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HIV/AIDS AND FOOD SECURITY: NEW CHALLENGES AND NEW DEBATES

An input for the UNAIDS Scenario Building Process

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Introduction

This paper provides an overview of the recent attempts to focus an "HIV/AIDS lens" on the data generated during the latest Vulnerability Assessment Committee (VAC) survey conducted in two of the six southern African countries worst affected by the food crisis during April to June 2003. This project was commissioned by the UNAIDS Intercountry Team for Eastern and Southern Africa as part of their contribution to the VAC process. The objective was to further the understanding of the impact of HIV/AIDS on acute food insecurity in southern Africa and therefore identify the link between HIV/AIDS, and other vulnerabilities, with aspects of livelihood strategies that underpin food security in the region. It was therefore deemed appropriate to share some of these experiences with the UNAIDS Scenario Building process in their attempts to better understand the relationship between HIV/AIDS and food security. The paper formed part of a broader presentation made to the Regional Inter-Agency Co-ordination Support Office (RIACSO) meeting on the 9th of September 2003, which attempted to share experiences around HIV/AIDS and food security.

It should be stated up-front that the advent of AIDS underscores the fact that development and emergency responses can no longer be approached as "business as usual". In the past standard social and economic development practice has been punctuated by occasional emergencies that require short-term relief until people get "back on track." However, increasing poverty rates and the collapse of services show that development work has not been successful. Thus given the reality of AIDS, the entire approach to development must undergo a vigorous reconceptualisation. HIV/AIDS should be placed at the centre of the deliberations, be it food security, the future of the agricultural sector or poverty. The HIV/AIDS epidemic requires a re-examination of conceptualisations of famine, emergencies and development. The devastating impact of HIV/AIDS will be felt for decades and there is clearly a need for both humanitarian and development assistance in mitigating its impact.

HSRC RESEARCH OUTPUTS
2744

An understanding of the complex and diverse ways in which the epidemic affects livelihoods is necessary to begin to map the ways in which the epidemic is increasing underlying vulnerability and potentially contributing to emergencies.

HIV/AIDS, agriculture and food security

It is now well recognised that household food insecurity in rural and urban southern Africa cannot be properly understood if HIV/AIDS is not factored into the analysis. Carolyn Baylies (2002) notes that HIV/AIDS can, on one hand, be treated in its own right as a shock to household food security, but on the other, it has such distinct effects that it is a shock like none other. Livelihoods-based analysis of linkages between food security and HIV/AIDS show that the impact is systemic, affecting all aspects of rural livelihoods (Haddad and Gillespie, 2001); and that 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 (SADC FANR VAC, 2003).

The HIV/AIDS epidemic is eroding the socio-economic well being of households and threatens the social cohesion of communities (See Lamptey *et al*, 2002). For households, the impact is different from that of other diseases. Those infected are most likely to be at the peak of their productive and income-earning years. Households feel the impact as soon as a member falls ill. This is associated with a decline in income as the member's ability to work decreases, while living costs increase, such as medical and funeral expenses.

Between 60 percent and 80 percent of the population in many countries of the Southern African Development Community (SADC) 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.

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.

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 Tumshabe 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.

Thus 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.

Therefore what the literature on food security and AIDS suggests, is the possibility of substantially increased vulnerability to other shocks, such as drought or conflict, the emergence of new types of vulnerability, the erosion of some capacities and skills for coping with shocks and adaptation and emergence of new capacities in response to these threats (Harvey, 2003).

New Variant Famine?

In *extremis*, De Waal and Tumushabe argue, HIV/AIDS is creating a 'new variant famine'. The advent of a generalised HIV/AIDS epidemic in combination with drought and food crisis threatens to create this 'famine' across many parts of southern Africa. This hypothesis posits that HIV/AIDS-affected regions are facing a new kind of acute food crisis in which there is no expectation of a return to either sustainable livelihoods or a demographic equilibrium. To the contrary, the impacts of HIV/AIDS on agrarian households mean that they are (a) more susceptible to external shocks and (b) less resilient in the face of these shocks. This "famine" also threatens a vicious cycle of increasing mortality from multiple causes.

De Waal and Whiteside highlight four new factors, which characterise those affected by the HIV/AIDS epidemic; household labour shortages, loss of assets and skills due to adult mortality, the burden of care for sick adults and orphans and the vicious interactions between malnutrition and HIV (2002). The impact of these new factors is that the effectiveness of traditional strategies used to cope with famine are reduced and in some cases rendered impossible or dangerous. They conclude that in 'new variant famine' the prospects for a sharp decline into famine are increased, and the possibilities for recovery are reduced (Harvey, 2003).

It is important to recognise this position around 'new variant famine' although questions remain about various elements of the hypothesis. While the analysis is largely correct (for example, by the fact that AIDS is weakening and killing the productive age adults who usually survive famines), use of the term "famine" tends to lock people into discussion and conceptualisation of a relatively short-term event that can be overcome in a few years. The reality is that the high prevalence rates in southern Africa will ensure that many poor people will not "recover" easily, many others will die or become impoverished every year, and institutions will continue to be weakened. AIDS is a long-wave event, which requires different, long-wave responses. There is also the risk, pointed out by Paul Harvey, that the hypothesis about the possible future impact of HIV/AIDS can get transformed into an explanation of the current food crisis in southern Africa (2003).

A better conceptualisation in this regard is that HIV/AIDS is a correlation of the food crisis, not a cause. There have thus been objections about the implied use of the new variant famine to explain the 2002 southern Africa crisis when in fact a famine did not occur, in the conventionally understood sense of high levels of acute malnutrition and excess starvation related mortality (Harvey, 2003). For example a misrepresentation of the HIV problem risks causing inappropriate programming in response to HIV/AIDS and risks a neglect of equally important problems affecting rural areas. It is clear, is that HIV/AIDS will remain only one of a host of complex causes of food insecurity in sub-Saharan Africa and it is important that these are not overly marginalised in the new found enthusiasm on the part of the international aid community for addressing the links between AIDS and food security (Harvey, 2003).

Using "Proxy" Indices to Evaluate the Impact of HIV/AIDS on Food Security

A recent study undertaken by the SADC Regional Vulnerability Assessment Committee (VAC) attempted to further the understanding of the impact of HIV/AIDS on acute food insecurity in the southern African context (SADC FANRVAC, 2003). Data generated from emergency food security assessments conducted in Malawi and Zambia in August and December 2002 and from Zimbabwe in August 2002 were used to study the relationship between HIV/AIDS proxy variables and food security parameters. The emergency assessments were not designed specifically to analyse the relationships between HIV/AIDS and household food security. It is possible however to utilise the variables in the assessments to explore some of these relationships. Using a proxy variable approach, the data sets generated in the latest VAC assessments in Zambia and Zimbabwe were analysed to explore key questions on a national level.

The results presented in this report clearly indicate that households affected by adult morbidity, mortality and with a high demographic load are significantly more vulnerable to food security shocks than are other households. Insofar as these indicators suggest the presence of HIV and/or AIDS, this analysis strongly implied that HIV/AIDS has significantly increased the vulnerability of households to acute food insecurity in 2002-03. The analysis has shown that these households suffer from marked reductions in agricultural production and income generation, leading to earlier engagement in distress coping strategies, and, ultimately, a decline in food security. The cumulative impacts of HIV/AIDS on food availability, food access, and coping capacity are compounded, resulting in amplified negative impacts on overall household food security.

The analysis further demonstrates that different morbidity, mortality and demographic profiles have different effects on food security processes and outcomes. Key differences are seen according to whether or not the household has an active adult present or a chronically ill person, whether the head of household is chronically ill, whether there is a high dependency ratio, or whether the household has taken in orphaned children. Each of these characteristics has further nuances that are affected by age and gender. This study suggests that the impacts of HIV/AIDS on food security in the context of the 2002 food emergency are strong and negative.

In response to the need to better understand the impacts of HIV/AIDS on food security and to build on this research undertaken by key members of the VACs, UNAIDS made resources available to provide an "HIV/AIDS lens" on the VAC data generated between April and June 2003 in Zambia and Zimbabwe. The objective was to further the understanding of the impact of HIV/AIDS on acute food insecurity in southern Africa and therefore identify the link between HIV/AIDS, and other vulnerabilities, with aspects of livelihood strategies intended to underpin food security in the region. This analysis is reported in the following sections.

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 real 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.

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 linear 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.

Reasons for the ambiguous findings

Following from the theoretical/literature review in a previous section, the HIV/AIDS epidemic will have an impact at the level of individuals, on households in the rural areas, on the villages and communities living there, and thus will also be felt at the national level. Intuitively one would expect that data collected on the topic will confirm these impacts, given the burden of illness of a relatively large number of persons (as a result of accompanying infections) as well as shocks induced by the loss of household members. Yet if this was the case why was it not picked up immediately? The expected significant relationship between households infected/affected by HIV/AIDS being worse off than households not affected was not that apparent. This is an obvious area for further debate and discussion for any scenario building process that intends to build on effective interpretation of data.

One important conclusion that can be made regarding HIV/AIDS and food security in the current VAC assessments is that it was 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.

The adverse effects of HIV/AIDS on the agricultural sector can be largely invisible as what distinguishes the impact from that on other sectors is that it can be subtle enough so as to be undetectable (Topouzis, 2000). In the words of Rugalema, "even if [rural] families are selling cows to pay hospital bills, [one] will hardly see tens of thousands of cows being auctioned at the market...Unlike famine situations, buying and selling of assets in the case of AIDS is very subtle, done within villages or even among relatives, and the volume is small" (cited in Topouzis, 2000). This clearly has implications for analysis. Furthermore, the impact of HIV/AIDS on agriculture, both commercial and subsistence, are often difficult to distinguish from factors such as drought, civil war, and other shocks and crises (Topouzis, 2000).

It is thus important to remember that HIV/AIDS is only one of a complex web of factors that impact on rural people's livelihoods and that it is often difficult to disentangle the effects of AIDS from other environmental, political and economic events and trends. Harvey raises the need for caution when analysing figures such as those around cereal production in southern Africa over the past five years (2003). Although one of the factors behind the aggregate figures for decline in cereal production and increases in cassava production may be that households affected by HIV/AIDS are switching to less labour intensive crops, the role of the epidemic remains unclear at this level of aggregation.

Harvey uses the example of the dangers of unsubstantiated aggregation in statements such as the following from a workshop report (2003): 'HIV/AIDS has contributed to significant declines in agricultural production in southern Africa. For example, in Zambia – one of the countries hardest hit by HIV/AIDS – maize production has declined by two thirds in the last decade' (USAID 2003). Whilst it may be true that HIV/AIDS has contributed to declines in maize production in Zambia, there is as yet little research to disentangle the effect of HIV/AIDS from other possible causes (Harvey, 2003).

This raises a wider and important point that the HIV/AIDS epidemic in southern Africa is taking place in a context of already fragile economies. Disentangling the relative impact of HIV/AIDS on food security in Zimbabwe from the current economic collapse, for instance,

would be difficult. Perhaps the more important point is that these issues are mutually reinforcing.

Concluding comments

Thus HIV/AIDS can be seen to be a “creeping emergency” that progressively erodes the lives and livelihoods of those affected by the epidemic. Barnett and Whiteside describe HIV/AIDS as a ‘long wave event’ the impact of which takes place over many decades and see HIV/AIDS impoverishment as an event that will last as long as a century (2002). They point out that; ‘by the time the wave of HIV infection makes itself felt in the form of AIDS illnesses in individuals, the torrent of the epidemic is about to overwhelm medical services, households, communities’ (Barnett and Whiteside 2002: 16).

For these reasons, the developmental effect of HIV/AIDS on agriculture continues to be absent from the policy and programme agendas of many African countries. Many studies on HIV/AIDS that have focused on specific sectors of the economy such as agriculture have been limited to showing the wide variety of impacts and their intensity on issues such as cropping patterns, yields, nutrition, or on specific populations.

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