permanent sexual partners to these construction workers. The wives or sexual partners of the construction workers in rural areas and their families may contract HIV from their migrant husband/ partners.

Rural markets constitute another critical infrastructure sub- Saharan Africa that urgently needs to be addressed, given the linkages that have been established with HIV. The mobile population of sellers and vendors has incomes spent in hotels and bars and bus- stops. These facilitate HIV transmission. Thus rural infrastructure, programmes may increase susceptibility and vulnerability to HIV unless the socio- economic, socio- cultural and gender environments are taken into accounts, vulnerable group are identified and remedial measures are adopted. To this effect, rural infrastructure policies and program have to build-in mechanisms to reduce the spread of HIV/ AIDS not only during construction but also after project completion.

FOOD SECURITY AND SUSTAINABLE LIVELIHOOD

Access to adequate amount of food is the most basic of human needs and rights. Food security is dependent on four factors, availability, stability, accessibility of food, and good health. To achieve national food security, a country must be able to grow sufficient food or have enough foreign exchange to enable it to import food. Similarly, households must have sufficient income to purchase the food they are unable to grow for themselves. The basic cause of food insecurity are low productivity in agricultural combined with fluctuations in food supply, low incomes and insecure livelihoods. About 44 out of 49 countries in Africa are classified by FAO as low- income and food- deficit (LIFDG) FAO, 1996). Food – insecure adult household members are susceptible and vulnerable to HIV/ AIDS: malnourishment and poor nutrition contribute to a poor health status and by extension to low labour productivity, low income and livelihood insecurity. It is unlikely that people with low incomes will be able to treat sexually transmitted disease (STD). Given the labour shortage experienced by many rural households as a result of migration shifting employment patterns and HIV/ AIDS, there may be a need, in some instances, to review labour- intensive food production strategies, upon which food security policies and programmes are bused. Labour shortage also raises the issue of the sustainability of traditional agricultural production methods.

EMPOWERMENT OF RURAL WOMEN

Despite their critical contribution to food production, food security rural development in general, rural women in Africa have often been over- looked by rural institutions. Their limited access to productive resources (land, water 4to2) technology, input, support services (agricultural research, training and extension, credit, market) and social service (education, health) and low socio- economic status are important in the contact of HIV (du Guerny and Sjoberg, 1993). Low- income, income inequality and low status of women are all fairly highly associated with high levels of HIV infection.

The illness and/ or death of a woman is likely to threaten house hold food security, given that women provide the bulk of the labour for food production, animal tending, crop planting and harvesting across Africa. Infect, it has been argued that female morbidity and mortality has a particularly dramatic impact on the family (forsyth and Raw, 1996). If women fall ill while their husbands are working in urban areas, the overall socialization and education of the children and the management of the household may be seriously affected. Moreover, studies have shown that children's nutritional status is more closely related to the mother's work and income than to the fathers (Devereux and Ele, 1991).

As the status of women improves, as incomes improve and so forth, we can expect that HIV infection levels will be lower. Thus women's access to formal rural institutions, such as health and education, is essential for HIV prevention while their access to technology, inputs, credit etc is likely to mitigate the impact of AIDS by enhancing women's employment opportunities and incomes. Policies aimed at improving the socio- economic status of women are likely to enhance some women's ability to negotiate safe sex, although less so in rural areas. Nevertheless, expanding female education and employment opportunities, guaranteeing

base inheritance, property, and child custody rights, and outlawing and severely punishing slavery, rape, wife abuse and child prostitution, are essential for the protection of vulnerable women from HIV/ AIDS.

CONCLUSION

Given the rural composition of most countries south of the Saharan the majority of the over 159 million sub- Saharan Africans affected by the HIV epidemic live in rural areas. The magnitude of the HIV epidemic which now affects about one-third of the population of the region , the disproportionate burden it places on rural communities and on the rural economy, and the inadequacy of services and responses in rural areas point to the urgent need for rural institutions to address the policy programmes. The epidemic will impoverish rural house hold asset and communities, and capacity of rural institutions and disrupt the smooth operation of rural institution working to reduce poverty in the affected areas.

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