DRAFT

TECHNICAL NOTE:
Measuring the impact of HIV/AIDS on food insecurity
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Towards identifying the vulnerability of HIV/AIDS affected households to food insecurity. The RVAC-UNAIDS experience: Challenges and Opportunities[1].

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INTRODUCTION[6]

This paper has two broad objectives. First, to provide an overview of attempts to focus an "HIV/AIDS lens" on the data generated during the Vulnerability Assessment Committee (VAC) surveys in August, 2002 December 2002 and April to June 2003. The objective was to further the understanding of the impact of HIV/AIDS on household food insecurity in southern Africa.

The second part is a reflection of the results of this HIV/AIDS analysis of the VAC surveys. In particular the paper explores factors behind the mixed messages regarding the link between HIV/AIDS and food insecurity. The final part of the paper includes suggestions for an improved approach and way forward.

OVERVIEW OF THE SOUTHERN AFRICA VAC PROCESS

The VAC system in southern Africa comprises of a Regional Vulnerability Assessment Committee (RVAC) and National Vulnerability Assessment Committees (NVACs), currently in existence in about nine SADC Member States. The RVAC was constituted within the SADC FANR Sector Coordinating Unit in 1999 in response to a need for the SADC regional food security programme to keep abreast with all the developments that were going on in the field of vulnerability assessments; in particular, the 1996 world food summit FIVIMS initiative and the various other methodologies that were being employed by a host of agencies and NGOs in member States. It is also mandated to promote and strengthen the capacity of Member States to undertake and utilise vulnerability assessments for the purposes of food security planning in both emergency and non-emergency situations.

The VAC assessment strategy in the 2002/03 humanitarian crisis:

Through the VAC process, three rounds of emergency food security and livelihood assessments planned to cover the 2002/03 crisis period and provide have been completed. The first two rounds (August and December) focused primarily on emergency food needs; while the third round (April/ May) saw an increased emphasis on livelihoods-based vulnerability assessments (LBVA) with each NVAC attempting to examine linkages between food security and HIV/AIDS, health, education, child protection, water and sanitation.

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The planning and actual implementation of these assessments has been an evolving process beginning with the strategy that was developed and adopted by NVACs in June 2002 up to the completion of the last round in June/July 2003.

A. Objective of 'rolling' assessments

In order to provide immediate guidance to response strategies and continuous food security monitoring during the 2002/2003 food crisis in Southern Africa, the RVAC in June 2002 drew up an implementation plan to facilitate and coordinate rolling national level emergency food security assessments. The regional extent of the crisis (and the regional Appeal) called for a regional approach; and this series of assessments were the first regionally coordinated vulnerability assessments in the region. At the national level, assessments were to be coordinated through the National VACs, and technical experts provided technical assistance to ensure quality and build national capacity.

B. Process review – the need to examine food insecurity linkages to other sectors

After the August round of assessments, a review and planning meeting was held in Victoria Falls on 17-18 October. The meeting brought together NVACs, the RVAC and partner agencies, both regional and national. The meeting, which was held immediately after the September 2002 mission of the UN Special Envoy for Humanitarian needs in Southern Africa, served to bring into focus the fact that the acute food insecurity currently being experienced by countries in the region was further exacerbated by the HIV/AIDS pandemic, increasing poverty and a break down of social services. While the main output of the August VAC assessment was focused primarily on providing information for food aid programming, participants argued that subsequent rounds should provide comprehensive information on water and sanitation, HIV/AIDS, education, nutrition, etc, concurrently with food security information. Stakeholders, including UN agencies (RIACSO) articulated strongly, their need for comprehensive multi-sectoral information in order to formulate appropriate non-food response strategies.

C. The VAC-UNAIDS collaboration to examine HIV/AIDS linkages

While the RVAC has a clear mandate for providing leadership in food security analysis, multi-sectoral assessments clearly extended beyond the mandate and capacity of the RVAC. At this, and follow up meetings, several UN agencies made commitments to provide – within their areas of responsibility - technical and financial support to the expanded VAC assessments both at national and regional. UNAIDS committed to support the VACs in further exploring the impact of HIV/AIDS on acute food insecurity. They followed through by providing first a consultant to RVAC (at regional level) to assist with the analysis of HIV/AIDS data collected during the August and December rounds. An initial RVAC/UNAIDS report was produced in January 2003 presenting results of the analysis of the data from Malawi, Zambia and Zimbabwe. This was subsequently further developed by the RVAC through a more in depth analysis using the "proxy indicator approach", and the report was published in May 2003.

In May 2003, as a contribution to the third round, UNAIDS provided two consultants to support national level analysis in Zambia, Zimbabwe and Swaziland. This followed a VAC planning meeting held in Pretoria in March 2003 during which a multi-sectoral workshop was organized in which UNAIDS and other RIACSO partners provided technical input into multi-sectoral indicators to be included in NVAC tools for the third round of assessments.

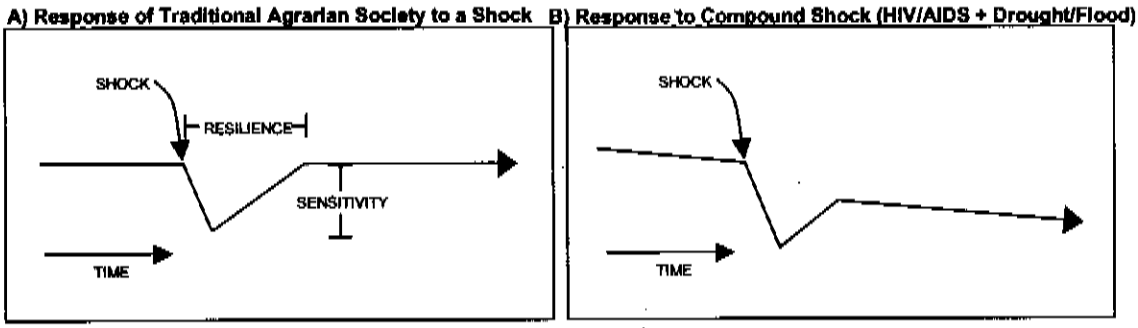
HIV/AIDS AND FOOD SECURITY: NEW CHALLENGES AND NEW DEBATES

The literature on food security and AIDS suggests 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).

In *extremis*, De Waal and Tumushabe argue, HIV/AIDS is thus creating a 'new variant famine'. The advent of a generalised HIV/AIDS pandemic in combination with drought and food crisis threatens to create 'new variant 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. Figure 1 represents the hypothesised differences that presence of HIV/AIDS signifies.

Figure 1: Hypothesised implications of HIV/AIDS for vulnerability to a livelihood shock



SOURCE: de Waal and Tumashabe (2003), adapted from Davies, 1995, page 26

One risk with the New Variant Famine position is 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 (Harvey 2003). A better conceptualisation in this regard is that HIV/AIDS is a co-factor 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 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).

Notwithstanding these issues, VAC data has been used to shed some more light on De Waal and Tumushbe's thesis i.e. that (a) HIV/AIDS affected rural households have been more vulnerable to the 2002 food crisis in Southern Africa than non-affected households and (b) that they are taking longer to recover. The following section sets out how this was done.

USING "PROXY" INDICES TO EVALUATE THE IMPACT OF HIV/AIDS ON FOOD SECURITY – CONCEPTUAL AND ANALYTICAL FRAMEWORK

How can the impact of HIV/AIDS on household food security be conceptualised? The Regional VAC developed frameworks to organise thought around this issue and to assist in the analysis of empirically derived relationships Figure 1 sets out the conceptual framework, whilst Figure 2 sets out the analytical framework. The VAC emergency assessments were not designed specifically to analyse the relationships between HIV/AIDS and household food security. By using the analytical framework shown in Figure 2, it was possible, however, to utilise the variables in the assessments to explore some of these relationships using a "proxy variable" approach.

Figure 1: Conceptual Framework

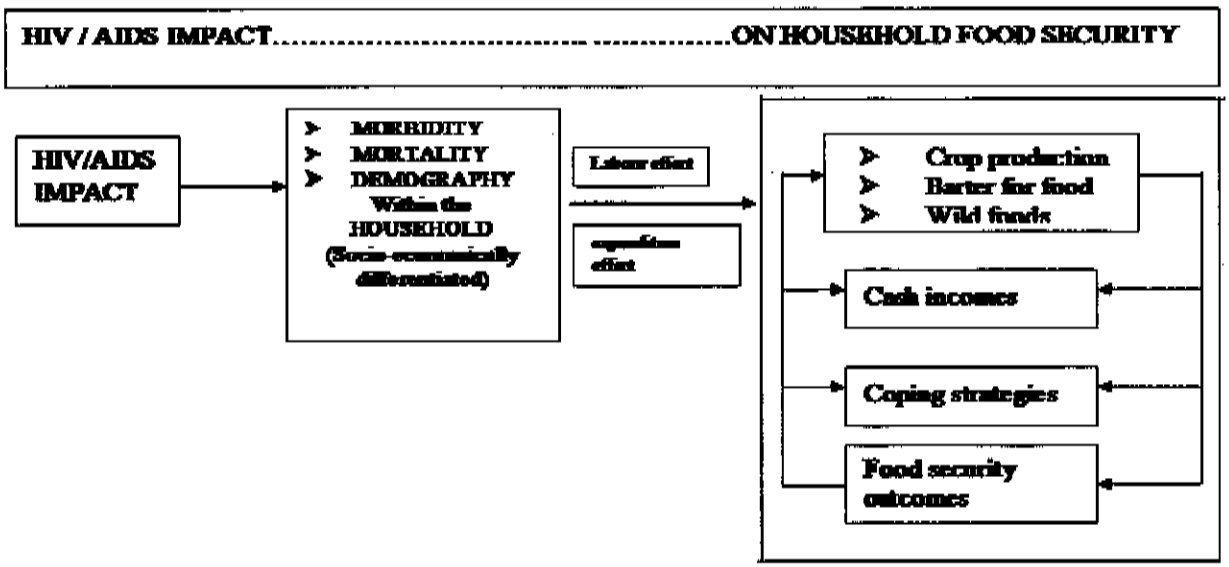
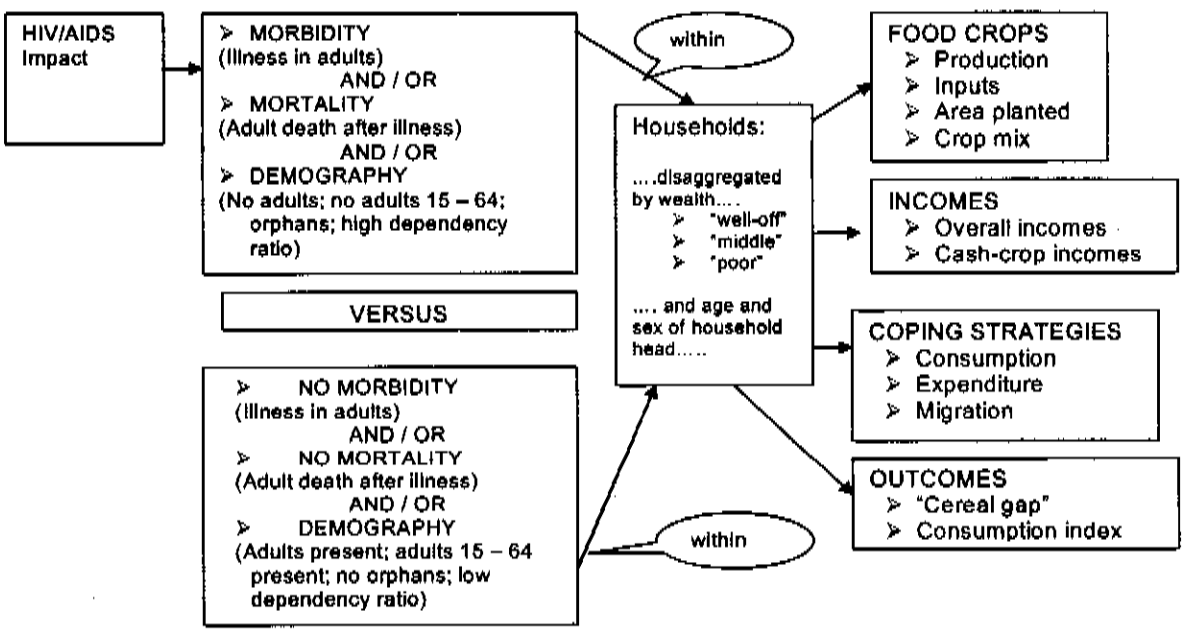


Figure 2: Analytical Framework



Using the Frameworks

The analytical framework has been used by (i) RVAC analysts and (ii) national VACs from Zambia and Zimbabwe - supported by UNAIDS consultants - to explore possible / probable HIV/AIDS impacts on household food security: In a study entitled: "Towards Identifying Impacts of HIV/AIDS on Food Insecurity in Southern Africa and Implications for Response", RVAC analysts explored VAC data from August 2002 (Malawi, Zambia and Zimbabwe) and December 2002 (Malawi and Zambia). In order to build on this research, UNAIDS made resources available to support the Zambia and Zimbabwe VACs in analysing VAC data generated in the May -June 2003 assessment. In all of these analyses, attempts were made to establish the impact of HIV/AIDS on household food security in 2002 – 03. As such they can be viewed as an attempt to shed light on the validity of the first part of the New Variant Famine thesis - i.e. that households affected by HIV/AIDS are more sensitive to livelihood shocks than other households.

Applying the framework to these data sets yielded mixed results in terms of discerning HIV / AIDS impacts

SADC FANR VAC study: The results presented in this report clearly indicated 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 showed 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 demonstrated that different morbidity, mortality and demographic profiles have different effects on food security processes and outcomes. Key differences were seen according to whether or not the household had an active adult present or a chronically ill person, whether the head of household was chronically ill, whether there was a high dependency ratio, or whether the household had taken in orphaned children. Each of these characteristics had further nuances that were affected by age and gender. The study suggested that the impacts of HIV/AIDS on food security in the context of the 2002 food emergency were strong and negative.

ZamVAC findings from the April-June 2003 assessment: As expected, proxy households were more likely to cite labour shortages within the household as an important issue compared to households not affected by HIV/AIDS. This had implications for the proportion of uncultivated land in 2002-03 and limitations to crop production. In households with a chronically ill adult, reduction in labour leading to reduced incomes combined with increased expenses for healthcare were factors behind less disposable income for purchase of fertilisers. Such households were significantly more likely to cite lack of fertiliser as an important production constraint than other households.

In terms of coping strategies, proxy households were significantly more likely to remove children from school and sell livestock than non-affected households. They were also slightly more likely to skip entire days without eating a meal.

However, in terms of the actual May 2003 harvest, 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.

ZimVAC findings from the April – June 2003 assessment: Based on answers given at the household level, it was clear that HIV/AIDS-affected households earn less income. The demographic indicators (dependency ratio, presence of orphans, absence of adults) showed the greatest impact on income.

Analysis of results for households in communal areas only showed a clear and direct relationship between HIV/AIDS proxies and households' total crop production at the total communal land level. Households without any adults aged between 15 and 59 years harvested less cereal, non-cereal cash crops and sweet potatoes than those with adults. The greatest decrease was found for cash crops while the smallest decrease was for sweet potatoes. Households whose head was chronically ill seemed to be less affected. For that group, production of cash crops decreased the most, but production of sweet potatoes – a less labour intensive crop - actually increased. This was consistent with the findings of the SADC-FANR VAC study. Some attempt was made to disaggregating the survey results by food economy zone (FEZ). Results are presented for only 3 out of 27 zones however. In these 3 zones, the same pattern emerged, however, it was weak in relations to some of the proxies.

At the national level, very little difference was found between the percentage of HIV/AIDS-affected and unaffected households leaving land uncultivated, although in some parts of the country the difference was larger.

As in the ZamVAC and RVAC analyses, there were some clear patterns with respect to certain coping strategies. A higher proportion of households with HIV/AIDS proxy indicators reported removing their children from school last year, compared to households without those indicators. A striking linear relationship was found between the dependency ratio and the removal of children from school. Those households with a high dependency ratio were more than twice as likely to remove a child than households with a low dependency ratio. Whether the dependency ratio is a robust indicator of HIV/AIDS impact is, however, another question, more fully addressed below.

METHODOLOGICAL CHALLENGES IN EXPLORING HIV/AIDS LINKAGES

The previous section provided an overview of the findings regarding the link between HIV/AIDS and vulnerability. Certain conclusions were clear. However, there were a number of methodological challenges in capturing the impacts of HIV/AIDS on household food security. This section will now consider these challenges.

A. Measurement Challenges:

In a general survey such as a VAC it is not possible to accurately identify those households with HIV infected persons or those affected by the epidemic. For this reason use was made of a set of proxy indicators (see Annexure 1).

i) Inclusion errors in the selected proxy indicators

There is a possibility that the selected proxy indicators were not able to discriminate sufficiently between HIV/AIDS infected/affected households and those not so affected. The following examples will suffice:

By all accounts, rural areas are not very healthy environments, as shown by relatively low life expectancies in the absence of Aids. Illnesses such as malaria, bilharzias and TB, to name a few, are common. When reporting a chronic illness in a household, a respondent would have included persons suffering from these diseases chronically illness. Thus, chronic illness as a proxy for HIV/AIDS, is somewhat weakened by the presence of other diseases although the impact on the household may be the same - but not necessarily.

The same applies to deaths that occurred in a household. In the case of deaths other inclusion errors may also provide a misleading picture. Respondents were asked: "How may adults (in a certain age range) died in the past year in this household, after being chronically ill"? For instance, respondents may have had difficulties in defining the period exactly one year ago (given the relatively low level of numeracy in rural areas). In addition, the shock of a death, even 18 or 24 months previously, may still

haunt the members with the result that such a death is recounted. In addition, respondents are required to provide a medical opinion on the cause of death i.e. "after a chronic illness".

In the case of orphans, it should be remembered high rates of fosterage/orphanhood was found in rural areas as a result of high mortality and migration, prior to HIV/AIDS. Thus orphans do not necessarily indicate HIV/AIDS consequences.

The possibility of including non-HIV/AIDS households was increased by the wide age ranges applied to many of the morbidity and mortality indicators during the VAC surveys. AIDS related deaths are concentrated in the younger adult ages and the use of the age range 15-60, as was the case in some of the VAC surveys, probably led to the inclusion of many deaths due to other causes in the older age ranges.

ii) Interpretation of proxy indicators

The presence of orphans may increase food insecurity and strain the financial position of the receiving household. However, in rural households orphans depending on their age, may function as a labour source offsetting labour shortages in the household. Other factors such as the sex and age of the orphan, the socio-economic position and demographic characteristics of the host household are also important. The crude proxy: "presence of orphans" cannot detect these important nuances, and this reduces its usefulness for the purpose of analysis.

The dependency ratio is a demographically determined indicator. Apart from the impact of a reduction in the number of adults that increases the dependency ratio, the dependency ratio is largely influenced by the fertility rate of a population. Under conditions of high fertility, high dependency ratios are the norm. High fertility will be reflected in high dependency ratios independent of the HIV/AIDS epidemic. Also, higher dependency ratios due to higher mortality rates among adults are partially offset by a reduction in the dependency ratio due to high mortality among young children. Another factor that impacts upon the dependency ratio at a household level in rural areas is the out-migration of members in the economic active ages to look for employment in the urban areas. Therefore, more work needs to be done to tease out the exact cause and effect relationships of dependency at a household level.

In the case of deaths in rural areas, these may be inflated as a result of sick members returning from urban areas. Such deaths may negatively impact on remittance income, but such remittances probably ended some time before the death of that person, but they will also add to the expenditure burden and care allocation burden on the household. The impact of these deaths on household livelihood strategies needs further investigation.

iii) Data collection issues

VAC surveys are prone to the same limitations common to all surveys that use the general population as respondents. A variety of reasons (the level of education of respondents, clarity of questions, ability to recall events and the willingness to supply the correct information etc.) can impact on the quality of information collected in the VAC surveys. In this respect one can also refer to the sizes of the samples, sampling methodologies, and training which all have a bearing on the data.

B. Other Methodological Challenges

i) Dynamic and static considerations

A typical VAC survey is a cross-sectional survey. It provides a picture of households at that specific point in time. Historical information is available, but dependent on the ability of respondents to make an accurate recall. A cross-sectional approach has certain limitations. Without baseline information it is difficult to make historical comparisons.

One limitation of a cross-sectional approach is the inability to obtain information of units that have disappeared in the period preceding the survey. One of the most severe and visible impacts of the

epidemic at a community level would be where households dissolve as a result of the epidemic (i.e. the important adult members of a household have died or are severely ill and the household ceases to exist as dependent members are transferred to other household). In some cases, children and adults would be incorporated into the households of relatives in the vicinity. In other cases, all members may die, while in other cases the surviving members migrate out of the area and start a new household elsewhere or be incorporated in other households. Clearly this is a very dynamic process. This phenomenon cannot be identified in a cross-sectional survey. In certain of the VAC surveys, questions were posed regarding the absorption of orphans from other households, but no questions were asked regarding the presence of adult members of other households and no questions were asked regarding the reasons for the absorption of orphans.

The changing composition of households in the face of HIV/AIDS has many consequences. How does such changes affect the resilience of a household to remain operational? It is not possible to provide an answer to this question using only cross-sectional survey data. Besides qualitative studies, a time element is needed.

ii) ***Data and analysis***

Clearly the nature of the analysis used may also have a bearing on the findings regarding the impact of HIV/AIDS. Broadly two types of data analysis was used in the VAC surveys. The first was use of descriptive statistics (percentage differences, cross-tabulations, etc). The second was using more rigorous methods ie statistical testing (chi square). Differences of interpretation of the data arose out of use of these different techniques.

C. Macro factors ("Noise" in analysis)

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 (Topouzis, 2000). It would appear that climatic conditions, food pricing policies, the lack of agricultural support and extension services, environmental degradation, a lack of infrastructure and poverty play an important role in diminishing harvests. HIV/AIDS may however compound matters during an environmentally induced food shortage, such as what happened the previous season. 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...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). 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.

i) HIV/AIDS is a "creeping emergency"

Thus HIV/AIDS should be seen as 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.

ii) The levelling impact of environmental factors
The food crisis in Southern Africa during the last 6 to 24 months ago was largely induced by a lower than normal rainfall levels and/or rainfall patterns that diverged from the expected pattern. Subsistence farmers thus experienced reduced harvests and/or planted smaller areas. This also resulted in less seed and other inputs being available due to the reduced ability of householders to pay for these inputs.

In the VAC surveys respondents were asked questions such as anticipated/actual harvest, area or relative area planted, in this season etc. In a particular area all households were more or less affected in the same way. If the lack of rain resulted in reduced harvests, that happened irrespective of whether a household was affected by HIV/AIDS or not.

iii) Poverty in rural areas
The extent of poverty is pervasive in rural areas in Southern Africa. This is at times aggravated by very specific political-economic factors, spatial locations, culture, etc. The pervasive nature of poverty is borne out by numerous vulnerability indices. To list a number: High percentage of *de facto* female headed households (prevalence of male labour migration), high proportion of young children in the population (high fertility rates), high percentage of adults with little or no education (political-economic reasons), high rates of unemployment, low levels of service delivery (health, education, clean water, electricity etc). However, one would expect households with infected members or affected by the epidemic to be even more vulnerable.

As a general observation one can state that many households in rural areas are vulnerable in respect of a number of dimensions. And that would include households not affected by HIV/AIDS. HIV/AIDS is an added burden that overlays communities and households, increasing the level of vulnerability even further. Due to the dynamic aspects of the epidemic, a cross-sectional survey is limited in measuring the exact impact of the epidemic, especially in the presence of a number of other indices of vulnerability.

CURRENT RESEARCH AND DATA COLLECTION PLANS OF THE VARIOUS VULNERABILITY ASSESSMENT COMMITTEES

The Regional and National VACs have a mandate to assess and monitor vulnerability of households to food insecurity. This is and will remain their central focus. HIV/AIDS is clearly a key contributory factor to household food insecurity in the region and for this reason it will continue to be a major area of interest for the VACs. Present plans of the NVACs include the following activities.

1. Conduct of national surveys utilising the proxy variable approach (see below)

Currently, the Swaziland VAC is analysing data collected in a large-scale demographic survey using an extended list of proxy indicators (see Annexure 2). The Mozambique VAC is planning to conduct a national survey within the next 6 months and this represents an opportunity to further improve the methodology through more focussed proxy indicators.

The rolling assessment strategy was developed and adopted specifically to provide information during the 2002/03 humanitarian crisis. There is a general recognition among stakeholders that the scope and frequency of the assessments conducted over the last year is unsustainable. The VACs are moving towards development of a livelihood monitoring system based on Food Economy Zone analysis. Whether it will be possible for the VACs to conduct regular HIV/AIDS – food security surveys (which will be much "slimmed-down" from the rolling assessment surveys) using improved versions of the proxy household methodology on a national scale is a subject for debate.

2. Conduct of focused studies for more in-depth analysis on particular issues e.g. orphans and /or geographical areas.

The Malawi and Zambia VACs are planning to conduct specific in-depth studies within the next year.

3. Conduct of large and/or small area studies using Household / Food Economy Baselines.

The VACs in Lesotho, Malawi, Mozambique, Swaziland, Zambia and Zimbabawe are all in the process of constructing livelihood baselines from which the impact of food security shocks - including HIV/AIDS - can be estimated. The Lesotho VAC is planning to use this approach to try and estimate the impact of HIV/AIDS related deaths on food security.

In order to perform these planned studies effectively, the NVACs will need technical support. To conduct the national proxy indicator survey, the MozVAC will need assistance from the epidemiological, statistical and questionnaire design fields, as well as analytical support. To undertake focussed studies, the Malawi and Zambia VACs will require help from social anthropology and PRA specialists and possibly statisticians also. To improve the utility of the Lesotho exercise, preliminary qualitative work will need to be done to establish actual impact of HIV/AIDS related deaths, which can then be fed into the model used to produce the results in terms of food security.

Although many NVACs have articulated their immediate plans for vulnerability assessments, longer term plans for the VAC system remain the establishment of livelihood baselines in all member States, and the development of monitoring systems that will track vulnerability to food insecurity as this remains the main mandate of the VACs. However as analysis from the last three rounds of assessments has shown, HIV/AIDS is clearly a contributory factor to household food insecurity. The VACs can continue to make a contribution in investigating linkages between HIV/AIDS and vulnerability through participation /linkages to existing longitudinal studies.

This concluding section deals with possible suggestions of how data collection activities as well as research efforts can be amended and/or re-directed to enhance the data used for investigating the impact of HIV/AIDS (and other aspects on vulnerability).

SUGGESTIONS TO ADAPT AND ENHANCE DATA COLLECTION EFFORTS

The recent VAC surveys presented the opportunity to test a variety of tools and approaches in order to investigate the impact of HIV/AIDS on vulnerability in general and food security in particular. The experience gained in conceptualisation, questionnaire design, and data collection can be utilised to improve future data collection activities in the region. In addition, the recent VAC surveys have indicated the need to adapt current methodologies and/or to introduce alternative methodologies to improve the understanding of the impact of HIV/AIDS in Southern Africa on for example livelihood strategies. The ultimate aim is to produce more accurate and relevant information for decision making and programme purposes. The suggestions relate mainly to methodological concerns.

a) Frequency of surveys

Consideration should be given to the frequency with which general surveys are carried out. Twice annual or even annual surveys are not sustainable from a resource point of view. If such surveys are to be undertaken, rather have less frequent surveys, but spend more time on the research design, construction of questionnaires, sampling methodology, training of interviewers, accurate conduct of the survey and analysis and report writing.

b) Need for small-scale studies/In-depth studies

There remains a need to continue, expand and refine small-scale studies in Southern Africa to assess and document how HIV/AIDS affected households are coping and to relate their livelihood strategies in detail (for example the recent study around Kariba and Binga in Zimbabwe by Save the Children 2003). Such qualitative demographic/ anthropological/ and economic studies should provide important insights that could inform the formulation of research questions.

c) Longitudinal studies

Consideration should be given to introduce a longitudinal element into the series of household surveys if the impact of HIV/AIDS is to be better understood. By making repeat visits to the same households, it would be possible to detect changes in the size and composition of households over time, to measure whether these households are worse off in subsequent visits in terms of a number of food security and household strategy measures. This will also allow the detection of households that have disappeared or imploded. It should be noted that a longitudinal approach calls for a sophisticated research design and requires considerable technical input.

d) Cooperating with existing Demographic Surveillance Sites

To expedite answers to the question of how HIV/AIDS is impacting on the livelihoods of rural households, another suggestion is to approach one or more of the existing Demographic Surveillance Sites in Africa[7]. These are surveillance systems that have been set up at great expense to track the health (including HIV/AIDS) and other aspects of rural populations in specific areas. Notable features of their operations are the longitudinal thrust of the work, and a sophisticated ability to track individuals and households over time. These surveillance sites have collected a variety of socio-economic information of participating households and could/should include food production and livelihoods strategies. The sites are able to provide information on the implosion of households, the long term affects of deaths within households and the relative ability of various households to recover from shocks as a result of environmental disasters for example.

e) Skills requirements

HIV/AIDS and livelihood surveys such as the VAC surveys require that teams be complemented with specific additional skills drawn from the ranks of various disciplines and specifically around HIV/AIDS with the intention to support/inform mitigation/policy strategies such as: statisticians (to assist with the design of the sample and to provide advice with analysis); epidemiologists (advice in refining the proxy indicators) and anthropologists (to assist with small-scale studies).

[7] Globally there is at present 31 surveillance sites, of which the majority is located in Africa (see the INDEPTH Network: at http://www.indepth-network.net/). In South Africa sites are located at Hlabisa (Africa Centre for Population and Reproductive Studies, The Wits Rural Facility at Agincourt and a site run by the University of the North. There is a DSS site in Mozambique as well as in Tanzania.

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ANNEXURE 1

CORE LIST OF HIV/AIDS PROXY INDICATORS AT THE HOUSEHOLD LEVEL

In the VAC surveys use was made of an indirect approach to identify households affected by HIV/AIDS, i.e. by means of "proxy indicators". The information required to construct these proxy indicators was obtained by means of a questionnaire approach. Four main categories of proxies were utilised, namely morbidity, mortality, social and demographic indicators. After construction, these proxy indicators were used as variables during analysis of the VAC data sets. Due to variations in questionnaires, the indicators were not exactly comparable over time and across countries during the recent VAC surveys. For instance age ranges differed as well as definitions.

Morbidity indicators

The prevalence of chronic morbidity in a household (excluding accidents etc), was used as a proxy for HIV/AIDS induced illness within households. The following questions were used albeit formulated slightly differently in each survey:

a) Are there any children under 5 years old in the household who have been ill for more than 3 months during the past 12 months?
Indicator: Chronically ill child aged present in household

b) Are there any adults in the household who have been ill for more than 3 months during the past 12 months?
Indicator: Chronically ill adult present in household

c) Is the head of the household among those who have been ill for more than 3 months in the last 12 months).
Indicator: Household head among chronically ill

Mortality indicators

Mortality information was obtained by asking respondents the following questions:

a) Has any child died in the last year after being ill for more than 3 months?
Indicator: Child died in the last year after being chronically ill

b) Has any adult died in the last year after being ill for more than 3 months?
Indicator: Adult died in the last year after being chronically ill

c) Was the person that died after being ill for more than 3 months the head of the household?
Indicator: Household head died in the last year after being chronically ill

Social indicators

The presence of orphans in the household and the absorption of orphans from other households are a direct indication of parental deaths on the one hand and the dissolution of other households on the other. In the VAC surveys variations of the following information was collected:

a) Number of orphaned children less than 15 years of age in the household
Indicator: Presence of orphans in the household

b) Number of orphaned children in the household who have come from other households.
Indicator: Households absorbing orphans from other households

Demographic indicators

During the various VAC surveys information was collected on the number of persons resident in the household, by specific age and sex categories. Thus it was possible to construct age-related indicators
Indicator: Dependency ratio (0-14 and 60 + as a ratio of 15-59)
Indicator: "Effective Dependency" ratio (0-14 and 60 + as a ratio of 15-59) (excluding ill adults from the denominator)
Indicator: Absence of adults in the household

ANNEXURE 2

EXTENDED LIST OF PROXY INDICATORS - SWAZILAND

The use of a household schedule made it possible to collect more detailed personal information at the household level. Whether more refined indicators will contribute to more significant findings, remains to be seen.

Chronically ill children

Chronically ill child	There is a chronically ill child(ren) aged 0-4 present in this household
One chronically ill child	There is 1 (one) chronically ill child aged 0-4 present in this household
Two or more chronically ill children	There is 2 (two) or more chronically ill children aged 0-4 present in this household

Chronically ill adults

Chronically ill adult	There is a chronically ill adult(s) aged 15-49 present in this household
Chronically ill male adult	There is a chronically ill male adult(s) aged 15-49 present in this household
Chronically ill female adult	There is a chronically ill female adult(s) aged 15-49 present in this household
One chronically ill adult	There is 1 (one) chronically ill adult aged 15-49 present in this household
One chronically ill male adult	There is 1 (one) chronically ill male adult aged 15-49 present in this household
One chronically ill female adult	There is 1 (one) chronically ill female adult aged 15-49 present in this household
Two or more chronically ill adults	There is 2 (two) or more chronically ill adults aged 15-49 present in this household
Two or more chronically ill male adults	There is 2 (two) or more chronically ill male adults aged 15-49 present in this household
Two or more chronically ill female adults	There is 2 (two) or more chronically ill female adults aged 15-49 present in this household

Chronically ill household head

Household head chronically ill	The household head (aged 15-49) is listed as being chronically ill
Male household head chronically ill	The household head (aged 15-49) is a male and is listed as being chronically ill
Female household head chronically ill	The household head (aged 15-49) is a female and is listed as being chronically ill

Children that died in the past year after being chronically ill

Child died after being chronically ill	A chronically ill child(ren) aged 0-4 died in the past year in this household
One child died after being chronically ill	One child aged 0-4 died in this household after being chronically ill during the past year
Two or more children died after being chronically ill	Two or more children aged 0-4 died in this household after being chronically ill during the past year

Adults that died in the past year after being chronically ill

Adult died after being chronically ill	A chronically ill adult (s) aged 15-49 died in the past year in this household
Male adult died after being chronically ill	A chronically ill male adult (s) aged 15-49 died in the past year in this household
Female adult died after being chronically ill	A chronically ill female adult (s) aged 15-49 died in the past year in this household
One adult died after being chronically ill	One adult aged 15-49 died in this household after being chronically ill during the past year
One male adult died after being chronically ill	One male adult aged 15-49 died in this household after being chronically ill during the past year
One female adult died after being chronically ill	One female adult aged 15-49 died in this household after being chronically ill during the past year
Two or more adults died after being chronically ill	Two or more adults aged 15-49 died in this household after being chronically ill during the past year
Two or more male adults died after being chronically ill	Two or more male adults aged 15-49 died in this household after being chronically ill during the past year
Two or more female adults died after being chronically ill	Two or more female adults aged 15-49 died in this household after being chronically ill during the past year

Household head that died in the past year after being chronically ill

Adult household head died after being chronically ill	The household head (aged 15-49) died during the past year after being chronically ill
Male adult household head died after being chronically ill	The male household head (aged 15-49) died during the past year after being chronically ill
Female adult household head died after being chronically ill	The female household head (aged 15-49) died during the past year after being chronically ill

Orphans

Child(ren) who lost both parents	Household where a child or children aged 0-14 is living and who lost both the father and the mother to death (i.e. double orphan)
Child(ren) who lost at least one parent	Household where a child or children aged 0-14 is living and who lost the father or the mother or both to death
Child(ren) whose father died	Household where a child or children aged 0-14 is living and who lost the father to death (i.e. paternal orphan)
Child(ren) whose mother died	Household where a child or children aged 0-14 is living and who lost the mother to death (i.e. maternal orphan)
One child is a double orphan	Household where there is one child aged 0-14 listed that lost both parents
One child is an orphan (any configuration)	Household where there is one child aged 0-14 listed that lost at least one of its parents to death
One child is a maternal orphan	Household where there is one child listed that lost the mother to death
2-3 children are double orphans	Household where there is 2-3 children aged 0-14 listed that lost both parents to death

2-3 children are orphans (any configuration)	Household where there is 2-3 children aged 0-14 listed who lost at least one parent to death
2-3 children are maternal orphans	Household where there is 2-3 children listed that lost the mother to death
4+ children are double orphans	Household where there is 4+ children aged 0-14 listed that lost both parents to death
4+ children are orphans (any configuration)	Household where there is 4+ children aged 0-14 listed who lost at least one parent to death
4+ children are maternal orphans	Household where there is 4+ children listed that lost the mother to death

Presence of adults

Household with no adult	Household without any adult aged 15-65
"Grand parent" households	Households consisting of children and older persons but without anyone in the economic active ages (15-65)
Household with 1 adult	Household with 1 adult aged 15-65
Household with 2 adults	Household with 2 adults aged 15-65
Household with 3+ adults	Household with 3+ adults aged 15-65
Household with no adult	Household without any adult aged 20-65. This proxy does not assume that persons aged 15-19 are adult and able to look after a household.
"Grand parent" households	Households consisting of children and older persons but without anyone in the age group 20-65
Household with 1 adult	Household with 1 adult aged 20-65
Household with 2 adults	Household with 2 adults aged 20-65
Household with 3+ adults	Household with 3+ adults aged 20-65

Dependency ratios

"Crude" dependency ratio	The "crude" dependency ratio within a household
"Effective" dependency ratio	The "effective" dependency ratio within a household

Composite indicators

Adult died after being chronically ill and chronically ill adult present	A chronically ill adult (s) aged 15-49 died in the past year in this household and there is a chronically ill adult(s) aged 15-49 present in this household
A chronically ill adult member died and a chronically ill child died	An adult died in the past year after being chronically ill and a chronically ill child(ren) aged 0-4 died in the past year in this household
A chronically ill adult member is present and a chronically ill child died	There is chronically ill adult member(s) present and in this household and a child 0-4 died after being chronically ill in the past year
A chronically ill adult	There is chronically ill adult member(s) and chronically ill child(ren) aged

member is present and there is a chronically ill child	0-4 present in this household
Adult household member died or chronically ill adult member present	A chronically ill adult (s) aged 15-49 died in the past year in this household or there is a chronically ill adult(s) aged 15-49 present in this household