

Workshop Report

**Methodology and Training Workshop on
Household Vulnerability Index (HVI) for
Quantifying Impact of HIV and AIDS on Rural
Livelihoods**

Farm Inn Pretoria, South Africa, 28-29 September 2006

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FANRPAN and Southern Africa Trust

in collaboration with
SADC

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List of Acronyms

FANRPAN	Food Agriculture and Natural Resources Policy Analysis Network
HSRC	Human Sciences Research Council of South Africa
HVI	Household Vulnerability Index
IFPRI	International Food Policy Research Institute
HBC	Home based care
NEWU	National Early Warning Units
NGO	Non Governmental Organization
OVC	Orphaned and vulnerable children
SADC	Southern Africa Development Community
SAPRN	Southern Africa Policy Resource Network
VAC	Vulnerability Assessment Committee
VAM	Vulnerability Analysis and Mapping
WFP	World Food Programme

Executive Summary

The Household Vulnerability Index Methodology and Training Workshop was held from the 28-29th of September 2006 at Farm Inn, Pretoria South Africa. The workshop had 12 participants representing 6 SADC countries, i.e., Lesotho, Mauritius, Mozambique, South Africa, Zambia and Zimbabwe. The workshop was organized by FANRPAN, with funding support from Southern Africa Trust and collaborative assistance from SADC.

During the two day workshop, issues related to the successful development of a widely accepted approach to quantifying vulnerability were discussed. These included: the identification and recognition of the existence of a gap in implementation of vulnerability assessments, food security and livelihoods programmes; the common sharing of the benefits that could arise from the use of the Household Vulnerability Index (HVI) model; the importance of partnerships and collaboration in the successful development and implementation of the model; and the challenges that exist in model development in terms of appropriate indicators to be used in the HVI computations and acceptability of the model among the major consumers, i.e., the civil society sector, academic and research institutes, universities, international development organizations, private sector, government, etc.

The workshop was participatory in nature, with the participants mainly contributing to the plenary sessions that allowed the exploration and sharing of ideas among country representatives. Participants were also concerned with the wider applicability and adaptability of the model to their specific environments. A programme of activities to be followed until the finalization of the study was also developed and endorsed by the participants. Each of the participants committed herself or himself to working closely with FANRPAN in developing the HVI model and also to act as FANRPAN focal points in their respective countries and organizations.

Over the coming three months, the study will be conducted in the three identified SADC countries with input from the reference groups at every stage of the study. The lead researchers Tendayi Kureya (Zimbabwe), Moses Sithole (Swaziland) and Makhala Khoeli (Lesotho) have to work closely to ensure the successful implementation of the study. Evaluation of the workshop by participants was positive and they indicated that they were pleased to be part of this important regional initiative.

1.0 Introduction

The Food Agriculture and Natural Resource Policy Analysis Network (FANRPAN) Household Vulnerability Index (HVI) Methodology and Training workshop was held from the 28-29th of September 2006 at the Farm Inn, Pretoria, South Africa in partnership with Southern African Trust (SAT). A total of 12 participants coming from 6 SADC countries and representing different institutions/ organizations attended.

1.1 Scope and Purpose of the report

This document reports on the proceedings of the HVI Methodology and Training Workshop. It presents the aim and objectives of the workshop, background to the workshop, key presentations and key discussions. It also highlights on the major resolutions and recommendations made by the participants.

1.2 Aim of the workshop

The workshop aimed at coming up with a widely accepted approach to quantifying household vulnerability in the SADC region and building on regional collaboration in the fight against HIV and AIDS, food insecurity and poverty.

1.3 Objectives of the workshop

The workshop focused on developing a common understanding on the proposed methodology to compute the HVI and fostering regional collaboration in implementing the HVI study. The workshop was expected to come up with the following outcomes:

- a. A wider understanding and appreciation of the HVI concept among the workshop participants;
- b. A list of individuals within the region composing the reference group of the HVI study;
- c. A shared vision among the participants on the way forward; and
- d. A critique of the draft HVI model in terms of its universality and adaptability to different environments within the SADC region.

1.4 Background to the Workshop

The **HVI Methodology and Training Workshop** was targeted at stakeholders in the SADC region, mainly institutions and organizations interested in research and development programmes on HIV and AIDS, food security and livelihoods programmes in the region.

The workshop was conducted under the backdrop of FANRPAN's earlier work in 2004 that focused on the *Impact of HIV and AIDS on Agriculture and Food Security* in seven SADC countries, i.e., Lesotho, Botswana, Namibia, South Africa, Swaziland, Zambia and Zimbabwe. Although the earlier study established common ground on how HIV and AIDS affected agriculture and food security, only ground work on quantifying this impact was laid. The major findings were that HIV and AIDS increased household vulnerability in two main ways, i.e., affecting households' capacity to recover from shock (resilience), and coping with external shocks. Hence there was a need to conduct a study

to establish a widely-accepted approach to measuring vulnerability of a household exposed to HIV and AIDS. This saw the commencement of the HVI study in August 2006 in Lesotho, Swaziland and Zimbabwe.

2.0 Opening Remarks by Fred Kalibwani

The opening was attended by all participants. Fred Kalibwani the Projects Officer for FANRPAN gave the opening speech to the workshop.

He gave an introduction to the background of FANRPAN and an overview of *The Impact of HIV and AIDS on Agriculture and Food Security* study. He described FANRPAN as a regional network focusing on research, policy and dialogue around food, agriculture and natural resources in the SADC region. The SADC region is food insecure and, HIV and AIDS is contributing to this phenomenon. Most studies have concentrated on the health related impacts of HIV and AIDS, but the previous study looked at its developmental impacts on agriculture and food security in rural communities. Some of the critical issues that need consideration include labour, agriculture production, marketing, processing, food security and gender implications of HIV and AIDS on rural livelihoods. The overall conclusion drawn from the study was that HIV and AIDS increases household vulnerability by affecting how households cope with external shocks and through reduction of household resilience to recover from such shocks.

3.0 Session 1: Conceptual Thinking behind HVI

In this session Tendayi Kureya employed a scenario analysis to initiate the thinking and the discussion around the HVI. He gave an example of three families living in the same community but with different socioeconomic characteristics. The example is illustrated below.

Household A

- household head is an 18 year old child who is uneducated and no longer attends school
- takes care of 5 brothers and sisters who are going to school
- owns 3 cattle
- the mother is alive but has relocated back to her kin group because of sickness
- they are currently getting support from NGOs in terms of food, seed packs, etc
- they harvest 80 kgs of maize per season.

Household B

- household head is a single parent – a woman who has never been married
- she has three kids all of whom are going to school
- owns 5 cattle
- involved in informal work such as gardening
- harvest 120 kgs of maize per season
- she is the sole income earner.

Household C

- both parents available
- father is bed-ridden
- they own no cattle
- the kids do not go to school
- low literacy levels
- involved in care work
- practice dry tillage
- harvest 40 kgs of maize.

The following questions were then given to the participants:

- *Which one of the three families is most vulnerable and why?*
- *Which one of the three families is least vulnerable and why?*
- *Rank the three families between 0-10 according to their vulnerability?*

Given the information above, Household C was ranked the highest in terms of vulnerability followed by Household A. All participants seemed to agree that Household B was the least vulnerable despite the fact that it was headed by a single mother. Household C was ranked the highest despite the fact that the household has both parents alive.

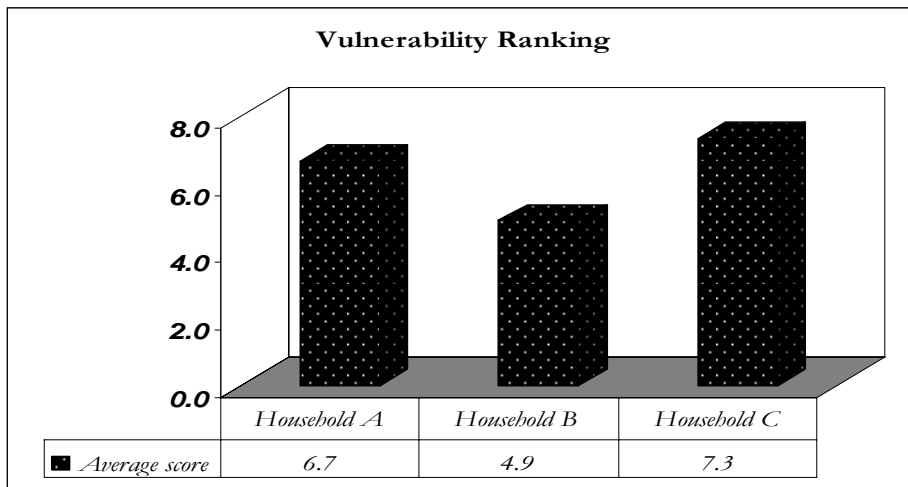


Fig 1. Household vulnerability ranking

Despite the simple ranking that the participants managed to do, there was an overall agreement among the participants that more information was needed for accurate and efficient vulnerability assessment. The need for a quantitative measure was expressed.

All participants agreed that HIV and AIDS make households more vulnerable. Challenges introduced by the small exercise include:

- coming up with an impartial way of targeting vulnerable households

- coming up with policy recommendations for social protection
- defining the role of government in social protection
- changing the thinking around the Orphaned and Vulnerable Children (OVC) and Home Based Care (HBC) programmes.

As shown in Fig 2 below, HIV and AIDS affects household livelihoods through its effects on a number of impact areas. The identified impact areas all build on the impact of HIV and AIDS on the household livelihood assets such as the human, natural, economic and social capital.

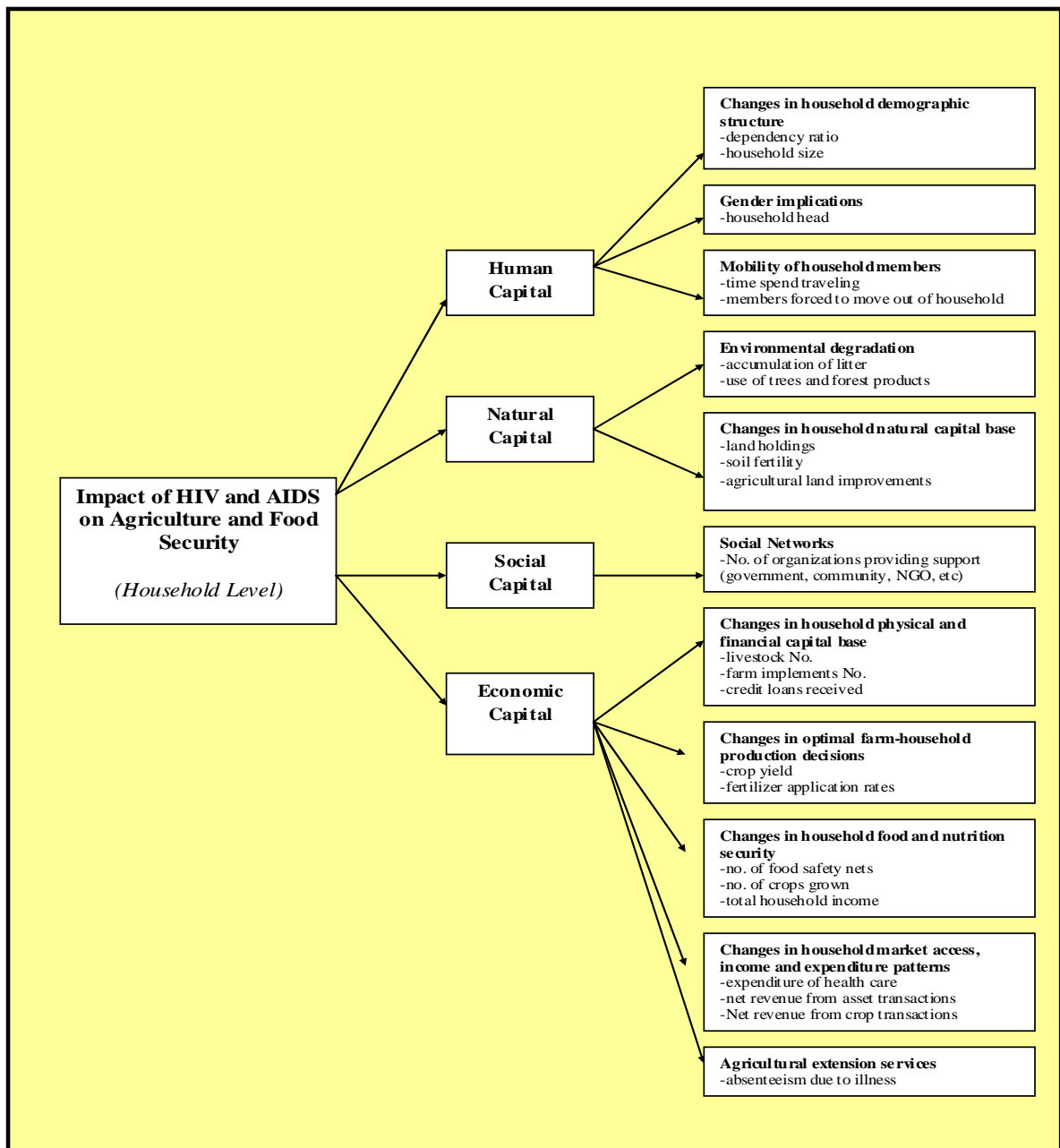


Fig 2 Conceptualizing Household Vulnerability to Impact of HIV and AIDS

A new impact area which did not emerge from FANRPAN's previous HIV and AIDS study has nevertheless been found to be important, and will be included in the model. This is the area that deals with households' access to information related mainly to HIV and AIDS and agricultural issues.

4.0 Session 2: Subscribing to the HVI Concept

4.1 Subscribing to the HVI Concept

This session began with country representatives subscribing to the concept of HVI and agreeing to the need of such a tool in the SADC region. Representatives from different countries gave a synopsis of the HIV and AIDS situation in their countries together with their views on the HVI as follows:

Mauritius: The country representative from Mauritius indicated that the situation in the country concerning HIV and AIDS is different from the rest of the SADC countries. The tourism industry is the most affected as compared to rural areas where the majority of farmers are located. The prevalence rate is not as high as in some SADC countries. Diabetes is one of the diseases that is of major concern. It was noted that HVI can be adapted to the Mauritius situation and be utilized to quantify the impact of diabetes on household livelihood.

Zambia: The country representative from Zambia indicated that the HVI concept is worth pursuing. He said HIV and AIDS in Zambia impacts on communities' livelihoods by way of affecting household agriculture production and food security. Consequently, HVI can be used to quantify this impact.

Zimbabwe: The country representative from Zimbabwe also indicated that HVI has potential use in Zimbabwe. The concept challenges the conventional targeting system used by most NGOs in their programmes. The quantitative approach introduced by this concept gives an option for categorization of households according to level of vulnerability.

Lesotho: The country representative from Lesotho presented the country experiences in computing HVI and showed that the tool can work. The HVI was computed from the data collected for the HIV and AIDS study. This was not easy; one of the challenges was that the data was collected for other purposes other than computing HVI. Gathering variables that were relevant for the computation of HVI was quite challenging. However, the computation and analysis of HVI added value to the study by quantifying the impact of HIV and AIDS.

The importance of HVI was emphasized by different participants for different reasons, of which some were as follows:

- The HVI would help countries to identify classes of household vulnerability and consequently the design of intervention packages for different classes.
- Integrating HVI in food security vulnerability assessment.

- HVI can be integrated into early warning systems.
- HVI can be used to monitor the progression of households from one level of vulnerability to another.
- HVI will help influence social protection policy by engaging the key decision-makers.

It was agreed that it is important to come up with a scale for ranking household vulnerability and areas that need to be considered in measuring vulnerability.

4.2 Introduction to the HVI study

Tendayi Kureya went on to introduce the HVI study to the participants. He said the major objective of the study was to develop a statistical index (HVI) for quantifying household vulnerability resulting from the impact of HIV and AIDS pandemic on agriculture and food security, as a means of improving the targeting of responses. The practical outcomes will be:

- a refined method for constructing a vulnerability index – the HVI. The HVI will shed new light on the different degrees and levels of household vulnerability introduced by the HIV and AIDS pandemic on household agriculture and food security
- a computerized statistical tool for computing HVI
- HVI tool for monitoring how assisted households graduate or deteriorate from one level of vulnerability to another. It will also shed light on what would be required to move households from vulnerability.

He described vulnerability as encompassing the factors that lead to variation in the impact of disease between different communities and individuals. Vulnerability was described as having two components: “external vulnerability”, which refers to exposure to shocks or hazards; and “internal vulnerability”, which refers to the capacity to cope with or withstand those shocks. He emphasized that the study will consider vulnerability as a concept that describes the features of a social and economic entity such as HIV and AIDS that determine the severity of impact on rural households likely to be caused by excess morbidity and mortality.

Tendayi emphasized that the Household Vulnerability Index (HVI) will be used largely to establish the different levels of vulnerability that the impact of HIV and AIDS on Agriculture and food security has introduced in the households studied. The different Household Vulnerability Indices (HVI) will reflect different degrees of vulnerability. Three levels of vulnerability will be of particular importance for policy purposes:

- Vulnerability level 1 = Coping level Households (CLH) – a household in a vulnerable situation but still able to cope
- Vulnerability level 2 = Acute level households (ALH) – a household that has been hit so hard that it badly needs assistance to the degree of an acute health care unit in a hospital. With some rapid-response type of assistance the family may be resuscitated

- Vulnerability level 3 = Emergency level Households (ELH) – the equivalent of an intensive care situation – almost a point of no return – but could be resuscitated only with the best possible expertise.
- Vulnerability Level 0 = non-vulnerable households

From the resulting indices it will be possible determine the percentage of households falling under each category from the study sample. It will also be possible determine the level of vulnerability of a specific household from any selected questionnaire. Using the HVI it will possible to put more weight to factors that are important in each country e.g. livestock in Botswana, seasonal agriculture in Zimbabwe, etc, and hence capture.

The presentation also touched on the need for a collaborative approach to the study. Participants felt that there was a need to consider the following stakeholders among others: Vulnerability Assessment Committees (VACs), Vulnerability Analysis and Mapping (VAM) committee in Zambia, SADC council of NGOs, umbrella bodies of NGOs e.g. Mauritius Council of NGOs, National AIDS Councils, National Early Warning Unit (NEWU) in Mozambique, UNAIDS and Ministries of Health in the region.

5.0 Session 3: Setting up of Reference Groups

The objectives of this session were to come up with a reference group of individuals of different practical and academic background, coming from a number of organizations and countries, who will help guide the project. This has been FANRPAN's strategy to ensure quality of research coming out of their projects. Participation will be through emails, commenting on every step of the project. The reference group should be passionate and should bring credibility to the process. The individuals should be driven by interest and could also be potential consumers of the output of the study. This group should be viewed as a working group and a peer review team.

A list of organizations from which the composition of the reference group will come from was suggested. This included the

- Regional and National VACs
- National Early Warning Units
- SADC HIV and AIDS Unit
- FAO
- Ministries of Agriculture, Health, Social Protection
- WFP
- Academic and Research Institutions
- IFPRI
- HSRC
- SAPRN
- Civil Society Organizations
- Individuals with an interest
- Prevention, Information et Lutte contre le SIDA (Mauritian NGO)

The workshop resolved to engage the various higher offices of the proposed institutions to provide individuals for the reference groups. FANRPAN could also use existing working groups in a number of countries in the region such as VACs to identify individuals to make up the reference groups. All the workshop participants agreed to be part of the reference group. Some other key individuals were also identified during the workshop as key to the process. These include

- A statistician from the University of Limpopo (Dr Legesse Kassa Debusho)
- ILRI- Sibonisiso Moyo
- Zimbabwe- Dr Matshe
- Swaziland- Dr Masuku
- Mozambique-Mrs Claudia Amelia Lopes (Food Security Unit)

6.0 Session 4: Practical Steps Forward (where do we go from here?)

The objective of this session was to map out the steps that will be followed after the methodology workshop until the completion of the study. Steps agreed upon are as follows:

- Present project to national meetings
- Set up the reference group
- Develop the questionnaire
- Circulate the draft questionnaire
- Conduct a pilot survey
- Training of enumerators
- Sampling
- Data Collection
- Data entry
- Data analysis
- Report compilation (4 reports, i.e., 3 country reports and 1 combined)
- National validation workshop
- Regional HVI policy dialogue
- Production of policy briefs and newsletter for countries and the region
- Publication in journals

Monitoring and evaluation will be done by the nodes and the regional secretariat.

7.0 Session 5: HVI computation and Practical Demonstration

At the end of the 4th session participants were given an assignment, the discussion of which was done in this session.

7.1 Assignment: *Critique and comment on the variables and the transformation that was used in the draft HVI model*

The following general comments were given at the start of the session:

- There is a need to separate ‘economic capital’ into its two separate components, i.e., financial and physical capitals.

- There is need to add more variables that can be used to measure given impact areas
- Principal component analysis should be used to sieve out important variables
- There is need to use the field test to recalibrate the model
- There will always be challenges related to the subjectivity of scores used in the HVI model

7.2 HIV Computation and Demonstrations

In this session, a practical demonstration of the HVI computation was shown to the participants. The participants were generally enthralled by the results of the computation and the realization of the power of HVI as a social and development tool that can be useful in their own work situations. The participants were also given a run down through the regional FANRPAN database for the HIV and AIDS and analysis to help them appreciate how the HVI study is complementing the previous HVI/AIDS study conducted in 7 SADC countries.

Below are some of the comments and additions that were given in this session as regards the variables to be used in HVI computation:

- *Natural capital*- Participants saw the need to add more variables to capture all aspects of environmental degradation such as firewood use, wild fruits collected, litter collected, harvesting of poles for construction. Other aspects of environmental degradation related to fisheries, water resources, land productivity and land degradation due to overgrazing. Participants felt that it could be useful to solicit from the environmentalist indicators that being used to measure environmental degradation.
- *Human capital*- more variables were suggested to help measure changes in demographic structures and the gender implications of HIV and AIDS. These included school time lost, changes in cropping patterns and elderly households. The participants also felt that when looking at the mobility of household members due to HIV and AIDS the following questions need to be answered i.e. who had left the household and how many have left?
- *Economic capital*- participants suggested that the fertilizer variable be changed to changes in fertilizer application. All expenditures such as food, education, health, assets, etc should be considered. All livestock should also be considered in the model. Participants also felt that there is a need to consider the following items when looking at sustainability of household food and nutrition security:
 - regular composition of household meal
 - number of meals per day
 - when household have shortages in food sources.
- *Social Capital*- Recommendations were that the model should consider other social support issues such as care and psychological support although these may be difficult to measure. Questions should be asked around the kind of support

that households want, the ones they value and what they are receiving. This then can be scored to put some quantitative measure to it.

8.0 Recommendations

Generally the participant felt that there was a need to build upon the workshop and go further to implement the study. It was proposed that the model be pilot tested with a smaller group of households. This will help in selecting relevant variables that are measurable and appropriate for HVI computation. The researchers were also urged to search through the work done by FAO, WHO, WFP and World Bank to inform the variable selection criteria.

The workshop also resolved that all parties, i.e., FANRPAN and all stakeholders around the study, commit to communication and dialogue around. Each participant was tasked with the duties of spreading the HVI concept through their respective networks. This would help stimulate dialogue around HVI within the region.

9.0 Appendices

9.1 Appendix A: Agenda for Workshop

Methodology Workshop for Household Vulnerability Index (HVI) for Quantifying Impact of HIV AND AIDS on Rural Livelihoods

Time	Activity	Facilitator/presenter
Day 1- 28 Sept		
0730-0800	REGISTRATION	<i>FANRPAN</i>
0800-0810	Introductions	
0810-0845	Opening Remarks by FANRPAN Director	<i>Dr L. M Sibanda</i>
	Background to the "Impact of HIV and AIDS in the SADC Region" Project	<i>Fred Kalibwani</i>
0845-0930	Session 1: Theoretical thinking behind HVI	<i>Tendayi Kureya</i>
0930-0945	Discussion on the theoretical thinking of HVI	
1000-1030	TEA/COFFEE/NETWORKING	
1030-1130	Session 2: Subscribing to the HVI concept (Introduction to the HVI study)	<i>U. Chipfupa/T. Kureya</i>
1130-1200	Practical experience from Lesotho	<i>Makhala Khoeli</i>
1200-1300	Discussion on the HVI study methodology	
1300-1400	LUNCH	
1400-1530	Session 3: Setting up the reference group for the Study opportunities for regional collaboration	<i>Fred Kalibwani</i>
1530-1600	Session 4: Practical steps forward	<i>Tendayi Kureya</i>
Day 2- 29 Sept		
0800-0930	Session 5a : Group work: HVI computations	<i>Two Groups</i>
1000-1030	TEA/COFFEE	
1030-1245	Session 5b: Discussion on methodological issues encountered	<i>Tendayi Kureya</i>
1245-1300	Closing Remarks	<i>Fred Kalibwani</i>
1300-1400	LUNCH	

9.2 Appendix B: List of Participants

	Name	Organization	Address/Email
1	Tendayi Kureya	Development Data Consultants	16 St Dominics Road Milton Park; Harare Zimbabwe tendayi@developmentdata.co.zw
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4	Araujo Bruno Scopes de	Eduardo Mondlane University	Faculty of Agronomy and Forestry Engineering University Campus P.O Box 257 Maputo, Mozambique baraujo@uem.mz barajous@yahoo.com
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