Third Round Food Security Assessment
SADC-FANR VAC

REGIONAL SYNTHESIS

Summary Information: HIV/AIDS and Food Security

1. Introductory pages / Executive summary

The claim that the current Southern African food crisis is inextricably linked to the widespread HIV epidemic, which has deepened the crisis, is supported in much of the food security literature and current thinking. This claim is underpinned by the fact that the region has the highest prevalence rate in the world (Lesotho 31%; Malawi 16%; Mozambique 13%; Swaziland 33%; Zambia 22% and Zimbabwe 34%), with infection levels around 25 percent of the population, 58 percent of the affected being women (UNAIDS, 2002). All dimensions of food security – availability, stability, access and use of food – are affected where the prevalence of HIV/AIDS is high.

AIDS undermines people's ability to engage in agriculture, and to benefit from rural development. As the current crisis in southern Africa has shown, those living with or affected by chronic illness have less labour, spend time caring for others, and have decreasing experience and skills. They may have to sell off productive assets, or leave them under-utilised. In essence the relationship between HIV/AIDS and food security is bi-directional: vulnerability and food insecurity feed into the risky behaviour that drives the epidemic; and the impact of HIV/AIDS exacerbates food insecurity, which again feeds into risk.

The major finding of the analysis around HIV/AIDS and food security in the current VAC assessments was that it is extremely difficult to draw out the specific impact of HIV/AIDS as the single most important cause of the food insecurity facing the six SADC countries undergoing assessments. The adverse effects of HIV/AIDS on food security and the agricultural sector in general can be largely invisible or subtle enough so as to be undetectable from other causes of food insecurity. It would appear, particularly in Zambia and Zimbabwe, that climatic conditions, food pricing policies, the lack of agricultural support and extension services, environmental degradation, a lack of infrastructure and poverty play a larger role in creating inadequate harvests than HIV/AIDS. However, the epidemic may compound matters during an environmentally induced food shortage, such as what happened the previous season. In Swaziland the situation may be somewhat different according to recent analysis conducted by the Ministry of Agriculture and Co-operatives, in conjunction with UNAIDS. This analysis attempted to record the "compounding" impact of the epidemic on largely land-based households utilising family labour, which were struggling with prevalence rates higher than 40 percent in some communities.

2. Introduction

2.1. General Introduction: HIV/AIDS and SADC

One of the most important challenges facing the Southern African Development Community (SADC) and its member states as it moves towards greater integration are the effects of HIV/AIDS on social, political and economic development (SADC HIV/AIDS Strategic Framework, 2003-2007). The region has the highest levels of HIV infection to be found globally, and many countries are now grappling with the intensifying impact of mature epidemics of HIV/AIDS, and the related epidemic of TB, that are reversing the hard-won development gains of the past 50 years.

Estimates for SADC as a whole suggest that the cumulative affected population, taking into account spouses, children and elderly dependents, must be close to 125 million [15 million

currently living with HIV plus 10 million who have died from HIV/AIDS, times a factor of 5 to represent the numbers of those directly affected]. This estimate implies that 60 percent - almost two-thirds - of the total population of SADC have been affected by HIV/AIDS: a figure that is significantly higher than for sub-Saharan Africa as a whole (SADC HIV/AIDS Strategic Framework, 2003-2007).

2.2 HIV/AIDS and food security

It is now recognised that HIV/AIDS can no longer be considered solely as a health problem; and that directed efforts are needed to address its social, economic and institutional consequences. The HIV/AIDS epidemic is also having an impact on nutrition, food security, agricultural production and rural societies in many countries. All dimensions of food security - availability, stability, access and use of food - are affected where the prevalence of HIV/AIDS is high. IFAD has suggested that the HIV epidemic is disproportionately affecting agriculture relative to other sectors (2001).

Between 60 percent and 80 percent of the population in many SADC countries depend on agriculture for their livelihoods, so the impact of the epidemic on this sector is crucially important. There is now mounting evidence that agriculture is losing to HIV/AIDS a significant and increasing proportion of its labour force – both men and women. The epidemic is thus threatening food security in the region, as well as raising the costs of commercial producers.

In these agrarian societies, the HIV/AIDS epidemic is intensifying existing labour bottlenecks, increasing widespread malnutrition; proving a barrier to traditional mechanisms of support during calamities, adding to the problems of rural women, especially female-headed farm households arising from gender division of labour and land rights/resources, and deepening macroeconomic crises by reducing agricultural exports. De Waal and Tumushabe argue that this is not because rates of HIV are higher among workers in the agricultural sector, both commercial and small-scale subsistence, than elsewhere but because the structure of the agricultural sector, especially the smallholder sub-sector, is such that it is much less able to absorb the impacts of the human resource losses associated with the epidemic (2003).

The potential impact of HIV/AIDS on agriculture may include:

- A decrease in the area of land under cultivation at the household level (due to a lack of labour stemming from illness and death among household members).
- A decline in crop yields, due to delays in carrying out certain agricultural interventions such as weeding and other inter-cultivation measures as well as cropping patterns.
- Declining yields may also result from the lack of sufficient inputs, e.g. fertilizer and seeds.
- A reduction in the range of crops produced at the household level.
- A loss of agricultural knowledge and farm management skills, due to the loss of key household members due to AIDS.
- Decline in livestock production as the need for cash and the loss of knowledge and skills may force some families to sell their animals.

5. National Livelihoods Security

d. HIV/AIDS, Health, Education, Child Protection, Water and Sanitation

ii. National/sub-national HIV/AIDS prevalence and links to food security (secondary data)

Zambia

Zambia is facing an HIV/AIDS epidemic of considerable proportions. The recently completed Zambian Demographic and Health Survey (ZDHS) found that approximately 15 percent of the Zambian population aged 15-49 were HIV positive (Central Statistical Office, Central Board of Health and ORC-Macro, 2002). The findings from this population-based survey suggest that in the younger age groups, women have higher infection rates than men. In the age group 25-29

approximately 25 percent of women tested positive compared to 15 percent of men. In the older age groups men predominate among those infected. Urban areas have twice the prevalence levels (23%) than those of rural areas (ZDHS, 2002).

Zimbabwe
Zimbabwe is facing an HIV/AIDS epidemic of considerable proportions (ANC 2001). The results of the most recent antenatal surveillance survey conducted in 2001 indicate that about thirty percent of all pregnant Zimbabwean women are HIV-positive. Coupled with past infections this translates into large numbers of people in the country falling ill and dying with multiple health, social, economic as well as food security consequences.

Swaziland
Swaziland has one of the highest prevalence rates of HIV/AIDS in the world, with latest estimates emanating from antenatal clinic (ANC) trails indicating that 38.6 percent of the population of just under one million people among the ages 15 to 49 are positive in 2002 (CSO, 2003). It was also estimated that more than 50 000 adults and children had already died of AIDS by the beginning of 2000, leaving 35 000 orphans. The number of orphans is projected to rise at an average of 10,000 per year for the next ten years, which translated into an estimated 140, 000 orphans by 2011.

Lesotho
HIV/AIDS prevalence rates in Lesotho for adults aged 15 to 49 stood at 31 percent in 2001 (UNAIDS). As identified in previous emergency food security assessments, HIV/AIDS is beginning to heavily impact on Basotho livelihoods - with reduced labour for planting and farming but crucially increased expenditure on medical and funeral bills, diverting household expenditure from productive activities.

Malawi
The 15 percent prevalence rate of HIV/AIDS infection in Malawi underpins a significant impact on food security, particularly at the small-scale or household level (UNAIDS, 2002). DHS data comparing death rates from 1992 and 2000 show an increase of mortality for women to be 74 percent and 76 percent for men. The assumption is that this is primarily due to increases in HIV-related mortality, since no major disease outbreaks have occurred during this time period.

Mozambique
The UNDP Human Development Report of 2002 indicates that 13 percent of adults (15-49) are living with HIV/AIDS in Mozambique. A total of 1.1 million adults and children are infected out of a total of 17.6 million people (UNAIDS 2002). This is a serious threat to food security, particularly since the most economically active part of the population is affected by the epidemic.

6. Household Food Security

b. Findings on Relationship Between Food Insecurity, HIV/AIDS, Health, Education, Child Protection, Water and Sanitation

i. HIV/AIDS

Zambia findings

As expected, those households who were directly affected by HIV/AIDS, assuming that the presence of one or more of the proxy indicators was an indication of households affected by HIV/AIDS, were more likely to cite labour shortages within the household as an important issue compared to households not affected by HIV/AIDS. The same applies to a variety of coping strategies. These responses were signs of households under stress.

However, in terms of a reduction in the amount of food produced or differences in food production, the data of the Zambian VAC survey on the whole showed no significant differences between

households categorized by the presence of one of the proxy variables and households not affected by HIV/AIDS. One possible reason could be that the measures of food production collected in the VAC were inappropriate for this purpose. There was also a lack of other pertinent information. For instance, crop production is partly dependent on the area cultivated, (at present and in the past), a measure not collected in the VAC. Other factors that have an effect on food production include the economic position of individual households and the characteristics of the members of the household. For instance educational attainment may be an important factor in mitigating the effect of HIV/AIDS. However, the VAC household survey did not collect such detailed information. The same applies to the productive activities of household members. The inability to include these and other factors may mask the specific impacts of HIV/AIDS at the individual household level. Another important factor that may have masked possible differences was the favourable climatic conditions during the past year in most of Zambia. This allowed a general increase in yields compared to last season.

However, the evidence does point to the fact that individual households affected by HIV/AIDS are not food secure or "coping". Targeted food aid strategies will do much to lessen the plight of such households. In addition, efforts that emphasize conservation farming, including minimum tillage operations, the development of new labour saving technologies and the development of new varieties of crops, should be supported. Such efforts will mitigate the impact of HIV/AIDS in rural areas by assisting households affected by HIV/AIDS to become more food secure.

Zimbabwe findings

Utilising secondary literature, it was hypothesised that households with a chronically ill adult would tend to leave land normally under production uncultivated as a result of the impact on labour (of both the infected individual and affected household responsible for care). This relationship was investigated using the Zimbabwe data for households with a chronically ill adult or chronically ill head of household. It was argued that an aggregation of all the provinces would blur the impact of HIV/AIDS on cultivated land so a focused analysis of separate provinces was conducted. This revealed that Mashonaland West, where 85 percent of households with a chronically ill, adult left land uncultivated that was normally under production, compared to 76 percent of households without a chronically ill adult that left such land uncultivated. This reflects the hypothesis albeit slight. In some provinces, such as Matabeleland North, no such differences were observed. This reveals the importance of specificity when investigating the impact of HIV/AIDS on households. The reasons why only small differences were discernable in acreage between affected and non-affected households is due to the effects of, among other things, drought, which does not make any distinction amongst households.

It was also hypothesised that households under stress (hunger, poverty, disease e.g HIV/AIDS, malaria and tuberculosis) would adopt a range of strategies to mitigate their impact through complex multiple livelihood strategies. These entail choices that are essentially "erosive" (unsustainable, undermining resilience) and "non-erosive" (easily reversible). One option for households under stress is the removal of children from school in order to (1) release them for household strategies requiring labour or (2) to relieve costs associated with school attendance (fees, uniforms, stationary). The "erosive" nature of such a strategy is the diminishing stock of human capital for future livelihood options. Another "negative" for food security is that these children may be removed from school feeding schemes and denied opportunities for nutritional balance. In households where HIV/AIDS proxy indicators exist, a higher proportion of such households appear to be removing their children from school than do households that do not exhibit such proxies. For instance, for households with a chronically ill adult, 27 percent removed a primary school aged child (between 6 and 14 years of age).

A striking pattern is the linier relationship between the dependency ratio and the removal of children from school. Those households with a high dependency ratio were twice as likely to remove a child than households with a low dependency ratio. The high dependency ratio is a result of households having a large number of children. Under situations of duress these households

choose or are forced to remove some children from school in a strategy intended to either offset expenditure or to release labour for household activities. It remains unclear which children are being removed as some remain within the education system. An indication of their gender and direct relationship to the adult members would reveal details about the kinds of choices households make in pursuit of livelihood strategies under stress.

These findings amongst others, does give some indication of the impact of HIV/AIDS on food security. However, this provisional analysis should be followed up by a more in-depth analysis, ideally using a multi-variate approach in order to disentangle the complex relationships between poverty, food security and HIV/AIDS.

Swaziland findings

A major study conducted by the Swaziland Ministry of Agriculture and Co-operatives (MOAC) revealed a range of impacts on food security that can be attributable to HIV/AIDS, using proxies such as morbidity, mortality, presence of orphans and dependency ratio. Generally these did not reveal a profound impact of HIV/AIDS although the study found that 17.04 percent of households were caring for AIDS orphans. From this study, the estimated total number of AIDS orphans in Swaziland was 29,379. This is a clear indication of the hypothesis that HIV/AIDS affects the most productive members of society (15-49), leaving behind the elderly and the young, who are less able to access employment or food.

The analysis clearly showed the effect of labour supply and income changes on the farm systems in the subsistence sector of Swaziland, in particular on the multiple livelihood systems utilised by such households. The study found that there was a significant reduction in area under cultivation in households that experienced AIDS-related deaths. The result of reduction in land area under cultivation is a decreased crop yield. In order to verify this in Swaziland, the MOAC study analysed maize production to determine the impact on crop yield. The study found a significant reduction in crop yield in households that had experienced an AIDS-related death. The reduction in maize production due to AIDS was 54.2 percent. The analysis also found a significant increase in children dropping out of school due to lack of fees in 46 percent of households that experienced AIDS deaths. This is a measure that households take to reduce expenditure because increases due to AIDS-related costs and income drops due to a loss of remittances as members of the household become increasingly or terminally sick and ultimately die.

The following factors may be drawn from the analysis to indicate the vulnerability of these farm systems to the impact of HIV/AIDS and its impact on household food security:

- The dependence of production on labour inputs means that as younger members who are disproportionately affected by HIV/AIDS die, the reduction in labour supply will affect production.
- The dependence on remittances for survival in many of the households means that as remitters die of HIV/AIDS the reduction in income will lead to less production on farms.

Lesotho findings

As identified in previous emergency food security assessments, HIV/AIDS is beginning to heavily impact on Basotho livelihoods - with reduced labour for planting and farming but crucially increased expenditure on medical and funeral bills, diverting household expenditure from productive activities. Assets utilised within multiple livelihood strategies such as livestock were being sold to meet higher medical expenses, particularly during the pre-diagnosis stage and during the time when victims were seriously ill. The loss of income had in turn impacted on the living standards of the affected household resulting in food insecurity, lack of agricultural inputs, poor education levels and lack of basic necessities.

Problems related to food shortages have been reported in a number of studies (see http://www.sarpn.org.za/CountryPovertyPapers/cppLesotho.php). According to these reports,

HIV/AIDS affected households were more vulnerable since young people, who are the most valuable labour input in the process of production, were apparently dying in large numbers and leaving agricultural activities in the hands of the elderly who cannot fully participate in production. The reports also indicated that infected individuals often cannot engage in farming activities due to illness. Most Caretakers, on the other hand, were reported to be diverted away from agricultural production as they were required to keep family members alive. This has ultimately resulted in limited labour required for the production of food and hence possible starvation and food insecurities. Similarly, reports indicated that the sale of livestock, which is otherwise used as draught power, seemed to be on the increase not only to cover medical expenses but also for other community members who needed money to purchase food from commercial outlets.

In a study commissioned by the FAO, it was reported that coping strategies adopted by rural communities were becoming inadequate in the prevalence of HIV/AIDS and acute food shortages. The study found that some people living with HIV/AIDS were increasingly employing sharecropping and *Mafisa* (livestock lending) as coping strategies. This was because they were often too sick to work on their fields and this arrangement allowed them to avoid the risk of their land being revoked and assured them of continued access to agricultural land and food. Ironically, it was later reported that some community members were showing reluctance in engaging in sharecropping and *Mafisa* arrangements with people affected by HIV/AIDS because the affected households were increasingly dishonouring the agreements by abruptly selling land or livestock, sometimes without alerting their contractual partners. One of the reasons was that infected and affected households were often forced to sell some of the *mafisa* livestock in order to cater for the medical treatment expenses or to meet funeral expenses once the infected individual passes away.

Malawi findings

In 2001, CARE Malawi conducted a study in fifteen villages across the three districts of central Malawi – Lilongwe, Dowa and Dedza on the impact of HIV/AIDS on agricultural production and livelihoods. The study found that more than 22 percent of households in the villages studied were affected by HIV/AIDS morbidity and mortality with the most direct impact being loss of labour. Three of the villages in the study had half or more of their households affected by chronic sicknesses in the past five years (two in Lilongwe district and one in Dowa district).

The CARE study found that three-quarters of households decreased agricultural productivity (resulting in reduced yields) and moved towards less labour-intensive crops when there were labour shortages in the household. Labour-intensive cash crops, such as tobacco, may also be given up. Additionally, land may be left fallow or households resorted to increasing dependence upon *ganyu* labour (Ganyu is any off-own farm work done by rural people on a casual basis, usually covering a period of days or weeks, remuneration may be in cash or in kind, such as food and is often, but not exclusively calculated as piecework). Forty-percent of surveyed households affected by chronic illness sold a portion of their assets in order to buy food or to pay medical or funeral expenses. Some farmers used standing crops (such as tobacco) as collateral for cash loans in order to meet immediate needs of the household. Families have also experienced decreased access to credit due to HIV/AIDS: Community-based credit groups will sometimes exclude families because they may perceive these households as high risk. In instances where landholdings are transferred to relatives temporarily, the ability to regain control of the land may be difficult and result in conflict between family members. Families will often times rely upon *ganyu* labour in order to meet short-term cash needs.

Women were especially burdened by HIV/AIDS since they often are the ones who care for sick household members. They represent 55 percent of all current infections, the result of increased susceptibility due to physiological factors, as well as cultural practices such as early marriage, and economic conditions that force women to engage in sexual activity in exchange for food or other essential items.

Mozambique findings

Sixteen years of civil war, cyclic floods and severe drought have collectively caused much hardship in Mozambique. However, it appears that the current drought, affecting about 600,000 people, alongside the impact of the HIV/AIDS epidemic, are together pushing a growing number of families into increased vulnerability (IRIN 3 June 2003). About 13 percent of the population is living with HIV/AIDS, although in some provinces like the northern province of Tete, an important corridor route between Mozambique, Malawi and Zimbabwe, the figure is over 20 percent. In addition, some 40 percent of the general population has no access to health services.

Countrywide, it is estimated that almost 300,000 children are orphaned by HIV/AIDS. Many orphans drop out of school, especially the girls, to care for the sick, to perform domestic chores and, now with the drought, to look for food. They are also especially susceptible to exploitation and sexual abuse. UNICEF have reported that 'now...food is in short supply, many [people] are developing full blown AIDS and dying sooner as their bodies are weakened because of their poor nutritional intake. 300,000 children have already lost their mother or both parents to AIDS. Orphans, especially those who are not looked after by extended families, are particularly hard hit by the consequences of the drought. Since child headed households usually do not have any income, they cannot afford the safe water from village points. In their fight for survival, many of them get trapped into prostitution and other forms of exploitation' (http://www.unicef.org.uk/news).

8. Outlook/Projections for 2003-04 Marketing Year: Household Food Security

v. Account of how HIV/AIDS is likely to interact with other hazards in 2003-04 marketing year, and potential effects on food security

It is widely recognised that HIV/AIDS increases the household's vulnerability since it slowly destroys the basic capacity to do things, by increasing the difficulty of going to work, cultivating fields, interacting socially, more generally, implementing diverse livelihood strategies. In fact, it attacks insidiously the core of the person's capacity of resilience. As has been shown in a number of studies, the consequences in terms of production deficit and decrease in earnings are severe.

This situation of vulnerability leaves the household more susceptible to other "shocks" such as the loss of income due to retrenchment or a failed harvest due to poor rains and inadequate inputs. The compounding impact of HIV/AIDS may force the household below the level of "vulnerability" into a situation from which it may not recover. Those households with a stronger economic safety net and a wider range of options to draw upon during the crisis are less vulnerable at each stage of the continuum of HIV/AIDS illness than their poorer counterparts.

Food security must therefore be seen as an essential component towards preventing the spread of AIDS, and of mitigating its impact at national and household levels. Ultimately, improving a household's food security reduces vulnerability to HIV infection, as food secure households do not have to resort to detrimental livelihood strategies in order to survive.

9. Conclusions & Recommendations

b. Policy Implications: HIV/AIDS and food security

HIV/AIDS impacts on communities and government and civil society in a cumulative way, which will probably worsen for decades as HIV moves through its temporal existence towards the full-blown AIDS epidemic. This situation no longer can be met through a continuum of development work punctuated by occasional short-term humanitarian responses, such as the response to the current crisis, with a subsequent phase of rehabilitation. There should rather be a "contiguum" of on-going, simultaneous, complementary approaches of development, humanitarian and rehabilitation work. This change has been called a paradigm shift as policy responds to

communities facing increasing numbers of households and individuals who simply need relief or welfare in order to survive, and to ensure that the young generation has the opportunity to build its own skills and resources base. This poses an important challenge for the VACs as they consider the current crisis and the future.

Future VAC responses

The analysis conducted around HIV/AIDS in this round of VACs is a tentative attempt to investigate the link between HIV/AIDS and food security in Zambia, Zimbabwe and Swaziland using the latest VAC data. This provisional analysis should be followed up by a more in-depth analysis, ideally using a multi-variate approach in order to disentangle the complex relationships between poverty, food security and HIV/AIDS. Unfortunately, the range of available data limits such an approach.

A large number of factors play a role in the downward spiral experienced by households that is affected by HIV/AIDS. Included here are macro-economic and climatic considerations. This is compounded by a multitude of factors working at the level of the individual, the household as well as at the community level. For instance educational attainment may be an important factor in mitigating the effect of HIV/AIDS.

Given the primary goal of a VAC survey, it is not feasible to extend the focus of a VAC survey to include a multitude of elements that may be used to investigate the impact of HIV/AIDS at the household level. One alternative would be to conduct a more intensive study looking at food production and food security issues among a smaller sample of households, including both affected and non-affected households. Another alternative would be to visit the same households in repeated VAC surveys. A longitudinal approach would provide an important time element, which should assist in answering many intriguing questions.

SADC member states response

It is essential that SADC facilitate in various ways mechanisms for sustaining agricultural production, incomes and employment in the region (SADC HIV/AIDS Strategic Framework, 2003-2007). Policies and programmes need to be supported for agricultural technology and crop research, and the results disseminated throughout the region. There is a need for integrated investment strategies relating to water, transport and adaptive technologies to sustain agricultural output. Such programmes should focus especially on the needs of women who are in many countries the main producers of food crops, and for whom programmes such as micro credit are important if they are to be able to respond to changing production and technology conditions. Since Ministries of Agriculture are losing human resources to HIV/AIDS there is a need for policies and programmes to sustain their capacity. Integrating HIV/AIDS in Ministries of Agriculture is also an important area where SADC can help to facilitate policy and programme development.

It is clear from the extremely specific and localised impact of the epidemic that the policy responses of SADC member states should encourage and learn from local implementation. National and international policies provide important direction in the fight against AIDS. However, efforts are always implemented locally. Too often, policy-makers don't understand the practical problems in communities, or the specific factors that lead to success or failure. Ministries, organizations, international bodies should make stronger efforts to learn from the successes and difficulties encountered by efforts to minimize the impacts of AIDS. These lessons should be continually used to review and improve policy.

Related to this observation, it is clear that better targeting and participation will help affected people take control of the situation around them. Practitioners must be clearer about who they are and are not working with. It is insufficient to target 'people affected by AIDS.' Impacts of illness and premature death vary widely from one family to the next; even the situation of a single family changes dramatically over time. Giving agricultural support can help a family, and be meaningless for a neighbour. Young girls are at high risk of HIV, but may not benefit from programmes that are successful with older women. Service organizations should use participatory approaches, through

which they actively seek out badly affected men, women, boys and girls of all ages. Efforts to work with 'the vulnerable' as a broad group must be replaced by efforts to work in different ways with people having different types of vulnerability.