‘Through a glass darkly’?:[1]

An enquiry into HIV prevalence on Stellenbosch wine farms

Penelope Morrell

MRRPEN004

A dissertation submitted in fulfilment of the requirements
for the award of the degree of MPhil in Sociology

Faculty of Humanities
University of Cape Town
February 2010

This work has not been previously submitted in whole, or in part,
for the award of any degree. It is my own work.
Each significant contribution to, and quotation in, this dissertation for the work, or works,
of other people has been attributed, and has been cited and referenced.

Signature: Date:

1: The quote in the title of this study is from 1 Corinthians 13, verse 12 from the Christian New Testament. The full passage is 'For now we see through a glass, darkly; but then face to face: now I know in part; but then shall I know even as also I am known'. By invoking this I intend to question what can be known, partially or in full – about the prevalence on Stellenbosch wine farms - in the secular realm of earth-bound research!

CONTENTS

TABLES AND FIGURES

ACRONYMS

AIDS	acquired immunodeficiency syndrome
ANC	antenatal care
ART	anti-retroviral therapy
ARV	anti-retroviral
ASSA	Actuarial Society of South Africa
CRLS	Centre for Rural Legal Studies
CSSR	Centre for Social Science Research
DoH	(National) Department of Health
ESTA	Extension of Security of Tenure Act
FAS	foetal alcohol syndrome
HIV	human immunodeficiency virus
HSRC	Human Sciences Research Council
IDC	infectious diseases clinic
IOM	International Organisation for Migration
MRC	Medical Research Council
NGO	non-governmental organisation
NPO	non-profit organisation
NSP	National Strategic Plan for HIV & AIDS and STIs (2007–2011)
PEPFAR	(US) President's Emergency Plan for AIDS Relief
PHRU	Perinatal HIV Research Unit
PMTCT	Prevention of Mother-to-Child Transmission (of HIV)
SAHRC	South African Human Rights Commission
StatsSA	Statistics South Africa
STI/STD	sexually-transmitted infection / sexually-transmitted disease
TAC	Treatment Action Campaign
TB	tuberculosis
UCT	University of Cape Town
USBC	United States Bureau for the Census
UNAIDS	Joint United Nations Programme on HIV?AIDS
USAID	United States Agency for International Development
VCT	voluntary counselling and testing
WCDEADP	Western Cape Department of Environmental Affairs and Development Planning
WCDoA	Western Cape Department of Agriculture
WCDoH	Western Cape Department of Health
WFP	Women on Farms Project
WHO	World Health Organisation

ACKNOWLEDGEMENTS

That 'it takes a community to raise a child' could equally be said about the process of writing a thesis. While the responsibility for any malformations remains mine, I was lavished with the robust, firm, kind guidance that is the due of 'almal se kind'. For this I am deeply grateful, even when I was unequivocally taught unwelcome rules and remanded to stay within certain limits. I was less pleased when my favourite data was rationed, however.

Johann Graaff undertook the supervision of this thesis when it was already a messy collection of ideas. He has been magnificent in supporting me in the processes of thinking and writing as I battled to tame copious amounts of material which, given my affection for it, was not a task lightly undertaken. The elegance and insightfulness of his observations – both regarding content and process - accompanied by a deep irreverence for herds of holy cows, helped liberate me from the critical monsters and remind me that this thesis was, sadly, unlikely to change the world order. For all of these, I am eternally grateful.

The courage of my brother, Robert Morrell, in the face of a distressed mature student is legendary - and bears testimony to the fact that terrible things can be said well. For over 25 years of engagement with ideas and with one another, I am always deeply appreciative - and am even more so here. Uta Lehmann waded into the fray early on and with her inimitable practical sense and calm, disaggregated trees into manageable pieces of wood. She also understands the value of a poultice of sushi and white wine, which is irreplaceable. Rochelle Kapp provided a constant watching brief of my progress, while Virginia Zweigenthal inducted me into the elementaries of epidemiology in which I have dabbled, undoubtedly precariously. And lastly, but by no means least, Richard Saunders persisted – to the point of personal danger - in asking what on earth the answer to 'so what?' might be. He also endured the unattractive final throes of the completion of the first draft – and I am deeply grateful that he endured the groans, silences and the erratic hours - and for not fleeing as lesser beings might have. My thanks to these five in particular, and to my family and friends in general

who have endured this communal process – and my genuflection to their collective fortitude.

Much of this thesis was written in hiding. Without accommodation in far-off climes to which I could retreat and behave autistically in deepest monastic privacy, I would have been a far greater burden to everyone. Jonathan Gunthorp and my mother, Bridget Rose, should be thanked by all for their roles in this – as they are by me.

Mark Jacobs, Martha Geiger and Charles Paulus reminded me to dot various t's and cross i's when I was running out of steam – for which my grateful thanks.

The staff of the Stellenbosch Hospice has been remarkably tolerant as I flailed around when my first thesis topic disintegrated, following the early findings of the Farms Project cited here. And my colleagues in the Farms Project, Lize Hellström and Diane Evans, have endured my pedantry, indulged my excitement when things made sense and have allowed me to share insights which I thought might enrich our work. I thank them for their generosity and for enduring a researcher-practitioner in their midst.

Without the Perinatal HIV Research Unit (now the ANOVA Health Institute), the Farms Project – and this thesis - would not have been possible. My thanks to them for permission to use the Project's data, and to the Centre for Social Science Research at the University of Cape Town whose financial support enabled me to buy some time to write.

ABSTRACT

Despite the complex and often highly specific nature of the social aspects of the HIV/AIDS pandemic, many projects working in the field do not base their strategies on local evidence, given the paucity of suitable local-level data as well as the presences of organisational constraints.

A project offering HIV testing to farm-based communities in Stellenbosch is a case in point. While no prevalence data exists for this sub-population, the assumption was that there may be high levels of infection, following the organisation's experience of AIDS-related illnesses on these farms and the social conditions on wine farms which were thought to produce vulnerability for infection. Some in the organisation also thought that farm-based communities battled to access healthcare. During the first year of providing voluntary counselling and testing (VCT) on wine farms, however, the Stellenbosch Hospice's Farms Project consistently found lower than expected levels of HIV infection.

This gave rise to the question being addressed in this thesis - which is what can be 'known' about HIV prevalence in a sub-population for whom there is no evidence-based prevalence data. In practical terms, if modestly-funded local-level organisations[1] were able to undertake accessible forms of research, what would they be able to surmise about HIV prevalence among proposed beneficiaries?

Taking an unusual approach to research on prevalence, this study employs a minimally positivist approach to investigate what can be 'known' about HIV prevalence on wine farms in the Stellenbosch area. It does so by

1 This term is used to include various forms of organisations – be they non-governmental, non-profit or service organisations – which are small, relatively survivalist organisations. It may be a church-based organisation, a large community-based healthcare organisation or a service organisation like a hospice. I do so to differentiate it from the larger, professionalised non-governmental organisations (NGO) which frequently have research capacity. My notional organisation is also not a community-based organisation (CBO), however, which are largely membership-based and whose access to their locations is usually more organic and embedded, while NPOs are invariably staffed by people who do not necessarily live in the locations in which they are intervening.

triangulating data from the four sources that such an organisation might use, had they the capacity. These sources are published statistics and published articles, the opinions of local 'experts', and their own organisational data – in this case the first year of Farms Project's results. Significantly this does not include the more conventional surveys and statistical modelling, which is beyond this kind of organisation's capacity.

After reviewing publicly available prevalence data and showing that there are none for this sub-sector, this study probes the HIV 'risk' and related prevalence data associated with issues of poverty, gender relations, 'race' and alcohol consumption on Stellenbosch wine farms. In addition it presents prevalence data from a sample of farms as well as reviews HIV 'risk' and prevalence in rural areas nationally. In doing so, it critiques the causal links often made between the kinds of social conditions found on farms and HIV infection.

On the basis of the data considered and the methods used, the study finds that levels of HIV infection on farms could be expected to be lower than the average prevalence in the Stellenbosch health sub-district. It cautions, however, that this finding is not conclusive, not least as it was unable to consider some significant social conditions – like the movement of people, and effects of socially conscious farmers and the services they provide. In addition it is not generalisable to other South African farms, given the particularity of wine farms and of the Western Cape.

The study concludes by noting the limited value of prevalence data to project design, given the range of factors that can affect it at any time, and that it necessarily masks variation within an area or sub-population. While prevalence is useful as a starting point in project design, it is important to disaggregate where infection lies through an analysis of key social conditions. The study concludes by highlighting the importance of this finer analysis for project design in order to avoid strategies founded on poor assumptions, while recognising the difficulty of this for modest organisations.

1. INTRODUCTION

The 2003 inquiry into human rights violations on farms undertaken by the South African Human Rights Commission 'began with an assumption that there are many statistics that have been compiled relating to the focus groups of the Inquiry' but 'as the Inquiry set about gathering data, it became increasingly apparent that these statistics, in many cases, do not exist. Furthermore, most government data does not make distinctions between urban and rural communities or distinctions within rural communities as to who lives on farms and who does not' (SAHRC, 2003:5). This lack of data equally applies to HIV infection levels on Stellenbosch wine farms.

Very little is known about the HIV prevalence at local levels – and less so about sectors of the population which have not been specifically surveyed, like people living on Stellenbosch wine farms. Assumptions about levels of infection and links between social conditions and illness are often not as simple or as linear as expected, and projects basing their designs on these assumptions risk undermining their intended aims.

While HIV prevalence data are available for the Cape Winelands health district, and the Stellenbosch sub-district which falls within it, these are for pregnant women and are not modelled for the general population. But, more importantly, there are minimal data about HIV infection for areas or groups *within* the Stellenbosch area, and the limited data from primary health care clinics, where available, cannot be sufficiently disaggregated to provide information on the infection levels of those living on farms.[2] In the absence of this quantitative data, then, this study uses mixed methods to find out what can be 'known' about HIV prevalence among those who live on wine farms in the Stellenbosch area – 'known' in the sense of surmised with reasonable confidence.

2 As there is no generic collective term used for all the people who live on the farm, no matter their occupation, I refer to them as 'people who live on farms' or 'on-farm' communities. The term 'farming community' goes beyond the farms to include those who work on farms but do not live there. The term 'dwellers' tends to be used for those who live on farms, but do not work there permanently.

The question of what the HIV prevalence on wine farms might be arose from a project's unexpected finding of low levels of infection, following HIV testing offered in 2007/08 to people on 14 wine farms.[3] The Stellenbosch Hospice's Farms Project was aware that circumstances on this relatively small sample of farms meant this was unrepresentative of wine farms in general – and that the small and skewed sample could be tipped by different findings on even few farms. That being said, the findings of lower-than-expected HIV prevalence echoed some beliefs about general trends e.g. a lower prevalence among 'Coloured' people as well as in the rural areas. There was also a sense in which they may be 'closed communities'.[4] Thus the question arose regarding what the HIV infection levels on wine farms in this area might be – and what could be known through more extensive research than is normally undertaken by modest local-level organisations.

Two commonsense views prevailed. The first was that the prevalence was low as most of the people on farms were isolated from urban life with the result that their sexual networks were HIV-free, rendering any 'risky' sex, less so. Some added the assumption that 'Coloured' people – who comprised the majority on these farms – had lower levels of HIV infection than people who were 'Black African'. The other view, and the one that the project initially assumed, was that HIV prevalence was likely to be fairly high, given a variety of social conditions on farms that might make those

3 During its first 14 months, the Project worked on a total of 20 farms – but four of these were out of the area (in Paarl or Helderberg) and two in Stellenbosch were not wine farms.

4 The dissonance between expected rates of HIV infection (from an NGO), and poor access to data was also found by Michael Westerhaus in the study about HIV prevalence rates in Acholiland in northern Uganda. 'Epidemiological information assembled by the Ugandan Ministry of Health and UNAIDS, largely based on antenatal surveillance, has provided a constricted and fragmented snapshot of HIV prevalence trends since 1993' while 'researchers at a large private hospital in Acholiland have consistently demonstrated a high HIV prevalence and surmised a linkage with the war'. But, as in the Farms Project, he reported that 'NGO reports claiming a heavy impact of HIV/AIDS on the local population have also been characterised as unsubstantiated and misleading'. The result was 'a rather muddled narrative of HIV transmission' (Westerhaus, 2007:591).

living and working there vulnerable to sexually-transmitted infections like HIV. The most commonly cited of these factors were alcohol abuse, gender-based (sexual) violence and perceptions of there being casual sexual relationships.

This study therefore investigates what can be known about HIV prevalence on wine farms in the Stellenbosch area. As a formal household survey is beyond the capacity of local-level modest organisations, a combination of methods was used which produced a finding which is descriptive and comparative, rather than numerical.

As prevalence data mask the local distribution of infection – and are likely to do so across Stellenbosch wine farms - it is important to supplement these with an understanding of social conditions in the local area, in order to inform where and how to intervene. This study reviews only five of these – poverty, gender relations, 'race', rural location, and alcohol consumption. In so doing, it probes the assumptions about their relationships to HIV transmission and, in so doing, cautions against making simple causal links and begins to reveal the complexity of conditions in which projects aim to intervene.

1.1 APPROACH

This thesis approaches the research question from the point of view of a notional organisation intending to implement an HIV intervention locally in that sector.

The topic of this study arose from work on farms undertaken by the Stellenbosch Hospice's[5] Farms Project in which the researcher had worked since its inception in mid-2007. During its first year, the Project was surprised to find low levels of HIV infection among those who tested voluntarily for HIV on 14 wine farms. This raised the question of whether the Project could have 'known better' about the HIV infection levels on farms before they started.[6] Would researching the question through whatever information was available have provided them with a more accurate sense of what was happening on farms?

Many modestly-funded organisations intent on making a difference at local level (like the Hospice) base the design of their interventions on sketchy information. An example is where there is a lack of information about the extent and distribution of infection in the sub-population they intend affecting – but there can also be internal reasons to do with the organisation's capacity, core business and resource interests, among others.

5 The Stellenbosch Hospice serves a section of the Stellenbosch municipal area, which is one of four local municipalities within the Cape Winelands District Municipality. The Franschhoek Hospice also works within this municipality.

6 Organisations do not always focus their attention on those in greatest need (e.g. those with the highest HIV prevalence or incidence). Some may choose to work with groups with special needs (like difficulty in accessing healthcare). This question assumes that high prevalence is an important piece of information in developing strategy.

By employing the idea of a notional[7] modestly-resourced non-profit organisation as a persona in this study, I aim to find out what such an organisation could know about HIV prevalence in a local sector, had they the resources to research the situation. In this study, I take on the role of this commissioned researcher.[8]

I use this framing for three reasons. Firstly it informs the sources I use (described below); but secondly, it offers comment on the challenges faced by such organisations working in the field of HIV at local level as they design and implement projects. Thirdly it questions the value of HIV prevalence data to planning processes.

Although knowing the levels of infection provide a starting point for project design, understanding the social conditions associated with HIV transmission might inform exactly where and with whom to work. Analysing the complex and highly specific combinations of social conditions which create 'environments of risk' is exacting, however, and the conclusion includes commentary about organisations' constraints in being able to research and use these kinds of data. The purpose is to make provisional comments on the challenges faced by these modest organisations within the complex and specific terrains in which HIV infection is transmitted and affects people at local levels.

7 I understand that this is fanciful and that all organisations are specific with particular sets of interests which would, at the very least, inform their approach to this research. I hope that the question - what can be known about HIV prevalence in a sub-population - is sufficiently generic to render this approach acceptable.

8 I briefly address my location in this project in the chapter on Methodology. Suffice to say here that I have worked in various ways in funded projects of a range of sizes and scopes for about 20 years, and will draw on this experience in this study.

1.2 OVERVIEW OF THE FARMS PROJECT

The Stellenbosch Hospice's initial motivation for a dedicated farms project arose from their perception that the number of patients on farms who were HIV-positive or AIDS-ill was increasing, following growing numbers of farm-based patients in the in-patient unit who were in advanced stages of AIDS-related illnesses.[9] One Hospice nurse reported that the provincial clinic would refer farm-based patients to the Hospice at the last minute, leaving Hospice staff to find and work with the deceased patient's family. While the Hospice recognised a general need for access to health services on farms, this was accelerated by a concern that this increase in cases was symptomatic of a much larger presence of HIV/AIDS[10] on farms, and that the Hospice was only seeing the 'tip of an iceberg' (LH, GN, EF).[11]

9 The Hospice does not have patient data that might illustrate this. (See Appendix B - which shows farm patients were under-represented in terms of AIDS-illness within farm-based patients as well as in comparison to all palliative patients.)

10 At the time the Farms Project was being launched, the 2006 provincial antenatal HIV survey warned of the growth of a possible 'emerging sub-epidemic' in the Stellenbosch area, among others (WCDoH, 2007:14). It is difficult to say if the Hospice's increased exposure to people who were HIV positive reflected an increase in actual prevalence. As hospices may only provide care to those who are referred to them, there is a range of variables which confound simple correlation. In 2008, the in-patient unit reported that about 90% of patients had AIDS-related illness (a significant increase on previous illness profiles), most of whom referred to the Hospice from the local Infectious Diseases Clinic. About 30–40% of the in-patient unit patients were from farms, with most being from urban Kayamandi (EF).

11 The assumption was that HIV transmission on farms was predominantly horizontal – though hetero-sexual sex - with some vertical transmission from mother to child. Assumptions about social conditions on wine farms (high levels of alcohol consumption, related violent and anti-social behaviour, foetal alcohol syndrome and minimal recreational facilities) led staff to believe there may be high levels of vulnerability to infection on farms.

While there were no public data on HIV prevalence for farms particularly,[12] the fundraising documents for a dedicated Farms Project cited an average HIV prevalence of 12% for the whole Stellenbosch municipal area[13] in which the farms are located.[14] HIV/AIDS (and related TB) became the primary focus of the Farms Project which was launched in October 2007, following the confirmation of three years' funding from a research organisation dedicated to HIV/AIDS.[15] The funding agreement required that the Project provide voluntary counselling and testing (VCT) for HIV and related TB to people on farms. In so doing, the Project embarked on a case finding exercise,[16] hoping to provide farm people with access to (early) diagnosis, to link them to treatment offered through the provincial health services[17] and to provide support and care where necessary. While honouring this focus, the Hospice regarded this project as a way to develop its chronic and palliative work on farms more generally, with a view to being able to offer a wider range of services to this community.

12 Of the 690 people tested for HIV in 2006 at the Bird Street clinic (the main clinic attended by the farming community), just over half of those tested (353 or 51%) were from farms – of whom 11,3% tested HIV positive. But this was not generalisable given that the number tested was 'hardly a drop in the ocean in relation to the 350 000 people (50 000 farm workers and their 300 000 dependents) in the South African wine industry, of which the largest percentage certainly resides in the Stellenbosch/ Drakenstein/Winelands district' (Hellström, 2008:13).

13 See map in Appendix A of the Stellenbosch municipality.

14 According to the project leader-doctor, this figure was obtained from a number of sources. 12% prevalence in the 'Winelands/Stellenbosch District' for 2005 was cited by the provincial department of health's District Head Office. The same prevalence was obtained from the Stellenbosch Municipality for February- May 2006, following a collation of VCT results from a number of clinics; while 11,6% was recorded at a single provincial clinic in Stellenbosch for the period February to April 2006 (Hellström, 2007).

15 The funding for the Farms Project was from PEPFAR/USAID through the Perinatal HIV Research Unit (PHRU) - based at the University of the Witwatersrand.

16 This is distinct from surveillance surveying or research – which was not the Project's purpose.

17 The Project was implemented at a time when 'the introduction of free antiretroviral therapy in the public sector is a turning point that enables South Africa to purposefully and deliberately choose the future path of the HIV epidemic in this country' (Abdool Karim et al, 2005:567). The Western Cape Department of Health has a record of delivering antiretroviral treatment relatively successfully, reputedly offering treatment to the highest proportion of people who present for it in the country.

As low levels of HIV infection (and TB and sexually –transmitted infections - STIs) begun to emerge from working on the first 14 wine farms, Project staff considered explanations for this. They suspected that illness was not evenly distributed within the farming community and that a number of factors might be skewing the unexpectedly low results. It was clear that the Project was accessing the more socially conscious farms where better social and living conditions may be mitigating vulnerability, making these results unrepresentative of farms in general. They also recognised that some people exercised their right to opt out of being tested – and some may not be invited to participate.[18] They also increasingly began to think that they may be testing people who were necessarily healthier, given that many of those tested were employed workers in whose health the farmers had a greater (direct) investment, compared with those who simply lived on the farms.[19] Despite these provisos, however, the results were still unexpectedly low.

So through enquiring into what the HIV prevalence on farms more generally might be, this study essentially asks whether the Hospice could have known differently had it been able to 'find out' before starting the Farms Project.

Crucially, however, this thesis is NOT an evaluation or case study of the Farms Project, preferring to address the more generic question that arises from it. While the Farms Project and Hospice provided their evidence for this study, a case study of the project would have entailed a closer, more inward focus on the organisation, the role players within it etc. This is not what is being addressed here.

18 Possible implications of this skewing are outlined in Chapter 2.

19 This view is myopic, of course, given that workers are highly unlikely to only have sex with workers, especially as most of the permanent workers are men and the communities are largely heterosexual.

1.3 OVERVIEW OF METHODOLOGY

In this study I have used a positivist approach - albeit weakly – to find out what can be known about HIV prevalence on Stellenbosch wine farms. This is described more fully in Chapter 2. In essence I use material as data, using it at face value and ignoring it origins and social production the which could have been the subject of an interpretist analysis. In so doing, I fully understand the constructedness of knowledge, but deliberately choose to ignore it in favour of using opinions simply as evidence.

In the search for what can be known about HIV prevalence within a local sector, I triangulate a number of factors – namely measures, data sources, observers and methods (Neuman, 2006:150; Denzin & Lincoln, 2000:391). I sort the data thematically to see what can be deduced about prevalence from this multiplicity of approaches and sources.

The multiple measures comprise HIV prevalence figures for urban-rural areas and for 'race'; and for a small sample of wine farms. These were obtained from two of the four data sources - namely the literature and the findings from the Farms Project.

Of the four information sources used, two are clearly quantitative. These are the Farms Project's statistics from the first year of HIV testing on farms[20] and the HIV-related statistics published by the South African government and by various local and international research bodies. The third source is the published literature that comments on HIV prevalence and on quantitative data, as well as on HIV-related risk and causality associated with various social conditions and behaviours. It also informs the descriptions of the socio-economic contexts of farms which provide a contextual frame for the study.

20 In order to include as many results as possible at the time of writing, data for 13 months – for the period November 2007 to November 2008 - are presented. This spills over into the second year of the Project (starting October 2008).

The fourth source is the key informants' interviews. While I used the qualitative method of semi-structured interviews, I am using the opinions expressed in these interviews as data in their own right. As I was interested in finding out what people thought the HIV prevalence on Stellenbosch wine farms might be and their understandings of social conditions related to it, I conducted the interviews in a way that clarified information and interrogated logic rather than investigated meaning or values. I therefore do not interpret the opinions on the basis of their production, the interviewee's social location or values etc. – but use them as data as a positivist might.

These interviews, then, are where I have triangulated observers' views. I obtained what I considered to be 'expert' opinion from 20 people whose institutional locations could be expected to give them access to information about HIV and/or health issues on farms in this area. They are the kinds of people who might typically be consulted by the notional organisation employed in this study, comprising doctors, farmers, social and community workers based on farms and NGO staff working on farms. The latter included staff from the Stellenbosch Hospice, in which the Farms Project was located.

Finally I use a mixed or multi-method (Babbie & Mouton, 2001:279) approach. I analyse and comment on quantitative data; I thematically analyse information from a number of sources; and I review literature – all of which is synthesised through triangulation to ascertain what can be known about HIV prevalence on these farms.

As data is used to construct a sense of what can be known, then, and I am using the literature as one source of this data, I depart from the convention of isolating the literature review in a separate chapter, followed by a chapter on the 'findings'. I therefore have two chapters which present all four sources of data, as useful.

The first of these (Chapter 3) comments on the nature of HIV information, including HIV prevalence, and how modest organisations might use it. It particularly critiques the statistics in the public domain and the challenges that understanding these might pose for a modest local-level organisation. The second (Chapter 4) presents the triangulated data about HIV prevalence as it may relate to farms and makes a finding about what the prevalence might be expected to be. It ends by commenting on the limitations of information on HIV prevalence to planning and points to the importance of understanding 'risk' and 'causality' inherent in the social conditions in local contexts, cautioning against overly speedy assumptions.

Chapter 5 draws the findings together, concludes what can be known, makes some observations about the value of HIV prevalence data and about the challenges local-level organisations face in planning effective interventions.

This study limits its focus to adults living on Stellenbosch wine farms, who may or may not also work there.[21] It excludes those who commute to work on farms given their significantly different living circumstances – although they are cited as a point of comparison.

21 Chapter 4 provides an overview of the social conditions on wine farms, particularly the shifts in employment and residential patterns. In short, people who live on farms largely comprise permanent workers and their families (referred to here as 'dwellers'), some of whom may work on the farms on a casual basis. Retired workers and their families may also be found, but some farmers have progressively minimised the numbers of people living on farms, especially grown children. As a result, some permanent workers live off farms and there is an increase in employing casual labour from off farms.

1.4 THE LIMITATIONS OF THIS STUDY

It is not possible in the space of this dissertation to comprehensively review the literature that may relate to HIV infection on farms. Most notably I have not undertaken a large household survey to fill the gap in quantitative data about various conditions on farms. I did not do so for a range of methodological reasons – but primarily because the scale of such an undertaking was disproportionate to the smaller scale of this study – and this would be beyond the reach of a modest local-level organisation.

I do not address the prevalence of STIs and TB in the Stellenbosch area generally, or on farms in particular. This is significant, as the link between these and HIV would suggest that examining TB rates and distribution may be one way of tracking where HIV infection may be found. This would be important complementary information and a study in its own right.

A wide range of themes comprising social conditions thought to be associated with HIV infection emerged from my interviews with key informants. They provide fascinating data for dedicated studies for which there is unfortunately not space here. Given the constraints of this study, then, I have not reviewed a range of conditions that may affect HIV transmission – as follows.

- This study does not review aspects of farm-based communities which, like other intimate communities, may have positive or negative effects on HIV transmission – like gossip, interpersonal vigilance, social cohesion, religious practice, family life and child-rearing practices, among others. I do not address the extent of HIV-related stigma and discrimination and the often devastating effects these can have on health-seeking behaviour.
- It does not examine farm dwellers' perceptions of immunity and vulnerability to illness, and of illness and medication.

- Nor does this study review perceptions of the provincial health services – including the mobile clinics that serve farms – or access to, and use of, condoms or HIV-related information.
- It does not enquire about the perceived value of building individual confidence and personal aspiration – of lifeskills training and the provision of recreational facilities.
- Nor does it review the effects of the social programmes that farmers run – from farm-based clinics and health workers, crèches, after school programmes and modest libraries to transport to health services and off-farm schools for which they pay.
- Nor does it investigate the effects individual farmers may have on the character of social interaction on farms – or of the generational family links that may contribute to this.
- The value of farm-based community/social workers is not commented on.
- Crucially I have had to choose to ignore the implications of farms as workplaces, thus omitting the effects this may have on, for example, who tests and how confidentiality and disclosure work in this context.

In addition the ways in which the full range of social conditions do (or do not) combine to comprise 'risk' and may (or may not) be causally linked with HIV transmission is not addressed. This is a significant piece of work which would naturally follow this study if organisations are to better identify where infection lies and how to intervene in it most effectively.

This limited study then, only begins to investigate the assumptions made about the diverse conditions in which projects work, often in very partial ways, to address what is a profoundly complex social and public health challenge.

2. METHODOLOGY

This chapter describes the scope of this study and outlines the approaches and methods used. It then describes in some detail the nature of the four data sources, being published statistics and literature, interviews with 20 expert key informants and data from the Farms Project's HIV testing on farms.

2.1 SCOPE

This study investigates HIV prevalence among those living on wine farms in the Stellenbosch municipality. While there is estimated to be about 600 farms in the area, it has been difficult to find out how many of these are wine farms.[22] In her thesis submitted in 2008, Leila Falletisch cites '406 wine farms in the Stellenbosch district' sourced from 'Captain Williams, South African Police, October 2006' (Falletisch, 2008:58). I will use this in the absence of anything better.

2.2 APPROACH

2.2.1 Positivism

This investigation is undertaken in the positivist tradition, despite its poor reputation among many social science researchers, both quantitative and qualitative (Neuman, 2006:81; Silverman, 2006:38). I employ positivism in the sense described by David Silverman, namely that I 'do not seek to produce a science of laws (like physics) but simply seek to produce a set of cumulative generalisations based on the critical sifting of data' (Silverman,

22 Kobus van der Merwe of the Agricultural Association in Stellenbosch was unable to either say how many wine farms there were or where this data could be found (personal conversation, 5 June 2008). I have not found it elsewhere, despite searching a wide range of websites.

2006:38). Rather than work from an hypothesis, then, I have employed the inductive approach espoused by positivists. I have collected, analysed and produced a 'theory' (a finding) from the data, using thematic analysis to build 'second-order constructs … and ultimately a theory that will make sense of the observations' (Babbie & Mouton, 2001:273).

Through triangulating a range of data, sources, observers and measures, I have endeavoured to find out 'what can be known' – 'known' in the sense of surmised or assessed with reasonable confidence. I do not assume that the result is a 'law of human behaviour', however (Haralambos & Holborn, 1995:811), nor that it is an objective truth – and in this and other ways outlined below, I deviate from pure positivism.[23]

Positivists aim to generate data that hold 'independently of settings and interviewers' and they prefer 'standardised interviews and dislike non-standardised approaches' (Gilbert, 2008:263). In this study I held semi-structured interviews with 20 key informants. My access to the informants was particular and I am not confident that a different interviewer would have produced the same outcomes. For the purist, this sample would both be too small and the process of interviewing too unstructured. I do not think that my findings would hold 'independently of settings and interviewers' as positivists require.

That being said, I employ positivism most assertively in the ways in which I conducted these interviews and in my treatment of the resulting data. Probing during the interviews focused only on clarifying the internal logic and consistency of the respondent's argument, rather than on a range of

23 Perhaps significantly in the context of the notional organisation employed in this study, Lawrence Neuman notes that many 'applied researchers' (by which he means administrators, policy analysts, programme evaluators and planners) 'embrace positivism' – and that positivists 'seek rigourous, exact measures' and 'objective' research' (Neuman, 2006:82). Apart from the positivist use of data, and the deliberate exclusion of various forms of social content described above, I depart quite significantly from most of the other constituent approaches which comprise more orthodox positivism.

social and personal factors obviously present in each informant's responses. Consistent with this, I have used the resulting 'data' from these interviews at face value, choosing to ignore why an informant might have thought something or how they came to think it. I have done this not because I do not understand that people's opinions are subjective and inescapably socially constructed in a myriad of ways. On the contrary. I do so fully understanding that this is unavoidably the case, but have not chosen this as the focus of this study. In describing the sources of the respondents' authority, then, I do not point to the psycho-social construction of their perceptions (which would have entailed an entirely different approach) – but do so to indicate the diverse public expertise and possible perceptions available within the selection of key informants. This investigation is not an attempt to try and understand how perceptions of the HIV prevalence are produced, so much as what that prevalence might be.

I proceed by treating the key informants' opinions as 'social facts' in the sense that Norman Denzin and Yonna Lincoln might do, where they describe texts 'based on interviews and other forms of talk' as 'social facts' which are 'produced, shared and used in socially organized ways' (Denzin & Lincoln, 2000:640). In addition, positivism holds that 'factors that are not directly observable, such as meanings, feelings and purpose, are not particularly important and can be misleading' (Haralambos & Holborn, 1995:15).

While I have used this idea of 'social facts', then, I do not do so in the sense that Nigel Gilbert does when he holds that interview data are 'regarded as accessing "facts" of the social world, accounts whose sense derive from their correspondence to a factual reality' (Gilbert, 2008:263). My use of 'social facts' draws rather on a critical realist approach which holds that a 'perceiver' cannot be 'directly aware of material objects which exist independently of him' but rather that 'he can derive knowledge of

independent material things from the appearance or sense-data which are directly present to perceptual consciousness' (Bullock & Trombley, 1999:733). Realists argue that while (purist) positivists 'believe that a science should confine itself to the study of the observable' this is not possible as there are various material phenonema that cannot be observed - like continental drift or magnetic fields – and that these have to be postulated as they 'may not be open to methods of detection' (even by scientists) (Haralambos & Holborn, 1995:860). In this vein, critical realists argue that perceptions are sometimes the closest one is going to get to material fact – and, while invisible, are substantive.[24]

Realism locates social events and mechanisms within the context of structures – be they Sayer's 'sets of internally related objects and practices' or Keat and Urry's 'system of relationships which underlie and account for the sets of observable social relationships and those of social consciousness' (quoted in Haralambos & Holborn, 1995:861). These invisible structures are observable through their effects. So while the ideas of class, and of the infrastructure and superstructures of society cannot be seen, their social effects (and representations) can be seen and, Haralambos & Holborn propose, are considered by Marxists to be real (Haralambos & Holborn, 1995:861).

While levels of HIV infection clearly do exist 'in reality', the descriptions in Chapter 3 of the difficulties entailed in 'knowing' about HIV indicate that I am not following 'modern positivists [who] adopt an essentialist orientation

[24] Critical realists distinguish themselves from naïve realists who understand perceptions of material objects to be 'commonly immediate or direct' while their more critical approach sees 'knowledge of independent material things' being mediated through the 'perceptual consciousness'. That being said, critical realists are not idealists or phenomenologists who 'take objects to be wholly constructed out of appearances or ideas' (Bullock & Trombley, 1999:733).

to reality: reality is real; it exists "out there" and is waiting to be discovered' (Neuman, 2006:82). Short of doing a full household survey[25] on farms - an elaborate exercise beyond the reach of a modest local-level organisation which would require extensive testing and modelling of data - I am proposing that the 'reality out there' might exist, but is almost impossible to know. [26]

My investigation exactly asks if something can be 'known' in the critical realist sense, using accessible but less exacting methods ot uncover 'social facts'. In triangulating many sources and using various sources and forms of information as 'social facts' I describe *a* (not 'the') reality as best as one can. I am aware that it is not the 'truth' that is found, so much as a finding that is temporarily unfalsified (in the style of Karl Popper) (Haralambos & Holborn, 1995:857

As noted above, I deliberately *ignore the factors that influence the construction of these perceptions,* excluding the 'meanings, feelings and purpose' which underpin them, not because I think these are 'misleading' so much as because this is not my focus. One might argue that the origins and construction of each social fact – and the values they expound - should give them greater and lesser validity as a 'fact', depending on the extent to which these might colour their relationship to the 'truth'. I am arguing that *all* perceptions and opinions are inextricably value-laden and that 'truth' itself may not be the objective reflection of reality that is often supposed. I have chosen not to weigh the social values implicit in my key informants'

---

25 The extent to which levels of HIV infection can ever be known - even by the more 'objective' quantitative method of household surveys - is always limited. Even in household surveys which attempt to eliminate subjectivities, these are present in design of the model and study, the choices made about various variables and skewing etc

26 Even if one could test every single person in a social sector in a short enough time period to prevent new infections occurring during the testing period, the current testing methods would give a false negative result for those who are in the 'window period'.

perceptions on any scales - an exercise which would have shifted the focus of this relatively brief study to the messengers and away from the messages in which I am interested. This is not to say that there is no danger of producing social facts which are deeply inscribed with chauvanisms and prejudices (and equally with naivete, idealism, romanticism etc) – so much as that where these occur, these might be mitigated by the use of a range of sources and data which might produce some balance. I hope to have done this here.

Chapter 3 bears witness to the fact that I do not regard statistics uncritically, as some positivists might (Haralambos & Holborn, 1995:850).

In the context of a pandemic like HIV, which necessarily changes at least over time and place, it would be impossible to subscribe to the positivist assumption that 'basic patterns of social reality are stable and knowledge of them is additive'; nor that 'regularity in social reality does not change over time, and laws discovered today will hold in the future' (Neuman, 2006:83).

I also deviate from positivism in not 'develop[ing] abstract and general theories about how the world works' (Gilbert, 2008:138). Given that I am not working with the 'survey research' loved by positivists (Gilbert, 2008:263), but rather with a patchwork of data from a variety of sources, I would fall foul of 'the positivistic purist [who] spurns [particularly qualitative] studies that draw on a small number of cases because they can never be representative and therefore do not offer the possibility of generalisability' (Gilbert, 2008:138). In Chapter 4, I debate the possibility of generalising about farms at all – and conclude that at best, this research may say something general only about wine farms in Stellenbosch (and not, for example, South African farms more generally). In the same chapter I also caution against making simple links between HIV and various social conditions – or about correlating social variables – and am insistent that assumptions regarding causality not be made lightly, given the various permutations and preconditions that may affect transmission.

So, for example, it can only be conjecture that people on farms have more unprotected sex with partners whose HIV status is unknown in the context of excessive alcohol consumption. Even where there is secondary evidence of this being the case (in key informants' stories of multiple concurrent partnerships or 'casual' sex) this sex may not be risky for HIV if there is no infection in the sexual network. It is therefore incorrect to assume, as people seem to, that excessive alcohol consumption is necessarily a vector for HIV transmission – although it can be.[27]

Contrary to looking for generalisation and causality, this study expresses caution about both – while recognising that there are conditions and trends which can be linked, with care, to HIV vulnerability and transmission.

In summary, then, I have used the positivist approach by working inductively, collecting and analysing a variety of data to produce 'social facts'. I have used these to find out what might be 'known' about HIV prevalence in the sense that critical realists understand this – namely that perceptions are sometimes the closest one is going to get to material fact – and, while invisible, are substantive. I employ positivism most assertively by taking 'data' from interviews at face value, choosing to ignore the social construction of the responses and the values implicit in them – given that I understand that people's opinions are inevitably subjective and inescapably socially constructed in a myriad of ways.

27 Michael Westerhaus cautions similarly, in a study which used both epidemiological and anthropological data, including interviews with healthcare workers and HIV-positive patients. While he concluded that war was one of the factors that resulted in higher levels of HIV prevalence in an area of war-torn Uganda, he noted that it was not clear exactly *how* it has been a factor – and is clear that this is not generalisable. He cites anthropologist Tim Allen's views of the function of war vis-à-vis HIV. These include that war can minimise transmission by isolating and regulating people - which sits alongside the characterisation of war as increasing vulnerability through displacement and disorientation, and rape by soldiers. Westerhaus also points to war-torn countries where prevalence is reported to be low and to countries in southern Africa who are not at war but which have high prevalence. He concludes that 'how all of these factors have played out is simply unknown' (Westerhaus, 2007:600-602).

I deviate from positivism in a number of ways, however. I do not think that the result of my enquiry is a 'law of human behaviour' and am not sure about the possibility of accessing 'objective truth'. Likewise I think that knowledge changes over time and therefore do not think my enquiry will discover 'laws discovered today will hold in the future' nor that 'basic patterns of social reality are stable and knowledge of them is additive' (Neuman, 2006:83). This is particularly apposite in the context of a pandemic like HIV, which necessarily changes at least over time and place. I also regard statistics as requiring careful uses and do not give them the weight that positivists might.

2.2.2 Other approaches

In addition to positivism, I use a structural approach to frame this study as I understand issues like economics and governance to profoundly impact the social conditions which are an inextricable part of people's realities. But I also understand that people have agency to both act within these structures and that they shape their contexts through their interactions with them.

This study is pitched at a meso level. It does not work at the micro ethnographic level nor at the macro policy level but focuses at a level between them, in an attempt to assess a condition (HIV prevalence) which is informed by both. Whiteside notes that 'there is a tension between intensive ethnographic research done at an individual level, and national survey instruments that lose detail', such that surveys which focus on households can miss the fact that 'AIDS means some [households] disappear' (Whiteside, 2008:67). In the absence of an extensive local-level household survey – which might provide a range of data from which patterns and correlations might become visible - it has proven impossible to extract information about HIV prevalence on farms from macro data and sources. High-level data of this type are invariably not helpful at local level and data on farms nationally would not alone have been useful in relation to specific conditions on wine farms in the Western Cape. To engage solely in closer, more ethnographic study, however, would run the risk of losing the perspectives which recognise the overarching conditions (on farms, in the

health systems etc).[28] I hope by pitching this between these levels – albeit precariously – to have located themes within the data which enables some preliminary findings about HIV on Stellenbosch wine farms, and about some of the conditions associated with it.

2.3 METHODS

I have deliberately not approached this research as a case study. I do this for two reasons.

Firstly while this study arose from the unexpected outcomes of the first year of the Farms Project, I did not want to critique or evaluate the Project or the Hospice, nor did I have permission to do so. By purposefully removing the question one degree away from the Hospice, I wanted to address the more general question about what can be known about HIV prevalence in a local setting, like the one on wine farms.

Secondly, and more importantly, my interest is in contributing to knowledge that might improve organisational strategies intended to promote HIV prevention or access to treatment. I wanted to know if a local-level project *like* the Farms Project could plan better had they the research capacity to know about prevalence in their area. I therefore employ the persona of a notional local-level modestly-resourced non-profit organisation throughout this study – and proceed to do exactly this research, as a case in point.

28 A study that linked anthropological and epidemiological evidence to formulate a narrative of HIV transmission in Acholiland in Uganda found that '[t]he ethnographic evidence presented regarding HIV's impact on Acholiland suggests that an incorporation of historical, political, cultural and social factors must form the backbone of efforts both to understand HIV transmission and design strategies for curbing the epidemic in war settings' (Westerhaus, 2007:590).

2.3.1 Mixed methods and triangulation

Data reflecting HIV prevalence are usually produced through quantitative research. As there are no quantitative data for this population group, however, this study seeks to find out what might be known through using mixed methods and triangulation to collect and interrogate various data.

Noting that triangulation 'is supposed to indicate that by coming from various points or angles towards a "measured position" you find the true position", Elizabeth Henning comments that she prefers to understand triangulation as '"interpreting and sourcing in various ways" to build a complete picture or text' rather than 'calculating a position from three different vantage points' (Henning et al, 2004:103). In this sense triangulation can be understood to work in more qualitative and complex ways, departing from the more scientific idea of triangulation which produces knowledge from plotting data simply in relation to one another.

In this thesis I have certainly sourced data in various ways using multiple methods (and sources and measures and observers) – and have interpreted what I have heard to 'reveal different dimensions of a phenomenon and enrich understandings of the multi-faceted complex nature of the social world' (Gilbert, 2008:128).

Mixed methods

Nigel Gilbert described mixed methods simply as the use of more than one method. They may 'bring together qualitative and quantitative methods' but need not necessarily do so (Gilbert, 2008:127). Arguing that 'the apparent differences between quantitative and qualitative research should disappear', David Silverman cites Martyn Hammersley's '*What's wrong with ethnography'* (1992):

> 'We are not faced, then, with a stark choice between words and numbers, or even between precise and imprecise data; but rather with a range from more to less precise data. Furthermore, our decision about what level of precision is appropriate in relation to any particular claim should depend on the nature of what we are trying to describe, on the likely accuracy of our descriptions, on our purposes, and on the resources available to us; not on ideological commitment to one methodological paradigm over another' (quoted in Silverman, 2006:55).

Haralambos and Holborn agree, noting that 'neither can produce totally valid and completely reliable data, but both can provide useful insights into social life' and that they can be 'usefully combined'. They suggest that 'quantitative data tend to produce rather static pictures, but it can allow researchers to examine and discover overall patterns and structures' while qualitative data is less able to do this, but rather 'does allow for a richer and deeper understanding of the process of change in social life' (Haralambos & Holborn, 1995:856).

My use of mixed methods follows Foss and Ellefson's approach which is to 'generate new knowledge through a synthesis of the findings from different approaches' (quoted in Gilbert, 2008:127).

This synthesis is carried through in the use of triangulation, which is central to the methodology of this study. This follows Denzin and Lincoln's understanding that triangulation 'reflects an attempt to secure an in-depth understanding of the phenomenon in question', claiming it as a way of adding 'rigour, breadth, complexity, richness, and depth to an inquiry' (Denzin & Lincoln, 2000:5).

Neuman cites several types of triangulation: of measures (using a number of ways of measuring something); of observers (in which a number of people add their perspectives); of theory (in which a number of different theories are used to plan research or interpret research findings) and of method (in which qualitative and quantitative research methods and data are used) (Neuman, 2006:150). Denzin and Lincoln also propose four ways of using triangulation, duplicating Neuman's triangulation of theory and methodology but adding triangulation of data (in which a variety of data sources are used) and investigators (in which several different researchers are used (Denzin & Lincoln, 2000:391)).

In this study I triangulate four of these – namely measures and data sources, observers (in the form of the key informants) and methods (in my use of mixed methods, described above).

Triangulation is used to identify patterns of data that corroborate one another (Babbie & Mouton, 2001:275), to 'search for convergence among multiple and difference sources of information to form themes or categories' (Cresswell & Miller, 2000:125). I have nonetheless retained the divergences within the themes and kept data that did not 'fit', thus 'disconfirming' the evidence built through triangulation.[29] I have not done this to undermine the findings of triangulation nor, necessarily to check their validity, but rather to include the multiplicity of perceptions and information in a quest to build a sense of what might be happening on wine farms relating to the transmission and prevalence of HIV/AIDS. Far from 'providing corroborating evidence collected through multiple methods', I have used 'disconfirming' data to exactly show that there is dissonance in the data within a theme - and set about explaining what this dissonance might indicate about either the data or about conditions on farms relating to HIV/AIDS.

29 For instance on the issue of who is 'better off' (financially), two farmers have diametrically opposite views: the doctor-farmer thought that seasonal workers off farms have more money (NG) while the farm manager thought that well-paid secure permanent workers are 'better off' (RJ).

Following difficulties in obtaining quantitative data about farms regarding human rights violations, the South African Human Rights Commission concluded that it was 'difficult to quantify the nature and the scale of human rights violations that occur in farming communities' and that 'without statistics it is easy for some to deny that human rights violations in farming communities occur'. In the absence of quantitative data, they turned to qualitative data, on the basis of which they were 'confident, however, that based on the repetition of claims of violations throughout the country, that these violations do occur' (SAHRC, 2003:5). In a study which similarly uses a range of sources, Westerhaus 'weav[ed] a narrative of HIV transmission in Acholiland that reflects the melding of epidemiological evidence with the viewpoints of the people living with and working on HIV/AIDS in the region'. Although he used a range of observers, data and two approaches – anthropological and epidemiological - he noted that '[i]n striving to comprehend the complex interweaving of war and HIV transmission in northern Uganda, the task is far from complete' (Westerhaus, 2007:591).

While the findings of this study are also necessarily incomplete – given choices and exclusions - I will nonetheless present a finding about HIV prevalence on Stellenbosch wine farms using this range of sources, observers, date and methods that, I hope, is temporarily unfalsified!

2.3.2 Thematic analysis

Following Linda Mabry's definition of thematic analysis - as 'the identification of emerging patterns and categories from iterative reviews of the dataset, a process which marshals evidence for developing and warranting findings' - I have sorted all data thematically to see what could be induced about prevalence and about the social conditions that may be associated with it (Mabry, 2008:218).

While I framed the analysis of the content of the 20 key informants' interviews by what I was interested in finding out, I also allowed new categories to arise. As the primary question about HIV prevalence was direct and precise, responses were assembled in a way that was essentially quantitative: 'How many people thought "x", how many "y", and how many "z"?' Given the semi-structured nature of the interviews, however, sorting the key informants' rationales for their estimated prevalences required that I code the transcripts thematically. I developed an initial set of keywords that began with the interview schedules but to which I added other keywords as they arose (e.g. condoms, teenage pregnancy, aspiration). I also generated sub-sections under these high-level keywords. While the responses are still treated as data with no commentary on their production, I have included some qualitative to provide information (as in the phrasing etc) lost in quantitative reporting.

I ultimately use the interview data from only four themes – namely poverty, gender, race and alcohol consumption on farms; and, where this arose interpersonal violence.[30] In doing so, I am not answering the questions of *which* social conditions on farms influence the transmission of HIV/AIDS, so much as whether some conditions popularly believed to affect HIV transmission might do so.

2.3.3 Methods and approaches

In summary, I have used data at face value and work inductively with a range of sources and measures to develop a 'theory' of prevalence on farms in the Stellenbosch winelands. I have done so in a way that employs positivism in its most minimal sense as I do not make the links or come to any of the conclusions that a more scientific positivist might do. In addition, I have triangulated a range of data sources, measures, observers' perceptions and mixed methods to establish what might be known through this multiple approach.

---

30 As is often the case in interviews, I pursued many other themes not reported on here, given the constraints of this study. These have been listed at the end of Chapter 1.

The quest here is whether these approaches and methods assist in penetrating the 'dark glass' of the title, resulting in a fuller knowledge of HIV in this group - even though it will necessarily fall short of the certain knowledge promised in knowing 'face to face'.

2.4 SOURCES

In the following three sections I describe and qualify the four data sources used in this study, which comprise the types of sources a modestly-resourced non-profit organisation may access. Broadly these are published statistics and expert articles in the public domain (which usually comprises a few easily accessible choice documents), the organisation's own experience and the insights of experts in the field.

2.5 SOURCES 1 AND 2: STATISTICS AND LITERATURE

The two sources used from the public domain are prevalence statistics and relevant literature.

2.5.1 Statistics

I use the term 'statistics' in its simplest form to mean 'a summary of information about the data' (Bullock & Trombley, 1999:827). In some cases, the data have also been analysed and modelled.

Statistics from a number of public sources are used. They are described and critiqued in Chapter 3 in particular, and used in triangulation in Chapter 4.

Statistics from the first year of VCT offered on farms by the Farms Project are presented in Chapter 4.

2.5.2 Literature

I have drawn on literature from a range of disciplines as I have felt useful. These include epidemiology, sociology, anthropology, social development, public health and social psychology.

I have limited my used of data from literature[31] to that published before the end of the research period, namely November 2008. I am aware that other data have been published subsequently – some of it particularly significant, like a third national household survey produced by the Human Sciences Research Council. Likewise, the Farms Project has produced further statistics from testing on more farms. These are excluded, however, as the writing up of this research was prolonged by its being undertaken alongside full-time freelance work. A commissioned piece of research of this nature would invariably have been completed in a more compact timeframe.

Qualitative research produced by local NGOs working on farms in this area – some of which is cited in this study - is briefly described in Appendix C.

2.6 SOURCE 3: THE FARMS PROJECT'S DATA

I gained access to the Farms Project's data through working for the Project in a freelance capacity as a researcher, facilitator, monitor and mentor since its inception in July 2007.[32]

Two forms of data have been included from the Project, representing a local, recent and relevant source. They are interviews with Hospice and Project staff and statistics of HIV results of people tested on farms during the first

31 This is distinct from analysis and commentary, where I have used a few articles after November 2008.

32 This paid work arose from my active search for a non-profit or non-governmental organisation which wanted some useful research undertaken in the field of HIV/AIDS – and which I would be allowed to write up as a thesis.

year of the Project.[33] In this section I comment on the nature and use of these data. While not critiquing these sources per se, I clarify their possible limitations, given that I was working in the Project during the time of collection, and given the skewing of the data of those tested on farms. In particular I show why it was not possible to model prevalence for farms more generally from this small, skewed data set.

2.6.1 Data – interviews with key informants

I interviewed seven Hospice staff, chosen on the basis of their positions of authority or their work on farms. Those in authority were the hospice manager (GN) and the project leader-doctor - who was also the medical director of the Hospice at the time (LH). Working on farms were the project co-ordinator (TG), two registered nursing sisters (CS and AB) and one home-based carer (MT). I also interviewed one palliative nurse who managed the in-patient unit to which people from farm might be admitted (EF). They are all included as 'key informants' of this study.

My dual relationship as freelancer and researcher raises a number of issues, among which are the possible effects on the research of my embeddedness and of mutual influence. Although I have reflected extensively on these, I have not included comment here, given the nature of the outward focus of this enquiry. Had I been engaged in more qualitative analysis, I would have presented these here.

To ensure that I did not merge my roles within the Hospice, however, I constituted formal interviews in which staff could express their views and I could check what I thought I had heard. I quote only from these interviews and do not use other sources of information. That being said, there is little doubt that my reading of the interviews is influenced by being a relative insider.

---

33 As the question being addressed here arose from the Hospice's work and is not about the organisation, I do not use other material from the Project or Hospice - like reports, minutes, records of strategy sessions etc or ethnographic material like practitioner diaries - as might typically be cited in case studies or evaluations of projects or organisations.

2.6.2 Data – Project statistics: HIV 'prevalence' on selected farms

Selection of farms

In its first year, the Farms Project came to work on the 14 farms[34] in a number of ways. In research terms they were 'available subjects' (Babbie & Mouton, 2001:166). Most farms were accessed through introductions and referrals (11) and two were through networking and word of mouth, following work done on another farm.[35]
Access was through the farmer or farm manager, to whom the Project's services (provided free of charge) may have been particularly attractive as they included TB testing, whose contagious nature is worrying to employers and which in the Western Cape is a more obviously pressing issue than HIV/AIDS.[36] I have characterised these farms in one of two ways, with some farms falling into both categories.

The first set of farms can be broadly described as being socially conscious, with established social service programmes for workers and families on their farms. Many of these farms have been owned and worked by the same families – both owner and workers - for many generations. I interviewed two

34 In order to minimise the variables, I have excluded farms which are in the Stellenbosch area but which are not in the wine industry (e.g. a nursery, and a farm whose staff were predominantly in the hospitality industry). I have also excluded wine farms in other areas, specifically Paarl where the Project worked on three very large wine farms. The data from the latter particularly were consistent with the trends on wine farms in the Stellenbosch area.

35 Of the 11 referrals:
- nine farms were identified by a human resources consultant who had recommended the Project's services to the farmers who retained his services (two of these were also interviewed);
- one followed a presentation the Project made to the Agricultural Association's Executive Committee; and
- one farm was referred to the Hospice by the provincial Department of Health following the farmer's request that those on his farm be tested for TB.
- one farm followed the Hospice's provision of care to a farm member.

36 As the HIV and TB test results were only given to the clients/patients and not to farmers, the farmers knew that they would not be able to use the health status of a worker or dweller in negative ways.

farmers and two social/community development staff from these farms, representing four farms in all. The second set of farms was concerned with productivity and/or reporting to foreign trade agreements on the health and social conditions of farm workers. Having healthy workers is good for production, while being able to report on initiatives that provide care for workers is good for marketing and access to markets. One of the key informants – the farm manager – was in this category.

While I cannot say what proportion of wine farms in Stellenbosch can be characterised in these ways, my sense from a broad reading of the literature is that these 14 farms tended to comprise those with better conditions for workers and their families. As such, this sample may well be skewed and cannot be said to be 'representative' of wine farms in Stellenbosch. Methodologically, however, as these farms were 'available subjects' and, as such, emerged from a 'risky sampling method' generalisation would be ill advised (Babbie & Mouton, 2001:166). In addition, information on wine farms collectively is difficult to find.[37] I have found no taxonomy of 'types' of farms against which I can assess the selection on which the Project worked – and have a dated statistic of how many wine farms and on-farm people might exist.[38] This makes modelling with this data improbable.[39]

---

37 Gaps in information in the agricultural sector in the Western Cape generally were noted in the 2005-6 budget speech of the provincial Minister of Agriculture, in which he noted the importance of '[r]eliable and timely data, together with spatial attributes'. He proposed '[a] farmer survey to determine certain attributes of our farms on a regional basis will empower our agricultural decision makers to make sound production, marketing and social responsibility … Statistics like these will enable all of us to make improved decisions and policies to the benefit of all agricultural and other communities in the Western Cape'. He allocated R60 000 for this research (WCDoA, 2006).

38 The Human Rights Commission noted in 2008 that '[the Department of Land Affairs had commissioned a research study to establish the current number of people living on commercial farms … [which] indicated there were nearly 3 million farm dwellers in South Africa.' The Western Cape had 400 000(7,4%)of these (SAHRC, 2008:29). Data at a more local level were not available.

39 The variables include various ways in which the sample of who was tested is skewed, as well as the smallness and lack of representivity of the sample of wine farms on which the Hospice worked. The farms reported on here all grew wine grapes, some made wine and they varied in size. They could be accurately categorised by those in the industry in terms of size, types of crops and business. They also all allowed the Project onto the Farm with relative ease. (Another study would focus on the motivations behind farmers' interests in welfare of their workers).

As noted, there is also a lack of contextual data (about other farms or the rural poor in the area) in which to place the findings. In addition the proportion of people tested

That being said, there is a question about what can be generalised about farms at all. In her recent work published in 2007 on the policies and trends affecting farm workers, Doreen Atkinson quoted Margaret Roberts' (1959) as having said that 'each farm is in a sense unique, so that an accurate system of sampling is virtually impossible to formulate' – and proposed that 'it is almost impossible to overemphasise the enormous differences between individual farms and between areas of the country, in a multitude of aspects of farm life'. Writing over 45 years later, Atkinson attributed the development of these idiosyncratic institutions to the fact that 'farms were never subjected to general industrial legislation, so each farmer developed a *sui generis* labour relations system'. [40] In terms of '[g]eneral claims about farm labour trends' she noted that these 'should therefore be used cautiously, as the exception is sometimes almost as important as the rule' (Atkinson, 2007:11). This was echoed by a farm-based community worker who, as a key informant, would not estimate what the overarching prevalence on farms might be as farms were too diverse and that it was '*verskillend op verskillende* places'[41] (DC).

That Stellenbosch wine farms are different with respect to HIV to farms in other parts of the country is clear. Firstly they are located in a province reported to have the lowest levels of poverty and lowest HIV prevalences in the country (see Chapter 3). In addition, although uneven and stressed, the health system in the province is reputed to be one of the most functional in

---

on each farm is unknown, given the difficulties described above of knowing the number of people on each farm.

40 While they are all agricultural workplaces in the wine industry in a circumscribed location (Stellenbosch) and are all regulated by various laws and agreements, they continue to differ in numerous ways. This can comprise who is employed permanently and casually or seasonally; who is employed from on the farm and off it; what arrangements exist regarding accommodation (for those permanently on the farms and those working seasonally); the formal rules on farms and the informal 'cultural' rules made by the community of residents; who may and does move on and off farms; and the various ways in which the farmer and various members of management influence the conditions of those who live and/or work on that farm. Doreen Atkinson asserts the uniqueness of farms (Atkinson, 2007).

41 Translation: 'Different in different places.'

the country. Secondly, distances between farms are significantly smaller, making it possible to access other farms and towns (and their facilities) considerably more easily than in other parts of the country. Finally, people living on wine farms are largely Afrikaans-speaking and 'Coloured', in contrast to the vast majority of farm workers and dwellers in the rest of the country who are 'Black African', and increasingly include people from neighbouring countries. So generalising to farms beyond Stellenbosch wine farms is not feasible.

That there is likely to be heterogeneity across wine farms is clear. This can be seen, for example in the range of key informants' expectations of the HIV prevalence on these farms. I have not understood these to be contradictions nor symptomatic of a methodological problem, but rather as reflective of diversity. That being said, and heterogeneity notwithstanding, I think there is sufficient commonality across these farms to say something about them. Their common histories of apartheid are compounded by (in many cases) the 'dop' system.[42] In addition, a swathe of new laws and regulations to do with wages, working conditions and security of tenure are affecting people who live on, work on, and manage, farms. In addition, there are trade protocols that increasingly include prescriptions about labour and social conditions as prerequisites to trade.

So while I support Atkinson's repeated advocacy for 'specific and localised research' (Atkinson, 2007:11), particularly in the context of HIV, I nonetheless do not simply support her claims of uniqueness, and propose that local research can reveal trends in a limited area. That is contained within my caution about the specific nature of HIV transmission and that care should be exercised when making generalisations about the association between HIV and social conditions.

42 The 'dop' system is addressed in some detail in Chapter 4. In brief, it was a system whereby cheap wine was given to farm workers as part of their daily pay and, on some farms, during every working day. Now outlawed, its legacy is one of alcohol dependency, continuing high levels of consumption and foetal alcohol syndrome.

Selection of people

While the Project had some control over which farms to work on, who was actually tested was determined by a range of uncontrollable factors – like who the farmer invited, which groups attended the educational session voluntarily or were required to attend, and who exercised their right to opt out of testing that was essentially voluntary.[43]

Much of the HIV testing was offered in winter (July to October), given that this minimised disruption to production on the farm. This affected the sample, however, as farmers employ many more casual (or seasonal) workers in summer in the harvesting season, both from among the people who live on the farm and from off the farm. Nonetheless, among those tested were workers who commuted onto the farms daily.[44]

As mentioned, reliable data about the demographic profiles of the residents on each farm were not available, given the fluidity of the farm population itself as well as the presence of other people living on the farm without permission. The Project therefore could not know what proportion of adults living on the farm was tested.

There were also a number of ways in which 'prevalences' *within* a farm may have been skewed, however.

- Some people will have opted out by either not attending at all or refusing to test after being counselled (although the latter was negligible).

43 Elizabeth Pisani observed that in some situations until the consequences of being found positive are observed, those at risk do not come forward. But that once they do the prevalence rates increase markedly (Pisani, 2008:170).
The Project recognised the limitations of testing being voluntary, however, given possible pressure from peers and, possibly, management.

44 There is a tendency to think that people who live off farms are casual workers. This is increasingly not the case as more and more permanent workers commute daily to work on farms in the context of many farmers reducing the number of people who live on their farms. Of those who tested who lived off farms, a third (26 of 67 or 38,8%) said they were permanent workers.

- The people who lived on the farms who tested were largely workers. A much smaller number of dwellers was tested. The inclusion of more dwellers may have produced higher prevalence, given that they comprise largely unemployed or partially employed women who may be more socially mobile given that they are not working full-time on the farm.
- The women who tested were older than those normally tested (e.g. at antenatal clinics) – with women in the age group 36 – 45 being most highly represented. Women in the 'high risk' category (aged 15 to 25) were poorly represented, at 16,5% of all the women who tested.

As the number of adults on each farm was not known, the proportion of those who tested cannot be known. The results are therefore only of those who tested, not of those who lived on the farm and, as such, cannot be said to be prevalences. [45]

Given the various forms of skewing, the Farms Project felt that the HIV infection levels being found on these 14 farms may be an under-representation of the prevalence in the farming community more generally. Not only might the Project not be reaching those infected living on farms, but the findings show that a higher proportion of the people who tested HIV-positive lived off farms. In addition, the Hospice staff in the field (including those working off farms) were finding higher levels of HIV prevalence in certain rural areas, reportedly characterised by poverty, unemployment, alcohol abuse and prostitution.[46] So the results on these farms were not thought to be conclusive evidence that on-farm communities were not worthy of attention vis-à-vis HIV infection.

45 The data were also not modelled to provide this measure.

46 For example the Hospice nurse reported that there are high and increasing levels of HIV infection in the Klapmuts area. The statistics from the Hospice's in-patient unit echo this.

Quality of data

The statistics from the first year of the Project's testing for HIV on farms was collected manually in the field and entered onto an Excel spreadsheet in the Project's office. The reliability of these statistics is subject to the usual vagaries of imperfect collection in the field (Pisani, 2008:84). This was compounded by the novelty of this kind of work for the Hospice staff and the incremental development of data collection systems in the first year, which included adding some categories, resulting in some incomplete data sets. These have been followed up with each farm where possible, but as those tested are not named in the Project's records and there are ethical implications relating to some questions, this has not always been possible. Since the initial collection, all data has been audited and standardised, using as many source documents[47] as possible to clean and complete the data set.

Summary

This section has identified cautions about the data from HIV testing on farms, and suggests the possible effects of this. It does so recognising that data are often subject to frailties of various kinds (see Chapter 3) and uses them in the light of the declaration of these cautions. Were this data inconsistent with the other data included in the triangulation, the various skewings might have become material. As this is not the case, however, these data are used as one of the sources of data in the triangulation to find out what can be known about HIV prevalence on farms.

47 These include the Department of Health's consent form (which clients sign to consent to be tested for HIV) and the Farms Project's own data collection form (a summary of the profile of the client), as well as a number of registers required by the Department of Health – namely the VCT register, the TB Suspect Register and the TB investigations register. Forms with test results from the National Health Laboratory Services (NHLS) were also used.

2.7 SOURCE 4: KEY INFORMANTS

Twenty key informants were interviewed for this study. They comprised farmers, doctors and nurses, social and community workers and staff working for non-profit organisations. Farm dwellers were neither interviewed nor consulted – and their voices are reported from surveys and research undertaken by others.

2.7.1 Farm dwellers

My choice not to access the views of farm dwellers for this study, although potentially controversial, was made for two reasons. (I have excluded the mention of social desirability bias which, while possibly particularly powerful here, is a factor in much qualitative data collection.)

Firstly and most importantly, the high-level nature of the question meant I wanted the opinions of people whose institutional expertise in HIV/AIDS and/or knowledge of the community would mean that they were likely to be informed at that level. I did not want individual anecdotes so much as an overarching view of prevalence within a population group. It would be unusual for a member of the researched group to have this slightly abstracted view of the amount of illness beyond his or her own location in that community.

Commenting on this kind of exclusion of those affected or infected, Westerhaus notes that '[w]hile healthcare workers, academics and government leaders may be positioned to make informed observations about the connections between poverty, violence and HIV/AIDS, it is only patients living with HIV and AIDS who can offer the lived experience of becoming infected and living with the illness' (Westerhaus, 2007:600). This is exactly the point. In this study it is these connections and informed observations that are sought, rather than the lived experience of those embedded in the conditions being studied.

In its extensive 2006 study of HIV on farms, the Centre for Rural Legal Studies (CRLS) warned that '[r]espondents were being interviewed about issues about which they knew little', and they cautioned the interviewers to be 'very disciplined in not "feeding" the respondents answers, and allowing the farm workers to speak for themselves' (CRLS, 2006a:38). In her Masters thesis for which she interviewed dwellers who knew her well, Leila Falletisch pointed to a related but different kind of difficulty of accessing opinions from farm dwellers. She thought that their knowledge was limited by 'social isolation and limited life experiences outside of the farm'. This was both material and conceptual as they battled to 'express opinions or ideas on how things could be outside of farm labourers' experience' (Falletisch, 2008:17).

The effects of stigma and discrimination associated with HIV on people's opinions was also raised by the CRLS, who observed that '[d]ue to the stigmatisation of the epidemic (not least by our own government), people might feel "marked" for the gossip mill by being interviewed on HIV/AIDS. Stigmatisation feeds off fears of dismissal, and loss of home and community, thereby effectively driving any knowledge related to HIV/AIDS underground' (CRLS, 2006a:38).

The objectivity wanted for this study, then - which is more likely to be found in formal, and less embedded, expertise - would be undermined by the more subjective opinion produced through gossip and conjecture usually associated with stigma and discrimination. Even if methodologically desirable, then, the process of accessing information about HIV from members of on-farm communities would be difficult and anecdotal estimates of levels of illness were likely to be highly unreliable.

In conclusion, this study is not an attempt to assess what the HIV prevalence on farms may be through asking as wide a range of people as possible. It is about what can be accessed through combining various authoritative sources of data.

That being said I have occassionally included the views of members of on-farm communities in footnotes, to illustrate points made more conceptually in the text. I have accessed these from the publications whose cautions about veracity have been cited above. These include the study on HIV on farms in the Eden district of the Western Cape undertaken in 2005, in which the Centre for Rural Legal Studies accessed 555 farm dwellers and 33 managers/farmers through semi-structured questionnaires and focus groups,[48] and the 2007/8 Masters thesis of Leila Falletisch in 2008 in which she interviewed ten adults (and ten children) over a five-year period on the farm on which she worked as a social worker.

2.7.2 Selection

The 20 key informants interviewed for this study were selected through purposive sampling on the basis that they could be expected to know about HIV or public health issues in the Western Cape, ideally relating to farms. Their expertise was institutional, such that their occupations, professional training and location of their work positioned them to have informed opinions relating to the topic. In selecting this approach, I wanted to hear from those considered experts and those whose opinions had authority. I thought these kinds of informants were the most likely sources of information about possible HIV prevalence on farms – and that each would know something about various social conditions which may be associated with HIV transmission on farms. While I did not expect them to know what the prevalence was, I was asking them to make an educated guess.[49]

48 *Straight talk. Perceptions and experiences of HIV on farms in the Western Cape* was undertaken over ten months in 2005 by large and suitably diverse researchers.

49 Joel Best argued that there is nothing wrong with making an 'educated guess' as long as it is stated that that is what it is, and is not elevated to the status of a 'fact', either initially or through repetition (Best, 2001:38).

Access to key informants

I started by contacting those who I thought would be particularly thoughtful and informed, with a parallel concern to obtain a large enough variety of views. The ultimate selection of informants was partly shaped by ease of access. Where people were not available despite pursuit over a number of weeks through various media, they were excluded.

Key informants were accessed through three routes – through contacts made through working at the Hospice; through contacts made during a previous freelance assignment with the Women on Farms Project (an NGO working on farms in Stellenbosch and beyond); and a few were accessed through personal links. As a result, I already knew about two thirds of the key informants quite well by the time I interviewed them. I knew quite a lot about those I had not met. There is little doubt that my work location facilitated access to some of these informants, and that I would not have obtained access as easily as an independent researcher. Without exception, people were generous with their time and interested in what I was doing.

2.7.3 Profiles of key informants

I finally accessed and interviewed 20 people, and had as long a list again of people who could have been interviewed.[50]

50 In a larger study I would have included three other sets of respondents. The first would be funders and policy makers, who shape the context in which health services and projects are implemented. The second would be people who represent the beneficiaries, like trade unionists (particularly a union which works specifically on farms in the Western Cape). And thirdly I would have interviewed a local government councillor who runs a Farms Desk focussing on the needs of the farming community.

Demographic profiles

The majority of respondents were between 30 and 50 years old with two being between 50 and 60[51] and two over 60.[52] In terms of formal education, all except one respondent[53] had completed school and the majority (17 of 19 or 89%) had post-school education, be this vocational (specialist nursing - 3 of 19, or 16%) or a university degree (14 of 19, or 73%).[54]

Three quarters of the people interviewed were classified 'White' and five 'Coloured'. Nobody classified 'Black African' was interviewed, reflecting the legacy of the racial history of the Western Cape. That the farmers were all 'White' men and that the caring positions (farm-based social/community development staff, and the Hospice and NGO staff) were all occupied by women is also symptomatic of our broader society and history. It would be unusual - and artificial - had these not been reproduced in the selection.

Table 1: Gender and 'race' profiles of key informants

	Gender		'Race'			
	Men	Women	'Coloured'	'Black African'	'White'	TOTAL
Farmers/ managers	3				3	3
Social development on farms		2	1		1	2
Health experts	2	3			5	5
Hospice – medical		5	2		3	7
Hospice – managers		2			2	
NGO staff		3	2		1	3
	5	**15**	**5**	**0**	**15**	**20**

51 One farmer and a farm-based community development manager.

52 Both are women directors of NGOs/NPOs.

53 The lay health worker in the Hospice had completed ten years of schooling and was recruited from among the manual staff in the Stellenbosch hospital.

54 Apart from the medical degrees (including one nursing degree), the types of university degrees were diverse.

Some of the perceptions and opinions were clearly informed by the class/'race' and/or gender of the respondents.[55] While these are undoubtedly material in a context as deeply inscribed as South Africa is generally and the farmlands are in particular, I do not comment on this, as noted above.

Vocational profiles

Vocationally there were

- five people in authority on farms (two farmers, one farm manager, two social/community development staff);
- five senior staff members of NGOs working on farms;
- six doctors (working as medical practitioners, managers in the provincial health department, and/or academics/researchers); and
- three nurses and one lay health worker (all from the Hospice).

The profiles of all key informants are given in Appendix D. I have given each a shorthand title or descriptor – like 'doctor-researcher', 'NGO director' - listed alphabetically in Appendix E, and use these in the text, rather than their names. While slightly cumbersome, I intend this to show the diversity of opinion within and across vocations or sites. Although simply characterised in this way, key informants often occupied more than one vocational (let alone non-vocational) 'identity'. Some respondents were purposively selected following my knowledge of their straddling a number of these bases. For instance I knew that the public health professor had been on the board of one of the Stellenbosch NGOs and that the Chief Medical Officer of the West Coast-Cape Winelands provincial health district was also a farmer. But I did not know that the two farmers had been members of NGO boards - nor that one of the NGO respondents had spent 30 years in the provincial health service, where some of the Hospice sisters had also worked. These multiple vocational locations broadened and deepened the base of their expertise and strengthened their roles as experts.

55 That being said, there was considerable divergence from stereotypes and I am sorry

Authority

Nobody interviewed was simply an expert in HIV prevalence in the winelands. Rather they were all positioned to make an educated guess, which is what I asked them to do – and these necessarily included an element of speculation. While some were specialists in the social conditions that are associated with HIV infection in the area, their answers were drawn ultimately from a combination of their professional and individual experiences.

While the broad bases of their expertise reached beyond their occupational titles, their authority and possible influence can be broadly clustered as follows.

- The employment titles of the first group provide public recognition of their expertise. These ten people were either managers within NGOs/NPOs, and/or were academics/researchers and medical doctors, be they practitioners, researchers or health managers.
- The second group were the clients of NGOs/NPOs. These were two farmers, one farm manager and two of their social/community development staff, all of whom had the authority over whether or not services reached the beneficiaries.
- The third group's influence was largely derived from experience in the field which, in this study, comprised five staff from the Farms Project at the Stellenbosch Hospice.[56]

(Some fall into more than one group – like the Farms Project leader who is a doctor - but here have been more neatly allocated.)

not to be able to have presented this here.

56 The hospice manager and project leader are included under the first ten, as in terms of authority, they are leaders within NGOs.

The bases of authority in professional expertise and experience were unevenly distributed across respondents. While the authority of academics, researchers and doctors was largely based on their academic and professional expertise, that of farmers and their staff was derived both from professional expertise as well as experience of living and working in the contexts being studied. The authority of NGO staff (including the field staff from the Project) was almost entirely experiential. (Those respondents occupying a number of roles, accessed authority in more than one of these ways.)

Similarly authority based on knowledge and experience of the material and social conditions on farms was also distributed differently. Some of the key informants were embedded in these conditions (farmers and their social service staff – and some informants who happened to live on farms); some had access to them (several doctors and NGO staff); while a few were entirely distant (researchers, medical managers). Only two respondents (both doctors)[57] did not have any (professional) experience of farms in the winelands at all.

These diverse authority bases - which include people with different distances from the subject, both geographical and conceptual - were intended to enrich the range of responses as well as minimise skewing among observer responses, although it will not have done so scientifically.

Occupational roles and interests

As said, the bases from which key informants were able to respond extended beyond job titles (on which they were primarily selected). Despite Figure 1 showing that 75% of the respondents (15 of 20) were in management positions, this seniority (and the social authority accompanying it) is considerably enriched by the range of experiences, interests and roles also present in their profiles.

---

57 The doctor-researcher (an expert in gender and health) and the doctor-manager (in state HIV/AIDS management).

To illustrate this, I have tabulated the roles contained within occupations, selecting those that each informant named or seemed to play, either concurrently or historically. I have also tabulated their interests as they relate to this study. Together I hope to show the richness of expertise which might have informed their opinions.

So, for example, while the first row in the figure below shows that three people were interviewed primarily as farmers, I have allocated as *roles* three farmers but also three managers, as they all did management work too. On the same line I have said that two farmers were involved in community development work, as two of the three farmers were very actively involved in the social wellbeing of those who live on their farm and beyond. Numbers in brackets are people who had a partial or historical experience of the role or interest. In this case one farmer had partial expertise in HIV, while two are well-versed with issues relating to alcohol abuse.

While this tabulation appears quantitative, it is not intended to be read this way as the weighting of each cannot be known. Rather, it is intended as a visual portrayal of the rich spread of roles and interests which live within the otherwise simple vocational title of 'farmer' or 'doctor'. Vertical totals therefore show how many key informants might have brought the experience or authority of a certain role or interest to their answers. So, for instance, three quarters (75%) of informants had an interest or involvement in HIV/AIDS, comprising 60% with a special interest and 15% with a partial interest or involvement. Just under two thirds (60%) did some work in community development and similarly 60% were health practitioners of some kind.

That being said, while the multiple bases from which people undoubtedly spoke contributed to the quality of the answers, the patterns and weightings are unknown and necessarily uneven. They are not balanced through any sampling and the unstructured interview allowed for personal emphasis to emerge as the informants chose.

Figure 1: Roles and interests of key informants

		Roles					Interests		
	TOTAL	Farmer	Manager[58]	Academic/ researcher	Health practitioner	Social/ Comm. Dev	HIV /AIDS	Alcohol abuse	Women
Farmers	3	3	3	0	0	[59]2	[60](1)	2	0
Farm - soc dev	2	0	2	0	0	2	[61](2)	[62]1(1)	0
Health experts	6	[63]1	4	[64]4	[65]3 (3)	2	6	[66]1	[67]1(2)
NGOs	2	0	2	[68](1)	[69](1)	2	1	1	1
Hospice – medical	7	0	2	[70]1	[71]5	2	5	1	0
Hospice – managers		0	2	0	0	2	0	0	[72](1)
	20	4	15	5(1)	8 (4)	12	12 (3)	6(1)	2 (3)

58 By 'manager' I mean people who manage resources, people and processes. This is distinguished from practitioners who do things, provide services etc.

59 Both farmers (compared with the farm manager) are actively involved in community development on their farms and in the broader community. They have been involved in setting up sports fields, crèches, libraries, and both promote responsible use of alcohol and health care generally. Both have been members of NGO boards.

60 One farmer was on the board of an NGO which intervenes in HIV/AIDS in Stellenbosch, including on farms. In addition he has had two lay health workers on his farm for over ten years, whose training has included issues relating to HIV.

61 Both social/community workers are aware of, and responsive to, issues relating to HIV/AIDS - but are not experts per se.

62 The social worker had recently completed a Masters dissertation on the effects of alcohol on people on the farm on which she worked (Falletisch, 2008).

63 The Chief Medical Officer of the West Coast-Winelands district is also a farmer.

64 Four of the doctors are engaged in formal research - at the University of Cape Town's Medical School, the Medical Research Council, and Be Part Community Research Services (trialling microbicides).

65 Three of the doctors are not currently practising as clinicians.

66 The professor of Public Health was a founding member of the NGO Dopstop which addresses issues of alcohol abuse and foetal alcohol syndrome.

67 The doctor at the Medical Research Council is the Director of the Gender & Health Research Unit. The two doctors who are part of the microbicide trials are working largely with women.

68 The Women's Health and Empowerment Project co-ordinator engages in ongoing research – most recently assessing health disparities among farm women using a rights-based approach.

69 The director of the NGO Dopstop was a nurse for 35 years.

70 As a medical doctor, the leader of the Farms Project is also the Principal Investigator on microbicide trials at Be Part Community Research Services.

71 This comprises one doctor, three nursing sisters and one lay health worker.

72 The Farms Project co-ordinator was particularly aware of gender issues – specifically violence and abuse - and the way these affected women living on farms.

The conclusion here is not that all information about HIV/AIDS is simply perceptual or provisional, so much as that people and organisations sometimes rely on their commonsense understanding of the situation - and act on it – given their own capacities and the state of information about HIV/AIDS.

Presentation of responses

Generally people were most comfortable talking about their own areas of practice and experience, and were more tentative when they were asked to estimate something. As no-one was an expert in every aspect of the questions, key informants were invariably asked for their opinions on aspects in which they were not expert. Only three people spoke with unambiguous certainty most of the time (DrRJ, RJ, LH). The others – including doctors and researchers – either expressed tentativeness through directly saying they were not sure, or through speech mannerisms.[73] Hesitation may have been partly the result of their being asked to conjecture about an issue and context which is both serious but also, at many levels, unknowable. Being in positions of authority may have made conjecturing more risky for some - or they simply knew enough to be uncertain.[74]

This sits at odds with the certainty one might expect from 'experts'. Suffice to say that this emphasises that some (expert) respondents felt the terrain was complex and/or that they were not fully informed. It is important therefore, that the responses of (most of) the key informants be read in this slightly more conditional way.

---

73 Three farmers (TR, SV and NG) frequently qualified what they said with 'but I may be wrong' and 'this is just my idea'. Two who had worked on NGO boards commented 'I am not educated in it, I am not trained to be in support' (saying he was not the best person to provide support to people who are HIV positive) (SV) and 'I didn't contribute a lot during that period [when he was on the NGO board] because I knew that I was not well-informed [about HIV] myself' (TR). Three of the Hospice staff were also tentative, equally qualifying their opinions.

74 I understood three of the four informants' choice of the HIV prevalence being 'the same as average' on farms as exactly about not wanting to hazard a guess (LH, AB, EF).

2.7.4 The interviews

The 20 interviews were semi-structured, largely because I did not want to foreclose on respondents' raising issues which a more structured process might preclude. While I used a basic guide of what needed to be covered in each interview (Appendix F), I customised the schedule for each, given what I knew of the respondent's interests and expertise. Near the end of each interview I checked that the standard issues had been addressed and where they had not, I asked direct questions.

Contradictions

The semi-structured nature of the interviews allowed for a dialogue and a deepening of understanding of what was being said. I also interrogated assumptions about behaviours and social conditions and their association with HIV transmission – and persistently questioned claims of causality. Where contradictions arose I usually queried these, as a result of which some people realised that their earlier remarks could not be valid and consciously changed their minds. Where they did not do so, I did not pursue this.

For instance:

Respondent:	'The community was closed before all this casual labour started coming onto farms. So the levels of infection are rising because of these people coming onto farms.'
Interviewer:	'How is casual labour linked to HIV?'
Respondent:	'Well a lot of the people who come onto farms are Black (African) and the infection levels are higher among them. So they bring it onto the farms.'
Interviewer:	'So you are saying that those coming onto farms are infecting those who live there?'
Respondent:	'Yes.'
Interviewer:	'If they are coming on and off farms on a daily basis, when are they having sex?'
Respondent:	'Hmmm – I'm not sure…..'

Interviewer: 'Most of the people who live on farms are 'Coloured' and the people who are bringing the infection are 'Black African'. Do you think that Coloured people are having sex with 'Black African' people?'

Respondent: 'No – it is very unlikely.'

Interviewer: 'So how do casual workers, who commute onto farms daily and who are 'Black African', bring infection onto the farms?'

In this composite example,[75] the contradiction within the argument was clear.[76] But I did not probe another example - where casual sex associated with drunkenness was seen as a route for HIV transmission - despite its including the idea that casual sex was a possible transmitter of infection, as its internal logic included the belief that this was the case. These, then, are examples of the positivist approach in which the respondent's logic, rather than why they thought what they did, was the focus of my probing.

In some cases of seeming contradiction, it is possible that both opinions co-existed, and they were not contradictions. For example the hospice manager offered two parallel opinions: one which argued why the prevalence on farms was higher than average and the other why it was lower. One farmer thought that the prevalence on farms would be higher than average (TR) but also invoked the idea of farms as closed communities. My sense was that he knew he had low levels of HIV on his farm - which is a relatively coherent community – but in commenting on a range of imagined farms, he thought HIV on farms was generally higher than average. In this way, opposing things may be true for different farms and people/groups, illustrating the heterogeneity across farms. They may also be the product of respondents laying out a set of ideas which they had not previously synthesised into a position – and realised the contradictions in this process.

75 This is a condensed summary of the logic of the argument – not a transcript from an interview.

76 This is not to say this is not a route for infection at all – as another respondent notes that there is the possibility of violent sex taking place during the day. There may also be consensual relationships between on- and off-farm workers – including across 'race'.

Findings that go beyond, or contradict, some of the data from key informants, does not invalidate their perceptions, nor does it indicate a lack of integrity in the inferences drawn. Rather it recognises that social conditions and causal relationships are often infinitely more complex than they seem. Westerhaus concludes that '[t]he desire to generalise too easily lures one towards uninvestigated, incomplete conclusions' and that '[m]aintaining honest integrity towards local context offers a means of keeping us from being led astray' (Westerhaus, 2007:603).

This study cannot produce irrefutable 'hard fact' about HIV and associated social conditions on Stellenbosch wine farms. The diverse views presented in this study - although not engaged in contestation - testify to the variety of information and perceptions available from which to make meaning. At best I hope to make preliminary findings and identify factors and trends to consider regarding HIV prevalence among people who live on wine farms in the Stellenbosch area. While there is some common ground in the findings, there are also quite marked divergences, as reported on in chapters 3 and 4 below.

2.8 LANGUAGE AND STYLE IN WRITING

2.8.1 Use of 'racial' terms

The racialised history of South Africa generally, and of life on farms in particular, makes 'race' an indelible part of the context in which the Farms Project was implemented. While I understand 'race' as a social construction, South Africa has used this very powerfully to oppress and disenfranchise the majority of South Africans, the lasting effects of which are painfully evident.

I will therefore use 'racial' classifications as it would be denying considerable aspects of the social conditions if this were simply ignored. I will use the terms 'Coloured', 'White' as used under apartheid but, given the contested nature of who is an African as well as of who is 'Black', I prefer to use the term 'Black African' rather than any of the terms used at various times under apartheid.

2.8.2 Manner of reporting

The presentation of interview findings is peppered with phrases like 'his/her perception is'. This is used to accurately report that the findings being used as data are indeed perceptions, and is not to infer that the respondent's ideas have lesser status than a 'fact', nor to diminish the view being reported. Where I do quote people verbatim, I do so in order that the phrasing can be seen by the reader for what it is – rather than the more concealed process of my summarising.

2.9 ETHICS

Ethical approval for this thesis was obtained from the Board of the Centre for Social Studies Research (CSSR) at the University of Cape Town in February 2008.

2.9.1 Permissions

The Stellenbosch Hospice

As noted above, an understanding about access to the Project and its data was part of the agreement under which I worked at the Stellenbosch Hospice at the outset. Access to staff for interviews was freely given but I have nonetheless asked permission for the use of the statistics, again given freely.

PHRU (PEPFAR/USAID)

The Perinatal HIV/AIDS Research Unit (PHRU) - through whom the funding from USAID and PEPFAR was made available to the Farms Project – gave permission[77] to reproduce the initial data from the Farms Project. I am grateful to them for this.

Key informants

I gained verbal permission from all key informants to use the data from the interview and to quote them directly. Four people were given transcripts of their interviews, to check their accuracy.

2.9.2 Confidentiality and anonymity

Each interview began with my describing the study I was undertaking and the purpose of it, followed by a request for permission to record the interview and for permission to quote the interviewee. I asked whether they required anonymity and how they wanted to be named (in terms of their occupational role).

All key informants gave verbal permission to be quoted and named. Everyone spoke on the record and no-one required that their contribution be reported anonymously. The interviews could not be confidential as this would have defeated the purpose of choosing people whose opinions have authority. Brief profiles of each informant are given in Appendix D, and descriptions of the NGOs from which some come, in Appendix G.

77 Per Helen Struthers, Programme Director of the Perinatal HIV Research Unit, November 2008.

The farms whose data is presented following HIV testing there are not named for a number of reasons. Firstly they have not been asked for permission to do so in this way – but more importantly, test results are only given to the person who was tested. While farmers are sometimes given an indication of the proportion of people found to be HIV positive, neither the farmers nor their support staff is given any information about individuals or their HIV status. Sometimes exact proportions are not given either, in cases where percentages were so low and the number of people tested so small, that it made conjecture easy.[78] Statistics are cited here, therefore, without any links to the farms on which the Project worked. The Project has a list of these, however, all of which are wine farms in the Stellenbosch area.

2.10 RELIABILITY, VALIDITY AND GENERALISABILITY

The question being addressed in this study arises from the recognition of the limitations of generalising, so the entire study addresses the importance of local-level data. That being said, this chapter has commented on the extent to which some general statements can be made.

Issues of reliability and validity are also addressed throughout chapters 3 and 4, particularly in the critique of data and its sources. The methods described above were chosen essentially to ascertain the reliability and validity of what can be actually known.

78 This issue of disclosure – and the related concerns about stigma and security of tenure and employment – provides an ongoing challenge for how to inform clients of some of and also poses a challenge regarding the provision of care and support to on-farm patients.

3. DIFFICULTIES OF KNOWING

This chapter begins by discussing the way in which modestly-resourced local-level organisations might select and use information in their planning processes, followed by the challenges posed to them by the nature of HIV-related ideas and information in particular. The sources of data on HIV prevalence are then reviewed and figures potentially relevant to those living on Stellenbosch wine farms are identified.

The chapter ends noting that there is no quantitative prevalence data for this sector, opening the way for the triangulated investigation into what can be known about HIV - using a range of methods, measures and data - in Chapter 4.

3.1 THE VALUE OF PREVALENCE DATA TO LOCAL-LEVEL PROJECTS

HIV prevalence is a measure of the proportion of people in a designated group who are HIV positive at the time the measurement is taken (Zweigenthal et al, 2009:95). The value of prevalence data lies in their ability to estimate the extent of current infection in a designated geographical area or population group and to show changes in the pandemic over time, where data is suitable for this purpose. In most cases, prevalence figures are modelled from the HIV status of a sample of people in the group being studied. Modelling is also employed to estimate projections of the extent and location of future infection levels, based on current data and articulated assumptions.

Knowing something about HIV prevalence and about whether it is increasing or decreasing can be important for a number of reasons, among which is that it can help policy makers and planners allocate resources appropriately. They can also help to identify the areas in which infections levels may be higher than in others. But this relies on the data being suitable and reliable – factors that this chapter will investigate.

Prevalence measurements are limited in a number of ways. Firstly they mask differences within the statistic by not being able to provide information about the conditions and distribution of infection that make up the measurement.[79] The importance of identifying infected sub-populations within a prevalence figure is separately reflected by Joel Best and epidemiologist Elizabeth Pisani who note that social problems are invariably patterned and do not apply to everyone; that HIV lives in sub-sections of populations. Rather than suggesting that information is simply not available at that level, they both allege that the identification of sub-populations with higher levels of infection is sometimes obscured as a result of interests. Joel suggests that making it seem as if an issue affects everyone effectively captures everyone's attention (Best, 2001:56), while Pisani confesses to having been part of the industry that perpetuated the message that 'AIDS affects everyone' and mourns the waste of resources that this has incurred. After extensive work with specific focus groups in Indonesia, she argued strongly for identifying who might be in infected and who is not, in order to focus resources on those who need it (Pisani, 2008:22,26).[80] Noting the potential of prevalence data to 'to mask epicentres within the [Western Cape] province', Shakih et al note underscore the importance of 'expanding the surveillance systems to detect

79 Commenting more generally, Susan Hunter noted that the underestimation of prevalence 'is that HIV/AIDS numbers are so difficult to interpret and project' and also that 'surges can be delayed for years or hidden in national averages' (Hunter, 2003:37).

80 Noting that epidemiologists are 'snobby' about qualitative research' believing that as 'soft' science it can be 'dismissed with a wave of hand [as] interesting but not statistically significant' epidemiologist Elizabeth Pisani notes that ignoring local level details obtained through things like talking to people in various ways is ignored at a project's peril (Pisani, 2008:49&314).

heterogeneity sub-provincially, in order to link with the local-level planning and resource allocation' (Shaikh et al, 2006:543).

Secondly measurements of prevalence which are robust enough to be compared over time mask the movement within the statistic. Deaths and new infections are often cited here, but as Beaglehole et al (1993) suggest below, changes may be attributable to other factors altogether like, for example, the movement of people in and out of the area or group.[81] As shown in the example below, a declining prevalence may mean a number of things - which may include that people are staying alive on treatment and there are very few new infections or, in contrast, that there are high rates of mortality and correspondingly high rates of new infections.

Where consideration of mortality and incidence (new infections) data are important, this is confounded by the difficulty of obtaining this data. For instance, while incidence has been reported in the HSRC's three-yearly household surveys (Shisana: 2005:19),[82] more regularly-produced data are based on proxies (e.g. new infections among 14 – 19 year-old women). While research is currently being undertaken into ways of modelling incidence,[83]

81 Commenting that it was difficult to make sense of the HIV prevalence statistics partly as 'that information is not disaggregated – it's lumped together', the NGO co-ordinator of a women's farm health project conjectured that 'people blame the Eastern Cape because … there is a myth that it's Black people. But we do see an increase, not from just in the Eastern Cape but also people from the north coming in - and I ask myself "Why? What is happening there? What are they expecting to find here? What are the statistics? What does it look like? Is it people coming home sick in KZN? Is it people going home sick to Limpopo from the mines?" So I'm not sure what these statistics really mean – the antenatal statistics' (GR).

82 By its own account, the HSRC's 2005 household study provided the first nationally representative incidence estimates (Shisana et al, 2005:47).

83 Specifically at the time of writing, this is being undertaken by John Hargrove and others from the DST/NRF Centre of Excellence in Epidemiological Modelling and Analysis (SACEMA) at the University of Stellenbosch.

Eleanor Gouws has noted the cost, logistical and ethical complications entailed of doing so, as this can entail 'following negative people until they seroconvert' (Gouws, 2005:68).[84]

Accurate mortality data is also difficult to access as many death certificates do not include AIDS as a contributory cause of death,[85] partly due to the stigma associated with it (Gouws, 2005:67). While mortality data have been published for many years, missing information about underlying causes of death are likely to result in underestimates about HIV-related mortality.

Being high-level snapshots of current levels of infection, then, prevalence data are importantly complemented by other data. Finding out what can be known about prevalence in of such a sub-population – farm dwellers in the Stellenbosch area - is the focus of this study.

3.2 ORGANISATIONS AND INFORMATION ON HIV/AIDS

Most organisations and projects need a range of data and ideas to inform their plans. Where the intention is to offer services to communities affected by HIV/AIDS, organisations might want to know the extent and nature of the illness in that local context and the way in which social conditions intersect with conditions and attitudes associated with HIV infection. Failure to offer services in ways suitable to the local context have resulted in many well-intentioned (and sometimes elegantly-designed) projects not

84 Eleanor Gouws lists five indirect methods of modelling incidence levels which entail using mathematical and statistical methods, 'many of which use cross-sectional age-prevalence data' – and many of which rely on the prevalence data from the antenatal surveys which are critiqued in this study. She notes that direct data may become increasingly available through prevention trials, quoting a microbicide trial in KwaZulu-Natal (which entails working with a cohort of women over time) (Gouws, 2005:68).

85 A mortality report published by StatsSA notes that '[m]any HIV deaths are registered as being due to some other cause of death. This problem is aggravated by the fact that HIV is not a reportable disease in South Africa, unlike some other communicable diseases. Based on the age pattern of death rates by sex, it is likely that a high proportion of deaths registered as due to parasitic diseases, parasitic opportunistic infections, certain disorders of the immune mechanism and maternal conditions … are actually caused by HIV' (Anderson & Phillips, 2006:xv).

achieving their aims,[86] and evaluations of projects frequently point to the unfounded assumptions, unrealistic aims and/or inappropriate interventions outlined in the design of the project, some of which are imposed on local contexts in the name of 'rolling out' larger projects.

Westerhaus comments that '[w]hen it comes to actual HIV prevention projects, it is as though we are operating out of the belief that a grand, unifying theory of HIV transmission and prevention exists. This assumption has crippled HIV prevention efforts, policy and implementation over and over again. Programmes and policies moulded in this light have ignored their greatest resource – connection with and reflection upon local communities struggling to counter HIV's intrusion upon their lifeworlds.' As an anthropologist, he asserts that '[t]his is the precise space for anthropological analysis, which is seemingly dismissed too often as subjective and deviating from the scientifically accepted charts, graphs and epidemiological evidence' (Westerhaus, 2007:604).

While anthropological enquiry is not the only route to obtaining information,[87] there is nonetheless a strong sense that local information about the way HIV/AIDS manifests in a community is foundational to designing interventions that have a chance of making a difference.

86 For example, designing an intervention intended to minimise the chances of infection of young women in poor rural communities would require knowledge about their social, economic, religious, educational and recreational activities and contexts, for instance. There would be little point in offering a didactic programme on sexual abstinence, for instance, where many young unmarried women already have partners and/or babies and high social status is accorded to these; where world views and options are limited and sex at a young age is socially sanctioned, even promoted.

87 An example of a relevant anthropological work is Vivienne Ward's MPhil dissertation on *Networks, NGOs and Public Health: Responses to HIV/AIDS in the Cape Winelands.* (*M*arch 2007).

That being said interventions are difficult to get 'right', given layers of personal and social factors that exploit existing, and produce new, social fissures – and, often, inequalities - in which transmission can flourish. An example is the five-year case study in the Carltonville mining community, fully outlined in *Letting them Die* – and subtitled *How HIV/AIDS prevention programmes often fail*. Arguing for a community development approach rather than 'individual-level interventions', Catherine Campbell nonetheless urges that 'those involved need to be realistic about the complexities of implementing these approaches, and the time they might take to produce measurable results' (Campbell, 2003:20). She cites, for example, the ways in which 'gender and poverty facilitate HIV transmission and undermine the effectiveness of HIV-prevention efforts' pointing to difficulties faced by local community efforts in trying to ameliorate 'the impacts of macro-social problems' and 'non-local social inequalities'. She also describes the 'possibilities and limitations of local community strategies to bring about behaviour change in the absence of long-term social development policies and interventions' (Campbell, 2003:16-18).

The literature is also replete with the lessons and skills needed for offering prevention and treatment programmes – many of which promote local customisation. Despite this, however, the challenges of designing appropriate programmes remain, even though local-level projects are arguably the best placed to get it 'right'.

There are a number of reasons why organisations do not access the information they need for good project design, despite recognising the value of doing so. Three of these, typically intrinsic to a modestly-resourced local-level organisation, are reviewed here, if only to show that not all obstacles lie in the accessibility or veracity of the data itself. The three factors are to do with organisations' capacities, interests, and their need to survive.

Capacity

Many modestly-resourced projects simply lack the capacity – in terms of skills, time and/or money - to be able to access or use information in more than the most straightforward of ways.[88] This is particularly the case where research is understood to be more than the gathering of supportive material and includes more extensive searches and the weighing of competing ideas or data, asking questions that probe issues and analysing more complicated texts. Skills to do this are not often found in modestly-resourced organisations, few of which have dedicated researchers.

Where staff members do have research skills, allocating time to undertake research in addition to their operational work can be a luxury which most cannot easily afford. Commissioning an external researcher is possible where funds are specifically allocated, but funding agreements invariably begin with the implementation of a project which has already been scoped and planned as presented in the funding proposal. Where this is not the case, the research may be determined by the interests of the funder.[89]

There are also capacity issues entailed in using statistics, however, with the default being the use of these data at face value. Best suggests that '[w]hen people do not understand a statistic – how it came into being or what it means – they can make honest errors' – as, I suggest, some do in citing antenatal statistics as if they are for the population at large. 'They may try

88 For example, an introductory guide for advocacy work intended for people working at community level in southern Africa noted that '[m]any advocacy organisations have neither the resources nor staff time to do the research necessary to support their propositions and arguments' (Sharma, undated:57).

89 In my professional experience, the European Union (EU) particularly commissions extensive research ('appraisals') before funding some large programmes. These assessments are large scoping exercises and are framed by the area being funded by the EU. In the case of the Farms Project, two months was allocated for research prior to the start of implementation. Crucially this was framed by the agreement with the funder whose interest was HIV/AIDS - which tallied with the Hospice's commonsense understanding of HIV being an issue on farms. The question about prevalence not only did not arise, but might have risked unpopular findings.

simply to repeat a number, but fail, inadvertently transforming the figure's meaning' (Best, 2001:93). In addition, respectable reports in which statistics are presented usually include cautions regarding any deviant findings. Not only are non-specialist users unlikely to read these (usually in a preliminary methodology section), but extracts from reports are often published without this commentary.[90] While there are users alert to the importance of these cautions[91] and provisos (like TAC, for instance)[92] data are invariably used uncritically.

Interests and survival

Investing resources in research is only worthwhile if the organisation uses the findings. Where the findings conflict with the organisation's interests or survival, however, this may not occur.

Firstly, while organisations ostensibly exist to make a difference to beneficiaries through strategies described in their goals and aims, they also spend a considerable amount of energy on their own survival. In so doing, some organisations may choose not to engage with ideas that might threaten their access to resources – particularly those from funding and development agencies - despite the possible improvement to strategy and to assisting their beneficiaries the ideas may offer.

90 Joel Best asks '[h]ow can an ordinary person someone who reads a statistic in a magazine article or hears it on a news broadcast – determine the answers to such questions [about the source, method, interests of the originator, validity of the sample etc]' (Best, 2001:169). Noting that this would entail 'an impossible amount of work', Best proposes that being critical 'means appreciating the inevitable limitations that affect all statistics…; not being too credulous, not accepting every statistic at face value'. But, he adds it 'also means appreciating that statistics, while always imperfect, can be useful' (Best, 2001:170).

91 Elizabeth Pisani's *The wisdom of whores. Bureaucrats, brothels and the business of AIDS* gives detailed insight into her experience of the wide range of pitfalls that she encountered in doing HIV surveillance work and in providing authoritative reports for, among others, UNAIDS and FHI (Family Health International).

92 In the context of the key informant interviews in which the 2007 antenatal results were discussed, one NGO director and the manager-doctor raised questions about the methodology of the antenatal survey, with the first querying the selection of the sample and the second, pointing to the importance of the 'confidence intervals'. Both worked – or had worked- in the provincial department of health, and had direct dealings with the antenatal surveys.

Being reliant on external funding, many organisations are vigilant about what is attractive to funders, as a result of which their work is often strongly circumscribed by what is being paid for at that time. So, for instance, they might experience a conflict if research findings on HIV prevalence or social conditions were at odds with the interests of potential or actual funders (see, for example, Pisani, 2008:98,233). And if a donor wanted to only fund certain types of interventions - like prevention messages including abstinence - but research showed that this would be unlikely to have any impact, organisations accepting such funding would be faced with a dilemma – or a challenge of very skilful programme design!

The second way research findings may create a dilemma is where they are at odds with the identity, main values or ideology of an organisation. Where the identity and purpose of an organisation are strongly premised on specific approaches and world views, information tends to be sifted through the lens of these interests, thus sometimes limiting the effectiveness of their interventions. As Best suggests, where statistics 'reinforce our beliefs, prejudices, or interests', they are less likely to be scrutinised (Best, 2001:63). For example an organisation lobbying for post-exposure prophylaxis after rape, might exclude research that questions the link between rape and HIV infection. Similarly fundamentalist Christians are likely to exclude – or contest - evidence that queries abstinence as an effective prevention strategy.

In these kinds of organisations, 'research' would tend to comprise accessing and re-presenting information and ideas that support what they want to do or propose, rather than an open-ended enquiry. Where organisations cite their own experience[93] or research, these will largely be in support of their work. It would be highly unusual - and often not in their interests – to show

93 The strength of these kinds of organisations is often in the practice and experience of their staff and their knowledge of the areas in which they work. While this can be rich and should certainly be included, its limitations (of possibly myopias arising from, for instance, being too close to a context or issue, of parochial knowledge, of vested interests etc) should also be understood.

poor or contradictory findings, unless this was to propose further or different work which they knew would be well-received.[94]

This instrumental approach to information is not to underestimate the seriousness of organisations, nor to imply a cynicism in their approaches. Rather it is to recognise that their interests are not only, or always, motivated by what might be of greatest assistance to those they aim to benefit. Their own identities and their need to survive materially can predominate, resulting in their proceeding with too little data or in the face of strong opposing respectable evidence, despite the advantages these insights may offer to their beneficiaries. While this is likely to limit the ultimate effectiveness of their interventions, some projects cannot, or will not, risk discovering that their course of action or founding principles are poorly grounded.

For the purpose of this study, however, I am deliberately choosing to find out what a project *could* know about HIV prevalence among people living on Stellenbosch wine farms, and will leave aside these questions of selection and use, which will depend on the circumstances of each organisation.

3.3 THE CONTESTED &SHIFTING NATURE OF INFORMATION ON HIV/AIDS

Data and information on HIV/AIDS change over time as the pandemic itself unfolds and as new theories and understandings are developed. They are also contested, both within political debates and across disciplines, and it is not unusual for practitioners in the field to have different views on approaches and interventions. New data and knowledge, theories and ideas are frequently proposed and critiqued – and foundational texts contested. HIV also resides in a board spectrum of disciplines which do not necessarily agree with one another. Added to this, local data can be profoundly informed

94 This is partly the case with the Hospice's Farms Project. This thesis would not have been possible were it not for a funder/development partner - the Perinatal HIV Research Unit – which supports the spirit of enquiry within the Project's work.

by people's material experience of HIV, which can be influenced by the local popular responses to those infected or affected, including negative discrimination and stigma.

Not only might this maelstrom of data leave organisations and researchers perplexed about how to select and validate information, but they risk being caught in the cross-fire of inter-disciplinary squabbles and different frames of analysis.

3.3.1 Size

A high-level example of having to choose from an array of data is seen in the estimates of the numbers of people infected with HIV. As this figure can only be estimated, figures are produced through various forms of extrapolation and modelling – and as such are open to contestation.[95]

Actuary and demographer Rob Dorrington et al noted that 'one of the problems that policy and decision makers are faced with is the wide range of estimates of the size and impact of the HIV/AIDS epidemic'. As researchers in the respected ASSA2003 project, Dorrington et al assert that their estimates are based on the most thorough research and that '[i]t is important to note that the level of uncertainty about the estimate from the ASSA model is not as great as that presented by the wide range of estimates on offer', cautioning that '[s]ome of the estimates are more reliable than others' (Dorrington et al, 2006:17).

95 Eleanor Gouws represents the common caution about modelled data which should be interpreted 'with care', given their dependence on the choices that need to be made about 'the structure of the model and the assumptions about the key parameters that cannot necessarily be determined directly from the raw data' (Gouws, 2005:68).

Figure 2: HIV prevalence in total population in 2005[96]

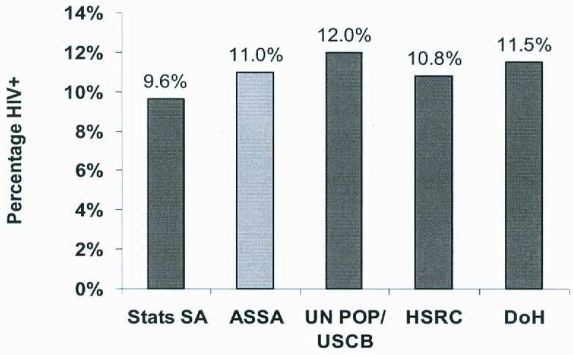


Figure 10. HIV prevalence rate in total population in 2005

(Dorrington et al, 2006:19)

The ASSA2003 project quotes a range of figures from five significant sources indicating the number of HIV-infected people at the end of 2005 – ranging from 4,5 million (StatsSA) to 5,7 million (UN POP/USBC[97]).[98] Accumulated AIDS deaths at mid-2005 from these same sources ranged from 1,5 million (ASSA) to 2,8 million (UN POP/USBC).

96 Sources (Dorrington et al, 2006:19):
- Stats SA: *Mid-year population estimates, South Africa, 2005*.
- UNPOP/USBC: 'both use UNAIDS estimates as input. The numbers here were derived from UN Population Division population projections'.
- HSRC: Rehle, T., Shisana, O. (2003) Epidemiological and demographic HIV/AIDS projections: South Africa. *African Journal of AIDS Research* 2(1):1-8.
- DOH: *Summary report. National HIV and Syphilis Antenatal Sero-prevalence survey in South Africa, 2004*.

97 USBC – United States Bureau for the Census.

98 Barnett and Whiteside point out that 'epidemiologists and statisticians may make assumptions and extrapolate, but they are dependent on the information they are given' all of which originates at country level. As have others, they identify the frailties in these data, starting with deeply imperfect data collection and data systems (Barnett & Whiteside, 2006:46).

While the researchers caution care with 'using outlier estimates unless these are supported by empirical data or reasoning' (Dorrington et al, 2006:17&18), only more discerning users would be able to assess these data and, for instance, the different modelling approaches used in producing different results.[99]

3.3.2 Authority

Making sense of the vast amounts of information produced about HIV and AIDS is a challenge, given its fluid and contested nature. Despite these frailties, however, information is frequently given authority on the basis of its origins, which include countries' health departments, international agencies and the HIV/AIDS 'industry' generally. Pisani describes her role in the construction of UNAIDS[100] data, including 'beating-up' data to make stories that would attract funds or the necessary attention (e.g. see Pisani, 2008:106).

Later in this chapter I critique the South African antenatal data and comment below on the UNAIDS' use of these data, despite its flaws. In a similar critique of authoritative data in a study in northern Uganda, Westerhaus describes the contested use of various antenatal and hospital data regarding HIV prevalence, and cites other researchers who have noted the 'pitfalls of ANC surveillance, especially from earlier in the epidemic'. He also disagrees with the conclusions of both teams of researchers - from the Italian health service's Instituto Superiore di Sanità and from an NGO - who, in his view, might overplay the low prevalence and the effects of the war respectively (Westerhaus, 2007:595).

99 For instance Nicoli Nattrass shows how 'two different publicly available epidemiological modelling packages (namely the Spectrum AIDS Impact Model and the ASSA2003 model) predict very different impacts of rolling out highly active antiretroviral treatment (HAART) on new HIV infections' (Nattrass, 2007:1).

100 The Joint United Nations Programme on HIV/AIDS.

Noting the authority often given to statistics on the assumption that they 'come from experts who know what they're doing', Joel Best reminds the reader that '[o]ften these experts work for government agencies … and producing statistics is part of their job' (Best, 2001:21). He comments that it is only possible to regard official statistics as 'straightforward facts that cannot be questioned' if one 'ignores the way statistics are produced' – and notes that '[a]ll statistics, even the most authoritative, are created by people. This does not mean that they are inevitably flawed or wrong, but it does mean that we ought to ask ourselves just how the statistics we encounter were created'. He notes that 'official numbers … reflect certain bureaucratic decisions about what will be counted and how to do the counting' (Best, 2001:22) and cites the decisions that need to be made in labelling or categorising issues in the first instance, which are susceptible to subjectivity, even where there is disinterest.[101] Best's main thesis, then, is that all statistics are 'products of social activity' - and although they are all imperfect, ' some are far less perfect than others' (Best, 2001:27-29).

3.3.3 The effects of politics and religion

In the 1990s 'many African countries deliberately minimised their HIV/AIDS data out of fear that overly adverse reports would deter millions of tourists and international business investments' who would not want the burden of high death benefits or replacing and training workers (Hunter, 2003:37). Barnett and Whiteside cite the 'most telling example of the politicisation of data' as being Zimbabwe' s change of its HIV prevalence in 1987 from its original 'several hundred cases' to 119, on hearing that South Africa reported having 120 cases (Barnett & Whiteside, 2006:55).

101 Pisani describes very clearly the way in which 'the statistics you see in the newspaper every day' are 'boiled up out of cauldrons of uncertainty, of best guesses, of spilled samples, or errors corrected on the fly' (Pisani, 2008:10).

It is well known that '[s]tatistics … can become weapons in political struggles over social problems and social policy' and that '[a]dvocates of different positions use numbers to make their points' (Best, 2001:10. Also Pisani, 2008:11,95,256). Noting that reports 'usually ignore controversies about measurement' and that 'even well-established measurements can be controversial', Best cites the example of 'how to measure poverty [which] has been a contentious issue for decades'. People who are 'liberal' want a higher, more inclusive measure, with a lower threshold being favoured by those deemed conservative (Best, 2001:51). In South Africa, unemployment and HIV prevalence statistics, among others, are significant sites of contestation, given the implications they have for policy, budgets and many people's daily lives.

The political contestation about HIV/AIDS in South Africa, centrally located until recently at the highest levels of government, will not be reviewed here. Quite simply it has resulted in a crucial lack of clear political leadership, and in mixed messages about the nature of the pandemic and ways to treat it which have had direct effects on local communities and those that work with them.

In addition – and at the heart of some of the political contestation – is that HIV and AIDS is inextricably about sex, and talking about sex in South Africa is not always easy. The predominance of conservative religious beliefs(dominantly Christian, but including Islam and a range of traditional African religions) has had a significant impact on what is known about HIV and combines with the poor political messages to undermine very ordinary public health messages about HIV. On the one hand it produces silences and a reluctance to address issues openly, while circulating information that is counter-productive to managing the pandemic on the other.

The situation has been compounded by the voluntary nature of testing and the confidentiality of results. Not only does the issue of confidentiality and disclosure confirm that one's HIV status has a social weight attached to it (which having diabetes might not have, for instance), but it can make the collection, analysis, production and dissemination of data difficult.

These significant public influences have burdened debates and ideas about HIV and AIDS with often negative moral, cultural and psychological associations and meanings which have undermined the development of an informed citizenry and have contributed to the stigma and discrimination associated with HIV and AIDS. Gaps are filled with speculation, misconception and myth-making, often associated with personal and societal anxiety and denial. HIV-related information has been produced, understood and appropriated in numerous ways which can make it hard for projects to access local-level data, but which also requires that they develop ways of navigating these often congested information pathways. As members of broader society, staff of organisations and the beneficiaries they serve are all subject to these influences, requiring careful but tenacious insistence on working with information that will inform the project design and benefit the beneficiaries wherever possible.

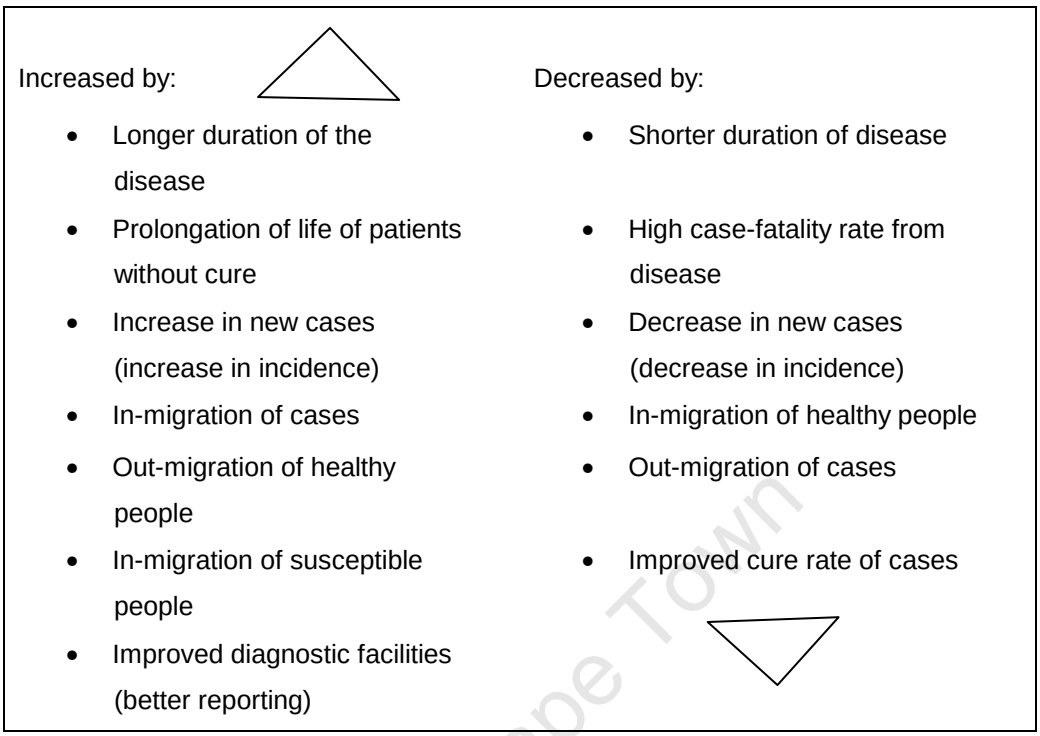
3.3.4 An example of contested analysis

An example of contested analysis is found in the different understandings of the national 'levelling off' of HIV prevalence reported in the 2006 national antenatal survey.

Epidemiologists Robert Beaglehole, Ruth Bonita and Tord Kjellstrom list seven factors that increase prevalence but equally six that decrease it. These can be grouped into

- those where there has been an actual increase in numbers of people who are ill;
- a proportionate shift following the movement of people; and
- better information about the number of people who are ill.

Figure 3: Factors influencing observed prevalence rates



(Beaglehole et al, 1993:17)

It would therefore be hasty to conclude, as some people do, that the levelling off of HIV prevalence is the result of a balance between deaths and the incidence of new infections, without taking into account some of these other factors. Deaths and incidence were nonetheless the almost exclusive focus of a debate, briefly reviewed here, about the apparent levelling off of HIV prevalence (nationally) in 2006. There was no mention of the various possible effects of the movement of people in and out of the country - or of the effectiveness of information systems to capture and produce data sufficiently consistently so as not to produce any turbulence in the figures.

This phenomenon - referred to as the pandemic reaching a 'mature phase' - was foreseen by Eleanor Gouws and Quarraisha Abdool Karim who wrote in 2005 that 'data collected over recent years indicate that the epidemic has started to level off, an effect that is unlikely to be due to interventions, but

simply reflects the natural saturation of the epidemic. While the HIV prevalence is no longer increasing significantly, the incidence of new infection is balanced by rising mortality rates' (Gouws & Abdool Karim, 2005:48).

This was repeated by the three main sources of data on HIV prevalence – described and used below – which proposed that the epidemic was 'maturing' in 2006. ASSA2003 projected in 2003 that in mid-2006 the number of new infections would be matching the number of people dying (Dorrington et al, 2006:3).[102] This was supported by data from the Human Science Research Council's 2005 national household survey (Shisana et al, 2005:135) and by the Department of Health's 2006 national antenatal survey (DoH, 2007a:6). UNAIDS and the World Health Organisation (WHO) repeated this in their 2007 *AIDS Epidemic Update*, in which they note that 'HIV prevalence data collected from the latest round of antenatal clinic surveillance suggest that HIV infection levels may be levelling off, with prevalence among pregnant women at 30% in 2005 and 29% in 2006 (Department of Health South Africa, 2007)'. Critically they propose that 'the decrease in HIV prevalence among young pregnant women (15 – 24 years) suggests a possible decline in the annual number of new infections' (UNAIDS & WHO, 2007:16).

It is against these claims that the activist organisation and long-standing antagonist of the national Department of Health's policies on HIV/AIDS, the Treatment Action Campaign (TAC) noted that '[i]t has become extremely difficult to interpret the meaning of prevalence in recent years for two reasons: the HIV epidemic has matured into an AIDS epidemic (with more people dying) and antiretroviral treatment is helping people with HIV to live much longer. These two opposing effects confound our understanding of

102 'During this period, the number of people dying from AIDS each year is increasing rapidly and is expected to plateau after 2015.' By 2006 it was estimated that 1,8 million people would have already died as a result of AIDS, 5,4 million would be infected with HIV, and nearly 600 000 would be AIDS sick (Dorrington et al, 2006:20). The details of 'mature phase' were projected by Dorrington et al using the ASSA2003 modelling process which projected 5,4 million would be infected with HIV, and nearly 600 000 would be AIDS sick. 1,8 million people would have already died as a result of

prevalence. It has become very difficult to understand how the antenatal and overall prevalence relate to new infections' (TAC, 2008). They believe that '[a]t this point in the HIV epidemic, the key measure of HIV prevention success is incidence, i.e. the rate of new infections'.[103] Writing in 2008, they anticipated the imminent release by the HSRC of an incidence study[104] which they hoped would provide 'a much better picture of the trajectory of the epidemic' (TAC, 2008).[105] While they query the mortality rates – given the possibility of treatment counteracting the maturity of the epidemic – they nonetheless also contain their concerns to deaths and new infections. Commenting on the then-recently released 2007 antenatal statistics, a *Mail and Guardian* journalist asserted that the decline of an infectious disease following 'accumulated death rates, should be a matter of national shame' – and criticised the health department's having taken credit for this decrease. Arguing that 'only the ARV treatment programme can be attributed to public policy', he pointed out that successful implementation of this programme should stabilise and *increase* prevalence, as it should prevent people from dying. He claimed the reduction in prevalence was likely to result from a combination three factors: 'the natural progression of the epidemic' in which diseases increase, plateau and decline; 'the effect of ARV therapy' where the viral levels of people on medication are reduced, making them less infectious; and the 'influence of cumulative death rates'. While he acknowledged that death rates were difficult to assess, he proposed that 'death alone might explain the falling numbers' (Jack, 2008:35).

AIDS so the number of new infections would have been matching the number of people dying (Dorrington et al, 2006:3). See also WCDoH, 2006:14.

103 The incidence in the Western Cape in the HSRC's 2005 population-based survey was the second lowest at 0,9% (in relation to the highest being 4,2% in Mpumalanga) (Shisana et al, 2005:49).

104 2008 HSRC survey, report - released in 2009, is not being considered in this study, given the boundaried period of the research.

105 Incidence is measured through a proxy using new infections in the age group 15-19.

In contrast to this theory of deaths balancing new infections, the Western Cape Department of Health's 2006 antenatal report proposed another interpretation, namely that there was variation within these high-level statistics that may be balancing one another out. So lower prevalences in some areas were balanced by higher prevalences in others (where new infections were not countered by mortality) where there may be the growth of 'sub-epidemics' – including in the Stellenbosch health sub-district.[106] The 'levelling off' of HIV prevalence was thus due to a masking of variation within the overall prevalence, rather than a balance of deaths and new infections (WCDoH, 2007:14).

Writing two years earlier, the authors of the Western Cape Provincial Spatial Development Plan failed to explain the low levels of infection in the province. Although they thought it 'has not peaked yet', they attributed this to the province's 'physical location' and that it would 'follow the national trend with a lag of six years' (WCDEADP, 2005:143). Curiously, while the report notes the province's HIV-related successes,[107] it does not link these to the difference in the levels of HIV infection. While this thesis cautions against making links too easily, a plan of this nature should exactly begin to understand the factors at play, given its roles in planning for the province. For instance although the initial reach of treatment was relatively small, the early provision of treatment in the Western Cape (unmatched elsewhere in the country) may have delayed some deaths, making the prevalence higher.

106 The Western Cape Department of Health reported 'very high growth rates over the 2001-2005 period ... in the Greater Athlone, Knysna/Plettenberg Bay and the Stellenbosch areas' (WCDoH, 2007a:14).

107 They report that 'the Western Cape was the first Province to offer both Prevention of Mother to Child Transmission (in 1999) and Anti Retro Virals (in 2001)' and that '[b]y March 2003 the Department had achieved full roll-out of the programme to all 25 districts, and all pregnant woman attending public-sector maternity services have access to the programme' (WCDEADP, 2005:143).

If people on treatment were adherent and acted to reduce the risk of infecting others, it may have reduced new infections.[108] The authors also do not take account of a range of other factors listed by Beaglehole et al – like increased migrancy from the Eastern Cape (where levels of infection are higher and which might have increased the prevalence in the Western Cape); or a possible increase in health-seeking behaviour following advocacy by NGOs including TAC (which might increase prevalence (as people adhere to treatment and stay alive) – but also might reduce incidence, as people engage in less 'risky' behaviour). This Plan could have been a useful local source of data – but is disappointing in its analysis.

The meaning of the levelling-off of prevalence data matters to organisations working at local level. Depending on the analysis, it could direct work to areas of high infection, or point to either the need for focussing on prevention work *or* the promotion of access to treatment.

Key informants' perceptions - a maturing or delayed pandemic?

The expert key informants for this study also offered various opinions about changes in prevalence, particularly regarding the Western Cape. The five respondents who volunteered these opinions - four of whom were doctor-managers-researchers - were adamant that levels of infection were likely to increase dramatically and/or that the Western Cape was in some kind of time lag (CS, VZ, DrRJ, LL, NG).

108 The doctor-manager volunteered in her interviews that '[w]e hope that ARVs will decrease the risk of sexual transmission if somebody is on them – because they've got a low viral load, less STIs. In fact it has been shown that there is almost zero transmission if people are spiralogically suppressed, with no STIs. So it should have an impact - if people are adherent, of course' (VZ). The doctor-farmer noted that 'ARVs is a very important way of preventing the spread of the disease. The chance of getting infections when you're on ARV treatment is much less. So I believe that – even having started with ARVs three four years ago, we are already preventing it from going up. I don't have enough proof but I think the best effort for us at the moment is to put as many people on treatment' (NG).

The two doctors who do not work in Stellenbosch thought that the pandemic would still reach the Western Cape. The first – who worked in the provincial health department – thought that the pandemic would follow the pattern 'because that's what we've seen elsewhere'. Commenting on a perception that HIV prevalence is lower among people classified 'Coloured', she thought that 'it's a lack of penetration of HIV, in terms of a critical pool. That has happened in the African community but it hasn't happened yet in the Coloured community. But it's going to take off' (VZ). The other research doctor also thought that it was 'extremely likely' that the pandemic's presence in the Western Cape was only delayed as 'all the risk factors for the spread are there in that community and it seems more remarkable than anything. But the epidemic hasn't taken off very very powerfully in the Coloured community in the Western Cape - and you can't help thinking that that's simply got to be a matter of time' (DrRJ). Citing the large number of men in and out of jails where there are 'high levels of rape … and HIV transmission' as well as 'the very risky drug use', she thought that 'the idea that they might just be temporarily behind seems very very plausible' (DrRJ). And although she did not elaborate, the farms-dedicated Hospice nurse felt that 'I think we are early actually [in the phase of the pandemic]. It's going to still start happening' (CS).

The doctor-farmer – who had worked concertedly in the West Coast and Cape Winelands districts since 2004 to ensure that the provincial health system made antiretroviral therapy (ART) and PMTCT available - thought that although 'we're following the rest of the country because it looks like we are going to …. we are going to stop it – we're definitely stopping it – because I think ARVs is a very important way of preventing the spread of the disease. The chance of getting infections when you're on ARV treatment is much less. So I believe that even having started with ARVs three four years ago, we are already preventing it from going up' (NG). The HIV doctor-researcher who worked in the same area, also at clinic level providing treatment, thought differently. She cited Dr Francois Venter (President of the HIV Clinicians Society of Southern Africa, among other things) who at a recent meeting had said that 'ARVs is not making a difference at the moment' because new infections continued to outstrip the number of people

put onto treatment. She added that 'in this morning's newspaper, the new Minister of Health [then Barbara Hogan] said half a million people will get HIV, new infections a year. [But] we don't start even 10% of that on …ARVs. So I don't think we are … making a difference'. Even though she recognised that the health system in the Western Cape *'is beter af as die res'* she nonetheless thought that without significant success in prevention *'ek dink dit kan ook opgaan'* (CA).[109]

These projections of an increase in infection levels are in direct contrast to the two respondents who thought that the pandemic was already present but that only the 'tip of the iceberg' was being seen (TG, TR). In addition, a number of respondents (GN, LH, LF) thought that people on farms were opting out of being tested and also that infection levels off farms were likely to be higher in some areas (Klapmuts, Franschhoek etc). The inference was that the epidemic is already in the Western Cape and that the prevalence is higher than is known, as some of it is hidden, while some of it is known to be in particular geographical areas. This might be attributed to the masking of difference proposed by the provincial health department above.

And finally, the NGO co-ordinator of a women's farm health project invoked Beaglehole et al's migration in proposing that while the province had been a 'closed community' of sorts, this may not remain the case:

> 'KZN and the provinces in the north – they have a lot of mixing across the borders – this is my assumption. We are a more protected community – we are further south. But it's probably just going to make its way down south and we'll also now have more. The harbours, seaports are opening up and we are seeing an increase in the amount of cocaine coming through here in Cape Town harbours. So we might have a pandemic starting and new wave coming in from the south and moving north' (GR).

109 Translation: 'Even though the Western Cape is better off than the rest [of the provinces] I think it will increase.'

Conclusion

While the political skirmishes were evident in this example, this example shows the extent to which a range of informed people – including respected epidemiologists and well-established academics, a journalist, staff of an established research organisation, of government health departments and of an activist organisation, and other experts of various kinds including doctors, researchers, local farmers - have different views on a fairly straightforward subject.

This indicates the difficulty of finding out about prevalence (among other things) – and supports the importance of triangulating as much data as possible to establish what can be known.

3.3.5 Conclusion

This brief review outlines the diverse range of social, moral and political contexts, and medical and public health approaches - in which the notional modestly-resourced organisation and the key informants in this study must select and assess data. While this presents a significant challenge, my conclusion is not that nothing can be certain or known. Rather, it is to recognise that these organisations must operate within data-fluid contexts, where diverse interests and ideas are expressed and contested, and where much of the data is site-specific, timebound and provisional. This produces a challenge for resource-constrained organisations whose almost necessarily unsophisticated interpretation of data limits its capacity to 'know'.

It is in this context that this enquiry into HIV prevalence is mounted, as it seeks to find its way through various data to assess what can be known about the prevalence among those who live on wine farms in the Stellenbosch area.

3.4 REVIEW OF QUANTITATIVE DATA ON HIV PREVALENCE

HIV prevalence data are produced for geographical areas of various sizes (at a fairly high level), and sometimes include analysis on the basis of people's age, gender, 'race', occupation, locality type etc. Data from larger surveys can also be analysed on the basis of people's conditions (e.g. everyone who has an STI), actions (everyone who had unprotected sex in the last month) or habits (everyone who drinks more than 'x' measures of alcohol a week).

As noted above, HIV prevalence data, along with a host of other HIV-related information, are readily available, including on the internet where they are published by national governments and research bodies as well as a host of international organisations like UNAIDS, the WHO and the Global Fund.[110] Much of this information is at a high (national) level, while some provide closer views of what may be happening within countries or sectors of society.

High-level national data are produced bi-annually by Statistics South Africa (StatsSA), while the South African Department of Health has published HIV prevalence statistics every year since the early 1990s. The Western Cape Department of Health has produced a provincial survey since 2001.[111] As the epidemic in southern Africa is transmitted overwhelmingly by heterosexual sex, the health departments' reports are generated from data from antenatal clinics. Colloquially referred to as the 'antenatal surveys',[112]

110 Global and regional estimates have been available since the late 1980s, and country-specific estimates since 1996 (Garcia-Calleja et al, 2006:64). International agencies invariably reproduce country-generated data.

111 'Since 2001 the Western Cape Department of Health has been conducting annual, anonymous district-wide HIV seroprevalence surveys among first visit antenatal clinic attendees using public sector health facilities in conjunction with the national antenatal surveys' (Gouws and Abdool Karim, 2005:52).

112 These are the *National HIV and Syphilis prevalence survey, South Africa* produced annually by the national Department of Health and the *HIV antenatal provincial and area surveys,* also produced annually, by the Western Cape Department of Health.

they provide prevalence figures for the women surveyed as well as some for the general population, modelled from this data.[113] Frequently cited, the reports produced by the national Department of Health provide data at the national, provincial and health district levels, while the Western Cape department publishes data for the province and the health districts and sub-districts within it.

With the advent of 'rapid testing'[114] however, HIV surveillance has also been undertaken in the form of household surveys. The most comprehensive of these are the two national household surveys undertaken every three years by the Human Science Research Council (HSRC) for the Nelson Mandela Foundation in 2002 and 2005[115] – each called the *South African National HIV prevalence, HIV incidence, Behaviour and Community Survey*.[116] While expensive and requiring extensive participation from the people being sampled, these population-based surveys include a range of demographic data from which various profiles of prevalence have been extracted, providing detailed information about where infection may live and how it changes, as well as some explanations for these. In this way, data from household surveys begins to disaggregate the high-level data and to describe the diversity of the epidemic, influenced as it is in each instance 'by combination of microbial, biological, individual, societal and contextual factors' (Shaikh, 2008:185).

113 The 2006 national antenatal report notes that '[a]ntenatal surveys are not designed to provide information on HIV prevalence in the rest of the population (men, non-pregnant women and even children) who have HIV infection. These estimates are derived from antenatal survey data using mathematical models, which are designed to make these projections' (DoH, 2007a:15).

114 Initially HIV tests were processed in laboratories, requiring people to wait days for their results. Rapid testing has made it possible to give clients results within an hour. In a few cases, a laboratory process is still needed to confirm a result.

115 A third household survey was produced by the HSRC in 2009 during the writing of this thesis – but as this fell outside of the data collection period, it has not been considered.

116 As these are frequently referred to in this thesis, they will simply be referred to as the 'HSRC household surveys'.

And finally future statistical scenarios for HIV/AIDS in South Africa in 2006 were projected through ASSA2003, a modelling process based on 2003 prevalence data.[117]

In summary - prevalence data in South Africa are typically obtained from these antenatal and household surveys. Where available smaller more specific studies might be accessed for certain sectors of society.[118]

3.4.1 HSRC household surveys

While the population-based surveys provide an extensive range of data, they are more complex, more expensive, produced less frequently and require careful attention to representivity as well as to the handling of the actual test samples (Shisana et al, 2005:3). The authors of the 2004 national antenatal survey comment on 'various challenges and limitations' associated with '[o]ther studies and surveillance approaches (such as population-based or household surveys)'. In addition to cost and logistical problems, they cite 'low response rates in some settings' with UNAIDS estimating 'refusal rates of between 24 to 42% in recent surveys carried out in some African countries' (DoH, 2005:1). This is supported by Jesus Garcia-Calleja et al who identify the limitations of population surveys as being 'the potential for bias introduced by non-response rates and the exclusion from the sampling frame of populations groups at high risk of infection' (Garcia-Calleja et al, 2006:64).

---

117 The model 'makes use of data from several sources to project the potential course of the epidemic and the demographic impact it is having'. It was developed by the Actuarial Society of South Africa in collaboration with the Centre for Actuarial Research and the South African Medical Research Council (Dorrington et al, 2006:i).

118 South African examples include studies on the military, health workers, educators and young children attending health facilities (DoH, 2007b:23 &131). Various baseline prevalence studies were found for sub-populations in other countries. Local area-bound studies included a 2006 behavioural surveillance survey in Kerala, India 'intended to track trends in HIV/AIDS related knowledge, attitudes and behaviours in sub-populations in Kerala, especially those at high-risk of acquiring HIV infection'. Studies of specific sub-populations focused largely on sex workers and their clients. These included HIV prevalence studies among female sex workers of Calicut, Kerala, India and another in Buenos Aires, Argentina; HIV prevalence and risk factors among Spanish prostitutes, and among prostitutes and clients in Amsterdam; and HIV prevalence and sexual behaviour of male clients of brothels' prostitutes in Dakar, Senegal.

As in any respectable survey report, the methodology chapters in the HSRC household surveys outline the limitations of the methods used, and declare cautions as well as changes in method from the previous survey. Relevant to this study, is the report's warning about the use of data for the Western Cape, noting that '[t]he *coefficient* of relative variation for the Western Cape is outside of the threshold of 0,20, suggesting that the findings of this province must be interpreted with caution, [and that] further analysis of the data will be undertaken to clarify the situation with regard to HIV prevalence in the Western Cape' (Shisana et al, 2005:46).[119] I have therefore had to exclude the provincial data from this study. As these surveys do not produce data at district or area levels, a question about these data does not arise.

The authors also suggest that the national prevalence among adult men may be under-represented, given that people living in police and army barracks, prisons, educational institutions and hospitals were not included (Shisana et al, 2005:47). That being said, Gouws and Abdool Karim validated aspects of the findings of the HSRC household surveys by relating them to data from other sources:

> 'The data on HIV distribution by race is consistent with data from the National Blood Transfusion Services; and the data on gender and age distribution of HIV infection is consistent with the population-based studies [in KwaZulu-Natal] conducted in conjunction with the Malaria Control Programme between 1990–1992' (Gouws & Abdool Karim, 2005:54).

While subject to the frailties of surveillance work generally, then, I nonetheless regard these surveys as providing valuable data – to be used critically as with any data of this nature.

---

119 It reported a drop of 8,8 percentage points in the three-year interval - from 10,7% in 2002 to an astonishing low of 1,9% in 2005 (Shisana et al, 2005:46).

3.4.2 The 'antenatal surveys'

The antenatal surveys have the opposite characteristics to household surveys. While the logistics of testing and collection are more manageable, and the results are more frequent, the resulting data is significantly more limited, most notably that the sample is constrained to poor, largely 'Black African' women between 15 and 49 years old (Shisana et al, 2005:3).

Nonetheless, Gouws and Abdool Karim described them as 'the most reliable estimates of temporal trends of HIV infection in the general population, as well as age-specific HIV prevalence and geographic distribution of HIV infection in South Africa', which 'have been used to monitor the progress of the HIV epidemic in the heterosexually active population in South Africa.' Prefixing this with an acknowledgement of 'several biases inherent in this population', they continue that '[t]he large sample size in each survey, consistent methodology and the timing of these cross-sectional surveys have aimed to minimise several biases inherent in cross-sectional studies' (Gouws & Abdool Karim, 2005:52).

Although the authors of the 2004 national antenatal survey also claim that '[t]he antenatal survey provides the best available estimates of HIV infection among the South African population', they note that while 'facility-based methods including voluntary counselling and testing (VCT) may be easier approaches' they caution about 'bias as participants are self-selecting' (DoH, 2005:1). And while the authors of the 2005 antenatal survey also report that 'a methodology devised by WHO and UNAIDS over 10 years ago is the central tool in this methodology' (DoH, 2006:6), the 2006 antenatal report warns that for a variety of reasons there may be 'an overestimation of HIV prevalence', noting that '[t]here are a number of recognised limitations in determining HIV prevalence from ANC sentinel surveillance' (DoH, 2007a:18).[120]

120 The HSRC household survey agrees that the antenatal surveys overestimate the prevalence. In the household survey in 2005, 23,2% of the sample of women who had been pregnant in the past 24 months were HIV positive, compared with 29,5% in the antenatal survey. They attributed this to being able to include a wider range of women

The use of the national antenatal data to estimate country and regional estimates is opposed by Garcia-Calleja et al, among many others. Starting with the obvious comment - that 'they do not inform about non-pregnant women and men' - they also note that 'assumptions and validity of these estimates [are] being questioned by some', given that the 'coverage of rural areas by the sentinel surveillance system in most countries is incomplete' (Garcia-Calleja et al, 2006:64).

Authority and use

South Africa's national antenatal surveys are used widely as the authoritative source of information about HIV prevalence in the country. The antenatal survey's data and the trends mapped over a number of years are frequently quoted locally (see, for example, Shaikh, 2008:176; Heywood, 2007:23; Richter et al, 2007:370; Wechsberg et al, 2008:131) – and international use of these data is seen in a brief review of global websites, among others.[121]

The ease of access and authoritative origins of these survey reports, opens the antenatal survey data to misuse. As noted above, the inaccurate use of statistics can be done purposefully to make claims more convincing or, as Best suggested, as a 'product of more sincere, albeit muddled interpretations by innumerate advocates' (Best, 2001:62 – also Pisani, 2008:320). Citing statistics inappropriately can result in changing their

---

in their sample, while the antenatal attendees were largely women who were 'Black African' (and poor).

121 For example the UNAIDS website includes a link to the latest (2007) national antenatal report and also includes South Africa's report to the United Nations General Assembly Special Session on HIV and AIDS (UNGASS) which cites the country's HIV prevalence and trends using the 2007 antenatal data (UNAIDS, undated). Another example is that of the Kaiser Family Foundation's October 2008 monthly fact sheet on HIV/AIDS for South Africa which references the 2006 national antenatal survey and the UNAIDS 2008 Report on the global AIDS epidemic as sources for the prevalence data in South Africa (Kaiser Foundation, 2008:1).

meaning, making them 'mutant', giving then an unintended new life of their own. While not exclusive to antenatal survey results, these are prone to being 'mutant' in two ways.

Firstly, it is not uncommon to hear people cite the unmodelled antenatal statistics (of pregnant women) as if they are the prevalence for the general population. An example of this is seen in *Health and democracy* published by the reputable South African NGO, the AIDS Law Project. Here a table entitled 'HIV prevalence in South Africa 1990–2005' not only does not cite the source of this data, but quotes what appear to be data from the national Department of Health's antenatal survey as if they are the levels of infection for the general population (Richter et al, 2007:370). In so doing they effectively make the claim that in 2005, just under a third (30,2%) of the population was infected with HIV – while it was estimated to be closer to 11%.[122] With sufficient publicity and repetition, a 'mutant' use of this kind of statistic will make it a 'fact'.

The second way in which antenatal data has become mutant is where figures that are not comparable (usually over time) have nonetheless been compared, and meaning made from this – as elaborated on in the next section.

It is exactly in the context of the antenatal survey's widespread influence and in the political contestation referred to above that criticisms of the antenatal survey's data are identified and amplified - spurred on by Best's rejoinder that '[j]ust because someone claims authority does not mean we ought to grant it' (Best, 2001:157).

---

122 This figure is on page 10 of the the 2005 national antenatal report (DoH, 2006:10). On page 19 of the same report it is proposed (through modeling) that a total of 5.54 million people may be infected. Calculated as a proportion of the population that year (StatsSA, 2006: 2.1) the estimation is that 11,8% of the general population may be infected.

Contestation: The 2002 data

On the release of the 2002 statistics, the Department of Health claimed that the results indicated that the infection levels were slowing down following 'no statistically significant increase or decrease … in each of the provinces' 2002 HIV prevalence estimate' (SAPA, 2003). Commenting on these statistics, the TAC contended that 'the findings have not been properly interpreted' and that while 'the average national prevalence rate might not have increased, … the prevalence rate in certain race and age groups most definitely had' (SAPA, 2002). Here TAC is pointing to the masking of trends within sub-groups, effectively critiquing the lack of more differentiated commentary from the Department.

Claims and counter claims were made, partly reflecting the political contestations of the period. The Health Department claimed a lack of increase over four years of HIV prevalence in the under-20 category which indicated a slowing down of new infections; also that '[t]he survey revealed the national HIV prevalence rate (sic) had the characteristics of prevalence rates in mature HIV pandemics around the world' and that 'the 26,5% prevalence figure, although higher than the previous year's 24,8%, was not statistically significant' (DoH, 2003:6). TAC claimed this was not 'a fair interpretation or reflection of the scale of the pandemic' and that the fact that 'more than one in four sexually active women in the country may have HIV' was 'alarming' (SAPA, 2002).

This is an example of contestation around the interpretation and use of antenatal data. The following instance is about their production.

Contestation: Comparing data from 2006 with 2007

Mapping trends across time is important for tracking changes in the pandemic, with the ability to do this depending on the consistent use of sampling and methodology.

September 2008 saw the eruption of a fierce debate about the value of the recently released national antenatal data for 2007. Allegations of changes in the method between 2006 and 2007 were made, countered by objections from the Department of Health that this was not the case. At best, the detractors feel that the 'particular statistic's flaws are severe enough to damage its usefulness' (Best, 2001:167). Invariably the problem was both statistical and political.

The data for the Western Cape were particularly pertinent here.

Table 2: HIV prevalence from national antenatal surveys: Western Cape: 2006 and 2007

(Extracted from the 2007 national report (DoH, 2008:19))

	Province: Western Cape	**Health districts**					
		Cape Winelands	**Central Karoo**	**Eden**	**Metro**	**Overberg**	**West Coast**
2006	15,1%	13,2%	8,3%	11,5%	17,0%	13,0%	7,3%
2007	12,6%	12,8%	23,6%	13,1%	16,1%	19,4%	10,2%

At first glance, the statistics in the table above suggest that the prevalences in the province and in the Cape Winelands district seem to have decreased (from 15,1% to 12,6% and from 13,2% down to 12,8% respectively). While the extent of the decrease in the province might draw attention, this could be attributed to a combination of the factors cited by Beaglehole et al (1993) – or to the narrower 'maturing epidemic' attributed to increased AIDS-related deaths exceeding new infections (WCDoH, 2007:14).

But the lie to these statistics – even to a non-specialist – is seen in the reported increase of 15,3 percentage points in the Central Karoo from 8,3% in 2006 to 23,6% in 2007. The confidence interval in 2006 was large at 0,5–16,1, but increased in 2007 to 13.2–37,0. As the project leader-doctor exclaimed: 'That's very odd. It's an outlier. The epidemic doesn't just grow that fast!' (LH). Had the Central Karoo figure not provided a warning sign, unsophisticated users of government statistics could be forgiven for assuming that these authoritative data were generally correct – or, at least, consistent with the previous year's data from the same source.

Shortly after the 2007 survey was released, Rob Dorrington and David Bourne, both highly experienced critical demographers,[123] published an article entitled 'Has HIV prevalence peaked in South Africa? Can the report on the latest antenatal survey be trusted to answer the question?'. In proposing that the report could *not* be trusted, they pointed to changes in methodology between 2006 and 2007 – but also referred to earlier changes between 2005 and 2006.[124] They concluded that 'interpretation of the trend in the antenatal survey data is becoming increasingly difficult as one has not only to allow for possible bias at the young ages … but also the impact of treatment on prevalence levels' (Dorrington & Bourne, 2008:755).

123 Prof Rob Dorrington is an actuary and demographer and the Director of the Centre for Actuarial Research at the University of Cape Town. Among other things, he is a regular participant in the UNAIDS/ WHO Reference Group on Estimation, Modelling and Projections. David Bourne was Chief Research Officer with the Department of Public Health and Family Medicine at UCT, having worked for many years at the Medical Research Council. His main field of interest was vital statistics.

124 Dorrington & Bourne note that between 2005 and 2006, the change was in the size of the sample, which was 'so different from that used previously, one cannot be sure of the extent to which the decrease is simply due to the larger, more representative survey measuring prevalence more accurately'. In the recent findings, an age weighting was introduced that was not used in 2006. Here Dorrington and Bourne contend that 'using the population of all women to re-weight the data will inevitably underestimate the prevalence of women attending public antenatal clinics in that year' given that 'by definition, women attending antenatal clinics are pregnant, and have therefore been exposed to unprotected sex. They further qualify that 'since fertility rates have a very distinctive pattern with respect to age, the age distribution of women attending antenatal clinics is very different from that of the female population' (Dorrington & Bourne, 2008).

At the time, the *Mail and Guardian* (26 September – 2 October 2008) complained similarly that 'the problem is that the assumptions made by the analysts to create a coherent picture are not recorded, thus clearing the way for the charge that the data have been manipulated to give the impression of victory in the war against HIV' (Jack, 2008:35).[125] This had been preceded by a denial by the Department of Health of manipulation of these data. In the *Business Day* of 11 September 2008, Director General Thami Mseleku stated that the methodology had not changed between 2006 and 2007 and 'that they would not explain why the report's figures for the Western Cape appeared contradictory'. While this data is in the public domain and is used by the public, he 'did not want to discuss it in the press' and proposed that those who were criticising the data meet with him 'to discuss their claims that the report was flawed' (Kahn, 2008). So while these data were released in public, the critique or an update were not – leaving the public to use the data as 'fact'.

The TAC also commented on this shift in method. While '[i]t is not necessarily wrong for the Department of Health to change its calculation methodology if it has a reasonable basis for doing so, but by failing to state that it has done so in the report, it has made a mistake or misled the public into thinking a real decline in prevalence has been measured … The failure to adequately explain these methodology changes and why they were done is poor science and renders the antenatal survey a much less useful source of

125 The journalist concerned proposed three possible causes for the decline in levels of HIV infection. These are 'the natural progression of the epidemic' in which diseases increase, plateau and decline; the 'influence of cumulative death rates' which, while acknowledging that these are difficult to assess, proposes that 'death alone might explain the falling numbers'; and 'the effect of ARV therapy' where the viral levels of people on medication are reduced, making them less infectious. In asserting that the health department should not take credit for a possible decline as 'only the ARV treatment programme can be attributed to public policy', the journalist asserted that the decline of an infectious disease 'because of accumulated death rates, should be a matter of national shame' (Jack, 2008:35).

data than it could otherwise be'. They called on the Department of Health 'to release the details and rationale for the methodologies used to calculate provincial and national prevalence from district data for its 2007, 2006 and 2005 antenatal prevalence studies' (TAC, 2008). By the close of the period of data collection for this thesis, they had not done so. [126]

Following this contestation, I have not used the results of this survey in this study. In order to have a full range of data for the same period, I will use the national and provincial data for 2006, as the most recent full set of data available as at November 2008.

In conclusion, the country's antenatal data continue to be used both internationally and locally as evidence for the prevalence in South Africa. I have not seen any negative critique of it, apart from the local examples above. Certainly very few staff of the notional organisation are likely to carefully track these kinds of debates and, like the world at large, are likely to use the data at face value.

3.4.3 StatsSA

StatsSA produces data on HIV prevalence which is high-level and unnuanced[127] – and are not often cited.

As they do not produce HIV prevalence data at a provincial level or profiles of prevalence by any group, these data are not used in this thesis.

126 At the time of writing in 2008/9, the provincial antenatal report for 2007 had not been released, despite being a year overdue. Informal enquiry with colleagues close to the provincial department suggested that the provincial report had been prepared but was being withheld for political reasons, as their results would necessarily contradict the controversial national statistics.

127 The sources of the data they use are not mentioned in the report – but 'Spectrum Version 4 (UNAIDS, 2005)' is listed in the references.

3.4.4 ASSA

As noted above, ASSA2003 produced projections for various HIV/AIDS scenarios for 2006, based on 2003 data. These have been 'calibrated to fit each of the provincial epidemics' at which level 'they are more useful to planning and management'.[128]

Released in November 2005, they estimated that in 2006 the HIV prevalence in the Western Cape would be 5,4% with the highest levels of infection being 10,8% among women aged 15 to 49 (Dorrington et al, 2006:99).[129] They do not have estimations for areas smaller than provinces – nor for any sectors that may be pertinent. As such they are seldom used in this study.

(Another example of 'mutant' statistics mentioned above is in the reporting of ASSA modelled projections, as if they are actual survey results (see, for example, Shaik, 2008:177).)

3.4.5 Comment

The purpose of this section has been to assess the value of quantitative statistics generally, and to this study in particular. Specific attention was paid to the antenatal studies, given their influence. By critiquing statistics in this way, it is not my purpose to imply that quantitative data has no value, nor that nothing can be known. Rather I hope to underscore, as many have and do, the importance of recognising the limitations of quantitative data, and to point to the possible value of supplementing them with other data in order 'to tailor interventions and programmes to the local situation, based on local evidence' (WCDoH, 2007:14).

128 The key informant working as a manager in the provincial Health Department noted that they use the ASSA data to model the anticipated need for ARV services for the Western Cape (VZ).

129 The prevalence rate reported in the national antenatal survey in 2006 for the same age group was 15,6% – which could confirm the overestimation of this source and/or suggest an underestimation of the ASSA projection.

The frailties in publicly accessible data pose particular challenges for non-specialist users. Whether summaries of data are reported through the popular media (without comment on methodology) or the full report is accessed through something like the internet (with the methodological notes included), I suggest that few ordinary users are able to use statistics in a sufficiently discerning way to avoid some of the pitfalls raised in the examples above. This puts a particular responsibility on those who place data in the public domain where they will be accessed by a range of users, from non-specialists to specialist peers users, whose naïve use they must foresee and whose fastidious glare they must withstand.

In conclusion, it is clear that there is no HIV prevalence data for local levels to inform an intervention like the Farms Project – so this study seeks to find out what might be known about prevalence using other, qualitative sources of data.

But secondly, while prevalence data may be able to show changes in the burden of disease in a given area or sector over time, they crucially cannot show the composition of the statistic – the distribution of illness within the area or community, or which factors change within the prevalence measurement - requiring complementary data on mortality, incidence, migration, data collection methods etc to really do so. This effectively limits the value of prevalence data and points to the importance of supplementing it with other more qualitative data, if it is to be used in designing interventions that might make a difference.

3.5 FINDINGS: HIV PREVALENCE - BY AREA

To conclude this chapter, a summary of the existing relevant prevalence data by area is presented, extracted from the sources described above. This is followed in the next chapter by a more complex triangulation of data to supplement the gap in local-level data shown here.

Table 3: Summary of HIV prevalence for 2005 and 2006 [130] as reported by various sources

	National		Western Cape Province		Cape Winelands District		Stellenbosch Sub-district	
	2005	**2006**	**2005**	**2006**	**2005**	**2006**	**2005**	**2006**
Projections: Population								
ASSA2003 (Dorrington et al, 2006:99)	11,0%	11,2%	No data	5,4%	No data	No data	No data	No data
Survey results: Population								
StatsSA (StatsSA, 2005b:1; StatsSA, 2006:1)	10%	11%	No data	No data	No data	No data	No data	No data
HSRC household survey (Shisana et al, 2005:44)	10,8%	No data	(1,9%) [131]	No data	No data	No data	No data	No data
National DoH antenatal survey AND StatsSA (DoH, 2006:15; StatsSA, 2006:2.1)[132]	11,8%	11,4%	No data	No data	No data	No data	No data	No data
Survey results: Pregnant women								
National DoH antenatal survey (DoH, 2007a:6)	30,2%	29,1%	15,7%	15,1%	No data	13,2% [133]	No data	No data
W Cape DoH antenatal survey (WCDoH, 2007:12,16)	No data	No data	15,0%	14,5%	11,4%	12,6%	15,5%	16,9%

130 I have not included 2007 in this table as there are very little data, given that I have chosen to exclude the national antenatal data for 2007, given its lack of reliability. ASSA's projections are for 2006 only.

131 Figure to be treated with caution, as noted above.

132 The national antenatal surveys only model an approximate *number* of people in the general population who might be HIV-positive, and give no modeled prevalence figure. I have therefore calculated the prevalence for the general population using the total population figures obtained from StatsSA for each year.

133 This was the first year that national surveys reported prevalence at district level.

3.5.1 Provincial prevalence

The data at provincial level is considered here as the larger context in which the farms are located. In a more comprehensive study, prevalence data for the sending areas of migrants to the Western Cape (particular the Eastern Cape) might also be considered.

The Western Cape is reported as having the lowest HIV prevalence in the country. ASSA projected that the HIV prevalence in 2006 would be the lowest at 5,4% (Dorrington et al, 2006:99). While the antenatal survey does not model data for the general population at provincial level, the antenatal prevalence figures for the same year were 15,1% and 14,5% (DoH, 2007a:6; WCDoH, 2007:12), the lowest recorded prevalence among pregnant women. This was just over half the reported national average of 29,1% (DoH, 2007a:6).

As noted, the provincial Department proposed that there are sub-epidemics within the province and districts – one of which could be Stellenbosch (WCDoH 2007:14). This was repeated by Gouws and Abdool Karim who commented that these relatively low levels of infection mask 'a high density of people infected with HIV' which they identified as being 'within Cape Town's large population' (Gouws & Abdool Karim, 2005:56).

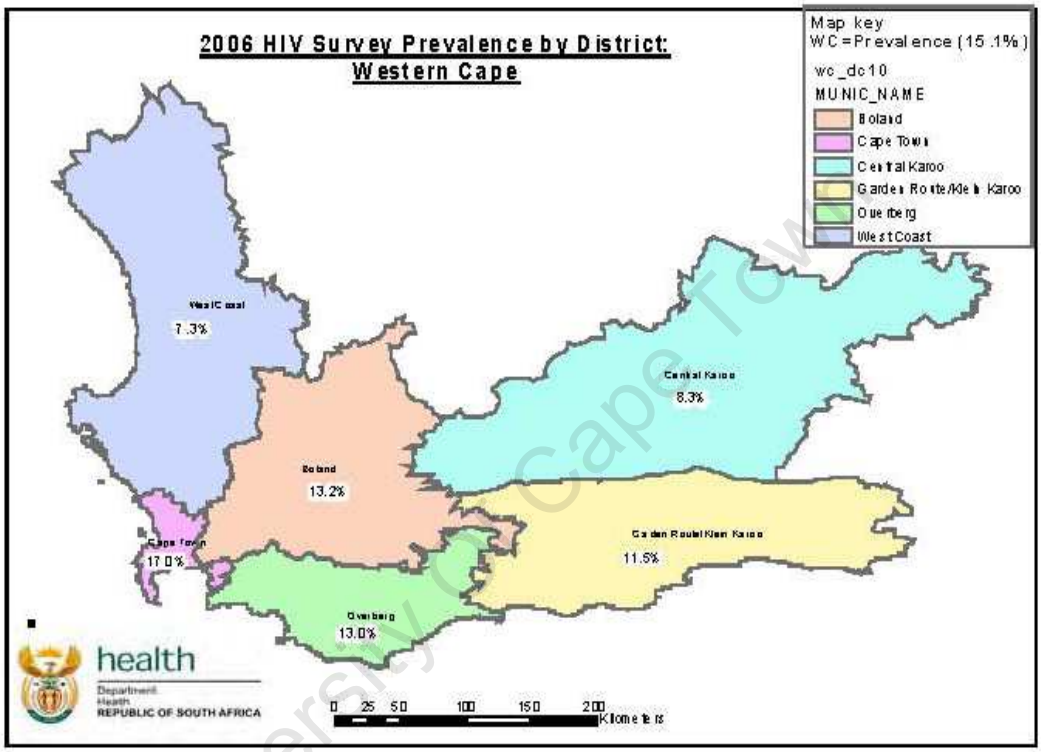
3.5.2 Prevalence by health district

While ASSA does not have projected figures for areas smaller than provinces, both national and provincial antenatal surveys have data for the six health districts (of which the 'Cape Winelands' is one) while the provincial department also has data by sub-district.[134]

134 There are four sub-districts in the Cape Winelands district, of which the Stellenbosch sub-district is one.

In 2006, pregnant women in the Cape Winelands (previously the Boland – as in the map below) had the second highest levels of HIV infection after the high-density Cape Town Metro district. The national antenatal figure was 13,2% (DOH, 2007a:19) while the provincial was lower at 12,6% (WCDoH, 2007:16).

Figure 4: 2006 HIV Survey Prevalence by district: Western Cape
(DOH, 2007a:30)[135]



Among the four health sub-districts in the Cape Winelands district, however, Stellenbosch reported the highest prevalence, at 16,9% of those at antenatal clinics (WCDoH, 2007:11).[136] This presumably contributes to Stellenbosch being identified as having a 'sub-epidemic'. Neither the national nor provincial reports offers any explanations for the differences

135 HIV prevalence by district in 2006 was West Coast = 7,3%; Cape Town (Metropole) = 17,0%; Boland (Cape Winelands) = 13,2%; Overberg = 13,0%; Garden Route/Klein Karoo (Eden) = 11,5%; Central Karoo = 8,3% (WCDoH, 2007a:19).

136 HIV prevalence among pregnant women within the Cape Winelands health district - by area: 2006: Stellenbosch = 16,9%; Ceres/Tulbagh= 12,7%; Paarl = 12,6%; Worcester/Robertson = 10,6% (WCDoH, 2007a:11).

between districts[137] nor between sub-districts, and this comparison is not the purpose of this study.

3.5.3 Prevalence within Stellenbosch sub-district

Despite their recognition of the heterogeneity of HIV prevalence and the importance of local data, the provincial Department does not routinely produce data below sub-district level.

The Project applied unsuccessfully to the Department for HIV-related statistics for local provincial primary health care clinics in the Stellenbosch area.[138] Had these been forthcoming, their value to the Project would have been limited, however, given people's patterns of use and the nature of the data kept by the clinics.

Firstly while members of the on-farm community attend a number of clinics within the area, some choose to attend clinics out of area (in Paarl, or perhaps Franschhoek) for purposes of anonymity. Some people also move between clinics. So not only would accessing data from a few clinics merely comprise a form of sampling, but there could also be no certainty if patients' records were complete - or duplicated in another clinic. (There is no central record system and records are seldom collated across clinics).

137 Other than the Metro, all the districts include a large town, some smaller towns, peri-urban settlements (townships), and people living in farm and rural settings. (This structure is changing at the time of writing, but I shall refer to the structure as it was during the first year of the Farms Project.)

138 Through the Hospice, I requested VCT data for various clinics in Stellenbosch in November 2008 from the head office of the District Municipality– but a year later none has been forthcoming, despite prompting.

In addition, the clinics' data systems are not able to identify patients by address or location type.[139] Had they been able to do so, however, this in turn would have been confounded by two things. The first is that those who work on farms increasingly no longer live there. So while they may give a farm address when taken to the clinic by the farmer, this is not necessarily where they live. There are also people who live on farms without the farmer's consent - who may or may not give the farm's address. But secondly while a prevalence figure might be found within the dataset of those attending clinics with farm addresses, it would be unclear what proportion of the on-farm population this would represent, given the lack of data about the total on-farm population.

3.5.4 Relevant data

At the time the Farms Project was being designed in mid-2007, then, the HIV prevalences within the areas relating to it were therefore as follows:

Table 4: HIV prevalence among pregnant women for 2005 and 2006, as reported in the departments of health's antenatal surveys

		2005	2006
Province:	**Western Cape**		
	(DoH, 2007a:6)	15,7%	15,1%
	(WCDoH, 2007:12)	15,0%	14,5%
District:	**Cape Winelands** (WCDoH, 2007:16)	11,4%	12,6%
Sub-districts:	**Stellenbosch** (WCDoH, 2007:11)	15,5%	16,9%

139 Attempts to get data from the local Infectious Disease Clinic in Ida's Valley in Stellenbosch fell foul of underdeveloped data systems which could not easily discern which patients on antiretroviral therapy had farm addresses. My offer to do a manual count through patient files was (perhaps understandably) turned down. This lack of coding or access was confirmed in personal conversation with a clinic sister, 19 July 2009.

While planning the Farms Project, the project leader produced an estimated prevalence for Stellenbosch generally of 12%, working from a patchwork of statistical sources from the provincial Department of Health. In my search for other data for this thesis, I could not do any better.

This lack of local data is in the context of the provincial Department of Health pointing out that 'health service data suggest that the epidemic may be concentrated in a locality, highlighting the need to examine the local context using several sources of data'. They urge planning of responses to the AIDS epidemic to be undertaken with a 'more nuanced approach, taking into consideration the factors that influence the variation', which include 'the wide disparities of a range of factors such as the socio-economic status, unemployment rates, poverty levels and health outcomes' - and point to the need to 'tailor interventions and programmes to the local situation, based on local evidence and focussing on the context in terms of locally relevant groups, new infections, sexual networks and risk behaviours' (WCDoH, 2007:14). In the absence of this suitable local-level data, then, it is this local evidence that this study seeks to identify and to use to find out what can be known about HIV prevalence among people on Stellenbosch wine farms.

I start with the limited quantitative data relevant to the lives of people on wine farms. These are the prevalence data for Stellenbosch sub-district (presented above), and two prevalence figures from the HSRC household survey - for 'race' and locality type - as well as data on some reported behaviours (like alcohol consumption and condom use). To these I add the other data sources and measurements mentioned in Chapter 2 - to assess what can be known about levels of infection in a sub-sector like wine farms in the Stellenbosch area, using these mixed sources and methods.

3.6 CONCLUSION

This chapter has mapped some of the difficulties of knowing about HIV prevalence at local level. Reviewing the possible sources of prevalence data, it sifted what might be useful, illustrating one of the study's assumptions – namely that there are no prevalence data relating to Stellenbosch wine farms.

It also outlined some of the difficulties the notional modestly–resourced organisation might face in working with HIV data. These comprise their own internal constraints – their capacity, interests and the need to survive - as well as the contesting and shifting nature of HIV-related data and information itself. This crucially included identifying the frailty of some of the even most frequently cited and reputable data – particularly from the national antenatal survey - and concluded that some data would not be used in this study, given methodological difficulties encountered in its production.

Given the absence of traditional quantitative measure for prevalence, then, the next chapter embarks on the triangulation exercise described in Chapter 2 – in search of what can be known about HIV prevalence through using a variety of data, sources, measures and methods.

4. WHAT CAN BE KNOWN: A MULTI-FACETTED ENQUIRY INTO HIV PREVALENCE

Having ascertained that there is no publicly accessible quantitative data on HIV prevalence for those living on Stellenbosch wine farms, this chapter investigates what might be known about infection levels by triangulating various sources of data, measurements, and data itself.

It starts by briefly reviewing the pre-requisites for HIV transmission as well as what might constitute 'risk'.

It then examines prevalence and HIV 'risk' as they may apply to life on Stellenbosch wine farms - first in rural areas in South Africa generally and on these farms in particular, then in relation to issues of poverty, gender relations, alcohol consumption and 'race'. This is done by juxtaposing relevant material from the literature, the national data from the HSRC household survey, the local statistics from the Farms Project's first year on farms and the key informants' opinions - in order to distil what each factor might contribute to what can be known about HIV prevalence on these wine farms. Having made a preliminary finding in each category, I then triangulate these and describe what they indicate collectively about prevalence on these farms.

4.1 ESSENTIAL CONDITIONS FOR TRANSMISSION

Assuming that transmission of HIV on Stellenbosch wine farms is (largely hetero-)sexual,[140] vulnerability to infection has two pre-requisites: firstly the presence of someone who is infected and secondly that they are having unprotected sex within a sexual network. No matter how dire, social conditions like poverty, gender relations, ignorance and alcohol abuse (to name a few) will not produce 'environments of risk' in the absence of infection, nor will any number of permutations of sexual partnerships in a closed and uninfected sexual networks produce infection.

That being said, HIV does not transmit easily through heterosexual sex. Quoting 'the medical community', Hein Marais cites the estimates for this as 'a male having unprotected sex with an infected female partner runs a 1/1 000 risk of becoming infected; in the reverse scenario, the female partner runs a 3/1 000. The presence of STDs [sexually-transmitted diseases] is generally believed to increase the risk factor by 10 to 20 times' (Marais, 2000:55).

4.1.1 'Risky' behaviour

Some sexual practices are more prone to transmitting HIV infection than others, however. The most infectious time to have unprotected sex is when someone is newly infected, when their viral load is high. Having unprotected sex with this person more than once, increases the opportunity for infection – and this is compounded if there is some trauma involved. It is the possibility of repeated sex with someone whose viral load is high that underpins the idea that multiple concurrent partnerships are one of the major vectors of infection, given the various opportunities this allows within a sexual network. This is addressed more fully below.

140 While blood from injuries in the workplace may be an issue on farms and there may be injecting drug users, the dominant mode assumed here is heterosexual intercourse. While there are undoubtedly men who have sex with men this is not reviewed here, and was not volunteered as an issue (as it might be expected to be, by some of the more outspoken informants).

The nature of the sexual network is therefore crucial to transmission, with the entry of an infected person into the network being the issue. For instance serial monogamy and polygamy can be entirely safe practices if the HIV status of all parties is known and the networks remain closed. While there is debate about whether or not just one incident of unprotected sexual intercourse is sufficient to put the whole network at risk, the public messaging that cautions people against casual sex and shows how 'just one' can affect a lot of people remains important.

The idea of protected sex itself is not simple, however, as people in monogamous partnerships may well be 'safe' without using condoms, making a report of low condom use not necessarily an indicator of risk. Conversely people who do not use condoms in a monogamous partnership in which one partner is not faithful may well be at risk – as described under multiple concurrent partnerships below. [141] Who one has sex with, when, and how often are therefore significant factors.

Intimate partnerships – monogamy and affairs

Multiple concurrent partnerships comprise a number of people having sex within a sexual network on an ongoing basis. [142] The classic example is of married women who are at risk, given that their husbands have another partner(s), and they are either unaware of this or unable to negotiate

141 In research into the link between alcohol abuse, gender-based violence and HIV infection in Botswana, it was found that 'the vulnerability of women from poor backgrounds has been linked to poverty, which has pushed many into marriage and cohabitation with men who subject them to abuse. It is unfortunate that women often have no choice but to stay in an abusive relationship for economic reasons'. The authors add that 'abusive men often take advantage of the vulnerability of women and engage in extramarital relationships with younger women because they are said to be "cleaner", i.e. less promiscuous than older women and thus free of HIV. It is obvious that these factors are collectively accelerating the spread of the virus among married and cohabiting couples' (Phorano et al, 2005:199).

142 Elizabeth Pisani differentiates between serial monogamy characterised by relationships that take place in 'strings' or 'chains' and multiple concurrent partnerships which take place in 'nets' or 'webs'. She shows how the entry of one infected person into a net or web can begin to infect everyone, given the high viral load just after infection (Pisani, 2008: 135&156).

condom use to protect themselves.[143] While none of the partners is infected with HIV, these arrangements are not intrinsically risky – but the multiplier effect of one person becoming infected can be impressive and is gaining attention as a major route of infection.

The assumptions about casual sex taking place on farms are in contrast to the findings of the HSRC (national) household survey with respect to multiple partnerships (assuming that people declared their 'infidelities' in this survey). The study found that people from 'rural formal areas' (which included farms) were the *least* likely to have multiple partners, compared with people living in any of the other three localities. 91,1% of men[144] in rural formal localities said they only had one partner while 98,3% of women[145] said so. In terms of 'race' nationally, 88,8% of 'Coloured' men and 96,5% of 'Coloured' women said they had only one partner[146] (Shisana et al, 2005:56). This is compelling data, and supports an expectation of their being a lower-than-average prevalence on these farms.

This sits at odds with both common perceptions and some anecdotal evidence of life on farms - which suggest that there is a lot of casual sex between various partners as a result of the ready availability of alcohol, limited mobility and the lack of recreation on farms, among other things.

143 The NGO co-ordinator of a women's health project pointed to the difficulty of negotiating condom use inside a marriage: 'It's difficult to be faithful. You can be faithful, faithful is an individual choice, but your partner while you're faithful is not faithful – you cannot protect yourself from transmission and use a condom. The position of women does not allow them to effectively negotiate condom use.' She added that 'you can be faithful to your partner, but if your partner is not faithful to you, then really you are still at high risk' (GR).

144 This is significantly higher than men in the other three localities where the percentages of men with one partner were 80,0%, 81,3% and 84,0% (Shisana et al, 2005:56).

145 This is similar to women in other areas - being 96,8%, 96,5% and 98,1% (Shisana et al, 2005:56).

146 The following proportions of men said they had only one partner within the previous 12 months: 'Black African' = 80,7%; 'Coloured' = 88,8%; 'White' = 96,2% ; 'Indian' = 96,0% (Shisana et al, 2005:56).

There is an assumption that condoms are difficult to get and, if available, to negotiate (for a variety of reasons to do with drunkenness, male power etc), suggesting that sexual activity is often unprotected. Levels of teenage pregnancy are thought to be high, again indicating unprotected sex is taking place.[147] While these ideas are necessarily based on hearsay and conjecture and are not verifiable, they lead to a relatively common perception that there may be HIV infection on farms.

The key informants with experience of farms had contrasting information. The Farms Project co-ordinator reported that during pre-test counselling on farms, many people who did not use condoms also did not consider themselves to be at risk, as they were "'married to someone 20 years on the farm"; or "married five to six years to someone on the farm – not using condoms"'. She confirmed that they did indeed test HIV negative (TG).

In contrast there were reports of incidents of 'cheating' and infidelity on farms, although the extent to which these were, in fact, multiple concurrent relationships was not fully investigated.[148] For instance the farm-based social worker reported that 'of the families that I know of - married families in long relationships [about 15 couples] - at least three of those are also having affairs that are well known. … I'm talking about the long-established marriages - which is probably, say, about half' (LF). In her report on gender

147 This was voiced by the hospice manager who thought that 'more sex was happening and therefore the possibility of infection was higher' (GN).

148 Evidence of the possibility of extra-marital affairs was also seen in the farm-based community worker story of a conversation with her own husband: '*Ek was baie open met my man en het vir hom gesê dat ek is baie eerlik met jou maar as ek uitvind jy doen dit, dis* hard luck! *Geen saamslaap nie. Jy kan sê dat jy met daardie vrou 'n kondoom gebruik het, maar jy kan nie seker wees nie. So ons moet absolut eerlik wees – een bedmaat and that's it!'* (DC).
Translation: I was very open with my husband and I said that I am very honest with you but if I find out that you are doing it, then it's hard luck! No more sleeping together. You can say that you used a condom with that women, but you can't be certain. So we must be absolutely faithful – one sleeping partner and that is it!

and violence on farms, Linda Waldman wrote that 'any woman who is known to use contraception is called an *oom* (uncle) or *mansmens* (male) because she cannot have children' and their partners 'are known to turn their attention to young girls in the blok'. Waldman's informant said that 'women accepted this male behaviour and suggested that men are even justified' (Waldman, 1994:16).

Men are not the only people reported to have affairs, however. The NGO co-ordinator of a women's farm health project mentioned a farm-based woman who had an affair with her neighbour's husband, despite being HIV-positive herself – as a result of which she became pregnant and he became HIV positive (GR). This is complemented by a story of a man who was very depressed despite testing HIV negative as he knew of his wife's ongoing affair and was certain he would become infected (MT).[149]
Nonetheless Catherine Mathews reported that data from two national major surveys[150] showed that men were more likely than women to report multiple partnerships. In the age group 15–24, 23% of men compared with 9% of women said so, while in the older group (25–49), 12% of men compared with 3% of women said so (Mathews, 2005:145).

149 '*En daar was een man – hy was... lang getroud maar hy was baie upset. … En hy het gesê "Vir hoe lank kan ek negatief wees?" En toe vra ek vir hom "Hoekom vra jy?"... En agterna het hy gesê dat hy dink sy vrou drink en slaap rond … Hy't gedink dat hy kan net siek word …* And he was so depressed. He wasn't even glad to hear he is negative. He is just waiting for it. *En hy is 28 jaar getroud!'* (MT).
Translation: 'And there was one man – he was married for a long time and he was very upset … And he said "How long will I be negative for?" And I asked him "Why do you ask?" … And after a while he said that he thinks his wife is sleeping around, and the thinks that he is just going to get sick. And he was so depressed. He wasn't even glad to hear he is negative. He is just waiting for it. And he has been married for 28 years!'

150 She cites these as the HSRC household survey of 2002 and the Demographic and Health Survey of 1998.

4.1.2 Contexts of risk

The farmer-doctor pointed to the multiple factors that affect vulnerability to infection – only some of which are addressed in this study:

> 'It's just like the whole thing about the differences; it's not just race. It's also where were you born… Did you move? Have you been on the one place always? Where were you on the social grouping on the farm? Have you been exposed to drugs and alcohol? Where did you go? What's your level of education?' (NG)

The multiplicity of factors that can comprise risk for HIV infection are listed by numerous researchers, including Charles Parry and Quarraisha Abdool Karim (Parry & Abdool Karim, 1999:82); Tony Barnett and Alan Whiteside (Barnett & Whiteside, 2002:155-156) and the authors of the 2005 provincial antenatal study (WCDoH, 2006:14-15).

They include sexual practices (sexual risk behaviours, an unwillingness to use (or unavailability of) condoms, anal sex as a method of contraception, 'dry' sex); sexual networks (high numbers of lifetime sexual partners, social norms that accept or encourage high numbers of sexual partners); STIs (that are untreated or poorly treated); violence (high levels of rape and violent sex); exchange (the growing commercial sex industry, poor women and relatively better-off men); gender relations (the low status of women in society and in relationships); population demographics; material deprivation (inequality and poverty, unemployment); the use of alcohol; living conditions (high population density, the degree of urbanisation); social cohesion (unstable communities, disorder, low levels of social cohesion); social deprivation; and migration and movement (good transport infrastructure and high mobility, the entrenched system of migrant labour, the influx of political and economic refugees from other African countries, the return of freedom fighters from Angola and high prevalence countries like Zambia, Uganda, and Tanzania - and their redeployment to military bases throughout the country).

The 2006 provincial antenatal report concluded that 'the reasons for the variable growth of the epidemic are not clear and a combination of factors are attributed to the variation' (WCDoH, 2006:14-15) while Barnett and Whiteside proposed that 'a range of factors raise individual susceptibility to infection' when commenting on the longitudinal Carltonville study undertaken to investigate the social and economic factors contributing to the rapid spread of AIDS in urban South Africa.[151] Noting the predictability of these findings, the authors note that 'they confirm that if you put people in circumstances where they cannot maintain stable relationships, where they are mobile, when life is risky and pleasures are few and necessarily cheap, then sexually transmitted diseases will be rampant' (Barnett & Whiteside, 2002:155-6).

While it is clear that a multiplicity of factors – located both at individual and societal levels - creates susceptibility to HIV infection, many of these factors are not intrinsically risky, despite suggestions to the contrary. While some are more prone to creating risk than others, and each might contribute to an 'environment of risk', many do not *necessarily* do so alone.

As elsewhere, factors on farms which are thought to be risky for HIV transmission – like poverty, gender-related violence, alcohol, casual sex, teenage pregnancy - are based on an assumption of causality. But these factors may not be intrinsically risky, and often depend on a combination of conditions for them to become a vector of infection.

Beaglehole et al note that, 'a causal factor on its own is often neither necessary nor sufficient' (Beaglehole et al, 1993:71). In describing the frailty of some ecological (epidemiological) studies using quantitative data, they record that 'there are no completely reliable criteria for determining whether an association is causal or not. Causal inference is usually tentative and

151 This project was reported in detail in Catherine Campbell's *Letting them Die. How HIV/AIDS prevention programmes often fail* (2003).

judgements must be made on the basis of the available evidence: uncertainty always remains. Evidence is often conflicting and due weight must be given to the different types when decisions are made… *The likelihood of a causal association is heightened when many different types of evidence lead to the same conclusion*' (my emphasis) (Beaglehole et al, 1993:81).

The lack of simple causality becomes a theme in this chapter, as the candidacy of five social conditions for being a vector of HIV transmission on farms is assessed.

4.2 RURAL AREAS AND FARMS

In this section – as in the others that follow – I triangulate existing quantitative data with data from other sources and in other forms, as proposed in Chapter 2.

4.2.1 Prevalence: Rural areas nationally

The commonsense perception is that HIV prevalence is lower in rural than in urban areas – and various national data confirms this.

According to the country's *National Strategic Plan for HIV & AIDS and STIs (2007–2011) (NSP)* urban areas in the Western Cape had a prevalence of 17,6% in 2005, while the rural areas were at 10,1% (DoH, 2007b:27). The HSRC household survey produced remarkably similar findings for the same year[152] with areas which included farms ('rural formal' areas) having the lowest prevalence at 9,9%[153] followed by 'rural informal' areas[154] at 11,6%

152 Extraordinarily, the source of the data in the National Strategic Plan is not acknowledged. They may well be the 2005 HSRC household data – making this similarity completely unremarkable!

153 'Urban informal locality types' had a 17,6% prevalence.

154 People who commute to work on farms in the Stellenbosch area are likely to live in a combination of formal and informal localities.

(Shisana et al, 2005:35-38).[155] This difference within rural areas was repeated[156] in their prevalence data for working-age people,[157] at 13,9% and 17,3% respectively.

Among those tested by the Farms Project in its first year (all of whom would be 'working age'), the difference between the prevalence amongst those on farms (formal locality) and those who commute (both localities) was clear: 2,8% of the people from on farms who tested for HIV were positive; while nearly three times as many from off farms (11,4%) were HIV positive.

The HSRC household survey found that youth living in rural areas reversed this trend however. Young people aged 15–24 who lived in formal rural areas were reported to have significantly higher levels of infection (16,7%) than those who lived in less formal rural areas (11,1%) (Shisana et al, 2005:40). These differences were partly mirrored in their reports of their sexual activity. More people between ages of 12 and 24 living in formal rural localities reported that they were engaging in sex than those living in informal rural localities[158] (Shisana et al, 2005:53).[159] The study does not offer any explanations for either of these figures, however – but would be a point worth noting if one was engaging in prevention work in the area.

155 In the earlier household survey of 2002, farms were reported as having a much lower prevalence than that in urban areas. Its reported prevalence of 7,9% was a third of the rate in informal urban areas (21,3%) and less than formal urban areas at 12,1% (Shisana et al, 2002:47).

156 Caution needs to be exercised in drawing a conclusion about this being a trend, however, as the categories within rural areas changed between the 2002 and 2005, from the more focused 'farms' and 'tribal areas' of the 2002 study to the more inclusive 'formal' and 'informal' rural in 2005.

157 Aged 15–49.

158 1,9% in formal localities compared with 1,3% of those aged 12 to 14. This trend continues in those aged between 15 and 24 years old, with 67% in formal rural localities compared with 55,9% in informal rural localities (Shisana et al, 2005:53).

159 Young people aged 12 to 14 in rural areas were slightly less inclined to have sex at this age than those living in urban environments (Urban formal = 2,1%, urban informal, 1,7% (Shisana et al, 2005:53).

There was conflicting data about changes in prevalence in rural and urban areas, however. While the NSP reported a greater increase in HIV prevalence in the urban areas than in the rural areas in the Western Cape, for the five years between 2000–2005 (DoH, 2007b:27), the HSRC household survey recorded the opposite - nationally.[160] The provincial antenatal data proposed a third scenario – that levels of infection within rural areas had hardly changed in three years (from 10,3% in 2002 to 10,1% in 2005) while the urban areas *increased* by 4,7 percentage points[161] (WCDoH, 2006:10).[162] The HSRC household survey reports that despite the increase in prevalence in the rural areas, there were fewer new infections there[163] proportionate to the urban informal areas (2,7%/2,8% compared to 7,0% per year) (Shisana et al, 2005:49).[164]

These data can be understood in a number of ways. Firstly as the household survey describes national trends entailing the general population (in rural areas) while these antenatal data are for pregnant women (in rural areas) in the province, they are not directly comparable. In terms of trends that may be identified from these data, however, a provisional conclusion would be that the prevalence is changing more significantly in rural areas in other parts of the country than in the Western Cape. That being said, following Beaglehole et al's caution above, the changes of levels of illness in an area could be caused by a number of factors, only two of which may be increasing new infections balanced by mortality, but could equally include

160 While urban areas decreased by around 3 percentage points – from 12,1% to 9,1 % (formal) and 21,3% to 17,6% (informal) – rural areas *increased* by between 2 and 3 percentage points – from 7,9% to 9,9% (formal) and 8,7% to 11,6% (informal) (Shisana et al, 2005:44).

161 From 12,9% to 17,6%.

162 Although it does not name its sources, it is likely that the Western Province Spatial Development Plan drew on this data when it noted in 2005 that 'research has shown that there is a more rapid rate of increase in HIV prevalence in urban areas' in the Western Cape (WCDEADP, 2005:143).

163 The survey defines incidence as 'recent infections within the last 180 days'. New infections in rural areas were reported to be similar across locality type at 2,8% and 2,7% per year for informal and formal localities respectively (Shisana et al, 2005:49).

164 Urban formal localities had the lowest incidence at 1,8% per year (Shisana et al, 2005:49).

the movement of people, better reporting etc. (Beaglehole et al, 1993:17). I therefore cannot attribute meaning to these changes, other than to note the relative burden of disease.

In conclusion, national data from 2005 suggest that levels of infection within rural areas were lower than those in urban areas – and within rural areas were lowest in the locality type that included farms. In addition, working-age people living on farms were likely to have lower levels of infection than those off farms, while youth on farms were thought to have higher levels of infection than their nearby off-farm counterparts.[165] Incidence of new infections within rural areas nationally was similar, but lower than urban informal areas.

his supports the proposal that working age adults on farms – who formed the bulk of those tested by the Project – might have lower levels of prevalence than those off farms.

4.2.2 Prevalence: Stellenbosch wine farms

This section presents two sources of data about HIV prevalence on Stellenbosch wine farms, namely the key informants' expectations of prevalence on these farms and the results of the HIV tests conducted in the first year of the Farms Project.

VCT results from the first year of the Farms Project

Unlike the prevalence figures cited above, the data from the 14 farms are the actual numbers of people who were tested, among whom some were found to be HIV positive. Where proportions are mentioned, they are ratios *within*

165 A survey of farm workers in Limpopo Province undertaken in 2008 by the International Organisation for Migration (IOM) and Hoedspruit Training Trust found that 'female employees who daily travel more than one hour to work are more likely to be infected with HIV than their male counterpart – and women spent more time travelling to work than men. Female workers who live away from their workplace have a significantly higher risk to HIV than men (32% vs 17,9%)' (IOM, 2008).

the actual group of people tested, rather than in relation to the total population on those farms, given the difficulty of finding out how many adults there were on each farm. No modelling has been done – nor would it be appropriate to do so, as no claims are being made that these results are either typical or representative of HIV prevalence on wine farms. The reasons for this are given in Chapter 2 above.

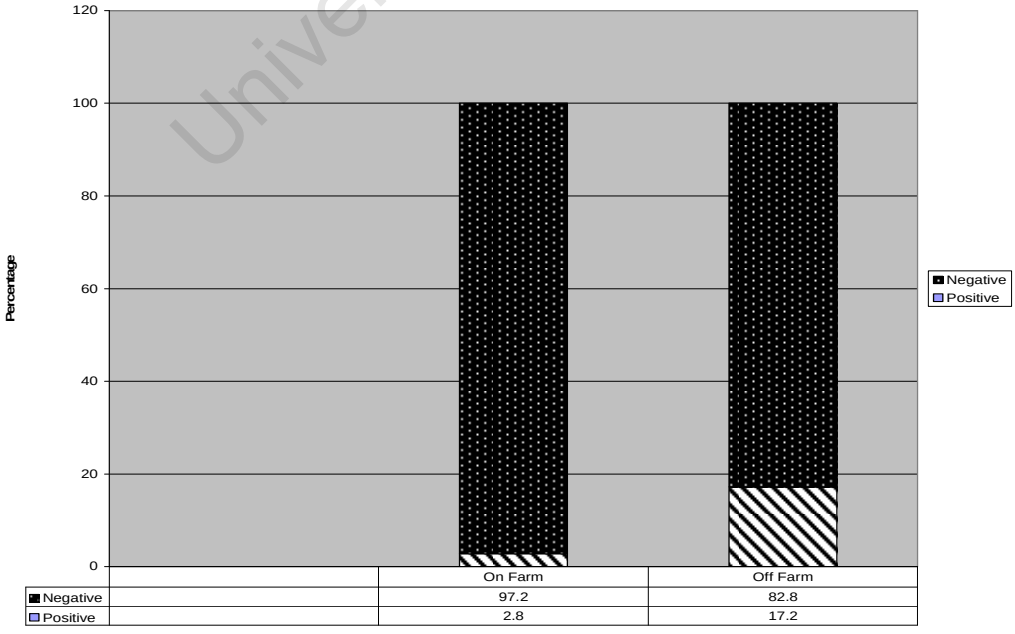
Overview of findings

On the 14 farms, a total of 414 people were tested for HIV, of whom 25 people – or 6,0% – were found to be HIV positive.

- 2,8% (9 of 321) of the on-farm people who tested were HIV positive; while
- 17,2% (16 of 93) of off-farm people who commuted to farms to work and were tested were HIV positive.

Thus those living on farms (in 'formal rural localities') were significantly less infected than those who lived off farms (in 'formal' and 'informal' rural localities') and commuted to work.

Figure 5: Comparison of HIV test results of people tested for HIV by the Farms Project on 14 Stellenbosch wine farms: by locality on/off farms: November 2007 – November 2008



The demographic profiles of those who tested positive are given in Appendix H, while commentary on 'race' and gender (on and off farms) are reported below.

People who live on farms

The nine on-farm people who were found to be HIV positive lived on five of the 14 farms – which means that on the other nine farms, nobody who tested was HIV positive.[166] Of those who were positive on farms:

- two thirds (6 of 9) were permanently employed, representing 2,4% of the on-farm permanent workers tested;
- one third (3 of 9) were casually employed, representing 7,7% of the on-farm casual workers who were tested;
- six were women (3,8% of all women tested) and three were men (1,8% of all men tested);
- eight people were 'Coloured' (2,5% of all 'Coloured ' people who tested) and one person was 'Black African' (12,5% of all 'Black African' people tested).

In summary, there was a lower prevalence among those living on farms than those off farms. Of those on farms who were tested, higher HIV prevalence was found among

- those casually employed than permanently employed;
- women than men; and
- 'Black African' people than 'Coloured' people.

These trends were also found in those who were tested who commuted to work on farms.[167]

---

166 This would be significant if we had tested all adults on each farm – but we cannot know if there were people who did not test who might have tested HIV positive.

167 Of those who were found to be HIV positive who lived *off* farms, four fifths of those infected – or 81,2% (13 of 16) – were women, which is higher than their representation within the group tested (two thirds – or 67,7% – of the people tested from off-farms were women).

'Black African' people were disproportionately highly represented among those who were HIV positive. While they constituted 38,7% of those who tested, they represented 81,2% (13 of 16) of those who were found to be HIV positive.

Key informants' expectations of HIV prevalence on farms

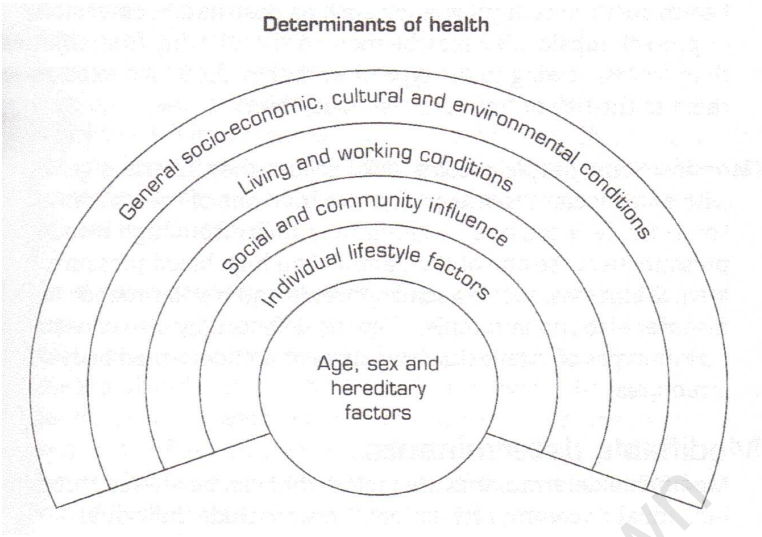
The primary question to the 20 key informants was what their expectation of HIV prevalence on Stellenbosch wine farms was[168] *in relation to* the average HIV prevalence for the greater Stellenbosch area. While the question was comparative and not numeric - with a view to mapping where they thought farms fitted into a 'hierarchy' of prevalence - I cited the 12% estimated as the general prevalence by the project leader. I asked whether they expected the prevalence on Stellenbosch wine farms to be the same as the average for the area, or higher or lower than this average – and why? I was asking them to make an educated guess.

This section presents the informants' responses which I have grouped according to the option they chose, adding a fourth (called 'diverse') for the four respondents who either felt that the variety of conditions on farms made it difficult to know, or who offered two contrasting estimates within the interview.

In briefly summarising the reasons given by the informants for their expectations of relative prevalence, I refer to Whitehead and Dalgren's model of determinants of health in which they layer the underlying or 'risk' factors to health in concentric circles, from those most closely located to individuals to those most societally located. This starts from the way age, sex and hereditary factors affect health; moves to individual and lifestyle factors; through social and community influences; then to living and working conditions; and finally to general socio-economic, cultural and environmental conditions (Whitehead & Dalgren 1991, quoted in Puoane & Hutchings, 2009:39).

168 In the case of the Hospice staff, I asked them to think back to just before the Farms Project began and to remember what they thought then. This is clearly not ideal, in addition to which one staff member started work at the Hospice just after the Project began so could not engage in this way.

Figure 6: Determinants of health



(Whitehead and Dalgren (1991)
quoted in Puoane & Hutchings, 2009:39)

This model also points to the there being multiple determinants of health which can – and sometimes must – co-exist to result in ill-health. For instance no amount of 'personal lifestyle' would protect people from some social or cultural factors. A widow who is 'given' to her brother-in-law is constrained in her options to protect herself from STIs or HIV. Social and community influence might mitigate poor workplace health conditions – e.g. insisting that people in on-farm housing are protected when spraying crops. And poverty may live across a number of determinants – but may not be sufficient alone to cause illness (see section on poverty below).

In a more extensive analysis of social conditions and risk, I would have employed this model more fully. As this falls outside of the ambit of this brief study, however, I simply introduce it to underscore the importance of identifying the locus of risk when designing interventions. If a determinant of health largely lies in the local socio-economic, cultural and environmental conditions, implementing a behaviour change prevention programme focussing only on individuals is bound to be a struggle. Similarly, implementing this behaviour change prevention programme where personal risk is low, given local lifestyle and social factors can be a waste of resources.

The responses

Just under half of the respondents (9 out of 20) thought the HIV prevalence on farms would be lower than the average for the area, while three said it would be higher, and four said it would be similar to the average. A further three people either referred to differences across farms or made two opposing choices during the interview, while one person explicitly chose not to answer the question on the basis that she could not know.

Table 5: Overview of key informants' expectations of HIV prevalence on Stellenbosch wine farms: November 2008 (expressed in relation to the average for the Stellenbosch area)

Lower than average	9
Average	4
Higher than average	3
Diverse	3
Would not say	1
	20

The fact that fewer people thought that HIV infection levels on farms would be higher than the average for the greater Stellenbosch area contradicts the popular link made between the poor social conditions on farms and high levels of HIV infection. It also contradicts some Hospice staff's concerns that HIV-positive on-farm patients were the 'tip of the iceberg'.

Lower than average

Of the nine respondents who estimated the prevalence on farms to be lower than the average for Stellenbosch, seven[169] attributed this to farms still being 'closed communities'. Even where there was movement on and off farms, they felt this did not affect the HIV status of those living on farms. In

169 RJ, LL, VZ, NG, LB, CS and MJ. SV and MT thought it would be lower than average but did not propose that this was because of a closed community.

addition some thought the mobility of the dwellers themselves was curtailed by a lack of resources and/or transport and distance made it difficult to go to town on weekends. Two of these respondents – both qualified nurses (CS and MJ) – specifically described a closed sexual community by saying that, while they thought there was unsafe sex taking place, the farm-based community was free of HIV as it had not been infected by outsiders.

Two of these nine respondents thought that the management decisions of the farmers made a difference. The first – the farms-dedicated Hospice nurse (CS) – thought that farmers chose healthier people to work on their farms (and by implication did not employ, and even moved off, those who were ill); and the second, the doctor-farmer (NG), thought that the structures and controls put in place by farmers served to protect workers (although whether this is from themselves or from outsiders was not clear). The home-based carer saw the presence of health workers on some farms as a positive influence (MT); and she and one of the farmers (SV) thought that farm dwellers were well-informed about HIV which resulted in health-seeking behaviours. The carer also thought there was less alcohol abuse and less teenage pregnancy on farms than there was in high-density urban areas like nearby Cloetesville (MT).

Two people cited forms of social stability as mitigating HIV transmission. The same farmer (SV) thought that those on farms were 'more conservative and family–oriented' while the doctor-manager (VZ) surmised that there may be more social stability on farms than off farms.

In summary, estimates of a lower prevalence on farms were based on the assumptions largely influenced by social and community conditions (like closed sexual networks, social stability and less alcohol abuse and teenage pregnancy) – with some of the factors being located in the living and working conditions on farms – particularly the idea of a closed community and the positive effects of interventions by the farmer. There were almost no assumptions about factors within the control of the individual or about those in the macro socio-economic context (like 'poverty').

Higher than average

All three respondents who thought the HIV prevalence on farms would be higher than the Stellenbosch average – two of whom were based on farms – were concerned that the HIV infection being detected was only 'the tip of the iceberg', and that many people were infected but were not being tested. The farm-based social worker was concerned that HIV infection was 'being hidden … with the TB and with the cancer – or not being spoken about' (LF) while the farmer felt that 'what is known is not what is happening on the ground level' inferring that there were higher levels of HIV infection than was generally realised (TR). The Farms Project co-ordinator thought that 'there are people on farms that are very high risk – who suspect that they are HIV – who do not come forward to test' (TG).

The farm-based social worker ascribed her expectation of high levels of infection to a 'lack of boundaries' within the on-farm community; a lack of limits and codes which contained and regulated personal and social behaviour. She reported that there were many stories of 'loose living' on their farm – as witnessed by, for example, 'women who have four children from different men', teenage pregnancies, and known extra-marital affairs. This was in the context of continuing alcohol abuse and some drug use with associated risky sex, sometimes accompanied by violence. In addition, she cited the lack of discernment of adults who were living with lifelong effects of foetal alcohol syndrome. She felt despondent about the overarching need for community conformity and farm dwellers' reluctance to change which undermined any attempts at shifting people towards health-seeking behaviour. Although the known prevalence on the farm on which she worked was low, she was sure that people who were at risk were opting out of being tested (LF).

The farmer – on a different farm – based his expectation of high prevalence largely on his experience in the AIDS-dedicated NGO in which he had been involved. Although he thought it may be 'unfair' and that 'there's no scientific reason why I say this', this exposure led him to expect HIV prevalence on farms to be 'closer to 30%'. He attributed this to ignorance (given dwellers' isolation), people's inability to distinguish 'right from wrong'

and to take responsibility, as well as the lingering effects of patriarchy, in which he included women's internalised messages about their subordinate roles in the world. He also noted that there were high levels of infection in Kayamandi, although he did not link this to infection levels on farms. In contrast he saw farm dwellers becoming more informed, 'because of television, because of education, because of their kids that go to school and they start to ask questions about themselves' (TR). There was little further motivation for his high estimate, as he focused on his own farm during the interview, despite attempts to broaden the focus of his responses.

In contrast to these, the Farms Project co-ordinator cited people's impoverished material conditions as her main reason for assuming there was high HIV prevalence on farms. This reduced people to forms of survivalism in which having sex – for material gain or security – was important and the use of a condom and the danger of contracting HIV were not pressing issues. She thought that the Project was not reaching those who were positive and that there was more infection than the initial results showed (TG).

In summary, the motivations for the estimates were evenly spread across the four determinants of health – including the ones that are physiological and not modifiable, namely FAS. It is arguable that some of the factors I have attributed to individual lifestyle – like people's inability to take responsibility and to distinguish right from wrong – are part of FAS. Patriarchy, the lack of regulating social codes and the reluctance to change in preference to social conformity fall into the ambit of social and community influence – while ignorance due to isolation moves to conditions of living and working, with material poverty and survival sex being rooted in the general socio-economic conditions.

Same as the average

Three of the four respondents who estimated that the prevalence on farms may be similar to the average for the Stellenbosch municipal area were Hospice clinical staff, one of whom had extensive experience of farms. Their answers were non-committal in all three instances, with two of the three overtly saying they really could not know. My experience of these staff is that they are all highly exacting professionals who would not be comfortable with making an uninformed (or 'educated') guess. My sense was that their answers were given as gracious but cautious compliance with the research process and that they would rather have talked only about the health-related factors on farms.

Despite having first alerted the Hospice to the need to intervene on farms, this Hospice nurse expected the prevalence to be similar to the average for the area as she 'wanted to be realistic' and '[y]ou can't just take a figure out of the air'. The main reasons she gave for HIV infection on farms were seasonal workers who stayed on farms overnight (especially those from other parts of the Cape who were 'Coloured'), the poor conditions in which some people live, and 'children [who] go away and then come back when they are sick' (AB).

The palliative nurse who managed the Hospice's in-patient unit was also cautious about guessing: 'You can't have numbers [statistics] if you haven't tested the person. So you need to confirm it.' While she had cared for farm-based patients in the in-patient unit, she did not think there were more patients from farms than from elsewhere (EF) – as Appendix B confirms. The leader-doctor of the Farms Project who also chose this option noted that they had 'no idea what the HIV prevalence was on farms' (LH) when they began seeing people from farms in the in-patient unit:

> 'From the descriptions of what the nursing staff brought, I thought it was going to be around about the average for the municipal community of Stellenbosch at around 11% … with little cohort groups where it might be higher' (LH).

She described these 'cohort groups' as likely to be 'dwellers' rather than workers, particularly those who lived 'right next to the farm' but who nonetheless gave the farm address. She reflected that 'maybe our data wasn't all that accurate when we documented it initially' (LH).

The fourth respondent was the doctor-researcher who thought that the risk factors for rapid spread – violence and alcohol abuse – may be balanced by those farms which were effectively 'closed communities' (DrRJ). She listed the risk factors as including people having 'a large number of partners – a lot of casual sex; a lot of that is associated with alcohol consumption. And there is a tremendous amount of violence and there is a lot of coercive sex – there is a lot of physical abuse' – all of which provided the opportunity for HIV transmission. She thought that although the community was not entirely closed, it might still have some of the elements of 'rural isolation' which could temper these factors (DrRJ). This response points most clearly to the diverse factors within the sector which may influence contexts of vulnerability to HIV infection. This heterogeneity is continued in the responses in the next section.

In summary these informants attributed their expectations either to the general fact that they did not think the farms were substantially different to anywhere else or to conditions which balanced one another out. So, for instance rural isolation and the 'closed community' - a product of Whitehead and Dalgren's living and working conditions - was thought to be mitigated by some of the social and community effects of endemic violence and coercive sex linked to alcohol. The opportunities provided by seasonal workers were another working condition that was thought to add to possible HIV prevalence, as was the socio-economic conditions of poverty.

Diverse

Like those who chose 'same as the average', three of the four informants who I have clustered under 'diverse' identified factors they thought might affect prevalence in opposite directions (the most common being the same as above – namely the 'closed community' offset by the effects of excessive alcohol consumption).

Two informants produced opposing and unresolved choices (GN & CA). The HIV doctor-researcher first described the conditions that might mitigate prevalence, followed by those that might exacerbate it. Protective factors were the older age profile of people on farms, the impotence of some men and the remoteness of the farms. But this very remoteness also meant that people were not diagnosed early and did not access treatment (CA). While their infection would increase prevalence, their untreated and unnecessary deaths would reduce it.

Changing her estimate during the interview, the hospice manager attributed her first claim of prevalence being higher-than-average to the abuse of alcohol and drugs, FAS and a related inability to concentrate or learn. She also listed boredom, a lack of recreation and an increase in movement on and off the farms as possible vectors. In contrast, and in shifting her choice to 'average', she invoked farms as 'closed communities' that were infection-free; and, where there was movement of people on and off farms, transmission was mitigated by her sense that sexual relations across 'racial' differences was unlikely. She concluded that, in the light of the lower prevalences being found in the first year of the Project, 'our assumption was that there was more happening sexually on the farm, than possibly is happening' (GN).

While these could be seen as possible contradictions – or shifts within their responses as they developed their argument – I left them unresolved. Rather, I have treated them as evidence of heterogeneity across farms – that their unconsciously contradictory answers reflected that both factors existed and might exacerbate and mitigate prevalence within and across farms.

Heterogeneity across farms was expressly reflected by the third respondent – the farm-based community worker – who ultimately said farms were too diverse to generalise and that it was '*verskillend op verskillende* places'[170] (DC). During the interview she avoided providing an estimate, despite my asking the question directly a number of times. Her responses were consistently about the importance of providing good information about HIV, about making protection available in a non-judgemental way and about the negative effects of alcohol. While she recognised that contextual factors on each farm could make a difference to vulnerability to HIV, she thought that even in difficult contexts, individuals could still decide – so that it also 'depends from person to person' (DC). Here the respondent minimised the effects of possible factors located at various levels influence, purposefully making the individual responsible for factors affecting their health.

The 'no comment' respondent, the NGO co-ordinator of a women's farm health project, simply said she could not know and was clearly reluctant to make an educated guess. She could not make sense of the statistics, partly as 'that information is not disaggregated – it's lumped together. It's all the same' (GR). Consequently she did not want to guess at the prevalence for a sub-population within the statistic, based on her experience, in so doing illustrating the limited value of higher-level prevalence statistics to local level work.

Comment

170 Translation: 'Different in different places.'

Expressions reflecting heterogeneity on farms cut across all estimates – and echo Atkinson's caution against generalising. In addition to the farm-based community worker who thought it was '*verskillend op verskillende plekke'*, the project leader-doctor (who expected average prevalence) and the project co-ordinator (who expected high prevalence) both pointed to the likelihood of there being 'cohorts' or 'clusters' of infection within and across farms (LH, TG).[171]

The doctor-farmer (who expected lower prevalence) also thought that '[y]ou can't generalise farms'. He compared his own farm which is 'stable, we've been there for a hundred years' with the neighbouring farm, which is 'not the family farm' and where an absent owner meant there 'wasn't that much control of [people] coming in'. He implied that there would be low levels of HIV on his farm and a 'cluster of HIV' on the neighbouring farm (NG). The farm manager (who also thought prevalence would be low) also identified a difference across actual farms: 'its almost farm-related, because if you are going to go to all 220 (sic) farms[172] you can pick it up on *this* farm, but the neighbour has got nothing; and the other neighbour has got nothing!' (RJ).

A recognition of diversity, unresolved contradictions and an expression of not really being able to know, were overtly displayed in the four responses grouped I under 'diverse', but were also contained in the responses of the four people who chose 'average'. Although the latter actually made a choice while the former did not, it could be loosely argued that a total of eight of the 20 informants recognised the diversity of factors. This is almost the same number as those who said it would be lower than average. In a sense, then, 16 people thought it could be lower (*in some places)*, and 10 that it could be higher (in others).

171 The project co-ordinator thought of farms as 'being places where people stay in communities where HIV is supposed to occur in clusters. You would expect clusters on farms to be HIV positive, in terms of the general community' (TG).

172 I did not ask him what this number was about. The social worker on the same farm obtained the number of 406 from the police.

Recognising that prevalence estimates (or, in this case, comparative descriptions) are necessarily a single comment about a group does not negate the diversity within it, although it does mask the differences. The need to work with local conditions within a larger prevalence description or estimate has been recognised – but were reflected in the comments by the academic doctor-researcher who cautioned that 'I'm not sure how generalisable local things are if you want to develop a bigger intervention'. He added that 'I think you would look at what works where, elsewhere. Test it on a farm, see if it works – implement it on a farm while the programme is evaluated – look for differences in sub-groups' (LL).

Ultimately this is what I will conclude: that prevalence is a useful *starting* point to be used to point to sectors or areas of infection; but that before and during a project, organisations should expect to actively research the internal contours of the sector to direct their energies and resources most effectively. It is clear from the many earnest but failed HIV/AIDS interventions that the virus spreads in highly specific conditions and that it is not always live or as it seems.

Summary of findings: Expectations of prevalence

The range of findings points to the likelihood of diverse levels of infection across the approximately 420 wine farms – with varying levels of HIV infection. On balance, however, the majority of informants opted for lower-than-average (9 of 20) with seven (four average and three heterogeneous) effectively straddling higher and lower. From the point of view of an organisation working at local level, this underscores the point that local conditions need to be taken into account even within a relatively small sector like Stellenbosch wine farms.

Review of the experts

In describing my weak use of positivism in Chapter 2, I argued that these findings were unlikely to be replicated by another set of experts – and that although levels of infection have a material reality, this enquiry does not assume there is scientific truth waiting to be discovered. Nobody 'knows' what the prevalence on Stellenbosch wine farms is and there is little doubt that a different set of experts using this method might produce a different finding.

All key informants produce responses from their own sources of expertise comprising their diverse sets of information on HIV/AIDS and the way they have located themselves in it. As described in Chapter 3, information about this changing and broad phenomenon is uneven and varied and ranges across disciplinary boundaries, resulting in people often having niched, specialist information, much of it is timebound. It is also increasingly supplemented by personal experiences, in addition to which there is a strong sense that knowledge about conditions on farms is either only impressionistic or is personal, experiential and local. Knowledge is therefore necessarily partial.

In being 'experts', then, key informants are likely to have used combinations of their expertise and experience. No-one was expected to know everything – thus the wide selection of informants.[173] Rather than expecting the informants to uncover a latent fact, then, I have followed the kind of enquiry that a local-level modestly-resourced organisation might, had they the resources to do so – to see *what could be known* – not *what exists.*

173 So, for instance, the respondents whose primary expertise lay in HIV/AIDS had to make some assumptions about conditions on farms in order to estimate the possible prevalence, while respondents whose primary expertise lay in conditions on farms had to make assumptions about how HIV spreads. My premise was that the broader a person's range of expertise, the more reliable their educated guess might be.

Validating the use and selection of key informants

The validity of the findings from key informants partly depends on whether opinions were broad-based or not. My assumption is that if people from different backgrounds held the same view, this would add credence to the finding rather than if, for example, all doctors thought one thing and all farmers another. As said, the variety of key informants' expertise was essential to being able to access a credible breadth of opinion and to avoid a narrow 'specialist' view based on a limited set of occupational or experiential authorities. If I had thought that one set of 'experts' like doctors would 'know', I could have simply interviewed them. As noted in the chapter on Methodology, a number of people occupied more than one locus of expertise.

This section presents the spread of expertise which produced each result, then, to examine how broadly opinions were held. In doing so I hope to validate and strengthen the finding.

Overview

A comprehensive table grouping the key informants by their responses and describing their authority bases is given in Appendix I. This comprises four high-level public aspects of their identities – namely their likely knowledge/ experience of HIV/AIDS, their knowledge/experience of farms, their occupation and their work location. These are summarised and then mapped diagrammatically (below) with brief remarks only as they apply to the focus of this thesis. (Again, I shall not comment on the way in which their social and professional locations may have produced their answers, so much as use this as data in its own right. Similarly, following the approach used in the table/figure on 'Roles and interests of respondents' in Chapter 2, this is not an attempt to quantify and explain the range of spread – so much as to summarise it visually.)

Those who thought the prevalence was 'lower than average' spanned the range of work locations and occupations, as did those who had diverse views or did not choose an estimate. Their knowledge of HIV ranged from fairly general to quite specialist and their appreciation of conditions on farms was equally broadly based. The view that prevalence on farms was lower than the general average for the area was therefore a widely held view across the four categories I have used to describe people – suggesting that there was no group that weighed it unduly.

Those who thought the prevalence would be 'higher than average' had in common lower levels of knowledge about HIV (which I characterised as that of an 'informed citizen') and/or they worked on farms. Their occupations and their knowledge of farms were again varied.

The choice of the 'same as the average' was expressly non-committal or a compromise. Three of the four respondents had in common their occupation and work location and all had clinical experience of farm-based patients. The fourth was also clinical but with no experience of farms.

As an understanding of the conditions under which HIV/AIDS infection spreads is foundational to the key informants' expectations, respondents' expertise in HIV trumps what people do or where they work as well as their knowledge of farms. It is therefore significant that six of the seven respondents who either held the minority view (that the prevalence would be 'higher than average') or had diverse views had the lowest levels of knowledge about HIV. And within this category – which I have called 'informed citizen' – three quarters (six of eight) held these minority views.[174]

174 This has been confirmed in many personal conversations where I continued to 'test' the commonsense view of HIV prevalence on wine farms. The majority of people – most of whom were not experts in HIV/AIDS and were 'informed citizens' – thought HIV prevalence on farms would be higher than average, given the history and current practices regarding alcohol consumption on these farms and the link of this with 'casual' sex. The minority thought it would be lower than average as farms were 'closed communities'.

Figure 7: Estimates of HIV prevalence on wine farms in relation to the average for Stellenbosch municipality – by respondents' levels of knowledge of HIV/AIDS

Description of level of knowledge of HIV/AIDS	Estimate of HIV prevalence			
	Lower than average	Same as average	Higher than average	Diverse
Informed citizen / non-clinical	1 1		1 1 1	1 1 1
Recent general clinical practice	1 1			
Extensive clinical practice	1 1 1	1 1		
Extensive clinical practice and research	1	1		1
Research	1	1		

While respondents with a wide range of access to, or levels of, knowledge about HIV/AIDS expected there to be lower levels of HIV prevalence on wine farms (than the average for Stellenbosch), this changes if one combines the (vertically represented) 'lower than average' and 'average' - following which, the more informed begin to dominate. Put alongside the observation above that those with less knowledge chose 'higher than average' this adds weight to the veracity of the 'lower than average' finding which, although broadly held, was given weight by this predominance of HIV-related expertise.

So there tended to be a convergence of views within two groups. Among 'informed citizens' (those with the lowest levels of knowledge of HIV/AIDS), three quarters held the minority views, while no-one held this view who knew about HIV/AIDS through research or through their clinical practice – be this recent or extensive practice.

Figure 8: Expectations of HIV prevalence on wine farms in relation to the average for Stellenbosch municipality – by respondents' access to knowledge of conditions on farms

Description of knowledge/experience of conditions on farms	Estimate of HIV prevalence			
	Lower than average	Same as average	Higher than average	Diverse
Works on farm – production	½ 1		½	
Works on farm – social support			½	½
Lives on a farm	½ ½ ½		½	½
Provides clinical care for patients from farms	½ 1 1	1 1 ½		1
Participates in organisation working on farms	½ 1	½	1	1 1
Does research relating to farms	1	1	½	
None	1			

Note: a fraction indicates that a person is described by more than one category. So ½ indicates that there are two factors that describe them, 1/3 that there are three etc.

The extent and source of respondents' knowledge of conditions on farms presented in Figure 8 above was not a significant factor in their choice of estimates of HIV prevalence. This is seen in the scattered distribution of knowledge bases within each estimate of HIV prevalence (vertical) – indicating that the choice of estimate of 'lower than average' was broad-based.

Among those who lived on farms or who provided clinical care there, the estimate was dominantly for a prevalence that was lower than average with some clinical staff opting for same as average. This might suggest that those whose knowledge came from intimate hands-on experience of conditions on farms did not think that farms had social conditions that made people more vulnerable to being infected any more than the average for Stellenbosch. However, those who have intimate access to knowledge of life on farms through providing 'social support' (as community or social workers) opted either not to estimate, or to see the farms as high risk likely to have higher-

than-average prevalences. This is an important group (despite comprising only two people) given their close engagement with the people who live on the farms and the conditions within which they work. This makes it difficult to draw any conclusions about convergence of opinion based on respondents' close knowledge of conditions on farms.

Figure 9 shows that the dominant view – that prevalence was lower on farms – was again held by respondents across the full range of work locations – making it a broadly held view.

Figure 9: Expectations of HIV prevalence on wine farms in relation to the average for Stellenbosch municipality – by respondents' work locations

Description of work locations	Estimate of HIV prevalence			
	Lower than average	Same as average	Higher than average	Diverse
Farm	11 ¼		1 1	1
Clinic/hospital	¼	1/3		½
Provincial health dept	1 ¼			
Hospice	1 1 1	1 1 1/3	1	1
NGO	1 ½ ¼			1
Research institution	½	1 1/3		½

Most respondents – 8 out of 11 – who worked in a health-related setting (clinics/hospitals, the provincial health department and the Hospice) thought the prevalence on farms would be 'lower than average' or the same as the 'average'. Two of the exceptions were non-clinical people from the Hospice – and the third was a doctor who thought both that it may be lower and higher. The deduction, then, is the 'experts' in health were inclined to pitch the HIV prevalence on farms as lower than average.

Two of the three who thought the prevalence on farms would be 'higher than the average' worked on farms, and were intimately involved with the people on their farms – but these represented only two of the six respondents who worked on farms. The four others comprised three who thought it would be 'lower than average' and one who thought it was different on different farms.

Figure 10: Expectations of HIV prevalence on wine farms in relation to the average for Stellenbosch municipality – by respondents' type of work

Descriptions of types of work	Estimate of HIV prevalence			
	Lower than average	Same as average	Higher than average	Diverse
Clinical health practitioner	1 1 ½ ½ 1/3	1 1 1/3		½
Farmer	1 1 1/3		1	
Manager/co-ordinator	1 ½ ½ 1/3	1/3	1	1
Researcher / academic	½ ½	1 1/3		½
Social / community worker on farms			1	1 1

Again, Figure 10 shows that with the exception of the farm-based social and community workers, each estimate was chosen by respondents from many occupations. Similarly people who did the same job did not hold the same views as one another, suggesting that respondents' work occupations were not definitive in their estimate.

Conclusion

The key informants' dominant expectation was that the prevalence might be lower on farms than in the Stellenbosch area more generally – although there was considerable expectation of a high degree of diversity across farms.

Choosing people with a wide range of expertise - of understandings of HIV, of farms as well as holding different occupations in various work locations - was central to being able to make claims about the validity of this method. The analysis above both illustrates the ways in which these various sources of 'expertise' may have been brought to bear, as well as any convergence of opinions *across* these.

This analysis finds that each of the options (relating to the average prevalence) was chosen by people across a range of areas of expertise. While there was little consensus *within* two of the four categories (namely location of work and knowledge of the context of farms), there was some agreement among those with similar occupations and with similar levels of knowledge about HIV.

Those who worked on farms, in clinics and hospitals, in the Hospice, in NGOs and research settings, had diverse views, with only those who worked in the provincial department of health holding the same views as one another. Experience and understanding of farms also did not produce common outcomes among the respondents, except for the farm-based social and community worker who either thought HIV prevalence would be higher or they could not/would not decide.

That being said, those who were clinical health practitioners and the farm-based social and community worker held similar views within their occupational roles. The majority of clinical health practitioners (seven of eight) chose either 'lower than average' or 'same as average' – while the two farm-based social and community workers chose 'higher than average'. Those in other occupations (managers, researchers and farmers) held more diverse views. A more extensive study might examine whether this was at all linked to the relative 'distances' from the 'frontline' (of HIV and of context). This also begs the question of whether the outcome would have changed significantly had there been a different proportion of farm-based social and community workers among the respondents, for instance.

Similarly, there was some coherence among those more informed about HIV/AIDS who largely opted for the prevalence being lower than the average levels in the greater area – although some also made a cautious estimate of 'same as average', not wanting to guess.

In addition there were clusters of agreement regarding some of the social factors which might influence HIV prevalence on farms – but in most cases these were balanced by a cluster with an opposing view. (So lower prevalence based on the theory of farms as 'closed communities' was in direct contrast with expectations of higher levels of infection given the movement of people on and off farms.) Some respondents held both views: that they were closed communities but that infection came through migration.

It would be hasty to conclude from this relatively small sample of respondents that choosing respondents on the basis of expertise of HIV and of occupation would necessarily produce a more informed result. I would be very reluctant to exclude people with a knowledge of the context, for instance.

These two sets of patterns - of diversity within two categories and some convergence within the other two - underscores the importance of talking to a sufficiently large and varied range of people. Single respondents cannot simply represent any single category.

Given that the dominant expectation was held both by people of diverse profiles as well as among those with expertise in HIV, therefore, lends some validity as a process - while recognising that there can be no perfect sampling of key informants and that another set of respondents may well not produce exactly the same outcome.

4.2.3 Implications for HIV prevalence on Stellenbosch wine farms

While the key informants' expectations of HIV prevalence on farms was not conclusive, the tendency to expectations of lower-than-average prevalence corroborated both the other sources of data – namely the Farms Project statistics from testing on farms which found that those on farms had lower HIV prevalence than those off farms (skewing notwithstanding); and the national data which found that the formal rural locality type – which included farms – had the lowest prevalence of all the four locality types. That being said there was considerable mention of there being heterogeneity across wine farms in Stellenbosch which it would be simplistic and unwise for a project to overlook.

Most of the determinants of health mentioned were related to the middle two bands – namely social and community influences and living and working conditions – while there was also mentioned of the choices people made within those contexts which might be attributed to 'individual lifestyle factors'.

4.3 POVERTY

The definition of poverty is contested both by academics and politicians, some focussing more narrowly on material poverty while others include factors like freedom (to speak, to vote) and opportunities (to access healthcare, education etc). Wiseman Magasela makes the case for multi-dimensional poverty rooted in the socio-economic rights contained within the country's Constitution (Magasela, 2007) while Gemma Wright,Michael Noble and Wiseman Magasela undertook research in South Africa based on the idea of 'socially perceived necessity'[175] in which an acceptable standard

175 'Necessities' are defined by Wright et al as 'activities, possessions or services that are required to enjoy an acceptable standard of living within South African society'. This work is located within the Indicators of Poverty and Social Exclusion which 'considers poverty and social exclusion in terms of socially perceived necessities' (Wright et al, 2008:1).

of living was understood to go beyond mere subsistence to include concerns like 'adequate care for the sick'[176] and a 'decent neighbourhood' (Wright et al, 2008). More generally, a multi-dimensional understanding of poverty was pioneered by Amartya Sen whose capability theory is based on people having access to a set of freedoms which enables them to act within their environments in ways that are not curtailed by constraints like a lack of basic opportunity or resources (Sen,1999).

While these approaches are crucial to embracing the full impact of various forms of poverty on people's lives, material poverty in South Africa continues to mean that many people have minimal access to basic resources – including food and water – and to various forms of opportunities and well-being. While the Western Cape is the second wealthiest province in the country,[177] it is also home to many people whose household incomes are meagre – among whom are farm workers for whom the minimum wage in the Stellenbosch area for the period 1 March 2007 – 28 February 2008 was R5,34 an hour (R1 041 a month – based on a 45-hour week) (DoL, 2006:5).

Pointing to the importance of 'distinguishing [between] the different socio-economic situations and relationships which have developed on the land in different parts of the country', the South African Human Rights Commission (SAHRC) proposed that this approach 'demands a more fine-grained analysis that is grounded in the conditions in sub-sectors of the agricultural economy and within different districts in the countryside'. They cautioned, however, that 'at the same time, we must not lose sight of the fact that, overall, farm workers remain amongst the most marginalised groupings in South African society' (SAHRC, 2008:15).

176 This research found that 'adequate care for the sick' was among the top two items considered 'essential' in a list of 56 items, with the other being 'a house that is strong enough to stand up to the weather'. The next two were 'street lighting' and 'mains electricity in the house' (Wright et al, 2008:9).

177 The Western Cape provincial government reported that in 2005 '[o]nly 5,7% of Western Cape inhabitants were in severe poverty against the national rate of 24,7%, and 19,1% were in poverty, compared to 42,3% for all of South Africa' (WCDEADP, 2005:163).

4.3.1 Socio-economic conditions on farms

> 'Having little or no access to land resources, lowest payments in employment, lowest skills and low levels of education, farm dwellers are particularly poor both in economic and human capital' (CRLS, 2006a:28).

This view is echoed by others who note that farm workers and domestic workers are amongst the poorest workers in the country (e.g. Atkinson, 2007) and are also the most socially excluded, having minimal access to 'opportunities, status, power and privileges available to others' (LRS et al, 2004:24). The conditions which has 'kept farm workers tied to a particular farm or farmer' are described by Falletisch as including '[t]ied housing, a shortage of employment and housing in South Africa, a high level of illiteracy among farm workers, the legacy of marginalisation and isolation, a lack of financial independence and the fact that the farmer remains, in most instances, `able' (Falletisch, 2008:46).

Livelihoods

The Human Rights Commission's 2003 national inquiry into human rights violations on farms found, among other things, that 'the payment of low wages[178] impacts negatively on the ability of workers and their families to improve the quality of their lives, and live with dignity and in an environment in which there is basic achievement of their social and economic rights' (SAHRC, 2003:185) – and that '[m]any farm dwellers are so poor that they do not have the financial resources to access these rights e.g.

178 This inquiry was held prior to the first sectoral determination for a minimum wage for agricultural workers in 2003. While this will have improved the wages of some of those who were very poorly paid, it also resulted in an increased casualisation of labour, putting these workers beyond the reach of these benefits.

money for transport' (SAHRC, 2003:194).[179] They also found that 'many farm dwellers do not have access to sufficient food' which they understood to be the result of 'low wages; high food prices; high cycles of debt; inflated food prices at some farm shops; abuse of alcohol that diverts money from being spent on purchasing food, particularly in the Western and Northern Cape' (SAHRC, 2003:199; see also Schneider et al, 2007:5).

This inquiry coincided with the establishment of the first minimum wage determination agreement for agricultural workers, which included the regulation of basic conditions of employment. Comparing the wage increases formally promulgated in this determination with the rates of inflation, however, the Women on Farms Project reported in 2007 that 'we now know that inflation far exceeded this rate and that the wages of farm workers are therefore decreasing in real terms at the same time that workers are spending larger proportions of their wages on food' (WFP, 2007:3). Writing two years after the wage determination, Beatrice Conradie noted that some farmers recognised that the employment of the wives of permanent workers was essential, given that both husband and wife needed to work 'in order to get by'. They nonetheless employed these women only as casual labour, effectively only giving them irregular access to this minimum wage (Conradie, 2004:18).

While there were some benefits from the new agreements and legislation for those employed seasonally, contractually or casually – like maternity benefits and unemployment insurance in some instances – the CRLS commented that 'these laws have had little impact on improving the lot of "non-permanent" workers' (CRLS, 2003:12). Although some temporary workers live on farms, their ranks were being swelled by those from off

179 The Inquiry reported AgriSA's response to the information received about general trends in labour conditions made in the provinces as being 'generalisations'. They noted that 'AgriSA reiterated that it has clear policies on child labour, the use of illegal immigrants and compliance with labour laws. AgriSA suspects that the cases referred to the Inquiry do not occur on commercial farms where their members are, but on smallholdings or on land that is not utilized for farming purposes' (SAHRC, 2003:25).

farms, some of whom used to live on farms. Households of off-farm seasonal workers are typically almost entirely dependent on cash incomes, following 'a broad and severe lack of access to economic capital and natural resources'. Cash and paid employment were central to the survival of these households with '80% of household income, on average, [being] derived from salaries, casual work and seasonal employment' (Du Toit, 2004:15).[180]

Housing and employment

At the time the Farms Project was launched, access to housing traditionally provided to permanent workers on Stellenbosch wine farms was decreasing and patterns of employment were changing. This followed the promulgation ten years earlier of two tenure acts – Labour Reform (Labour Tenants) Act, Act 3 of 1996 (LTA) and the Extension of Security of Tenure Act, Act 62 of 1997 (ESTA) – which had the unintended effect of a dramatically increasing evictions and movement of people off farms into 'low-cost developments or informal settlements around small Western Cape country towns' (Du Toit, 2004:11). Sometimes this comprised adequate housing, sometimes in 'agri-villages' – while many were moved into less satisfactory arrangements, leaving them ultimately to fend for themselves. (The origins and implications of these moves are given in Appendix J as an example of the kind of analysis that can inform local-level interventions.)

In addition, trade agreements were increasingly requiring compliance with minimum standards for production and sometimes labour conditions - and increasingly competitive global markets combined with a dramatic increase in production input costs over the past few years, had tightened the profit

180 One key informant farmer – who each year employs the same people from off the farm as casual workers – makes sure that he 'employs them long enough that they qualify for UIF so that for the time that we don't use them, at least they have an income'. This farmer invests considerably in the social conditions on his farm, believing he must start there as his conscious contribution to improving conditions in Stellenbosch generally (TR).

margins in the industry (LRS et al, 2004:10&11).[181] Cutting labour costs by employing people 'flexibly' was thought to be one way of cutting costs in these circumstances.[182] Seasonal work on farms is a long-established international practice, where periods of work of high intensity see the employment of substantial numbers of casual - or 'seasonal' - labour. On some farms the same people are employed every season – and some groups of people in the Western Cape are reported to move from farm to farm working casually according to seasonal need. While seasonal work has seen people temporarily employed on farms for generations, there has been a significant increase in the extent of casual and temporary employment. This has been accompanied by a parallel increase in labour brokers (CRLS, 2006a:4; CRLS, 2003:3; Du Toit, 2004:11) who are meant to provide basic benefits to the workers whose labour they contract out, thus relieving farmers of various obligations they would have had as employers.[183]

Unintended consequences

The consequences for workers of these new regulations were 'mixed':

> 'On farms that produce quality wines, and where management believes that it needs the support of a motivated and skilled work force, conditions have improved. But most wine farms are reacting to the competitive pressures and increased labour legislation requirements by passing risks and costs on to their workers' (LRS et al, 2004:11).[184]

181 Notes from meeting with Kobus van der Merwe, Stellenbosch Agricultural Association, 5 June 2008.

182 The two farmers I interviewed disagreed with this – both from a costing and social point of view. They noted that the conditions of the vines depended on skilled handling and that the productivity of workers was definitely enhanced by a context where they felt valued and secure. One farmer was adamant that the employment of casual labour for what have historically been core functions was unwise (TR, RJ).

183 For a critique of labour broker's employment practices see CRLS (2008) *Going for Broke. A case study of labour brokerage on fruit farms in Grabouw.*

184 The effects of increased global competition in the wine market is said to have mixed consequence for farm workers – with 'even on progressive estates more and more farm work is being done by seasonal and casual workers, often provided by third party contractors. A deepening divide is growing between 'insiders' and 'outsiders'' (LRS et al, 2004:11).

As noted, many families have been moved off farms, and there has been a complementary increase in the employment of casual labour (Hill, 2002:7, SAHRC, 2003:173), effectively shifting the burden of the employer to labour brokers, or more often, to the workers themselves.

The negative unintended consequences on farming families have been echoed in various reports by a range of bodies including a national survey of evictions undertaken by the Women on Farms Project in 2005 (Wegerif et al, 2005), a follow-up report in 2008 by the Human Rights Commission (SAHRC, 2008:9); the Western Cape Spatial Development Plan of 2005 (WCDEADP, 2005:189); and the Centre for Rural Legal Studies' 2003 Annual Report (CRLS, 2003:3).

Doreen Atkinson summarised the losses to farm-based families following these changes by commenting that 'ironically, and tragically, the post-apartheid government's attempts to improve the situation of farm workers has been based on a lack of understanding of the longer-term and underlying forces that shape the pressures on farm workers and their families. The result is that most farm workers' circumstances have worsened' (Atkinson, 2007:4). While recognising the historically complex relationship in which farmers provided farm-based families with services (in 'micro-welfare systems' that are part of the 'compact' on farms) (Atkinson, 2007:165) she proposed these worsened conditions would continue in the absence of a coherent and integrated strategy to address agriculture and food production which included the livelihoods of farm workers and their families.

Comment

As proposed in Chapter 2, conditions on wine farms are not the same as farms in other parts of the country – and are invariably not the same as one another. That being said, there is a foundation of commonality – both historical and current. The historical legacy of poverty, alcohol abuse and violence – both interpersonal and sexual – have not been eradicated by these regulations and shifts, although some of it will have been displaced to

nearby peri-urban and rural settlements, while the recent policies and laws that affect conditions on farms regarding employment, livelihoods and housing are also common. While these are enacted differently across farms and caution must be exercised in making simple generalisations, I contend that it is possible to point to trends to be considered if working on farms in the winelands.

It is in this volatile but common context that this study focuses only on people who continue to live on wine farms, and on the extent to which the conditions there produce 'environments of risk' for HIV infection. The perceptions among some in the Hospice that conditions on farms made them ripe for HIV transmission, coupled with increasing numbers of patients arriving in the final stages of AIDS-related illnesses, informed the establishment of the Farms Project from which this thesis question arises.

4.3.2 Poverty and HIV

It is common cause that HIV is not simply a product of personal decision-making about sexual behaviour. In addition to Whitehead and Dahlgren's model of the determinants of health introduced above, Catherine Mathews notes the importance of 'also extend[ing] our view to broader contextual factors of structure and environment and the way these shape the possibilities of safe sexual behaviour', and that 'this is particularly important in South Africa where health problems of poor communities stem very largely from economic, political and social conditions, and where individual choices about adopting health behaviours are constrained by these broader conditions' (Mathews, 2005:146).

Quoting Richard Parker, Delia Easton and Charles Klein, Mathews reports that 'social factors such as poverty, instability, gender inequities, sexual oppression and racism often have interactive and synergistic effects, directly determining the vulnerability to HIV of groups and individuals'. She continues that they describe this as 'structural violence', a concept which is 'particularly relevant in South Africa where historically constituted political

and economic marginalisation, based on racist ideology, has shaped the vulnerability of the vast majority of the population' (Mathews, 2005:150).

The impact of poverty on youth's vulnerability to HIV infection is seen in Kevin Kelly and Warren Parker's work on youth's response to HIV/AIDS undertaken in six sentinel sites in South Africa. Focussing on 15 to 19 year olds, they found that youth who lived in households where there was 'not even enough money for basic things like food and clothes' were almost twice as likely to have had sexual intercourse than those from homes where there was 'some money for extra things such as going away for holidays and luxury goods' (74%:38%). Their three main explanations for the link between poverty and increased sexual activity were a 'high level of association between sexual activity and material favours' (transactional sex); a lack of 'things to do' and of any kind of recreational facilities; and 'a marked breakdown in parental authority', especially where one of the parents (usually the father) was a migrant worker (Kelly & Parker, 2000:28).

So deprivation of various kinds can – but does not necessarily – inform behaviour that might be risky for HIV transmission, especially in contexts where unprotected sex is exchanged in some form, be this directly or indirectly, for survival.

There is an extensive literature on the link between poverty and HIV prevalence in which the link is asserted by some, and critiqued by others. Those querying the necessary link between poverty and HIV point to countries in which the prevalence is highest (including South Africa)[185] but which are not the poorest or least developed (e.g. Drimie, 2002:6; Gillespie et al, 2007:S10; Pisani, 2008:127).[186] Likewise some countries in which

185 High prevalences in relatively better-off countries – deduced from UNAIDS, 2006 and WHO 2006-2007 statistics - are Botswana 24,1%; Namibia, 19,6%; South Africa 18,8%; Swaziland 33,4% (Beegle & de Walque, 2009:99-100).

186 Pisani asks 'How come South Africa and Botswana, which have the highest female literacy and per capita incomes in Africa, are awash in HIV, while countries that score low on both – such as Guinea, Somalia, Lai and Sierra Leone – have epidemics that are negligible by comparison?' (Pisani, 2008:127).

there is widespread poverty have lower levels of infection.[187] This does not simply negate a possible link, so much as indicate that poverty – as a single determinant – is not *simply* causal. In other words being poor does not necessarily make people vulnerable to infection (and, equally, being materially wealthy does not simply protect people from infection). While Scott Drimie suggests that poverty essentially creates 'an environment of risk' - which includes reducing people's ability to handle risks, to participate in HIV prevention and treatment programmes and increases vulnerability to HIV generally - others point to poor nutrition (compromising the immune system) and chronic parasitic infection (Stillwagon, 2002:17) and survivalist transactional sex.

Drimie and others[188] identified a bi-directional link between poverty and HIV. While poor people may be at greater risk of HIV, being affected by HIV can exacerbate poverty by pushing non-poor people and communities into poverty, and poor people into destitution (Drimie, 2002:6; Bollinger & Stover, 1999:4). Loss of employment, or threats of this, and people's reluctance to test for fear of being found HIV positive are examples of this. The vulnerability of casual workers is even more pronounced, as their inability to sell their manual labour as they become ill forces them into more marginal forms of employment or destitution (Amnesty International, 2008:27,70).[189]

187 Low HIV prevalences are found in the following poorer countries: Angola 3,7%; Benin 1,8%; Burkina Faso 2,0%; Burundi 3,3%; Chad 3,5%; Democratic Republic of Congo 3,2%; Madagascar 0,5%; Mali 1,7% (Beegle & de Walque, 2009:99-100).

188 The doctor-farmer recognised that 'bad health or disability causes you to have poverty. And it's a vicious circle – you get sick and the sicker you get the poorer you get' (NG).

189 Amnesty International noted that '[s]ome of the women in the rural areas of Mpumalanga and KwaZulu-Natal interviewed for this study reported they were unable to continue to do piece work on farms once they became ill and either sold vegetables or became dependent on their extended families. This was intertwined with their stories of vulnerability to their husbands' sexual dictates (particularly regarding unprotected sex) and, in some cases, violence' (Amnesty International, 2008).

The extent to which an 'environment of risk' tips people into vulnerability to HIV is likely to be quite specific, however. Not all people who are economically destitute sell or exchange sex, for instance – and not all people who sell or exchange sex are economically destitute. The same will apply to a range of factors including sexual violence, hostile gender relations, alcohol and drug abuse, among others. These can but do not necessarily result in sex that is 'risky' for HIV.

In some contrast, Gillespie et al have shown that inequality rather than poverty per se can be a factor in increasing vulnerability, while their review of various studies has also shown that wealth and associated increased mobility and opportunities can also increase vulnerability (Gillespie, 2007:S10).[190] They conclude that socio-economic status generally must be accounted for in designing interventions as poverty, wealth and inequality interface with HIV vulnerability in particular ways in each setting (Gillespie, 2007:S1).

The question then, is whether conditions associated with poverty on some farms might contribute to this environment of risk. Do low wages, insecurity of tenure, poor housing, increasingly insecure or temporary employment and a lack of options (including recreational and educational ones) contribute to a climate of vulnerability to HIV infection for some people? And if so, would intervening in some of these reduce vulnerability? And where these are not present in these forms – where people live limited, secure, modest but not impoverished lives – is there less HIV?

190 See also Bujra, 2006:117 – who invokes the power differential inherent in class differences.

Data relating to wine farms

The HSRC presented no data on poverty and its possible link to HIV.

While a number of key informants referred generally to the poverty on farms as possibly exacerbating HIV transmission (linking it to increased drinking and some prostitution (AB, MJ, CS)), the limitations imposed by poverty were also seen as being protective. The academic doctor-researcher thought that 'poor people are really at risk but they don't have enough money to do things that put them at higher risk', commenting that 'all they can do is just drink, because that's all that's accessible to them. They can't actually get into social networks that allow sexual relationships' (LL).

Although the Farms Project did not collect any socio-economic data, it certainly tested many people on farms for HIV who were poor and visibly malnourished - the vast majority of whom were not HIV positive.[191] In about half of the cases, there was at least one (known) person on the farm who was infected.[192] While not definitive in any way, it is one example of a lack of a simple link between poverty and HIV.

Conclusion

My provisional answer here remains that material poverty – as one of the 'general socio-economic, cultural and environmental conditions' which might be a determinant of peoples' health - can, but does not necessarily, create conditions for increased vulnerability to HIV infection; that it can be a

191 Of the 321 people tested who lived on the 14 farms in the first year of the Farms Project, nine people were HIV-positive.

192 This is a crucial assumption – that there is infection somewhere on most farms. How they are located in sexual networks will be central to whether or not infection spreads. There was considerable data from key informants about farms being 'closed communities'. Given space, this cannot be reviewed here – but one main obstacle to the lack of HIV transmission is the absence of infection in the sexual networks. Where farms are entirely disease 'naïve' and are effectively closed to outsiders, no amount of sexual combinations will produce vulnerability to HIV.

strong contributory factor, particularly as it limits people's options and can produce various forms of desperation less likely to be seen among those materially better-off. Material poverty can also prevent people from keeping or making themselves safe, both through the lack of information and through physical conditions like poor housing, and limited protection against interpersonal violence etc. Forms of powerlessness associated with poverty can also produce adverse psychological conditions in some people – like fatalism and aggression. But, perhaps remarkably, these are not always sufficient for HIV transmission.

4.3.3 Implications for HIV prevalence on Stellenbosch wine farms

These findings are not in themselves a strong indicator of whether material poverty exacerbates HIV transmission on farms or protects people against it. As such while it may be a contributory factor - particularly in its relationship to behaviours which are thought to be more directly linked with HIV transmission, like excessive alcohol use and prostitution - the evidence here is not strongly focused in one direction or another.

4.4 'RACE'

4.4.1 The idea of 'race'

The literature on 'race' is large and necessarily complex – not least as the idea of 'race' itself is contested. In this study, I work from a position interested in de-essentialising the idea of 'race', while at the same time not underestimating the power of its construction and the way in which it continues to be mobilised in many spheres in South Africa, including by those living on farms themselves.

I am aware of the overlaps between 'cultural' or social practices and norms which can, but do not necessarily, correlate with the idea of 'race'. While I use 'race' as a high-level descriptor, then, given the persistence of the material and social consequences of inequality based on race and class, I regard these at starting points after which other factors begin to disaggregate these overarching categories.

I will not review the idea of 'race' per se, focussing rather on the contested relationship between 'race' and HIV/AIDS and the ways in which the current and historical 'racial' peculiarities of the Western Cape resonate on farms.

4.4.2 'Race' in the Western Cape and on farms

Apartheid – and the policies and practices which pre-date the actual apartheid era by over two hundred years - are deeply inscribed on the lives of the people on wine farms. Farm work in the Western Cape has historically been dominated by people who have been classified 'Coloured' and are Afrikaans-speaking.[193] These patterns continue to reflect the remnants of apartheid legislation which allocated the Western Cape as an area of 'Coloured Preference'[194] – but also where in 2007, 50,2% of the population was Coloured and 30,1% was 'Black African' (StatsSA, 2007:25).

193 According to the 2001 census the 'racial' profile in the Western Cape was still markedly different from that of the rest of South Africa. 'Most of its residents (53,9%) are Coloured by a considerable majority with Black Africans comprising the second largest group (26,7%). The White and Indian groupings are 18,4% and 1% of the total population of the Province, respectively'. In the Winelands district in which Stellenbosch falls, the ratios are Coloured (64,9%), Black African (19,8%), White (15,0%) and Indian (0,3%) (WCDEADP, 2005:122&123). This can only be indicative however, as the population will have changed in the seven years since the census.

194 During the apartheid era, if 'black Africans did not qualify in terms of the Natives (Urban Areas) Act (No 21 of 1923) and its later amendments and enactments, their movement to the "western province" (as this area was referred to then) was strongly controlled by influx control measures, and those who tried to settle in the area were forcibly removed' (Groenewald, 2008:8).

The historically 'closed community' on farms, compounded by the historical 'racial' policies like Coloured Labour Preference, have produced a dominant and enclosed grouping of families on wine farms with identifiable characteristics, some of which might differ to people classified similarly by 'race' or class or occupation. I regard the farming community on wine farms, then, as a sub-population within the 'Coloured' group more generally.

As noted above, the pattern of employment on farms is currently changing with the increasing casualisation of labour (Du Toit, 2004:11; WFP 2007:2)[195] and a parallel increase in migrant labour into the area generally, much of which comprises 'Black African' people from the Eastern Cape.[196] Those actually living on farms remain predominantly 'Coloured', however, with a very small minority of people being 'Black African'. Those who are 'White' are in managerial or support positions on farms and there is no evidence of people formerly classified 'Indian'.

Given that this study is about those who live on farms, I have focused on people more broadly classified 'Coloured', while 'Black African' people are considered in their roles as commuting workers and as those who live in the area more generally. When comparing the on-farm community with the greater Stellenbosch area, 'race' becomes an issue - albeit it a sensitive one, given concerns about 'racialising' HIV, addressed below.

195 Quoting a survey of 77 wine and fruit farms in six Western Cape districts undertaken in 2004 by Fadeela Ally and himself, Andries Du Toit reported that 'they found that 58,7% of farms (and 70% of deciduous fruit farms) had reduced their permanent on-farm labour force in the previous three years, while almost half of respondents (47%) indicated plans to decrease labour in the future' (Du Toit, 2004:11).

196 Quoting 2006 figures from StatsSA, Cornie Groenewald reported that in the period 2001 to 2006, the 'Black African' population in the Western Cape increased the most by 7,9%, followed by those classified 'Coloured' at 2,6% (Groenewald, 2008:13).

4.4.3 'Race' and HIV

The doctor-researcher attributed the racialised origins of the HIV epidemic to various forms of migrancy – that the 'historical reasons why the heterosexual epidemic started amongst Africans' as being 'seeded into South Africa through … migrant labour and people coming in - both ANC coming back into the country from exile but also people like Renamo and other groups who were coming back into South Africa for training within the population'. She thought that 'the way in which the epidemic particularly took off in KZN – [was] because the people were moving between Mozambique and KwaZulu-Natal' (DrRJ). Current evidence indicates that these origins have not been overcome – with proportionately more people classified 'Black African' being infected than any other 'racial' group in South Africa.

The pandemic is spread by a combination of sexual and social practices and conditions which nurture its transmission. While these are unlikely to be entirely homogenous within and across a 'racial' group – or within and across large groups of other descriptions - where practices which promote transmission are commonly found within a group, and where there are high levels of infection in this group, correlations begin to have some purchase, even if they are not consistently accurate and they mask other phenomena within that group. The higher levels of infection and the practice of multiple concurrent partnerships among 'Black African' people is a case in point, despite this not being exclusive to this 'race' group.

Consistent with the contested nature of ideas and information about HIV/AIDS raised in Chapter 3, the racial allocation of the burden disease and perceptions of race, sex and HIV are the subject of considerable bodies of literature and debate. These revolve around whether or not 'Black African' people are being accused of having more sex than other 'races', with particular sensitivities about what might be being said about 'Black African' men's sexuality. The protagonists of this position imply, as then President Thabo Mbeki did, that 'Black African' men are being characterised as being

sexually rampant and uncontrollable.[197] Criticising Charlene Smith's claims of South Africa as having 'a culture in which rape is endemic', Mbeki imputed her to be 'saying that our cultures, traditions and religions as Africans inherently make every African man a potential rapist' and that 'African traditions, indigenous religions and culture prescribe and institutionalise rape' (Mbeki: 2004).[198]

The debate is a political one, having taken place in a heightened period when the then-President of the country was intervening personally and powerfully in debates about the cause and descriptions of HIV/AIDS – most notably engaging with 'AIDS dissidents' and positing that AIDS was caused by poverty and not the HI virus. There was also extreme sensitivity about what may be being said about 'Black African' people in relation to higher levels of HIV infection (for which there was increasing evidence from government data, among others).

The poverty-causes-AIDS debate has passed, while sensitivities about 'race' prevail, given HIV's link with sex. Were HIV caused by an insect or non-potable water, the illness would not carry this particular burden. But HIV is reputed to have drawn to it the prejudices and fault lines within societies. Undoubtedly 'race' continues to have powerful valence, drawing on a range of histories of which the exploitation of subjugated people in medical contexts is only one. In addition some debates resound with moral judgment deeply resonant of religious (particularly Christian) conservatism and condemnation. While racism and moral conservatism prevail, they cannot be denied – but they disallow descriptions that are free from judgement. Without simply trivialising sensitivities then, it is nonetheless important to point to some of the difficulties this produces, in the face of evidence of higher prevalences among people classified 'Black African'.

---

197 Lisa Vetten summarises this debate in Vetten, 2007:437-9.

198 At one rather pedantic level, it cannot be held that aspersions are being cast on 'Black African' men generally, given the markedly varied distribution of the pandemic on the continent, concentrated largely in the south and east. This must imply that the negative characterisations about 'Black African' men (or 'Black African' people generally) do not apply to those in the centre, west and north of Africa where prevalence is much lower – but is a prejudice only to do with southern African 'Black African' people.

The most obvious is that not being able to examine evidence prevents suitable solutions being developed. While this needs to be done in ways that do not exacerbate existing fault lines, denying that there are groups with higher levels on infection makes focussed intervention impossible.

Evidence

The authors of the 2005 HSRC household survey identified 'race' as 'an important epidemiological variable as it embodies socio-economic contexts that influence HIV infection. [Black] Africans live in contexts that increase vulnerability to many illnesses - and HIV is no exception' (Shisana et al, 2005:xxvi). In this description, Shisana et al attribute the determinant of higher prevalence to the outer ring of 'socio-economic, cultural and environmental' factors. While the vast majority of people who live in poverty in South Africa are 'Black African', I have commented on the relationship between poverty and HIV above – recognising that it may, but does not necessarily, exacerbate risk of infection.

A year after Mbeki's altercation with Smith, the 2005 HSRC household survey's findings did not support the idea that 'Black African' people are in some way less restrained and have more sex than other people. Not only did they find no significant difference across 'race' in the proportions of people reporting sexual activity,[199] but they also found that considerably more 'Black African' people reported having used a condom than 'Coloured' people (40,8% compared with 17,5%) (Shisana et al, 2005:65). This is curious if placed next to the higher levels of incidence and prevalence among people who are 'Black African' – and begs the question about sexual networks in which multiple concurrent partnerships are said to be critical vectors of infection.[200]

---

199 Sexual activity in the age cohort 15 to 24 was reported by half the young 'Coloured' people (52,3%) and nearly two thirds of young 'Black African' people (60,6%). These differences between 'races' decreases in the larger age cohort of 25-49 and 50+, where 90% of all 'races' reported sexual activity (Shisana et al, 2005:53).

200 It also begs a methodological question, but one that cannot be answered – which is of social desirability bias in the answers. Do people report on this kind of intimate

Examining the 'individual-level risk factors as well as sexual network structures between different racial or ethnic groups' among adolescents aged 14–22 living in Cape Town, Chris Kenyon and others provide one explanation of the differential 'racial' spread of HIV in South Africa. They review the inability of '[i]ndividual-level factors to explain more than a part of the variation' citing 'the most comprehensive international study of differences in sexual practices around the world ... [which] concluded that men and women in Africa typically have a similar or lower number of lifetime partners than do their heterosexual counterparts elsewhere. Similarly within Africa, the prevalence of higher-risk behaviours was unable to explain the very different spread of HIV across sub-Saharan Africa' (Kenyon at al, 2009: 243). Paying particular attention to the way sexual networks and partner concurrency were practised, however, they concluded that 'the striking differences in the various sexual-network-parameters, such as the type, extent and duration of concurrency and the degree of core-periphery mixing, are likely to explain a large part of these differences' (Kenyon at al, 2009: 252).

The theory of multiple concurrent partnerships and sexual networks is being proposed as this is written - and is contested, as it too relies on attributions of 'cultural' practices. It potentially contributes to a non-judgemental description of possible causes for the differential in prevalence, however.

---

behaviour - which is now so publicly prescribed – in terms of what they actually do, or what they *know* they should do, but don't do? And equally unanswerable, are there tendencies in social desirability bias which are 'racially' inscribed?

4.4.4 Prevalence in relation to 'race'

National prevalence

Gouws and Abdool Karim cite data from 'voluntary blood donors through the National Blood Transfusion Services[201] and the more recently conducted [2005] Mandela Foundation/HSRC national population-based survey' as evidence that HIV is 'substantially more common in the Black African population'. While they note that 'most data collected from public sector facilities are from Black African users', they do not infer that this either skews or invalidates this finding (Gouws & Abdool Karim, 2005:63).

The HSRC household survey is the only source available for this study that reported data according to 'race'. Regrettably these data are constrained by their own methodological caution, however, which propose that the prevalence for 'Coloured' people be regarded as provisional, given two issues. Firstly the researchers report an inexplicable reduction in prevalence within this group over the three years between the 2002 and 2005 survey - from 6,1% to 1,9%. A similar reduction for 'White' people was also reported[202] while changes in prevalence among 'Black African'[203] and 'Indian' people over the three years were not significant. This is despite the confidence intervals for both 'Coloured' and 'White' people[204] being relatively small in 2005, having decreased since the 2002 study (Shisana et al,

201 In 2005, the Service became embroiled in a scandal over the different ways in which it treated blood from 'Black African' people, given higher rates of HIV prevalence broadly in this group. I would regard this source of data with some caution, therefore, subject to knowing the 'racial' and possibly income profiles of all people who donated blood.

202 The prevalence among 'Coloured' people dropped from 6,1% to 1,9% and from 6,2% to 0,6% for 'White' people (Shisana et al, 2005:44).

203 For instance in the same period the prevalence among 'Black African' people had increased by 0,4 percentage points from 12,9% to 13,3% (Shisana et al, 2005:44).

204 In 2005, under one percent (0,6%) of 'White' people were infected and 1,6% of those classified 'Indian' (Shisana et al, 2005:xxvi).

2005:44).[205] Secondly, following this first caution and given that 'Whites and Coloureds comprised 20% and 56% respectively of the Western Cape survey sample',[206] the survey also advises the reader to treat the prevalence data for the Western Cape with caution (Shisana et al, 2005:46).[207]

Although the actual prevalence figures (of 1,9% and 13,3% for 'Coloured' and 'Black African' people respectively) should be treated with caution, then, it is safe to deduce that 'Coloured' people nationally had lower levels of infection than 'Black African' people – although the extent of this and how this is distributed provincially is not known (Shisana et al, 2005:38&40).[208]

A number of the key informants made general statements about the prevalence being higher among 'Black African' people generally The doctor-researcher summarised this as that 'Africans have a very, very much higher HIV prevalence than people of other race groups, and Coloureds have an HIV prevalence which is lower than Africans' but that '[i]t's nothing as low as Whites and Indians'. She proposed that the importance of this for the Western Cape was that 'a lot of the difference between HIV prevalence between areas could be explained by the racial differences ... in the ... composition of the population. Because any area that has a higher proportion of Africans than any other area is going to have a higher HIV prevalence because that's just following national trends.' (DrRJ) She attributed this to the history outlined above.

---

205 The decreases in urban areas were reported as being from 12,1% to 9,1% in formal localities and 21,3% to 17,6% in informal localities (Shisana et al, 2005:44).

206 In 2003, StatsSA found that 61% of the national 'Coloured' population (approximately 2,4 million of 4 million) lived in the Western Cape (StatsSA, 2003:10).

207 The representation of these populations in the 2001 census is similar to this – where 'Whites' comprised 19,4% and 'Coloureds' 61,1% of the population in the Western Cape (StatsSA, 2005a:5), Of the national population of just under 45 million people, 79% classified themselves as 'Black African'; 9,6% as 'White'; 8,9% as 'Coloured'; and 2,5% as 'Indian/Asian' (WCDEADP, 2005:121).

208 In 2005, the same survey reported new infections as being highest among 'Black African' people. At 3,4% per year this compared unfavourably with the national incidence of 0,3% per year among 'Coloured' people which was the same as for 'White' people (Shisana et al, 2005:48). Again the caution about data regarding 'Coloured' people applies.

Stellenbosch wine farms

Two sources of HIV prevalence data are used here to comment on the 'racial' patterning of levels of infection. They are the results of the HIV tests from the first year of the Farms Project and the key informants' expectations of HIV prevalence, by 'race'.

VCT results from the first year of the Farms Project

A racial differential was evident in the results of the HIV testing undertaken by the Farms Project on 14 wine farms, where proportionate to the numbers of people tested, more people classified 'Black African' were HIV positive. Just over half (56% or 14 of 25) of all people who tested HIV positive were 'Black African' - while they represented only just over a tenth (10,6% or 44 of 414) of all people who took the test. Within 'racial' groups:

- 31,8 % of all 'Black African' people tested (14 of 44 people) were HIV positive.
- 3,0 % of all 'Coloured' people tested (11 of 370 people) were HIV positive.

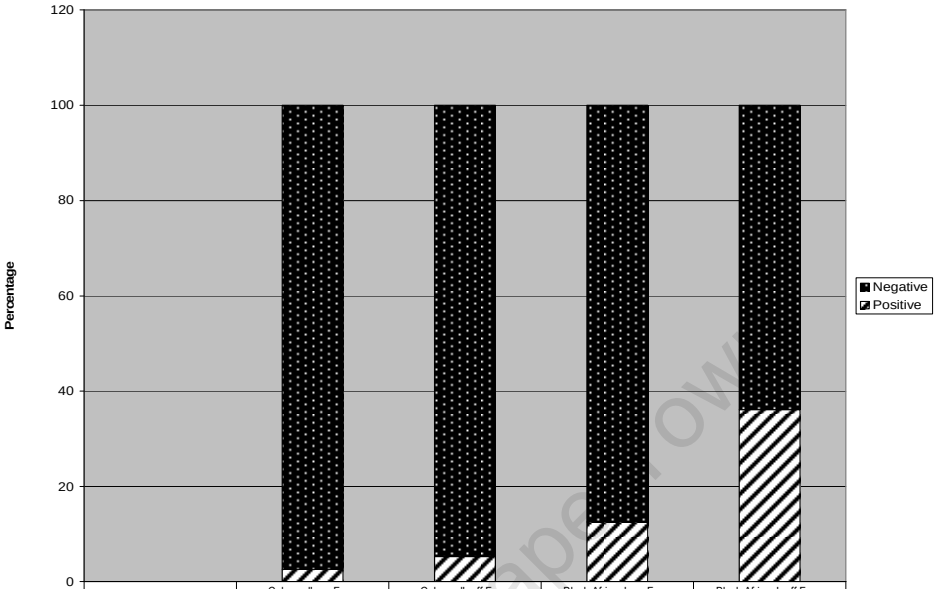
That being said,

- 81,8% of the 'Black African' people tested (36 of 44) lived off farms
- 15,4 % of the 'Coloured' people tested (57 of 370) lived off farms

Of the people from off farms who tested, then, 81,2% of those who were HIV positive were 'Black African' (13 of 16), while they represented only 38,7% of all people who lived off farms who took the test (36 of 93).

Of the people from on farms who tested, 11,1% of all those who were HIV positive were 'Black African' (1 of 9) - while they represented only 2,8% of all people who live on farms who tested (8 of 321).

Figure 11: Comparison of HIV test results of people on 14 Stellenbosch wine farms tested for HIV by the Farms Project: by 'race' November 2007 – November 2008



		Coloured'- on Farm	Coloured'- off Farm	Black African'- on Farm	Black African'- off Farm
Negative		97.4	94.7	87.5	63.9
Positive		2.6	5.3	12.5	36.1

A more extensive study would examine the factors that may begin to explain this differential – including effects of any differentials in socio-economic conditions on sexual behaviour (like housing conditions), family structures and 'cultural' practices, sexual networks and patterns of intimate partnering (including multiple concurrent partners). This is beyond the scope of this study, however - although some possible explanations were offered by the key informants.

Key informants' expectations of HIV prevalence

Perceptions of prevalence among 'Black Africans'

Among the responses from the key informants, half (10 of 20)[209] expected people who were 'Black African' to have the highest HIV infection levels in the Stellenbosch area.

Three medical staff working in clinics in the area had experience of this. The HIV doctor-researcher who worked in the HIV clinic in nearby Franschhoek (part of the Stellenbosch municipality) reported that they found higher levels of infection among 'Black African' people than those classified 'Coloured' (CA). The prevalence was reported to have escalated in Franschhoek with the arrival of 'Black Africans', according to the NGO director who had managed the mobile clinics and worked with statistics from the antenatal clinics in the area. She also thought that some people came expressly to access the health services, given that they arrived in the area already ill (MJ). More broadly, the doctor-farmer with an overview of the West Coast-Cape Winelands health districts reported that 'you definitely get more clusters [of infection] in the Black groups' (NG).

The Farms Project co-ordinator noted that 'there is a racial divide - and for some reason, amongst Afrikaans-speaking Coloureds on farms the prevalence does not seem to be as high as among Africans who live off the farm and come in' elaborating that 'the prevalence rate in Kayamandi[210] seems to be higher than in the Stellenbosch area - and certainly higher than

209 DrRJ, VZ, LH, MJ, TG, GN, TR, NG, CA, CS

210 In this study, I have understood the mention of 'Kayamandi' as a proxy for 'Black African' people, given that this is the main area in which Xhosa-speaking people live in greater Stellenbosch.

the farms and the farm dwellers or farm communities'. She surmised that 'a lot of the people have come from the Eastern Cape where prevalence is higher' (TG).[211] This was supported by, the hospice manager (GN) – while five key informants said that people migrated from the Eastern Cape when they were actually HIV positive (VZ, TG, MJ, GR, EF), with three of these saying that they came expressly to access healthcare (MJ, GR, EF).[212]

The analysis in the Western Cape Department of Health's 2006 antenatal survey warned that while 'the impact of migration may influence the growth of the epidemic, the growth and spread of the epidemic cannot be ascribed to migrancy alone. It nonetheless describes some of the characteristics of migrancy that may intersect with vulnerability to HIV infection:

> 'It is globally recognised, that underlying factors such as socio-demographic and economic factors associated with migrancy and rapid urbanisation influence the spread of the epidemic. Individuals and families associated with migrancy are often faced with poverty, discrimination, alienation, the separation from the family and the breakdown of established community and social networks makes (sic) individuals vulnerable' (WCDoH, 2006:14&15),

The issue of migrancy of various kinds, is a significant area for research but was not able to be included here, given constraints of space. It is alluded to in Appendix J.

---

211 The HIV prevalence in the Eastern Cape has been about double that in the Western Cape. In 2006, HIV prevalence was reported to be 28,6% for the Eastern Cape and 15,1% for the Western Cape while the 2007 national antenatal survey, reported it as 26,05% and 12,6% respectively (DoH, 2007a:14).

212 'Because on the other side [the Eastern Cape] you get really sick people. You get families that stay here, brothers, sisters, whatever – they've got a job here, a house or whatever - and then they go fetch that one from there and bring them here for better [health] services' (EF).

Perceptions of prevalence within the 'Coloured community'

The proposal being made by some key informants, then, is that HIV prevalence is considerably lower in the 'Coloured community' than among people who are 'Black African'. Four respondents said this clearly, while one doctor resisted this simple conclusion.

The NGO director thought that 'the prevalence wasn't that high [amongst 'Coloured' people]'. Commenting that 'Coloured people are moving between Bonteheuwel and farms etc' she nonetheless concluded that '[i]n the Western Cape it wasn't that high.' While the point is not clearly made, the inference seems to be that even though people move between urban and farm areas, there are generally low levels of infection among people classified 'Coloured' (MJ). This was echoed by the doctor working as a manager in the provincial health department who estimated the prevalence to be 'around 5 and 8% in the Coloured community' - but that it was likely to 'take off' (increase). In the absence of data analysed by 'race', she proposed using clinic-level data from specific geographical areas as 'a proxy' for race. She acknowledged these would be hard to access, however (VZ).

At one such possible clinic, the Franschhoek clinic, the HIV doctor-researcher who worked there thought that among young 'Coloured' people '[t]heir friends are healthy and they have not been affected by HIV as the 'Black' community' – and that they 'are much more in denial and don't want help, than the Blacks' (CA).

This lag in infection levels was repeated by the doctor–researcher who thought that although the levels were currently lower among 'Coloured' people than among 'Black Africans', they were only 'temporarily behind'. She identified jail[213] and drug use as two significant factors that might

213 'Coloured' men are the most highly represented in the jail population as a proportion of the 'racial' demographics of the country. As at June 2008, 1,3% of the 'Coloured' male population was in prison, compared with 0,7% of 'Black African' men; 0,1% of 'Indian' men and 0,1% of 'White' men (Department of Correctional Services, 2008:10).

increase infection levels in the 'Coloured' population[214] and concluded that 'all the risk factors for the spread are there in that community and it seems more remarkable than anything that the epidemic hasn't taken off … very very powerfully in the Coloured community in the Western Cape. And you can't help thinking that that's simply got to be a matter of time' (DrRJ).

In contrast, the doctor heading up the Public Health department reported that the infection levels in 'some Coloured communities in Cape Town are pretty high – they are higher than 15%'[215] – but that 'it's not necessarily "if you are Coloured it's this, if you're African it's that". It's a sort of trajectory – there is a history.' Like the other two doctors above, however, he thought that 'the rates [prevalence] will carry on climbing if nothing is done' (LL).

The two different expectations of actual prevalence given here highlight the limitations of overarching data for local–level projects. My sense is that the lower estimate cited (of 5% to 8%) - was a general overarching estimate, while the higher figure ('higher than 15%') was specific - 'for some Coloured communities'. This illustrates the recurring theme of the flattening effect of average statistics which mask 'sub-epidemics' in particular geographical locations or within certain communities or sectors. This is borne out by some key informants who reported that they thought there were high levels of infection in Cloetesville (MT) and Klapmuts (AB) within the 'Coloured' populations who live there. In addition, the Farms Project was increasingly of the view that people who lived in marginal informal housing on roadsides, on the edge of farms, near garbage heaps – were presenting with higher levels of infection. These people were often 'Coloured' and might well have been doing occasional casual work on farms, or been socialising in informal shebeens with farm dwellers.

214 She cited the 'cycling of a lot men in and out of jails' with the associated 'high levels of rape … and HIV transmission in the jail population' as well as the 'increase in drug injection in the Western Cape that we hadn't seen before' which was 'predominantly a Coloured population problem' and which she thought was 'going to have a huge impact [on HIV infection rates]' (DrRJ).

215 I did not ask for the source of this evidence during the interview.

Sex across the 'colour' line

Whether or not respondents thought that sexual networks were enclosed on the basis of 'race' is briefly examined here. I asked informants whether people thought it was possible that 'Black African' workers – who were generally thought to have higher levels of infection – could be a route of HIV transmission to the largely 'Coloured' people on the farm. Given the assumption in this study that transmission is largely sexual – and largely heterosexual - the actual question was whether respondents thought that sex takes place across the 'colour' line', other than in the forms of rape and sexual violence? I raised this question directly, following a number of respondents' assertions that migrancy onto farms of people from the Eastern Cape, Kayamandi, Khayelitsha etc was a vector of transmission.

Sexual relations across 'race' was thought unlikely by the six people with whom this was formally raised, comprising three doctors and three Hospice staff members. The others were silent on this issue as it was either not relevant to their situation or it did not arise during the interview.

A general lack of 'social integration' in the country was mentioned by the academic doctor-researcher (LL) as well as by the research doctor:

> '[T]here is still, in general, very little social mixing between racial groups in South Africa. And there is very little sexual mixing and so that means that an epidemic that started in one sexual network of a group is actually very likely to largely actually stay there. And so you do need to look at the extent to which there would be sexual mixing across race to think about the way HIV is spread' (DrRJ).

This was supported by the doctor in the provincial health department who thought that 'Coloured farm workers … are probably very prejudiced against having relationships and social interactions with African workers' (VZ).

The Farms Project leader-doctor said that 'we don't get the impression that the migrant workers from the Eastern Cape who are predominantly Xhosa, mix with the Coloureds. I mean it's very infrequent that you will see that. They keep separate' (LH). The Hospice manager agreed that 'sex across the colour line is, in my books, not happening very much in the Western Cape' (GN) – as did the nurse managing the in-patient unit who thought that there was 'unlikely to be much sexual relations taking place across the "racial" line' (EF).

There were two kinds of exceptions. The first was about violent sex where the choice of who to have sex with was removed;[216] and the second was about social and sexual mixing off farms in neighbouring small towns.

As mentioned in the next section, violent sex was not raised at all by many respondents.

In terms of social and sexual mixing in neighbouring small towns, the Hospice nurse working in Klapmuts – a peri-urban settlement with high unemployment and seasonal workers - confirmed that she thought sex was happening across 'race' in a community which she described as having a widely diverse 'racial' composition (AB). Similarly the HIV doctor-researcher reported that at the clinic in Wellington she saw two couples where 'the boyfriends are Black and the ladies are Coloured' (CA). And the nurse who ran the Hospice's in-patient unit who thought sex across 'race' did not happen 'so much on farms' also thought that 'with my patients in the ward that stays off farms – that happens [sex across the colour line]' (EF). So at least three people thought that sex might take place across the 'colour' line off farms.

---

216 The NGO co-ordinator of a women's farm health project pointed to the fact that women were not always in a position to choose who they have sex with, particularly in the context of sexual violence and rape. While she made no explicit reference to 'race', this was in response to an overt question about whether commuting workers were a possible route of infection. In addition she refers to 'the male farm workers [who] may have to move between two different provinces or two different farms for job security' (GR). While 'Coloured' men are known to work across farms, they are not known to move across provinces, inferring that some of the men she was referring to may have been 'Black African'.

In relation to farms, two people thought that 'Coloured' seasonal workers from, for instance, Grabouw or the Hex River valley were a considerably greater threat of being a vector of HIV infection than 'Black African' workers who commuted onto farms (VZ, AB).[217] A crucial difference was that they often stayed on the farm overnight while local casual workers – whether 'Coloured and 'Black African' – did not.

4.4.5 Implications for HIV prevalence on Stellenbosch wine farms

The interim conclusion here is that in South Africa, HIV prevalence among 'Coloured' people generally is likely to be lower than among 'Black African' people (some of whom work on farms) – with the high-level statistics masking clusters of high infection. Certainly there is likely to be heterogeneity within the group of people called 'Coloured' while there is also likely to be difference in conditions and practices across farms and across the on-farm/off-farm divide which may affect HIV transmission. One of these is the possibility of having inter-racial relationships.

In addition, however, there was a sense that the pandemic would still affect people classified 'Coloured', consistent with theories that there may be a lag in the epidemic and that its force is yet to be felt in the Western Cape. Whether or not the high levels of infection in some 'Coloured' communities living in off-farm peri-urban settlements are the harbinger of this is not known. Quite plainly, for people to become infected – particularly those in historically more isolated communities as farms may have been – there needs to be sufficient mixing and sexual activity with people who are infected. If one of the premises is that people classified 'Coloured' are a closed community or sexual network of sorts, the question is whether it will remain closed (and if not, who will 'open' it?) and whether there are sufficient levels of infection – and sexual practices – within that population group for HIV to spread.

217 'But if they have interaction with the apple pickers – like Grabouw and those sort of people – then there is a risk there for them' (VZ).

As a contribution to current estimations of HIV levels on Stellenbosch wine farms, then, the fact that residents are overwhelmingly classified as 'Coloured' contributes to an expectation of lower HIV prevalence on farms.

4.5 GENDER

In a longer study this section would address women and men on farms and the relationships between them, since this thesis is about gender, not about only women.

As gender is about relationships and power, it therefore includes concerns about the ways in which men and women relate to one another. Over the last few decades a wide and sophisticated body of literature has developed which addresses the ways in which gender identities (masculinities and femininities) are constructed. Were I able to do justice to this, I would draw on the founding work of Raewyn Connell (1995) from whom the idea of multiple forms of masculinity stems and disaggregate the description of men, such that only some were identified as the perpetrators of the various kinds of violence described here – and other (more benign) descriptions were included.

For example a consideration of men's abusive behaviour would include examining the ways in which a range of factors, central among them poverty[218] and alcohol consumption, have significantly disabled men on farms (seen in the interviews[219] and literature). I would also move beyond viewing people as simply performing structural roles and engage with the individual choices men and women make even i constrained circumstances.

218 For example Janet Bujra notes that 'we have been used to thinking of sexual power (especially as exploitation or oppression) as a phenomenon gendered male, but men are also divided in many ways, with one of the most significant being their class positionality' (Bujra, 2006:118).

219 An indication of the range of men's behaviours is seen in an example from Falletisch who observed that while some 'men punish women when women drink, some men hand over their pay packet to the woman, who then gives him pocket money' (Falletisch, 2008:86).

Simply attributing hegemonic male power to men on farms profoundly underestimates the complexity of these gender relations. That being said, given the historical and continuing structural gender-based inequalities on farms, I will focus primarily on women on farms – but do so with this strong proviso.

In keeping with working with gender in less hegemonic ways, then, I have also textured the descriptions of women by regarding them as actors, despite structural constraints.

4.5.1 Women on farms

Although there has been an increase in the absolute number of women employed in agriculture, more women than men are employed in casual and seasonal jobs on Western Cape farms. In 2004, only a quarter (23%) of permanent jobs were being done by women, while they occupied about two thirds (64%) of temporary jobs[220] which do not enjoy the same levels of remuneration and benefits as permanent work (Du Toit, 2004:11; LRS et al, 2004:26; CRLS, 2008:10).[221] In their 2003 inquiry into human rights violations on farms, the SAHRC found 'widespread discrimination practised against women in the workplace' in the form of being denied 'equal access to employment and maternity benefits, being paid less than men for similar or the same work and being prevented from seeking employment due to a lack of childcare facilities' (SAHRC, 2003:184).

220 In a 2004 survey of 77 farms in the Ceres area, du Toit and Ally found that '[w]hile only 21% of permanent jobs were held by women, almost two-thirds of the harvesting labour force was female' (Du Toit, 2004:11).

221 The CRLS study on HIV on farms concluded that '[o]n the Western Cape farms we visited, we conclude that men – firstly Afrikaans speaking men and then African language speaking men – … have more job security than women. This is followed by Afrikaans speaking women, with African language speaking women having the least job security' (CRLS, 2006a:7&8).

In addition to the majority of farm women being paid less and having less job security, their security of tenure is often premised on their relationship with a man, as houses are linked to permanent positions (Du Toit, 2004:11; SAHRC, 2003:58,179). The Women on Farms Project reported that 'despite the laws expressly de-linking women's tenure rights from that of men, in reality women's tenure security remains directly tied to the tenure fortunes of her male partner' (WFP, 2007:2). In a study they undertook in 2005, the organisation found that 'housing contracts were held by men even in cases where women also held permanent employment contracts. In addition to simply undermining their autonomy, lack of access to housing makes it extremely difficult for women to become independent in situations where violence makes this necessary for her wellbeing and for that of her children' (WFP, 2005. Also LRS et al, 2004:24). Although not specific to the winelands, Ruth Hall reported that, according to Sunde and Kleinbooi (1999), '[w]idows and orphans may be evicted from their homes' following the death of a male head of household, 'since access to housing on farms is usually part of an employment agreement between a landowner and male household head' (Hall, 2008:133).

A 2005 investigation conducted by Action Aid and the Women on Farms Project found that food insecurity was still pervasive in families of women workers (Action Aid & Women on Farms, 2005). These meagre circumstances were also identified by the 2006 CRLS study which found that '[s]ince democratisation, the gap in earnings between women and men has widened, making women farm workers even poorer than their male counterparts (Statistics South Africa, 2004)' (CRLS, 2006a:2).

Many women on farms are thus trapped in various conditions of vulnerability, following their uncertain employment and limited alternatives, and their dependence on men for housing and support – made more invidious by a reported high incidence of domestic and sexual violence, here often fuelled by alcohol (CRLS, 2006a:28).

Violence on farms

High levels of violence in the farming community were reported by those who participated in the Centre for Rural Legal Studies' 2006 research into HIV/AIDS on Western Cape farms. About two thirds (62%) of the residents claimed to know of family violence in their community and just over a third (37%) of sexual violence (CRLS, 2006a:125).

Table 6: Reported perceptions of violence taking place in the farm community
(developed from CRLS, 2006a:125)

	Residents	Managers
Sexual violence (like rape)		
Yes [there is sexual violence]	37%	24%
No [there is no sexual violence]	54%	61%
Did not know	9%	15%
Family violence		
Yes	62%	48%
No	32%	36%
Did not know	6%	5%

In terms of sexual violence on farms, the authors commented that the respondents were likely to have under-reported this 'since there is still a large degree of stigmatisation and shame attached to being raped. Some mentioned that if it happened, people would keep it a secret, while others said they had not witnessed it, or simply did not know about it. Several mentioned that it did not happen on the farm, but in town' (CRLS, 2006a:125).

This underreporting is in some contrast to the director of the Women on Farms Project commentary that '[i]t is difficult to put into words the extent to which trauma is somehow "normalised" at farm level. Generations of socialisation into acceptance has meant that for the women we work with,

levels of tolerance for what passes as "normal" is quite high.[222] This is especially the case with respect to violence against women and children' (WFP, 2007:3).

The doctor–researcher – who had conducted extensive research on gender-based violence of various kinds - thought that there would be 'a tremendous amount of violence [and] a lot of coerced sex' on farms. In a large national study on femicide in which she had participated, they had found that 'the prevalence of femicide in the 'Coloured' population is higher than in any other group' (DrRJ).[223] In follow-up research with men in prisons who had killed their partners, some of whom had been farm dwellers, she reported that 'there're huge issues coming up around cultural life on farms and sexual relations, and whatever, which seem to be extremely complex – very heavily imbued with alcohol and violence' (DrRJ).

It was surprising, then, that rape was mentioned by only two key informants, neither of whom were employed on farms. The NGO co-ordinator of a women's farm health project noted that the fact that there were 'no toilets in the vineyards' meant that women 'have to squat somewhere and that makes them vulnerable. And because of the seasonal workers – it's not always known who the people are and women are more vulnerable' (GR). The HIV doctor-researcher reported that '*ek't 'n klomp ouer dames*, older than 60, has been raped… By the time they get to me, nobody ever thought to test them and they all die, because they're stage four ' (the final stage of illness). She linked this with drugs '[b]ecause nobody in their right thinking mind would rape a 60 … So its drugs, I think, just altered their, their conscious thoughts…. *Maar ek kry dit al hoe meer*' (CA).

222 At a number of workshops with farm women in 2006/7, I heard about the phenomenon of violence being equated with 'being loved' - both first-hand and stories told about others; that some women wore their bruises with some pride.

223 See Abrahams, N., Jewkes, R., Martin, L.J. et al. 2008. Intimate femicide-suicide in South Africa. A cross-sectional study. *Bulletin of the World Health Organisation*, 86(7).

Reports of the levels of violence on farms on which key informants worked were muted – perhaps echoing the lower reporting by managers in the table above.[224] Both the farm manager and social worker employed on the same farm reported that there were cases of domestic violence - although they did not think this was sexual. Identifying the violence as largely alcohol-related, the farm manager had not heard of any rape charges in the time he had worked there – rather 'I know it's men hitting women and stuff like that, but not….' (RJ) The social worker on the same farm – to whom many family matters were reported – commented that violence 'goes through phases. November, December, January is generally quite a bad time' – with the violence largely taking the form of 'fighting between men and women – domestic violence'. She noted that there were three or four families in which levels of violence were high, and that 'one man ended up in hospital because his wife stabbed him in the hand!'(LF). Had there been instances of sexual assault or rape on that farm, my sense is they would have mentioned it.[225]

One farmer reported that 'there used to be [violence on my farm], but it's very seldom now - really seldom. If any, I would say once a year or twice a year, maybe. And it's normally the one couple - and that's the woman that's the alcoholic. Her husband tries so hard to better himself, but she's holding him back' (SV). He went on to describe a self-styled street theatre group on the farm – who called themselves 'the Pretty Ladies' and had twice been to the Klein Karoo Nasionale Kunsfees - who wrote their own plays 'which was all about family violence, different forms of family violence. I could see them in it – I could see this family, that family' (SV).

224 As noted in Chapter 2, these farms had better social conditions than some, and the interviews reflected relatively high levels of social cohesion. That being said, incidents of sexual violence can remain private so access to this information by those working on farms is likely to be incomplete.

225 This is, of course, in the context of notorious rates of under-reporting of rape.

Key informants from the other three farms (TR, DC and NG) did not raise the issue of domestic and sexual violence – and I did not ask. Again my sense is that two of the three would have volunteered this had it been a dominant feature, while the nature of the interview with the third did not lead in this direction.

Juxtaposing the literature and the key informants' responses, then, has resulted in a mixed picture of the levels of violence on farms. Both reported higher levels of domestic violence than sexual violence – but this is not unusual, given the layers of social complication entailed in talking about, or reporting, sexual violence.

Agency

That women act within, or despite, these contexts is seen in a number of the examples cited by key informants. Their actions are sometimes health-seeking - in refusing to comply, in asserting or defending themselves - but are sometimes risky - like multiple pregnancies while still a teenager, and being sexually proactive in ways that put them at risk[226] which can include various forms of transactional sex.

Examples of women's assertive behaviour cited by key informants include

- extra-marital affairs (mentioned a number of times but seen, for example, in the man's fatalistic acceptance of his wife's extra-marital affair reported in footnote 145 above) (MT);
- the woman stabbing her partner in the hand – reported in this section above (LF);
- the community worker's laying down the law about faithfulness in their marriage - cited in footnote 144 above (DC); and
- an HIV-positive woman having unsafe sex with her boyfriend without disclosing her status, declaring it was revenge for being infected (DC).

226 There were at least two stories of women being proactive in their choice of sexual partners: both entailed women who were HIV-positive who knowingly had unprotected sex with these men, one of which was thought to be directly vengeful.

Sexual exchange

Apart from engaging in sexual networks which are largely social, the issue of transactional sex was raised by a number of people. While some thought that farm dwellers may sell sex (LF, LH, MJ, GR, NG), others questioned whether they were able to buy it as well (VZ, LL, CS).[227]

The doctor-manager wondered whether 'anyone [is] wealthy enough [on farms] to go around paying for sexual favours? I'm just wondering if there is stuff like people paying their school fees or people giving cell phones or any of that?' (VZ) The academic doctor-researcher did not think so. He thought that given the poverty on farms 'you can't buy sex, you can't promise things to partners. There might be sex going on but it is a different scale' – and that it was not 'transactional sex' in the way it is usually meant (LL). The farms-dedicated Hospice nurse agreed, on the basis that she 'did not think it [transactional sex] happens that much in the Coloured community' as they are 'just too poor' (CS).

This assumes those paying for sex are within the farm community. The farm-based social worker reported that 'one of our farm workers [is] a prostitute on the road there. And I wouldn't be surprised if there aren't a few others who we have not seen them on the road, but certainly are getting paid' (LF). But increased disposable income is thought to come onto the farms in the form of seasonal workers who move from farm to farm where they stay overnight for a number of weeks. In the fruit and wine industry in the Western Cape (and in the experience of the Farms Project) some seasonal workers are 'Coloured' which, in addition to their increased alcohol consumption made possible by their income, was thought to facilitate transactional sex (NG).

227 In intimate communities, ties other than money may open doors to sex – like social positioning. Also 'sugar daddy' relationships may well occur based on various currencies of exchange – but this is not investigated here.

Five respondents thought that survivalist transactional sex did take place – and that this increased risk of HIV transmission (LF, LH, MJ, GR, NG). The Project leader-doctor, the NGO director and NGO co-ordinator of a women's farm health project (LH, MJ, GR) thought women on farms engaged in transactional sex from material necessity and that this fuelled HIV transmission. The latter added that it particularly took place among young people who 'get drunk and then have sex for another beer'[228] and that it may also be linked to the increase of 'tik' on farms (GR). In some contrast, the doctor-farmer thought some women instrumentalised sex as part of a conscious strategy to escape their poor conditions (not just survive) - to buy their ways to materially better lives (NG).[229]

There is a debate about whether selling sex is choice or necessity – an act of agency or submission. It could be either, depending on the circumstances. As some key informants observed (DC, GR, MT), exchanging sex for drinks at a party is a choice, albeit made in a specific set of material and social circumstances – while others suggest that some women are compelled to sell sex for basic survival (LH, CS).

Drimie observed that more women are forced by poverty into selling sex for survival than there are commercial sex workers (Drimie, 2002:10) while Hall noted that in some countries 'there is a high incidence of transactional sex

228 Referring to the urban area of Cloetesville, the Hospice home-based carer pointed to 'young girls, they sleep around. They sleep around – just for the money, just to buy beer or booze or anything. Or tik. Ja!' (MT).

229 On a different level, the doctor-farmer regarded selling sex as part of a strategy to escape one's conditions. Referring to this kind of person a '*wakker*-girl' he thought that she would 'realise that "If I want to move out of my conditions, I need to connect with other people. I need to get a boyfriend that will take me out of this. And then I need to know that if I want to have a Levi's denim, I need to have a boyfriend that knows to give it to me - and then I need to use my body!"' He sees it as entirely instrumental: 'They are just using sex – it's their lives. And I don't think they believe that they are a bad person by doing that – it's just the facts." He sees this as one of the way the world works: 'It's honest, it's not malicious!' (NG).

in farm worker populations, a consequence of the dependence of women on relations with men, in order to secure access to employment on farms' which leads to 'higher HIV prevalence on commercial farms than in surrounding areas'[230] (Hall, 2008:134).

Comment

Conditions on some farms continue to reproduce gender relations that undermine and underestimate women and girls. This begins with the allocation of jobs and houses to predominantly male workers, thus ensuring women's dependence on their partners and precarious material existences. Domestic and sexual violence, and the threats of violence, limit many women's options - as do some mothers' pressures on their young daughters to have babies. The tolerance of multiple concurrent partnerships in the forms of extra-marital affairs also potentially puts men and women at risk as their otherwise monogamous sexual networks became vulnerable to other sexual partners.

While the spectre of male power was invoked through mention of gender-based violence, men were not always described by key informants as simply dominant.

While men and women were reported to both engage in poorly judged sex, this has more serious consequences for women given their greater physiological susceptibility to infection. This inequality may be mitigated by the poor health status of some farm men, however, whose immune systems may be compromised by poor nutrition and generations of alcohol abuse, making them susceptible to illness and infection.

230 Hall quoted this from Izumi, K (2006) *Reclaiming our lives. HIV and AIDS. Women's land and property rights in Southern and East Africa* etc. Pretoria: HSRC, FAO and Global Coalition on Women and AIDS.

4.5.2 Gender and HIV

The physiological, social, cultural and economic conditions that result in higher levels of HIV infection among women are well-documented. I shall review a small sample of these here.

The first point is that girls' and women's bodies are physiologically more susceptible to infection,[231] more so for girls and young women. This provides fertile ground for infection through various social practices that put girls and women at risk – and the higher prevalence amongst young women in particular is testimony to this.

The social conditions which put girls and women at risk have gender inequality at the heart – the most obvious being harmful cultural norms which result in their being socially and economically dependent on men (e.g. Kisson et al, 2002:41–44; CRLS, 2003:5; Wechsberg et al, 2008:131). Under these circumstances women and girls engage in various survival strategies - like complying with social and cultural requirements (like being 'inherited' by a brother-in-law on the death of a husband) or engaging in 'survival' sex. One farmer commented on the internalised oppression of 'Coloured' women (on farms) who 'have a very bad self-esteem' which he attributed to 'tradition' (TR).

While male partners' dominance can make it difficult for girls and women to act in health-seeking ways, their vulnerability can be exacerbated by their own lack of information which can lead to their engaging in behaviour that is risky in ways they do not understand. In addition sexual violence, or the

231 'Women are between two and four times more likely than men to contract HIV from a sexual encounter. Reasons include higher concentrations of HIV in semen than in vaginal fluid, the larger area of exposed female than male genital surface area, the longer period of exposure of semen in the vaginal tract, and the greater permeability of the mucous membranes in the vagina compared to the penis' (Nattrass, 2006:2).

threat of it, can significantly increase girls' and women's vulnerability to HIV as it not only makes safe sex impossible to negotiate, but can transmit infection in itself (e.g. Amnesty International, 2008:13; Jewkes & Dunkle, in press; UNAIDS/UNFPA/ UNIFEM, 2004; Shisana et al, 2005:1&25-26).[232]

Girls and women are not simply subject to their circumstances, however, and some enact their own 'agency' despite the context of what Jewkes and Dunkle have characterised as 'overwhelming male power'. The authors proposed that these 'alternative narratives of female agency and power … form an important part of the landscape of sexuality in South Africa' and that understanding these is also crucial for understanding women's risk for transmission of HIV (Jewkes & Dunkle, in press).

The extent of risk undertaken by women engaging in transactional sex depends on the physiological conditions of the exchange, specifically whether condoms are used. But there is certainly some risk entailed in the unprotected sex which results in girls and young women falling pregnant.

Jewkes and Dunkle confirmed that women engage in risky behaviour. 'The epidemiological evidence does not indicate that the common ways in which women assert sexual agency … translate into agency that is useful in protection from HIV. Indeed having multiple partners, transactional sex or older male partners and drinking alcohol are generally found to be highly risky'[233] (Jewkes & Dunkle, in press). They noted that these kinds of acts of

232 'The UNAIDS-led Global Coalition on Women and AIDS has identified seven action areas to address women's vulnerability to HIV: improved reproductive care; reducing violence against women; protecting property and inheritance rights of women; ensuring equal access for females to treatment and care; supporting efforts to provide universal education for girls; supporting improved community care with a special focus on women; and promoting safe sex technologies that are controlled by women, such as the female condom and microbicides' (Global Coalition on Women and AIDS, 2005:2) (Nattrass, 2006:2-4).

233 Quoting from the 2005 HSRC household survey, Nicoli Nattrass notes that 'young women are more sexually experienced than young men, thus reflecting the pattern of young women having relationships with older men. This in turn places them at an elevated risk of HIV infection: women reporting having relationships with men more than 5 years older than themselves, and men reporting having relationships with women more than 5 years younger than themselves, were statistically more likely to be HIV positive' (Nattrass, 2006:2).

women's agency critically take place within the dominant relations and do not challenge or re-shape power – and most importantly, they not only do not protect women from HIV, they put them exactly at the interface of potential infection.

Gender expectations do not particularly protect men from infection either, albeit that their infection levels are lower than women's. Quoting UNAIDS,[234] Nattrass asserts that 'the norms and practices which define masculinity … also put men at risk' and that these include 'definitions of masculinity which emphasise multiple partnering and sexual relations with younger women as well as a preference for 'skin on skin' (i.e. unsafe) sex. Thus, dealing with the feminisation of the AIDS epidemic also entails reaching out to men and boys in an effort to change sexual culture and risky masculinities' (Nattrass, 2006:2-4).

Gender-based violence

Men's violent and controlling behaviours, having multiple partners, engaging in transactional sex, coercing non-partners into sex, heavy drinking and drug use are cited by Jewkes and Dunkle as 'part of a construction of masculinity'.[235] But as alluded to above, not all forms of masculinity are vested in the use of violence (against women) nor do all consider violence to be a legitimate use of physical and bodily power. Nevertheless, it is a distressing feature of South Africa's gender terrain that nearly a quarter of men admit to having raped a woman (Jewkes et al, 2009). While a history of colonial and apartheid violence 'explains', at a general level, why men continue to use violence so readily (Morrell, 2001), history cannot on its own explain why men are violent.

234 Quoting from UNAIDS (2000) *Men and AIDS: A Gendered Approach (World AIDS Campaign), Geneva.*

235 'Indeed it was particularly interesting that the HIV prevention behavioural intervention Stepping Stones, which sought to prevent HIV by building more gender equitable relationships not only reduced men's sexual risk taking tangibly (as shown by a reduction in new herpes infections), but reduced perpetration of intimate partner violence, sustained to two years after the intervention, and impacted on alcohol consumption, drug use and transactional sex' (Jewkes et al, 2008).

Explanations that have been offered to explain risk-taking behaviour more generally include that men (particularly working class men undertaking dangerous and arduous work) are accustomed to taking risks (Campbell, 2003), that men feel entitled to respect (Ratele, 2001) and entitled to sex from women (Shefer et al, 2005), and that among some young men, violence is considered a normal way of relating to other people especially in intimate contexts (Sathiparsad, 2005). Perhaps crucially for farms, violence may be a resource to affirm masculinity when contexts of poverty seem to deny all other avenues to manhood (Wood and Jewkes, 2001). So the violences of men can be seen as reflecting both their power and their vulnerability. All these studies specifically argue that violence is not a natural form of male expression or behaviour, but that it needs to be understood in social contexts and, specifically, as part of a repertoire of behaviours which flow from and feed into constructions of masculinity.

That being said, there is no doubt that the perpetrators of sexual violence are men and that there is a strong link between violence – including the threat of violence - and vulnerability to HIV infection. Indeed UNAIDS, UNFPA, UNIFEM[236] see gender-based violence as a significant driver of the pandemic - that it is 'now one of the leading factors in the increased levels of HIV infection among women' and that '[u]nless the link between the two is broken, it will be hard to reverse the epidemic' (UNAIDS/UNFPA/UNIFEM, 2004:2).

The strong correlation between the two was asserted by the United Nations' Human Right Commission in 2005 when they noted that not only does 'violence against women and girls increase their vulnerability to HIV/AIDS, [but] that HIV infection further increases women's vulnerability to violence, and that violence against women contributes to the conditions fostering the spread of HIV/AIDS' (Ertürk, 2005:89).

236 The Joint United Nations Programme on HIV/AIDS (UNAIDS), United Nations Fund for Population Activities (UNFPA), United Nations Development Fund for Women (UNIFEM).

The HSRC reported in 2004 that 16,5% of South Africans had been involved in relationships characterised by intimate partner violence (Dawes et al, 2004:48). Quoting Abrahams et al, Lisa Vetten also reported that 44% of 1 394 men working for three Cape Town municipalities in 1999 'were willing to admit to researchers that they abused their female partners'. In the same year, Mathews found that South Africa had the highest rates in the world of women murdered by their intimate partners (Vetten, 2007:429).[237] Poor women in particular often lack the choice to move to protect themselves and Vetten, among many others, points to the 'intersections of race, gender and economic marginalisation … which are often treated as "separate, compartmentalised discriminations" rather than compounding ones' (Vetten, 2007:442).

Addressing the risk of contracting HIV through rape, the key informant who was the doctor–researcher thought it was 'an evident truth that you can get HIV from rape - because rapes in general are almost always an act of unprotected sex and you know – usually with another partner - and any act of unprotected sex has risk of HIV'. She also noted that they were trying to prove within a current study that 'men who rape … have more risk behaviours' and that they were 'trying to find out if they've got more HIV' (DrRJ). This view was in contrast to an earlier finding of a recent publication which she cited in which modelling by Nicola Christofides et al found that rape 'probably does not result in many HIV infections each year' qualifying that this was 'probably less than 0,05% of new infections' (Christofides et al 2006, quoted in Jewkes & Dunkle, in press).

237 Vetten cautions the simple use of these statistics, however, given that the 'state of South African crime statistics often makes it impossible to distinguish a rise in reporting rates from a rise in the actual incidence of a particular crime'. Writing in 2007, she added that studies undertaken by the MRC and StatsSA in the early 2000s had not been repeated, making it impossible to use these to assess any changes in rates of violence (Vetten, 2007:430). She proposed that 'were community victimisation surveys to be run routinely to monitor under-reporting, then we would be in a much better position to understand what the numbers reported to the police actually reflect' (Vetten, 2007:442).

Reporting on their research that showed that 'women who experienced sexual abuse in childhood are more likely to develop HIV subsequently', the doctor-researcher explained that 'sexual abuse and rape do three things'. While some women withdraw completely from men, in others 'the levels of sexual risk taking goes up' as 'the act of rape teaches women something about their [in]ability to control their bodies and how they see themselves.' As a result, some rape survivors 'tend to have more partners and have more sexual risk taking'. She noted that '[t]here may be a link that some of the risks that led to them to being raped actually led to those behaviours before rape. But we don't know enough about that - but I think that [with] some women there are those issues' (Dr RJ).

But it is the effects of the powerlessness that results from living in relationships characterised by violence and controlling male behaviour that put women at all kinds of risk. Abdool Karim reports that '[s]everal studies have established a strong association between experience, or fear, of violence and HIV risk. Fear of violence prevents women from even discussing HIV risk with their partners, let alone requesting condom use' (Abdool Karim, 2005:257; See also Kisson et al, 2002:42). Mathews adds that 'intimate partner violence was associated with an increased likelihood of women engaging in HIV risk behaviour (having multiple partners, having concurrent partners, engaging in transactional sex and having problems with substance use)' (Mathews, 2005:147)[238] to which can be added that these women 'have more frequent sex, and thus more opportunities for infection, and are less likely to use condoms' (Jewkes & Dunkle, in press). The threat of violence is often sufficient to elicit compliance and it is thought that some '[m]en also engage in a range of strategies to assert a position of dominance and control within relationships which may not entail the use of violence, or not require it to be used very often' (Jewkes & Dunkle, in press). In these circumstances women comply with their partner's requirements as a means of survival – and in so doing, put their lives at risk.

238 Quoting a study by Dunkle and colleagues of 1 366 women at antenatal clinics in Soweto.

In addition to being trapped by a need for material security, the NGO co-ordinator of a women's farm health project also thought that some women stayed because of their 'spoilt' status -suggesting that they may think '[w]e are both HIV positive and who is going to want me? My reputation will be scarred or marred if I leave this farm where people know' (GR). UNAIDS, UNFPA and UNIFEM comment on the dangers to women who are found to be HIV positive, proposing that if their HIV-positive status becomes known 'many women risk being beaten, abandoned or thrown out of their homes. Many are afraid to ask their partners to change their sexual behaviour or use protection. While violence and the fear of violence make it hard for women to access prevention, treatment and care, the very fact that they are living with violence seems to increase their susceptibility to HIV' . They cite a study in Tanzania which found that HIV-positive women were over two-and-a-half times more likely to have experienced violence by their partner than HIV-negative women (UNAIDS/UNFPA/UNIFEM, 2004:2).

In summary the dominant gender relations in the country which include high incidence of threats and acts of sexual violence means that not only are many women not able to protect themselves from HIV infection, but they may be exposed to violence if they become infected. In addition, their own acts of sexual independence can lead them to engage in behaviours that again put them at risk.

Given the descriptions of violence on farms above, and of many women's material dependence on men, it is conceivable that gender relations on Stellenbosch wine farms might be a factor in increasing girls' and women's vulnerability to HIV. Coupled with anecdotal reports of high rates of teenage pregnancy and early sexual debut, various difficulties in accessing or negotiating condoms, women and girls on farms seem vulnerable to becoming infected with HIV.

4.5.3 Prevalence among men and women

In 2006 UNAIDS reported that 'in sub-Saharan Africa, which is home to 62% of the world's HIV infected people, 59% are women' (UNAIDS & WHO, 2007).

National prevalence

Certainly more women than men are infected with HIV in South Africa.[239] Projections of HIV prevalence as well as survey results consistently report this. Evidence points to the skewed distribution of infection across gender in the age group 15 to 24, supporting ASSA2003's estimates that in 2006, young women would be four times more likely to be infected than young men and would lead new infections (Dorrington et al, 2006:ii).[240] This was borne out by the HSRC household survey of 2005 which found that women 'account[ed] for 87% of recent HIV infections in this age group' and had an eight-times higher incidence[241] than men of the same age (6,5% compared to 0,8%) (Shisana et al, 2005:135).[242]

239 WHO/UNAIDS estimated that in 2005, 3,1 million women older than 15 were infected, compared with 2,2 million men – this being a ratio of 58,5:41,5 (WHO/UNAIDS, 2006:2). This is similar to ASSA's projected prevalences for 2006 for people 15–49 years of age where the ratio was projected to be 59,1:40,9% (Dorrington et al, 2006:8).

240 ASSA put the ratio of women to men in ages 15 to 24 as 82,1:17,9%. This difference is supported by the 2005 HSRC household survey which found that for this cohort 'the prevalence of females is almost four times that of males – 16,9% vs 4,4%' (Shisana et al, 2005:45). It notes only minor differences between these findings and those found in the RHRU's *Youth survey of HIV and sexual behaviour* conducted in 2003, where male prevalences were slightly higher (4,8% compared with the HSRC findings of 4,4%) and the women slightly lower (15,5% compared with the HSRC findings of 16,9%) (Shisana et al, 2005:46).
WHO/UNAIDS prevalence rates for the same age cohort for 2005 supports this gender difference, reporting 4,5% prevalence among men aged 15 to 24 years and 14,8% for young women of the same age (WHO/UNAIDS, 2006:2).
In a sub-section of this age - being 20-24 year olds - the 2005 HSRC household survey found the prevalence to be 23,9% for women, and 6,0% for men (Shisana et al, 2005:34).

241 Incidence is defined as 'recent infections within the last 180 days' (Shisana et al, 2005:48).

242 Somewhat extraordinarily, the 2005 HSRC household survey found that many more men reported using a condom in their most recent sexual encounter than women did. Among 'Black African' people, 43,6% of men reported doing so while only 38,1% of women did. Among 'Coloured' people, 22,3% of men compared with 12,6% of women reported using a condom at their last encounter (Shisana et al, 2005:65).

The 2005 household survey found that 'HIV prevalence continues to be high in women aged 20–24 years and peaks in the age groups 15-29 years for females, and 30-34 years for males'. It found that a third (33,3%) of women in the age group 25–29 years were HIV positive. A year later, the national antenatal survey found that in 2006 'HIV prevalence in the 20 to 25 year age group [of pregnant women] has decreased in comparison to 2005' but that this was balanced by 'an increase in HIV prevalence amongst women in the 30 to 39 year age group … [which] could be partly attributed to a cohort effect referring to the fact that women in the younger age groups, who may already be infected, move into an older age cohort' (DoH, 2007a:9).

Generally then, the national evidence points to considerably higher infection levels among women than men, with a preponderance of infection being among young women particularly.

This was echoed in the findings of the CRLS study of HIV on farms[243] which reflected that roughly three times as many young women were infected than young men within their study cohort. In the 65 stories recorded, 70% (45 of 65) of those infected by the virus were female - of whom 33 were 'young women', 11 were 'adult women' and one was a six-year old girl. Of the 20 men infected, ten were 'young men' and nine 'adult men' (CRLS, 2006b:14). As a proportion of the whole sample, then, 'young' people accounted for two thirds (67,2%) of those infected, three quarters (51,6%) being young women and a quarter (15,6%) young men.

Stellenbosch wine farms

This section again uses two sources of data about HIV prevalence - the results of the HIV tests from the first year of the Farms Project and the key informants' expectations of HIV prevalence - this time to comment on gendered patterns in levels of infection.

---

243 This study included a collation of 64 case studies of farm residents and managers in which they described their experiences of people infected with HIV/AIDS 'involving friends, family members and, in only one case, herself' (CRLS, 2006a:14).

VCT results from the first year of the Farms Project

The results of testing farm dwellers in the first year of the Farms Project showed that proportionately more women were infected than men, both on and off farms. As such, these data follow the broader national trends.

Of the people who tested HIV positive, women were over-represented at 76% (19 of 25) against the 53% tested. This disproportion was also evident among women who lived on farms and who tested positive for HIV. Two thirds (66%) of the people who tested HIV positive were women compared to the half (48%) who tested. Only one of these was in the 'high risk' age bracket of 15 – 25, however, with half (3 of 6) being between 26 and 35 and a third (2 of 6) being between 36 and 45 years old.

Key informants' expectations of HIV prevalence

Five key informants – all from the Hospice – commented on gender in relation to HIV on farms.

Three proposed that the levels of infection among farm women would be higher than among men (LH, TG, MT). This included the Farms Project leader-doctor and the Project co-ordinator – both of whom attended the weekly inter-disciplinary team meetings at which patients were discussed. The home-based carer working on farms described the HIV-positive patients she cared for in their homes as being '[m]ostly women in their 20s and 30s who live with their families - some of them disclosed but most of them don't' – adding that one woman was scared to disclose to her boyfriend with whom she continues to have unprotected sex (MT).

This was in apparent contrast to the HIV-positive farm patients in the palliative in-patient unit, most of whom were men. This was not understood to be reflective of higher prevalence among men, however, but rather that they were being diagnosed later than women often when they were very ill.

In addition it was thought that that 'somehow or the other they [women] seem to stay healthier than the men, a lot of whom were non-compliant' and did not take their medication regularly (TG). The nurse who ran the in-patient unit agreed that men were largely admitted 'due to non-compliance … they do come in and end up like that. It could be women are more supported at home, within the family unit' (EF).

4.5.4 Implications for HIV prevalence on Stellenbosch wine farms

The trend on farms follows that of the general population – namely that proportionately more women are likely to be infected with HIV than men. Here the triangulation of data was mutually supportive – with very little disconfirming data.

Identifying the factors that may exacerbate risks for women on farms – which span the full range of Whitehead and Dalgren's health determinants - may be useful to an organisation's planning process informing where they might place their energies. But these data do not help answer the question about HIV prevalence on farms generally and do not help us know whether the prevalence is likely to be higher or lower than the average, or similar to it. Rather they are constituent data within the prevalence figure, but do not influence it.

If anything, the higher-than-usual proportion of men who were tested (and among whom the prevalence was lower than among women) may serve to bring the prevalence down in relation to the average prevalence for the area. To be certain of this, more comparative information would be needed, however.[244]

244 For instance, the proportions of men who *are* tested in surveys or other public data and, significantly the assumptions used in any modelling of survey statistics to correct for this kind of skewing.

4.6 ALCOHOL

Given the history of pervasive alcohol consumption on farms, I will focus exclusively on alcohol in examining the possible link between substance abuse and HIV transmission. As with other exclusions, the omission of drug use is not to underestimate its (growing) importance.

Problem drinking in South Africa is reported to be a major public health burden and 'alcohol consumption levels among the highest in the world' (Wechsberg et al, 2008:130). Quoting a 2005 Western Cape survey, the CRLS reported that '56% of adults were current drinkers – 76% men and 34% women' (CRLS, 2006a:31) – while in an earlier study of farm workers in the deciduous fruit industry (which includes grapes), Leslie London reported that 'close to half of the sample consumed more grams of alcohol per week than considered safe drinking (210 g) and 9.3% consumed amounts in excess of dangerous drinking (\490 g:week)' (London, 2000:1999) .

The 2005 HSRC household survey included questions about alcohol use[245] given its possible implications for HIV. It listed the following findings:

- The Western Cape has the largest proportion of 'high risk drinkers' in the country, being 15,6% of all residents older than 15. (By comparison only 2,6% of the population in the Eastern Cape are designated high-risk drinkers.)
- Nationally, more men were found to be 'high-risk drinkers' (13,6%) than women (2,1% of whom were 'high risk drinkers').
- 'Coloured' people were found to have the highest proportion of high-risk drinkers (17,8%), followed by 'White' people (7,2%) and 'Black African' people (6,4%).

245 Using the AUDIT scale, the study identified high-risk or misuse drinkers as scoring 8+ on the 10-point scale and defines these as 'any level of risk, ranging from hazardous or harmful drinking to alcohol dependence' (Shisana et al, 2005:72).

- The areas most affected by high risk drinking were the 'rural formal' areas (which include commercial farms) where 11,1% of people were identified as such – while 'rural informal' areas were found to be the least affected (3,5%).
- People between the ages of 25 and 49 were at greatest risk (8,9%) of being 'high risk drinkers', followed by 15–24 year-olds (6,3%) (Shisana et al, 2005:72).

A collation of these data suggest that 'Coloured' men between the ages of 24 and 49 living in the Western Cape in rural formal areas (which include farms) are the most likely to be 'high risk drinkers'. Quite simply, this specifically includes men of working age living on wine farms.

4.6.1 Alcohol consumption on farms

The abuse of alcohol on wine farms is legendary, dating back to the notorious 'dop' (or 'tot') system whereby cheap wine was part of workers' pay, while some farmers also supplied workers with 'two to three bottles of wine in tots at intervals throughout the course of the day' (LRS et al, 2004:24).[246] While the system was economic, it was also and particularly about social control (Falletisch, 2008:2). In 2004, over forty years after the system was formally abolished in 1961 by the Liquor Act (Falletisch, 2008:46), a small percentage (1,4%) of wine farms are still practising a version of this system (LRS et al, 2004:23) – although the Human Rights Commission's 2003 national inquiry noted with concern that 'alcohol abuse is perpetuated by cheap alcohol being easily available through the

246 A farm worker interviewed for *Behind the Label* said that 'people earned little money but in the morning and at 4pm, they got a mug of wine. In the evening they got another 750ml bottle of wine, and an extra drink for the road. This was part of their pay. By the time they got home they were already drunk.' Another said that '[t]he tot system brought great misery to our childhoods. I wanted sober parents and could only dream of having nice things and nice clothes. I still remember how I always wished that the weekend would never come, because of all the drinking' (LRS et al, 2004:24).

proliferation of mobile shebeens' (SAHRC, 2003:185).[247] Some also argue that farmers who make wine available cheaply to workers on credit, or give wine as a bonus, are simply continuing an old practice with a new label (Falletisch, 2008:56).

The 'devastating consequences of this system … [which] still persist on farms today' were listed as 'alcoholism, gendered and domestic violence, child abuse and foetal alcohol syndrome' (LRS et al, 2004:23).[248] The Human Rights Commission also reported on alcohol-related violence, noting that the incidence of acts of violence resulting in trauma 'is estimated at 60% and contributes towards child abuse, spousal abuse, malnutrition, poor hygiene, high rates of tuberculosis, unemployment, absenteeism and low education' (SAHRC, 2003:58).[249] It concluded that 'dependence on alcohol is an enormous and difficult social problem, which impacts negatively on the enjoyment of human rights and the creation of a human rights culture'. In the context of farms, it 'locks farm dwellers into cycles of dependence on the farm owner' (SAHRC, 2003:195).

---

247 The 2003 Inquiry found that in the Western Cape 'the manifestation of alcoholism is continued through the proliferation of illegal mobile shebeens that provide people with cheap liquor on farms … Widespread access to alcohol is made available through vehicles that drive to the farms to sell liquor to workers on credit. A 5-litre container of wine, known locally as a "papsak", is sold for as little as R14,00 to farm workers. These travelling shebeens sell these "papsakke" for as much as R60,00 and even as much as R75,00 over weekends. These shebeens are also viewed as contributing towards an increase of crime on farms. Farm property is stolen to sell or barter for liquor or drugs from these shebeens' (SAHRC, 2003:58).

248 High levels of alcohol consumption were found among farm workers in the deciduous fruit industry in South Africa in a cross-sectional analytical study conducted in 1993 'to assess levels of alcohol consumption and abuse and to explore the impact of the DOP system'. 'On the CAGE and a shortened version of the MAST questionnaires, 87 and 65% respectively had responses indicating problem drinking. Close to half of the sample consumed more grams of alcohol per week than considered safe drinking (210g) and 9,3% consumed amounts in excess of dangerous drinking (>490 g:week) … Workers with past experience of the Dop system were 9,8 times less likely to be abstainers than colleagues without exposure to the Dop system' (London, 2000:199). While these data are not current, the legacy of these levels of alcohol consumption is still apparent on farms.

249 A national study on the extent of alcohol abuse in 2000 in South Africa found that '[t]op rankings for overall alcohol-attributable burden were interpersonal violence (39,0%), neuropsychiatric conditions (18,4%) and road traffic injuries (14,3%). Interpersonal violence accounted for 42,8% of the injury DALYs [disability adjusted life years] attributed to alcohol in males and 25,9% in females. In terms of alcohol-attributable disability, alcohol use disorders ranked first (44,6%), interpersonal violence second (23,2%), and FAS third (18,1%)' (Schneider et al, 2007:iv).

The NGO co-ordinator of a women's farm health project also blamed the stubborn persistence of alcohol abuse, alcoholism and FAS on the 'legacy of the dop system'. While she recognised 'people who are more alcohol dependent are not unique to farming communities' she thought the high levels on farms were exceptional and noted that the predominance of FAS in the rural areas were 'an indicator of the levels of alcohol abuse and alcohol dependence with adults in the community' (GR). The NGO director whose organisation, Dopstop, focused on alcohol abuse on farms confirmed that among some adults 'it's still bad' and that among those who were alcoholics 'drinking is non-stop'. She thought 'substance abuse is more amongst the young people' who used both alcohol and drugs because of 'boredom - nothing to do - and peer pressure' (MJ).

That alcohol consumption mostly took place on weekends (MJ) was echoed in a 2001 study that found that just under half (45%) of adults on farms 'consume alcohol', mostly on weekends (Falletisch, 2008:62 – quoting C Henn, 2001:79). These levels were repeated by farm dwellers interviewed for the 2006 CRLS study who thought that alcohol abuse 'happens often, usually on weekends' (53%), while half the managers interviewed thought that 'there was alcohol abuse amongst about half to most people' (58%) (CRLS, 2006a:133).[250] The 20 farm workers surveyed on a single farm ranked 'alcohol and drug abuse' as the biggest social problem (19 of 20); followed equally by 'domestic violence' and 'jealousy' (14 of 20) (Falletisch, 2008:234).[251]

250 A fifth of dwellers (20%) said that alcohol abuse 'happens seldom', and a tenth (11%) 'only occasionally' while 3% thought it only happened 'when people have money' (CRLS, 2006a:12). Among the managers who said there was no alcohol abuse, they 'either asserted that there was no drinking on the farm, or that people drank responsibly. Others mentioned that people did not have enough money for alcohol, or that their religion prevented them from drinking' (CRLS, 2006:133).

251 Being a long-standing practitioner on the farm on which she did her research, Falletisch nonetheless reported that 'it is difficult to get an accurate picture of the alcohol consumption of the labourers. When drinkers are interviewed they underestimate the amount they are drinking. The same individual will report much higher alcohol intake in a sober period of his/her life' (Falletisch, 2008:63).

Three of the four farms on which the key informants were employed reported moderate levels of alcohol consumption, however, and I had no reason to disbelieve them.[252] The farm-based community worker said '*daar is 'n paar wat drink'* and was able to identify them by name (DC). One farmer reported having three alcoholics on his small farm - three siblings whose mother had also drunk excessively - who were 'all working and are not dry'. While alcohol was certainly consumed and enjoyed on the farm, no-one else abused it (SV). The second farmer[253] described in some detail how they had stopped the 'dop' system through a purposeful decision and an education process, with the result that the alcohol abuse on his farm had reduced and moderate drinking was included in farm life in a way that he thought was entirely responsible and socially acceptable (TR).[254]

On the fourth farm the farm manager confirmed that he thought 'alcohol and drugs happens everywhere. Ja – on this farm too' and referred particularly to the shebeen in nearby Eerste River to which he thought workers went after they had been paid (RJ).[255] The social effects of alcohol consumption on this farm provided the farm-based social worker with a significant case load, however (LF).[256]

252 This might reflect the skewing mentioned in Chapter 2 – namely of their being more socially conscious farms, with supportive intervention and higher levels of social cohesion.

253 I did not ask the doctor-farmer about the levels of alcohol and drug use on his farm as I had foregrounded his role as doctor during the interview.

254 'If we have too many bottles of wine, we share it with our workers. So I'm not afraid to give them a bottle of wine on a Monday evening, because I know that tomorrow they will be sober. They know the responsibility to use it correctly' (TR).

255 Two key informants thought that alcohol and drugs were simply less available on farms and therefore that alcohol consumption and abuse may be less extreme on farms than in urban areas. The nurse in charge of the Hospice's in-patient unit cited 'shebeens in the community as having more alcohol' (EF) and the Hospice home-based carer thought there was less alcohol and drug abuse on farms than in Cloetesville, especially as some farmers did not allow drinking on their farms (MT).

256 In her thesis on 'understanding the legacy of dependency and powerlessness on wine farms in the Western Cape', this key informant described one mother's appeal to other adults not to send children to buy alcohol and cigarettes and to discourage binge drinking in order to try to stop under-age drinking on the farm. Not one adult on the farm supported her proposal (Falletisch, 2008:226).

Attempts to curb drinking were described by the Farms Project leader-doctor, following an 'interesting discussion with the matriarchal farm owner' who had outlined their attempts to provide farm women with skills towards job creation:

> '[T]hey [the farmer] worked hard in terms a sense of self-respect and getting rid of the alcohol abuse – and really supporting their farm workers. And it worked really well until a labourer moved in with his girlfriend who then had a link outside and was selling alcohol on the farm and opened a shebeen there. And within a matter of weeks, all the progress was almost lost - and that's the genetic link. If you're an alcoholic deep down inside – the minute you touch alcohol again, you'll be right back to being addicted' (LH).[257]

Falletisch observed that '[t]o not drink is to place oneself in the position of an outsider, opening up oneself to ridicule, disdain and verbal abuse. Individuals who *do* give up drinking, do so as a result of an external threat rather than a conscious choice to change the course of their lives' (Falletisch, 2008:ii).

Foetal alcohol syndrome (FAS)

Eighty-eight out of every thousand babies (8,8%) in the Western Cape are born with FAS.[258] The province has the second highest incidence in the world, only after the Northern Cape where 122 out of every thousand babies

257 Among minority women in the United States who are 'heavy drinkers', Kendall Bryant reported a correlation between 'increased densities of liquor outlets' and increased higher risk sexual encounters and STDs which provided opportunity for HIV transmission (Bryant, 2006:1490).

258 FASfacts, a Western Cape-based NGO aiming to decrease alcohol consumption during pregnancy in order to reduce the incidence of FAS, described FAS as 'a characteristic pattern of physical and mental birth deficiencies, caused by alcohol consumption by the pregnant mother' which results in challenges like impaired ability to understand and remember, difficulty in following directions, poor social skills including lack of sympathy with others, among others' (FASfacts, 2002).

are said to be affected (Bell, 2008).[259] Quoting the Pebbles Project, Falletisch notes that the prevalence of FAS among children in the Stellenbosch area may be as high as 11% (Falletisch, 2008:69).

FAS is understood to contribute to 'learning disabilities, early school drop-out, juvenile delinquency, poverty, chronic unemployment, sexual acting-out (promiscuity, early and unwanted pregnancies, prostitution or sexual assault), AIDS, mental illness, homelessness, violence, crimes against property, theft, alcoholism, drug addiction and substance abuse' (FASfacts, 2002). As it is a lifetime condition, there are many adults living with these reduced capacities and behaviours, some of whom live on Stellenbosch wine farms.[260]

The founder of the Foundation for Alcohol-related Research (FARR), Dennis Viljoen, asserted that 'FAS thrives in areas where there is poverty, hopelessness, lack of work and recreational facilities', adding that he believed it was only a matter of time before FAS became second to HIV/AIDS as a major disease' (AFP, undated). Concern about the high levels of FAS was raised by the Human Rights Commission's 2003 national inquiry into human rights violations on farms (SAHRC, 2003:195).[261]

259 Schneider et al quote 1999 findings of Coxford and Viljoen, that '[d]ata from three underprivileged areas in the Western Cape suggests little awareness of the health risks of alcohol as 23,7% of the sample of 636 pregnant women attending 17 antenatal clinics reported alcohol intake sufficient to place unborn children at risk' (Schneider et al, 2007:10). They have estimated national incidence rate of FAS as 14 per 1 000 births 'based on an incidence of 11,8 per 1 000 births occurring in 92% of births in 2000 in SA *and an incidence of 40 per 1000 in the 8% of births in the coloured population*' (my emphasis) (Schneider et al, 2007:16).

260 Following the clinical features of FAS, 'children who suffer from FAS show a reduced intellect and do not cope at school. In turn, people with lower education levels have a higher incidence of FAS. Research also indicates distinct patterns in families with alcoholism, with both the FAS and the alcoholism being passed from one generation to the next' (SAHRC, 2003:58).

261 Quoting studies in 1996/7 which 'indicate that in the Wellington area of the Western Cape, the incidence was 45 per 1 000 live births', the 2003 Inquiry noted that 'when the research was repeated three years later, it had gone up to 67 per 1 000. In the De Aar area, research has indicated that the incidence is closer to 80 per 1 000. This is compared to an incidence rate of less than 1 per 1000 live births in the developed world. It is unclear whether there is a difference between rural and urban communities in the region. But whatever the outcome of that research may be, the

FAS has direct implications for HIV transmission in the way in which it reduces people's ability to make health-preserving judgements.

Conclusion

In her recent work on dependency and powerless on wine farms, Falletisch noted that 'the abolishment of the tot system has not significantly reduced the incidence of habitual excessive drinking' and that 'farm labourers consistently surrender the responsibility for their children, their homes, their behaviour while they cling to the remnants of paternalism, avoiding at all costs becoming masters of their own destinies'.[262] In conclusion she noted the need for research into 'accessible, appropriate and sustainable intervention strategies on farms that empower labourers and break the cycles of habitual excessive drinking, social violence and hopelessness' (Falletisch, 2008:iii). She does not suggest what this may comprise, however.

Listing the 'violence, sexual abuse, neglect of the children, self-neglect that accompanies the excessive consumption of alcohol', the Farms Project leader-doctor concluded that '[we]'ve now got a whole society of genetically linked, probable alcoholics' but that 'it's not something that you can just say "*ruk* yourself *reg'*"[263] (LH).

Both excessive consumption of alcohol and FAS are therefore likely to result in poor judgements around sex – which could include consensual unprotected sex and non-consensual sex. The implications of this for HIV transmission are addressed below.

---

syndrome is clearly prevalent at unacceptably high levels within the rural communities' (SAHRC, 2003:58).

262 Falletisch, a 'practitioner working in the winelands' records in her thesis that it is 'impossible to help people overcome addiction or engage in development or self-help projects while labourers have almost no sense of their own ability to create change or at leas be part of the change process' (Falletisch, 2008:4).

263 Translation: 'pull yourself together'.

4.6.2 Alcohol abuse and HIV

In the context of the HI virus, the assumption is that excessive use of alcohol heightens the vulnerability to infection through an increase in indiscriminate and unprotected, or 'risky', sex. Certainly many of the key informants of this study made this link (11 of 20) – although others de-linked the alcohol-related sex that may be taking place from the risk of HIV infection, given their theory of farms being closed communities and therefore (currently) untouched by the virus.[264]

Various authors agree on the affects of the excessive use of alcohol. These include that it may impair judgement and decision-making and diminish rational capacity, personal control and perception of risk - all of which may lead to sexual behaviour which may include multiple sex partners, unprotected sex/infrequent condom use and/or engaging in sex for money and/or gifts (e.g. Fisher et al, 2008:543; Adelekan, 1999:92; Wechsberg et al, 2008:131).[265] It is therefore not a surprise that alcohol use is thought to have 'implications for HIV risk' (Shisana et al, 2005:xxxi) and has been directly associated with sexually transmitted infections and HIV infection (Wechsberg et al, 2008:131; Fisher et al, 2008). It is this link that is further investigated here.

264 For example, a Hospice sister, who had initially thought that 'when people drink … [t]hey're perhaps more sexually active and then there will be a higher rate of transmission', recognised that more sex with different partners did not necessarily result in greater rates of HIV infection, as HIV transmission is 'not that easy' and depended on their being infection in the sexual network (CS).

265 Kendall Bryant reviews a number of the theoretical perspectives which have been proposed 'to explain the relationship between alcohol consumption and sexual risk-taking' and notes the complexity of making this link. Among these approaches are 'alcohol myopia, disinhibition and risk perception, excusatory behavior, physiological arousal, personality, stimulus seeking'. He points out that in using these approaches 'to establish the specific role of alcohol in a particular encounter' one also has to take into account 'individuals' understanding of the potential role of alcohol and their ability to self-monitor their behavior so that sexual intentions for seeking a specific risk level for behavior may mediate their use of alcohol' (Bryant, 2006:1470). In other words there is a range of individual factors which prevents drawing simple conclusions between alcohol consumption and sexual risk-taking.

Associations between alcohol consumption, risky sex and HIV

An association is often made, then, between excessive alcohol consumption and risky sex – and sometimes a link with HIV infection is also made.

In a 2006 study in Botswana '[s]trong circumstantial evidence' was found for a 'strong and consistent association' between 'heavy alcohol consumption … [and] sexual risk behaviours in both men and women' (Weiser et al, 2006:1944).[266] This direct relationship was also identified in a 2003 study undertaken in Cape Town by Schneider et al, who found that 'almost one in five HIV patients studied at a large infectious disease clinic … met criteria for an alcohol use disorder (Olly et al, 2003); [and] these patients were also more likely to have symptomatic HIV infection' (Schneider et al, 2007:4).

Fisher et al consistently found a correlation between increased alcohol consumption, risky sex and HIV prevalence using three methods. The first was a meta-analysis of studies conducted in Africa which investigated the direct relationship between alcohol use and the risk of HIV infection; and the second was a 'recent review of the literature … [which] documented an association between alcohol consumption and the presence of sexually transmitted diseases (STDs) that are often precursors to HIV infection' (Fisher et al, 2008:537). The third method was a local empirical study in Tanzania 'designed to determine HIV incidence and to identify factors

266 The authors caution, however, 'that these results may not apply to neighboring African countries [as] Botswana is unique in being relatively wealthy and in its government being strongly committed to tackling HIV' (Weiser et al, 2006:1948).

affecting transmission' among 'women employed in the bars and hotels' (undertaken in 2002/03 in Moshi Tanzania).[267] Here they found that 'drinkers' were at 'increased risk to be HIV+ when compared with nondrinkers'[268] and that '[p]roblem drinkers were at greater risk to be HIV+ than nonproblem drinkers … and were also more likely to have engaged in several types of high-risk sexual behaviors and to have other STD infections' (Fisher et al, 2008:537).[269] High-risk sexual behaviours included 'earlier age at sexual debut, multiple and concurrent sexual partners, and exchange of gifts or money for sex'. While the latter may be simply instrumental, they conjectured that 'the expense of acquiring alcohol may contribute to poverty and the need to engage in commercial sex work'. They concluded that 'these findings indicate that alcohol use and problem drinking *could* increase HIV/STD vulnerability by influencing sexual behaviors associated with these infections' (my emphasis) (Fisher et al, 2008:543).

Similar findings were outlined in a study in a population-based cohort in Rakai, Uganda in which the researchers 'examined alcohol use before sex and incident HIV between 1994 and 2002'. Here Iryna Zablotska et al concluded that '[a]lcohol use was significantly associated with inconsistent condom use and multiple sexual partners in both sexes'. They noted that '[a]lcohol use is common, and disinhibition as a result of alcohol may precipitate and reinforce sexual risk-taking' (Zablotska et al, 2006:1191). They concluded 'that alcohol use before sex is an important risk factor for HIV acquisition' (Zablotska et al, 2006:1196).

---

267 The researchers explain that '[i]n most African countries, alcohol is sold in small bars and hotels patronized by male clients who offer drinks and may seek sexual encounters with women employed in these settings. Thus, women working in these places are more likely to drink, have multiple sex partners and are at increased risk of acquiring HIV and other STDs' (Fisher et al, 2008:537).

268 In the second method – the review and meta-analysis - these researchers similarly found that 'drinkers have 57% to 70% greater risk of being HIV+ than non-drinkers, *with men and women having similar risk profiles'* (my emphasis) (Fisher et al, 2008:537).

269 While 9,5% of non-drinkers were HIV-positive, 22,4% of those who drank alcohol were HIV-positive and a risk for infection was 'positively correlated with the quantity of alcohol typically consumed per occasion' as well as the frequency of consumption within a week (Fisher et al, 2008:537).

Quoting Crush and Ambler (1992), Jewkes and Dunkle reported that nationally 'norms of alcohol consumption among women who drink are quite high, and drinking and socialising often provides a context in which risky sexual encounters occur, and often casual sex, motivated by both reciprocity for drinks bought and sexual desire'. They contrast this with 'powerful images among South African women of female chastity, obedience and abstinence from alcohol', being 'ideals of femininity that are heavily infused with Christian morality' and propose that these 'compete with more traditional models of femininity which accord women more social, sexual and economic freedom (Gaitskell 1982, Epprecht 1993, Marks 2002)'. (Jewkes & Dunkle, in press).

Excessive consumption of alcohol as an enactment of their own agency (mentioned in the section on 'Gender' above) does not make women safer and may well place them at greater risk of violence and sexual vulnerability.[270] The doctor-researcher thought that 'a lot of women have sex when they are very very drunk; and actually a lot of women do pass out, and a lot of women get sexually violated when they are paralytically drunk' (DrRJ). In addition, '[i]n the literature on alcohol abuse, heavy drinking women are often found to be co-habitors with alcoholic males, having alcohol abusing parents, initiating drinking at an early age and taking other drugs (May et al, 2000)' (Schneider et al, 2007:4). In a review of empirical studies conducted in sub-Saharan Africa, Fisher et al found that 'alcohol consumption was consistently related to risky sexual behaviors among men, greater consumption by men was associated with increased sexual risk-taking and risks among women were associated with partner drinking' (Fisher et al, 2008:537).

270 The farm-based social worker told of women who, when drunk, 'gave' their husbands to another woman for the night. She was not clear what this was about; whether it was calling people's bluff about expected affairs or humiliating them by taking sexual decisions (even though this entailed sending them to another woman!) Similarly extra-marital affairs often involved another woman on the farm – and women were reported to sometimes be the initiators of these (LF).

In their research in Botswana which addressed heavy alcohol use and the gendered nature of HIV-risk outcomes,[271] Weiser et al found that 'a lack of control in sexual relationships [here related to alcohol use] was associated with having multiple partners for both men and women, and with sex exchange for women. Not surprisingly, women were significantly more likely than men to report lack of control in sexual relationships, and were also more likely to consider lack of control in sexual relationships and a partner's refusal to use condoms as key barriers to condom use'. The authors noted that '[t]hese findings are consistent with studies showing that lower relationship control and forced sex for women are associated with both inconsistent condom use and higher HIV seroprevalence' (Weiser, 2006:1946).

An example of this on Stellenbosch wine farms was seen in the (iconic) case (told by the Hospice carer) of a woman who had just tested HIV-positive '*[w]at se outjie by haar gebly het en trek hy na 'n ander plaas en bly met die vrou. En dan kom hy net na haar wanneer hy dronk is. En sy was 99,9% seker sy was* positive.' They did not use condoms as '*sy het gesê "Nee! Daar is nie tyd vir negotiations man! As hy dronk is, dan wil hy nie nog wag nie!"*' [272] (MT). In contrast, the farm-based community worker reported that some women who were HIV-positive had unprotected sex with men when they were drunk to take revenge on them (possibly men generically, although this was not clear) for infecting them (DC).

271 This research aimed to investigate 'the prevalence and correlates of heavy alcohol consumption; and gender-specific relationships between heavy alcohol use (as a primary independent variable) and a number of HIV transmission risk outcomes, including having unprotected sex with a non-monogamous partner, having multiple partners, and paying for or selling sex in exchange for money or resources' (Weiser, 2006:1946).

272 Translation: 'whose partner used to live with her and has moved to another farm and stays with another woman. And then he comes to her whenever he is drunk. And she was 99,9% certain she was positive. They did not use condoms as he said 'No, there is not time for negotiations, man!'

Alcohol and violence

In addition to having unprotected sex when they and/or their partners are drunk, however, women can also be affected by the interpersonal violence that can be associated with men's excessive consumption of alcohol, whether they are consuming alcohol themselves or not. Where this includes sex, it is invariably unprotected and, depending on a range of factors (most notably if one partner is HIV positive), can lead to increased vulnerability to infection of either party.

Again the CRLS notes that '[m]ost descriptions regarding family violence [on farms] detailed violence of men against women (31%)' (CRLS, 2006a:130) which should be read alongside Falletisch's findings of interpersonal violence being exercised by both men and women – although men were more dominant. In the CRLS study, '28% of the statements mentioned that alcohol led to violence while a further 6% mentioned alcohol as a factor… Several incidents are mentioned [relating to alcohol and family violence] where women are also raped' (CRLS, 2006a:131). Waldman also describes the close link between sex and violence on farms, noting that 'sexual violence often ends in rape' (Waldman, 1994:12). Echoing the Women on Farms director who noted the resignation with which many women regard violence, Falletisch found that there was a high tolerance for violence, including sexual violence, given a range of factors, which included a belief that people who are drunk are 'possessed' and therefore not responsible for their actions (Falletisch, 2008:76).[273]

273 Falletisch describes a belief that when a person is drunk, they become possessed by the devil such that '[v]iolent behaviour is not attributed to the drinker's decision to over indulge. Alcohol is personified and the drinker is absolved … In many homes on farms, both parties are intoxicated or "possessed" and an ongoing cycle of violence and retaliation is established' (Falletisch, 2008:76).

The HIV doctor-researcher also associated an increase in rape and 'much more violent sex' with substance abuse generally – and with HIV infection, noting that '[s]*o waaroor dit nie beskermde seks is nie, dis violent seks, verhoogde kans, anal seks, verhoogde kans op* HIV transmission' (CA).[274]

Referring to a 'big study in Soweto of pregnant women looking at the links between violence and HIV' the doctor-researcher reported that they had found that 'alcohol was definitely a big factor' associated with HIV transmission (DrRJ). The link between alcohol abuse and gender-based violence and their impact on exacerbating HIV infection, was also researched in Botswana[275] where the authors investigated cases handled by NGOs who were working with women affected by gender-based violence. They found that '[i]n almost all the cases studied, violence in the household seemed to be alcohol related' and that '[a]lcohol abuse and related violence increased at weekends and monthends, when working men receive their wages and salaries.' They qualified these findings with the view that '[a]lcohol abuse as such might not be the root cause of domestic violence; it might just be one contributing factor, acting in concert with other significant factors such as the stresses resulting from social and economic hardships. The outcome of drinking may be to release suppressed feelings'. They concluded that '[a]lthough there is no doubt that alcohol plays a role in the violence that now occurs in most Batswana families, the precise relationship between heavy drinking, gender-based violence and HIV/AIDS requires multi-pronged research' (Phorano et al, 2005:198). The complex ways in which these three may be linked is discussed further below.

274 Translation: 'not only is it unprotected sex, it is violent sex, increased chance, anal sex, increased chance of HIV transmission'.

275 'The main objectives of the study were to identify the extent to which gender-based violence was associated with alcohol abuse [and] to establish the link between alcohol abuse, gender-based violence and the spread of HIV infection' (Phorano et al, 2005:189).

While substance abuse can contribute to gender-based violence, violence can lead to substance abuse among women. Jewkes and Dunkle propose that there is 'well-documented long-term impact on substance abuse and sexual risk taking' among women who have '[e]xperience of rape, including abuse in childhood, and physical violence' and that this is 'compounded by the increased risk of revictimization associated with certain kinds of sexual risk taking'. They cite Shirley Kohsin Wang and Elizabeth Rowley, who hypothesised that post-traumatic stress disorder (PTSD) may be part of the explanation for this, 'as women reach for alcohol and other substances as a way of coping with the debilitating, and if untreated, long-standing symptoms' (Jewkes & Dunkle, in press). Women therefore may drink recreationally and/or as a way of coping with untreated, and often unacknowledged, trauma from domestic and sexual violence. It is imaginable that this may be one of the contributing factors to some women's excessive alcohol consumption on farms – although it cannot be said to be the main or only reason.

The risk posed by alcohol, then, comprises the decreased use of condoms, possible partner swapping, and the use of force – all of which might create vulnerability for HIV transmission.

In contrast to the unprotected sex perpetrated by drunken men, another view of farm men was given by a number of key informants – of their being tired and often unable to have sex. Impotence was raised by the HIV doctor-researcher who reported that in her practice, some of the 'older' farm workers (who she identified as being over 35 years old) reported impotency which she thought resulted from alcohol abuse exacerbated by being nutritionally compromised and being tired from hard physical work. She thought this was 'not a big thing for them ['Coloured' farm workers]. On Saturday evenings ….if they're drunk, [they] fall down and sleep, wherever' (CA). The (non-medical) Farms Project co-ordinator also thought that some men became sexually disabled as 'alcohol also makes it difficult for men to

perform' proposing that 'if they are blind drunk then obviously they might think they … but they haven't!'. She suggested that this provides a 'grey area' around the assumption that 'alcohol equals low inhibitions, equals sex' (TG). In contrast, the doctor-researcher was confident that 'men can do pretty well [laughs] with extreme levels of alcohol!' but do eventually 'pass out' (DrRJ).

As 'men' on farms are not homogenous, there is little doubt that various kinds of behaviours with respect to alcohol consumption, sex and interpersonal/sexual violence exist on farms – including men who are monogamous partners or husbands, some of whom may drink excessively and some not. And there are undoubtedly women who drink excessively and are both active and passive participants in sex that might be risky.

Caution regarding a simple link

The association between excessive alcohol use and HIV infection, then, is premised on the risky sex that might take place when people are drunk. Some authors caution that these relationships may not be as causal or inevitable as they seem, however. Researchers investigating the nature and extent of the association between these three, repeatedly caution against making simple links between them, given the range of variables that may exist in each situation. In short, not only may the people being researched have other reasons to engage in unsafe sex (which may or may not be facilitated by alcohol), but the motivation for abusing alcohol and engaging in risky sex may be the same motivation (in parallel), rather than serial where the sex is a consequence of the alcohol consumption.

This idea of parallel or dual circumstances is repeated in Kendall Bryant's description of 'high-risk groups' where there may be 'an overlap between individuals "at risk" for alcohol use disorders and individuals at risk for HIV infection'. He proposed that '[t]hese individuals form so-called dual or multiple-risk groups and often suffer from mental health problems as well' (Bryant, 2006:1472). (In the case of farm dwellers, alcoholics and people living with FAS are an example of people with dual or multiple risk, in the sense that any alcohol use may be incidental to their sexual behaviour, given the brain damage and social dysfunction with which they live.)

An example of a caution about linear causality was given by Parry and Abdool Karim in relation to a Cape Town study among school-going adolescents which 'found a strong association between substance abuse (binge drinking and other drug use) and unsafe sex'.[276] Here the authors caution that '[i]t is clear that more exploration of the causal linkage is required. In particular, there is a need to investigate on an occasion-by-occasion basis whether, and how, substance abuse might be related to safe sex practices' (Parry & Abdool Karim, 1999:84). They conclude that 'we do not know to what extent it [alcohol] is a risk factor for enhancing HIV transmission, either directly in the case of injection drug use or less directly through, for example, facilitating unsafe sex' (Parry & Abdool Karim, 1999:87).

276 They give as examples of unsafe sex 'multiple partners in the past 12 months and not doing anything to prevent pregnancy or prevent disease during the last occasion they had sexual intercourse' (Parry & Abdool Karim, 1999:84).

Despite very clear associations between alcohol 'disorders' and HIV infection, Bryant claimed that the role played by alcohol consumption 'in HIV viral replication' was 'pivotal, but incompletely defined'. This followed his findings that '[i]ndividuals [in the USA] with alcohol use disorders are more likely than the general public to contract HIV' and that 'people with HIV are more likely to have serious problems with alcohol use at some time during their life'. He noted that '[c]omplex patterns of alcohol use … are frequently linked with unprotected sex with partners who may be HIV positive or who are injection drug users' which 'place individuals at risk for contracting HIV' (Bryant, 2006:1465) – and included in the list of 'environmental consequences' of 'hazardous drinking' unplanned pregnancy and acquiring HIV through risky sex (Bryant, 2006:1468). Despite the associations he draws between substance abuse, unprotected sex and HIV, however, he remained wary of their relationship being causal.

The causal link is also questioned by Stall and Leigh, who point to a number of factors which might affect the outcomes of studies regarding the link between alcohol use and sex that is risky for HIV infection. They name two.

The first are to do with variables within the specific forms of substance use/abuse, the relationship of the substance use/abuse to sex, and the formations of sexual partnering etc. Here they suggest that there may be many configurations of these which may not necessarily be that alcohol leads to sex risky for HIV. The second set of factors lies in 'underlying population differences … given that the studies on this topic have been conducted across a wide range of cultural and age groups, with a wide range of inebriating substances, between genders, among groups of varying gender orientation and at different stages of reaction to the pandemic'. Warning against ignoring confounding variables when allocating causality and linkages, they caution that '[i]t is important to remember that both substance use and sexual activity are complex and sensitive behaviors that

are almost certainly confounded with other personality, social and/or contextual variables. Furthermore, causal relationships are best identified through the use of randomized experimental designs, which are not possible to implement in this line of research' (Stall & Leigh, 1994:131). This echoes Bryant's warning against optimism about interventions based on the 'the role of a single substance use dimension' given the existence of 'complex behavioral outcomes for opportunistic behaviors such as unprotected sex' (Bryant, 2006:1470).

Perceptions of alcohol-linked risk for HIV on farms

The CRLS[277] summarised farm dwellers' perceptions of risk for HIV infection on farms as being 'anchored in a culture where alcohol abuse is endemic, and from which risky behaviour emanates' (CRLS, 2006b:13).[278] In their study, the abuse of alcohol and drugs was placed by dwellers as the second highest risk factor for HIV infection (23% of responses) after 'sexual behaviour' (34% of responses). The responses of farm management had a wider gap between these two, with 52% of responses identifying 'sexual behaviour' and only 15% for 'alcohol and drugs' (CRLS, 2006b:12-13). The study did not discuss these rankings.

Eleven[279] of the key informants for this study linked excessive alcohol consumption to increased risky sexual behaviour, which some linked with increased vulnerability to HIV. Three of these were from farms (of five farm-based respondents) while all those who were medically trained thought there was a direct link. The reasons given were that alcohol consumption could result in a loss of judgement and sense of self, in an inability to negotiate condoms, and in sexual activity with other or multiple partners.

277 This is the only study of which I am aware that specifically addressed both HIV and the alcohol abuse on these farms.

278 In a caption to a photograph taken by farmwoman Maria Johnson, she comments '[t]his scene is ironic because the man who was buried (at the funeral just before the photo was taken] had drunk himself to death. There they were, drinking at his funeral and nobody learnt anything from mistakes' (Hill, 2002:12).

279 DrRJ, LH, LF, DC, AB, TG, MT, RJ, LL, CA, CS.

Some commented on gendered ways in which alcohol consumption was linked to risky sex, reported further below.

The loss of judgement and sense of self was described as losing 'the sense of the self – the identity; … not hav[ing] the personal strength to care about their own being' (LH) and having 'lost or impaired' inhibitions (EF). A more permanent loss of judgement was seen in those living with FAS which, the hospice manager noted, meant 'that you can't make judgement calls' that 'if you are drunk you are not in control of your behaviour' (GN). One Hospice nurse thought that alcohol abuse led to people's judgement being 'in bed at the end of the day' and could result in 'indirect prostitution'[280] – which she linked to HIV transmission (AB).[281]

Four people thought poor judgement led to low condom use. Two doctors (LH, DrRJ) thought this[282] as did the NGO co-ordinator of a women's farm health project who was also concerned by youth who could not tell her 'what happened … because they have blackouts and then they … do not remember they had sex' (GR).[283] The nurse in charge of the Hospice's in-

280 The debts incurred by people who consumed alcohol was described by a member of Women on Farms Project, Martina Smith: 'I want to do something about the *smokelaars* (dealers) that sell alcohol on the farm. Almost all the men owe the *smokelaars* most of their pay – all their money goes to *smokelwyn* (wine), and the women have to feed the family on what's left over' (Hill, 2002:49). In the same publication, Catherine Davids noted that she was 'worried about the boys of today. I worry about the drinking they do, because they are still very young' (Hill, 2002:49).

281 The Hospice sister who worked in Klapmuts and on farms explained 'indirect prostitution' through an example: 'Say for instance, you've got a patient Patricia … who has full blown AIDS. She receives a grant, she's an alcoholic. She goes and buys on the book [on credit] her daily supply of alcohol. She's chased away at home, she goes and she lives at this supplier, or the smokkelhuis, and she uses her money to just pay for her alcohol. And she will clean and she will do washing and she will do maybe a bit of cooking and she will maybe have clients in the meantime. Because her judgement is in bed at the end of the day. That's just the way of living' (AB).

282 The Project leader-doctor thought that 'alcohol is obviously a vector for HIV transmission, in a sense that people just lose the ability to negotiate condoms and stuff like that' (LH). The HIV doctor-researcher echoed this: '*Ja, hulle verloor hulle inhibisies* … So safe sex is the last thing, I think, on their minds when they're drunk, or they are under the influence of tik. Condoms, they don't even use' (CA).

283 Falletisch reports that '[a]dolescents seemingly drink to get drunk with little or no cognisance of the potential harm' and that 'within the community, adolescent drinking is perceived as normal and in many instances [is] facilitated by adults' (Falletisch, 2008:67).

patient unit thought substance abuse made people more vulnerable to HIV infection as their 'inhibitions is lost or impaired, so you don't think about condoms, you don't think about "no I can't have another partner" or whatever. You don't think of those things, of looking out for yourself' (EF).

The psychological, social and cultural reasons for not using condoms are the subject of considerable research. Among the literature reviewed here, Phorano et al cited the inability or reluctance of people who have abused substances to use a condom as a significant factor that made sex unsafe and thus risky for HIV infection (Phorano et al, 2005:189. See also Weiser, 2006:1946; Zablotska et al, 2006).

The Dopstop director thought that another consequence of poor judgement associated with alcohol abuse was that people had sex with someone other than their regular partner (MJ). The two farmers who linked alcohol abuse with people having 'risky' sex were not clear if this simply comprised unprotected sex with their own partner or with people other than their partners – although the general sense was of swapping of partners (TR, SV).

Having unprotected sex with their partner or someone else – be this consensual or not - is one of the ways in which farm women might be affected by excessive alcohol consumption. This can result from their own excessive consumption and/or men's. The consequences of women's own alcohol consumption depend on how much and where they drink, the reason for doing so, their social circumstances etc. This can include sex, with varying levels of consent. In the context of men's consumption, however, women can become sexually vulnerable when men insist on unprotected sex, be this violent or not.

Comment

While the issue of causality remains unresolved, there is no doubt that excessive alcohol use, risky sex and HIV infection may be associated with one another, in a variety of ways. Firstly alcohol consumption can result in less discrimination around sexual activity, including having unprotected sex with partners whose HIV status is unknown. Here the details and patterns of sex might affect the extent of vulnerability. Secondly alcohol consumption can lead to violence which can include unprotected sex; and thirdly alcohol may be consumed in parallel to a disposition (be this personal or social) to having risky sex.

Where HIV is present in the sexual networks where unprotected sex is taking place, women particularly may become vulnerable HIV infection. There is evidence that in some cases, HIV prevalence is higher among those who consume more alcohol (be this in volume and/or frequency) than among those who consume less or none at all.

Assuming there was some alcohol-related 'risky' sex taking place on the farms on which low HIV prevalences were found, the suggestion is of a weak association between these and HIV transmission, for whatever reasons. There may not be as much 'risky' sex as imagined – and where it does take place, it may not be risky for HIV - for instance people may have unprotected sex with their own partner in a closed sexual network, or there may be a fairly highly populated sexual network, but which has no HIV infection.

In addition the social function of alcohol consumption on farms might be considered – that is, the role that alcohol consumption plays in social and, more pertinently, sexual interactions on farms. I have not found any studies that describe the social function of alcohol on farms, nor the workings of sexual networks there. There is simply not enough data – either about the farms on which the Project worked or more generally – to be certain.

4.6.3 Implications for HIV prevalence on Stellenbosch wine farms

No statistical data on HIV prevalence linked to alcohol consumption was available from any of the surveys – and caution about making assumptions or links is noted. There is also not enough information on the sexual networks on farms and the way in which sexual risk may take place in them – whether exacerbated by alcohol or not.

That being said, there is a strong sense in the literature that alcohol can contribute to environments of risk – although the presence of alcohol abuse does not simply create such an environment. The low prevalence on farms on which there is alcohol consumption - and possibly some abuse – supports that.

This evidence therefore does not contribute strongly to understanding the HIV prevalence on wine farms – despite the commonsense assumption that it would be a significant contributor to high HIV prevalence on farms.

4.7 SYNTHESIS OF FINDINGS ABOUT PREVALENCE ON STELLENBOSCH WINE FARMS

This chapter has reviewed some of the evidence which might inform an 'educated guess' about the HIV prevalence on Stellenbosch wine farms.

In summary, what was learned was as follows:

- Those living on formal rural localities including farms (nationally) may be less infected than other areas, although there may have been a slight increase between 2002 and 2005.

- Levels of infection on Stellenbosch wine farms are likely to be lower among those who live off farms and commute to work on farms - and on balance was thought to be lower than the average for the Stellenbosch area generally.
- 'Coloured' people – who comprise most of the on-farm population - have a considerably lower prevalence (nationally) than 'Black African' people.
- Women on farms seem to follow the national trend and have higher levels of infection than men.
- While the highest levels of alcohol consumption nationally are among 'Coloured men' in formal rural localities including farms, the link between excessive alcohol consumption and vulnerability to HIV infection is not established or clear.

Through triangulating these various data derived from various sources of data, measures and observers, this study finds that the HIV prevalence on Stellenbosch wine farms is likely to be lower than the average for the Stellenbosch area generally. This is contrary to some of the common sense of the 'risk' on farms – comprising among many others, poverty, alcohol abuse, and interpersonal violence, some of which is assumed to be sexual. This finding does not infer that these might not exacerbate vulnerability to infection, so much as they do not necessarily.

These findings recognised that there is likely to be considerable heterogeneity across wine farms – and that this lower-than-average prevalence does not mean that there is no work to do on farms – so much as that the higher prevalences are likely to be in clusters. While beyond the ambit of this study, it is clear that it is important to be able to identify social conditions as vectors of transmission beyond the high level assumptions often made – so that within prevalence data, people who are at risk or are ill can be found.

In the presentation of data in this chapter, some of these assumptions begun to be examined – expressly pointing to the importance of the organisations knowing enough about social conditions in order to avoid the kind of lightweight assumptions that are often made which might misdirect their interventions. I comment on the feasibility of this in the final chapter.

In summary the chapter has identified the following.

Firstly infection within sexual networks and unprotected sex are pre-requisites for vulnerability to HIV transmission occur at all. While we cannot know the sexual patterning on farms (an example of my claim to be using positivism weakly), the low levels of infection found may indicate that whatever the permutations of sexual networks and practices are, these may not have been within an infectious context.

Secondly the social conditions examined can, but do not necessarily, exacerbate vulnerability to infection. Despite conditions of poverty on farms, I have shown that these do not necessarily exacerbate HIV; that poverty can mitigate infection (given a lack of resources to use opportunities or to engage in exchange; and physical depletion). There were examples of where socio-economic factors may exacerbate infection, however, through transactional (and some commercial) sex and through some women being unable to remove themselves from risky domestic settings.

The possible impact of the higher levels of infection found among those living off farms – many of whom were 'Black African' – was not examined in detail, although the remote likelihood of sexual relations between them, given 'racial' difference, was proposed. That being said, there are also unexamined issues of social cohesion, social opportunities and other factors to do with living beyond the farm borders. The contrasting views of farms being a closed community with the penetration of these by various forms of migrancy have not been examined here.

Similarly excessive consumption of alcohol was linked to risky sex with significant certainty by informants. While the literature showed that it might relate to vulnerability to HIV infection, it cautioned against making direct causal links, given the range of variables that are associated with this. Alcohol on farms was often linked to interpersonal violence – which can exacerbate risk as it requires compliance or insists on sex, which is invariably unprotected.

In summary, it is possible for a modestly-resourced NPO to find out something about HIV prevalence in a population group in a particular area, using multiple sources, data and methods, given the will to do so and the resources. But the finding is only 'temporarily unfalsified' and is not evidence-based in the way an epidemiological study may be. To underscore, then, that this method was used in the absence of such preferable data.

Many social conditions that may impact on vulnerability to HIV were not reviewed here – despite having been mentioned in the key informant interviews. These are listed at the end of Chapter 1 – and investigating some (like migrancy, and the effects of social projects on farms) would be significant to understanding HIV transmission within the on-farm community. As HIV transmission relies on a combination of factors to produce environments of risk, a review of what might constitute risk and causality would also have enriched this study. As they stand, the findings are limited by resources constraints, as an NPO's would be.

In terms of its value to organisational planning processes, it is clear that HIV prevalence is a blunt instrument. While it may indicate generally where infection may lie, it does not help identify sub-populations or indicate the social conditions influencing the prevalence in various ways.

5. SUMMARY OF FINDINGS, IMPLICATIONS AND RECOMMENDATIONS

The aim of this study was to find out what could be known – in the sense of surmised with reasonable confidence - about HIV prevalence on wine farms in the Stellenbosch area in the absence of publicly available data and using a less conventional approach which employed a range of methods and data. In so doing is also hoped to establish whether this approach might be of any value to modestly-resourced non-profit organisations in contexts where no suitable local-level data are available.

A descriptive finding on the question was reached by working intensively with the four sources of data which might typically be used by such organisations. These were published statistics and expert articles (literature), the informed opinions of 'experts' and statistics from the Farms Project's first year of testing on farms.

Given that prevalence data masks localised clusters, I have commented on the limitations of HIV prevalence as an organisational tool and have pointed to the importance for project design of supplementing prevalence data with an understanding of social conditions in the local area. In investigating five of the many social conditions that emerged during the interviews, I distilled what might be known about levels of infection and also critiqued the nature of their relationships with HIV transmission.

This kind of research poses a challenge for modest organisations, however. Conflicting information regarding the association between social conditions and HIV infection arose during the investigation of the five themes, both in the opinions of the expert key informants and in the literature reviewed. Causal links are often not as assumed and assessing which combination of social conditions may produce an 'environment of risk' is an exacting task. It is not one that is undertaken here, but identifies the challenge this poses to organisations.

Given the brevity of the study, I end by making recommendations for how this work may be approached – recognising that these too need further examination before their robustness as a tool of analysis in the field could be ascertained.

5.1 SUMMARY OF FINDINGS

The question addressed in this study arose in the context of there being no prevalence data for those living on wine farms.

5.1.1 HIV prevalence

No data could be accessed from local clinics that would produce an appropriate answer, and data from the antenatal surveys were neither at sufficiently local level, nor were they modelled for the general population. In addition, some would suggest that these data are not as reliable as their current wide usage would suggest. Data from the HSRC household surveys was also at too high level and there was no local household survey from which this data could be extracted. The HSRC provided national data for categories related to this study, however – namely prevalence data on rural/urban areas and on 'race' – which, when brought to bear, corroborated the findings.

The HIV results of people tested on the 14 farms was deemed too skewed to make generalisations to wine farms in Stellenbosch generally. They could also not be used for modelling an estimate, given methodological challenges (including the difficulty of finding out how many people were on each farms, let alone on farms generally).

I did not find any data on prevalence among South African farm workers. Had I done so, I would have had to assess its value to this study, given the exceptional nature of those living on wine farms in the Western Cape compared with those in the rest of the country. That being said, I oppose the idea that no generalisations can be made about farms at all, given claims of excessive heterogeneity (Atkinson, 2007:11). While there are

certainly significant variations in conditions on farms, these are against a backdrop of the common legacies of apartheid and, in the Western Cape, of the 'dop' system (in many, if not all cases). In addition, current regulations relating to wages, working conditions and security of tenure, and increasing market pressures to conform to minimum standards for workers, are common to most farms. While farmers invariably continue to work in ways that are particular, these conditions produce a powerful overarching frame which curtails some options and presents compelling choices for how to access markets and make profits, among other things. My sense is that it is possible to make some local generalisations and to observe trends, recognising that these are necessarily at a high level and that there are invariably differences across wine farms.

From the four data sources used here, then, this study found that on balance the lower-than-expected HIV prevalence which the Stellenbosch Hospice's Farms Project found on the 14 wine farms in its first year, were corroborated, following the triangulation of a range of data, sources and measures. In other words, had an organisation like the Farms Project been able to undertake this kind of research when planning its intervention, it might have been able to know this. In addition, it has shown that the prevalence might be lower than may be commonly assumed from the social conditions on farms - like alcohol abuse, sexual violence, and movement on and off farms - which are commonly assumed to be linked to transmission.

5.1.2 Social conditions and HIV transmission

Just under half of the 20 key informants interviewed estimated that the HIV prevalence across Stellenbosch wine farms generally would be lower than the average for the Stellenbosch area. There was some agreement on the idea that farms were still relatively closed communities, by which was meant that they were closed sexual networks, no matter what happened within them. Subject to infection entering that network, the forms and permutations of sexual partnerships within these uninfected networks would have no bearing on HIV infection.

Alongside this theory, however, was a concern about the increased permeability of the farm borders, following shifts in labour practices and the movement of some people into housing off of farms. An increase in employing people from off farms – in addition to the seasonal workers historically employed - also added to the idea that the hitherto relative isolation of farm-based communities was being disrupted. Given the higher HIV prevalence among people classified 'Black African', the increase among commuting workers of 'Black African' people was thought to signal a possible vector of infection. But this was significantly moderated by perceptions that there is still very little social integration between people classified 'Coloured' and those who are 'Black African'. A greater possibility was posed by the movement on and off farms of 'Coloured' workers who were often drawn from the labour 'reserves' of neighbouring small towns or the newly established agri-villages. In these cases seasonal work and the attendant cash wages and 'parties' were thought to be a significant opportunity for HIV transmission.

Many respondents linked drunkenness with casual sex as well as with interpersonal, and sometimes sexual, violence. This was placed against the literature on social role of causally linked with casual or extra-partner sex. Increasingly infection is understood to be far more likely to take place in conditions of multiple concurrent partnerships – which would suggest that for casual sex to be a vector of transmission it would need to be patterned in a way that goes beyond single opportunities for infection. The extent to which this occurs on farms cannot be known, but there were anecdotal reports from informants of extra-partner relationships which social vigilance did not seem to exclude or prevent. While information about sexual practices and relationships is necessarily anecdotal, some informants thought that the sexual combinations on farms may not be as multiple or as precipitous as commonly imagined.

In addition, the ways in which gender relations are enacted on farms might, or might not, exacerbate transmission. The literature reviewed supported evidence that while some women may be subjected to men in more traditional patriarchal ways - and that this can be linked with risk for HIV infection - they may equally be placed at risk by acts of their own agency, depending on the choices they made. In identifying options for women (other than the stereotypical one of women as passive victims) I have also suggested that men are not simply perpetrators and that they are not solely responsible for creating 'environments of risk'.

The ways in which social conditions contribute to environments of risk for HIV transmission is a complete topic on its own. Nonetheless this study cautions against making easy links or drawing easy conclusions about vectors of HIV transmission.

5.1.3 The value of knowing about prevalence

While prevalence data are a useful *starting* point, they say little about where the various clusters of infection might lie within an area or sector. And they say also nothing about *how* to intervene, given the particular social conditions which give rise to the prevalence. Where organisations do not need to know about variations within an area, they might use prevalence data as they are – for example where they assist with estimating quantities of medication needed in an area. But if they need to accurately stock particular clinics within that area, or know which populations are more infected than others, the overarching prevalence is less helpful. In these and similar cases, the prevalence needs to be disaggregated to find out where high and low clusters of infection - or risk - might be.

My findings in examining only five social conditions were that their links to HIV were seldom simple and that the primary message was one of caution. Querying assumptions about direct links between social conditions and risk for HIV led to the conclusion that 'environments of risk' were invariably caused by a combination of social conditions and that some 'suspected' conditions were not intrinsically risky by themselves.

In addition, factors that might increase vulnerability in one setting may not do so in another. For instance poverty does not simply increase vulnerability. While it may put some people at risk (like engaging in 'survival sex', or remaining in a multiple concurrent partnership, despite the risk) it equally can mean that there is a lack of resources to act on opportunities which can limit incidence. The reviews of these associations were necessarily brief and provide opportunities for future in-depth research. I would also have liked space to critique the idea of 'risk' associated with HIV as well as the idea of 'causality'. My sense is that there is considerable literature on each – but space did not allow for this.

5.1.4 A worthwhile methodological approach

This study has found that triangulating a range of factors - like sources, data, observers and methods - was a worthwhile approach to addressing the question of what could be known about HIV prevalence on Stellenbosch wine farms. This conclusion was not simply based on having been able to make a finding, so much as that there was sufficient diversity in the sources, data, observers and methods to mitigate bias from any of these. Had the findings been more diverse, this would not have invalidated the method so much as produced a different finding – for instance suggesting excessive heterogeneity across farms.

In using data at face value – and ignoring the social and personal factors that influence the production of opinions - I have employed a positivist approach. I do so weakly however, as I regard these findings only as temporarily unfalsified - and not as a truth. I have also said that there was considerable subjective 'interference' (like the purposive sampling of key informants, the refusal to make simple causal links, and the limitations to generalising) that would horrify a purist positivist.

In summary, this study proposes that it is possible to know something about HIV prevalence through using this mixed methods approach, while recognising that the 'glass' of the title does not become completely transparent and that the HIV prevalence is not completely 'known', 'even as also I am known' (Christian New Testament: 1 Corinthians 13:12).

Given the intensity of the work, however, it recognises the challenge this research poses for modestly-resourced local-level organisations, even those with the will and some resources to do so – but it takes a lot of work to know this.

5.2 IMPLICATIONS FOR MODEST LOCAL-LEVEL PROJECTS

No matter where they are designed, HIV-related interventions are inevitably implemented in local conditions whose specificity can undermine their success if not designed with these in mind. In some senses, then, local organisations are best placed to find out about these – but can be constrained by minimal suitable information and their own limited capacity.

Westerhaus emphasises the 'vital importance of carefully considering local context in HIV prevention' which 'although a well-worn cliché by this time in the pandemic' finds that 'this lesson is startlingly absent from the day-to-day operations of HIV prevention programmes'. He underscores the importance of 'engaging with complexity' when formulating 'a narrative of HIV transmission and the implementation of HIV prevention practices', and points to the 'complex amalgamation of circumstances, processes and moments culminate in HIV transmission' (Westerhaus, 2007:604).

This study has found that an approach entailing the triangulation of a range of methods, data and expert opinions to identify the extent and nature of HIV in a local area is worthwhile. That it could be valuable to an organisation's ability to design interventions, where it is undertaken in ways that draw on a range of data and probe commonsense assumptions about

the risk produced by social conditions. That being said, this kind of research might be a tall order for the average organisation which has limited resources and faces various pressures. Not only are targets set by funders or partners, but it is unrealistic to minutely research conditions in the context of the scale of the pandemic which requires that a difference is made to a lot of people in a timeframe which is compelling.

Bearing these in mind, then, local-level projects might consider building a review process into their projects that unapologetically looks at what is being found in order to adjust their approaches towards greater effect – rather than engaging in a research process at the planning and design stage of the project, which is often, simply unrealistic. My proposal is that organisations take a sharp set of organisational tools to each intervention – which includes respectful enquiry, a preparedness to customise to micro conditions and, wherever possible, to change approach and design as conditions determine in order to make the biggest difference. The difficulty of doing this in funded projects should not be underestimated, however.

How to balance the need for local customisation with delivering services to more people in compressed timeframes in an information-light context is the challenge that continues to face local-level projects working in the context of HIV/AIDS in South Africa.

5.3 RECOMMENDATIONS FOR FURTHER RESEARCH

1. Farming communities are increasingly falling into the substantial gap created by the withdrawal of social services by farmers and the failure of the state to provide services and support to people living in rural areas. The effects on HIV vulnerability of the current shifts in employment and housing practices on commercial farms would be important to research – particularly when placed in the larger context of rural poverty.

2. The associations between particular social conditions and HIV transmission in the Western Cape farming community generally are areas for further enquiry. Aspects excluded from this study but listed under 'The limitation of this study' above provide fertile ground for such research. This might include consideration of the nature of such associations, be they correlations or causal links – as well as the extent to which there is intrinsic risk in some conditions. Some of these would necessarily be limited to farm-based communities, while others could be generalised to include commuting workers or the rural poor more generally.

3. Related to (2) above is the issue of being able to generalise. The material presented in Chapter 4 was characterised by a caution about generalising from a particular study. While I do not think that individual wine farms are simply idiosyncractic, generalising about HIV can be risky, given the importance of the combination of factors to creating an environment of risk. It might nonetheless be worth identifying if there are conditions under which associations between social conditions and HIV are stronger and weaker, however.

4. A considerable contribution could be made to organisational practice and practitioners if an accessible organisational 'tool' was produced that might assist with local-level research focused on identifying HIV-related 'risk' and clusters of infection. I am aware that there are various participatory methods for doing social analyses, but am not aware of once that is focused in this way. While this would need to be underpinned by understandings of risk and causality as well as by answers to questions like those posed in 2 and 3 above, it would need to be implementable within the resources of the kinds of notional organisations employed in this study.

REFERENCES

Abdool Karim, Q. 2005. Heterosexual transmission of HIV – the importance of a gendered perspective in HIV prevention. In *HIV/AIDS in South Africa*. Abdool Karim, S.S. & Abdool Karim, Q. Eds. Cape Town: Cambridge University Press. 243-261.

Action Aid & Women on Farms. 2005. *Rotten fruit: Tesco profits as women workers pay the price*. Stellenbosch: Action Aid & Women on Farms.

Adelekan, M.L. 1999. *HIV Prevention in drug-using populations in the sub-Saharan African Region: an agenda for research and intervention. Country report: substance abuse and HIV/AIDS in South Africa.* Second Annual Meeting of the Global Research Network on HIV Prevention in Drug-using Populations. 1999, August 26-28. Atlanta, Georgia. 89–94.

AFP. Undated. *A wine for faith.* [Online]. Available from Health and Fitness iAfrica.com: http://health.iafrica.com/features/499793.htm [2008, November 30].

Amnesty International. 2008. *'I am at the lowest end of all'. Rural women living with HIV face human rights abuses in South Africa*. London: Amnesty International

Anderson, B.A. & Phillips, H.E. 2006. *Adult mortality (age 15-64) based on death notification data in South Africa: 1997-2004*. Report No. 03-09-05. Pretoria: Statistics South Africa.

Atkinson, D. 2007. *Going for broke. The fate of farm workers in arid South Africa.* Cape Town: Human Sciences Research Council.

Babbie, E. & Mouton, J. 2001. *The practice of social research.* Cape Town: Oxford University Press Southern Africa.

Barnett, T. & Whiteside, A. 2002. Why Africa? In *AIDS in the twenty-first century*. Barnett, T. & Whiteside, A. New York: Palgrave Macmillan. 124–156.

Barnett, T. & Whiteside, A. 2006. The disease and its epidemiology. In *AIDS in the twenty-first century*. 2nd ed. Barnett, T. & Whiteside, A. New York: Palgrave Macmillan. 24–62.

Beaglehole, R., Bonita, R. & Kjellstrom, T. 1993. *Basic epidemiology*. Geneva: World Health Organisation.

Beegle, K. & de Walque, D. 2009. Demographic and socio-economic patterns of HIV/AIDS prevalence in Africa. In *The changing HIV/AIDS landscape. Selected papers for the World Bank's Agenda for Action in Africa, 2007 - 2011.* Lule, E.L., Seifman, R.M. & David, A.C. Eds. Washington, DC: The World Bank. 81-104.

Bell, J. 2008. Free foetal alcohol syndrome tests. [Online]. Available from Independent Online: http://www.iol.co.za/index.php?click_id=13&set_id=1&art_id=vn20081016055012469C290297 [2008, November 30].

Best, J. 2001. *Damned lies and statistics. Untangling numbers from the media, politicians, and activists.* Berkley and Los Angeles, California: University of California Press.

Bollinger, L. & Stover, J. 1999. *The economic impact of AIDS in South Africa.* The Policy Project. The Futures Group International in collaboration with Research Triangle International (RTI) and the Centre for Development and Population Activities (CEDPA).

Bryant, K.J. 2006. Expanding research on the role of alcohol consumption and related risks in the prevention and treatment of HIV/AIDS. *Substance use & misuse*, 41:1465–1507. DOI: 10.1080/10826080600846250.

Bujra, J. 2006. Class relations: AIDS and socio-economic privilege in Africa. *Review of African Political Economy.* 107:113-129.

Bullock, A. & Trombley, S. 1999. *The new Fontana dictionary of modern thought.* 3rd ed. London: Harper Collins Publishers.

Campbell, C. 2003. *'Letting them die'. How HIV/AIDS prevention programmes often fail.* International African Institute in association with Oxford: James Currey, Wetton: Double Storey Books, and Indiana: Indiana Univeristy Press.

Connell, R. 1995. *Masculinities.* Cambridge: Polity.

Conradie, B. 2004. *Wages and wage elasticities for wine and table grapes in South Africa.* CSSR Working Paper no. 90, December 2004. Cape Town: Centre for Social Science Research, University of Cape Town.

Creswell, J.W. & Miller, D.L. 2000. Determining validity in qualitative inquiry. *Theory into Practice*, 39(3): 124-130.

CRLS (Centre for Rural Legal Studies). 2003. *Centre for Rural Legal Studies. Annual report 2003.* Stellenbosch: Centre for Rural Legal Studies.

CRLS (Centre for Rural Legal Studies). 2006a. *Straight talk. HIV/AIDS on farms in the Western Cape.* Stellenbosch: Centre for Rural Legal Studies.

CRLS (Centre for Rural Legal Studies). 2006b. *Straight talk. HIV/AIDS on farms in the Western Cape. Executive summary.* Stellenbosch: Centre for Rural Legal Studies.

CRLS (Centre for Rural Legal Studies). 2008. *Going for broke. A case study of labour brokerage on fruit farms in Grabouw.* Stellenbosch: Centre for Rural Legal Studies.

Dawes, A., Kafaar, Z., de Sas Kropiwnicki, Z.O., Pather, R. & Richter, L. 2004. *Partner violence, attitudes to child discipline & the use of corporal punishment: A South African national survey*. Cape Town: Child, Youth & Family Development, Human Sciences Research Council.

Denzin, N. K. & Lincoln, Y. S. 2000. *Handbook of qualitative research*. Thousand Oaks: Sage Publications.

Department of Correctional Services, Republic of South Africa. 2008. *National offender population profile in the Department of Correctional Services.* Pretoria: Department of Correctional Services.

DoH (Department of Health, Republic of South Africa). 2003. *National HIV and Syphilis prevalence survey in South Africa: 2002*. Pretoria: Department of Health, Republic of South Africa.

DoH (Department of Health, Republic of South Africa). 2005. *National HIV and Syphilis prevalence survey, South Africa, 2004*. Pretoria: Department of Health, Republic of South Africa.

DoH (Department of Health, Republic of South Africa). 2006. *National HIV and Syphilis prevalence survey, South Africa, 2005*. Pretoria: Department of Health, Republic of South Africa.

DoH (Department of Health, Republic of South Africa). 2007a. *National HIV and Syphilis prevalence survey, South Africa, 2006*. Pretoria: Department of Health, Republic of South Africa.

DoH (Department of Health, Republic of South Africa). 2007b. *HIV and AIDS and STI national strategic plan for South Africa 2007 – 2011*. Pretoria: Department of Health, Republic of South Africa.

DoH (Department of Health, Republic of South Africa). 2008. *National HIV and Syphilis prevalence survey, South Africa, 2007*. Pretoria: Department of Health, Republic of South Africa.

DoL (Department of Labour, Republic of South Africa). 2006. *Regulation 149 of the Basic Conditions of Employment Act (75/1997): Sectoral Determination 13: Farm worker sector, South Africa. Gazette number 28518. 2006, February 17.*

Dopstop. 2008. [Online]. Available from Dopstop: www.dopstop.org.za. [2008, December 7].

Dorrington, R. & Bourne D. 2008. Has HIV prevalence peaked in South Africa? Can the report on the latest antenatal survey be trusted to answer the question? *South African Medical Journal*, October 2008, 98(10): 754-755.

Dorrington, R., Johnson, L., Bradshaw, D. & Daniel, T-J. 2006. *The demographics impact of HIV/AIDS in South Africa. National and provincial indicators for 2006*. Cape Town: Centre for Actuarial Research, South African Medical Research Council and the Actuarial Society of South Africa.

Drimie, S. 2002. *The impact of HIV/AIDS on rural households and land issues in southern and eastern Africa. A background paper prepared for the Food and Agriculture Organisation (FAO), sub-regional office for Southern and Eastern Africa*. Pretoria: Human Sciences Research Council.

Du Toit, A. 2004. *Forgotten by the highway: globalisation, adverse incorporation and chronic poverty in a commercial farming district*. Cape Town: PLAAS in conjunction with the Chronic Poverty Research Centre (CPRC), Institute for Development Policy and Management, University of Manchester, and the Centre for Social Science Research (CSSR), University of Cape Town. (PLAAS Chronic poverty and development policy series no. 4.; CSSR Working Paper no. 101, February 2005; Chronic Poverty Research Centre Working Paper no. 49.)

Ertürk, Y. 2005. *Integration of the human rights of women and a gender perspective: violence against women*. Report of the Special Rapporteur on Violence Against Women, its causes and consequences. Geneva: United Nations Commission on Human Rights.

Falletisch, L.A. 2008. *Understanding the legacy of dependency and powerlessness experienced by farm workers on wine farms in the Western Cape.* Masters Thesis. Department of Social Work, University of Stellenbosch.

FASfacts. 2002. *Facts – foetal alcohol syndrome.* Pamphlet. Worcester.

Fisher J.C., Cook P., Sam N.E. & Kapiga S.H. 2008. Patterns of alcohol use, problem drinking, and HIV infection among high-risk African women. *Sexually Transmitted Diseases*, 35(6): 537–544. DOI: 10.1097/OLQ.0b013e3181677547.

Garcia-Calleja, J.M., Gouws, E. & Ghys, P.D. 2006. National population-based HIV prevalence surveys in sub-Saharan Africa: results and implications for HIV and AIDS estimates. *Sexually Transmitted Infections*, 82(Suppl III): iii64–iii70. DOI: 10.1136/sti.2006.019901.

Gilbert, N. 2008. *Researching social life*. London: SAGE Publications Inc.

Gillespie, S., Kadiyala, S. & Greener, R. November 2007. Is poverty or wealth driving HIV transmission? AIDS. 21:S5-S16. doi: 10.1097/01.aids.0000300531.74730.72.

Gouws, E. & Abdool Karim, Q. 2005. HIV infection in South Africa: the evolving epidemic. In *HIV/AIDS in South Africa*. Abdool Karim, S.S. & Abdool Karim, Q. Eds. Cape Town: Cambridge University Press. 48–66.

Gouws, E. 2005. HIV incidence rates in South Africa. In *HIV/AIDS in South Africa*. Abdool Karim, S.S. & Abdool Karim, Q. Eds. Cape Town: Cambridge University Press. 67-76.

Groenewald, C. 2008. Western Cape: an overview. In *The state of the population in the Western Cape province.* Marindo, R., Groenewald, C. & Gaisie, S. Eds. Cape Town: Human Science Research Council. 7–24.

Hall, R. 2008. Rural livelihoods and land. In *HIV/AIDS and society in South Africa*. Ndinga-Muvumba, A. & Pharoah, R. Eds. Scottsville: University of KwaZulu-Natal Press. 125-142.

Haralambos, M. & Holborn, M. 1995. *Sociology: themes and perspectives*. 4th ed. London: Harper Collins.

Hellstrőm, L. 2007. *Draft Proposal: The Farms Project: Providing farm workers with access to HIV/AIDS treatment and care*. Stellenbosch Hospice.

Hellstrőm, L. 2008. *Grant Proposal. Promoting farm dwellers' early access to the health care in the context of TB and HIV/AIDS*. 2008, March.

Henning, E, Van Rensburg, W & Smit, B (2004) Making meaning of data: Analysis and interpration. In *Finding your way in qualitiative research. Pretoria:* Van Schaik Publishers. 101 – 140.

Heywood, M. 2007. A background to health law and human rights in South Africa. In *Health and democracy*. Hassim, A., Heywood, M. & Berger, J. Eds. Cape Town: SiberInk. 2–25.

Hill, S. 2002. *The house women on farms built.* Stellenbosch: Women on Farms Project.

Hunter, S. 2003. AIDS and the world. In *Black death. AIDS in Africa.* Hunter, S. New York: Palgrave Macmillan. 17-48.

IOM (International Organisation for Migration). 2008. Survey finds farm workers vulnerable to HIV, particularly women. [Online]. Available from the International Organisation for Migration: http://www.iom.int/jahia/Jahia/pbnAF/cache/offonce?entryId=16882 [2008, December 7].

Jack, E. 2008. Why HIV has fallen. *Mail and Guardian.* 2008, 26 September-2 October.

Jewkes, R. & Dunkle, K. In press. HIV and women. In *HIV/AIDS in South Africa 25 years on: a psycho-social perspective*. Rohleder, P., Swartz, L., Kalichman, S. & Simbayi, L. Eds. New York: Springer.

Jewkes, R., Sikweyiya, Y., Morrell, R. & Dunkle, K. 2009. *Understanding men's health and use of violence: interface of rape and HIV in South Africa* Pretoria: Medical Research Council.

Kahn, T. 2008. Health chief says HIV figures were not manipulated. *Business Day*. 2008, September 11.

Kaiser Family Foundation. 2008. The HIV AIDS epidemic in South Africa. *The HIV AIDS Fact Sheet, October 2008.* [Online]. Available from Kaiser Family Foundation: http://www.kff.org/hivaids/upload/7365-065.pdf [2008, November 10].

Kelly, K. & Parker, W. 2000. *Communities of practice. Contextual mediators of youth responses to HIV/AIDS. Sentinel site monitoring and evaluation project.* Johannesburg: Centre for AIDS Development, Reseach and Evaluation (CADRE). [Online]. Available from CADRE: www.cadre.org.za/files/Communities_of_Practice.pdf [2008, September 14].

Kenyon, C., Dlamini, S., Boulle, A., White, R.G. & and Badri, M. 2009. A network-level explanation for the differences in HIV prevalence in South Africa's racial groups. *African Journal of AIDS Research.* 8(3):243–254.

Kisson, C., Caesar, M. & Jithoo, T. 2002. The rights-based approach applied. In *Whose right? AIDS Review 2002.* Kisson, C., Caesar, M. & Jithoo, T. Pretoria: University of Pretoria. 37-56.

London, L. 2000. Alcohol consumption amongst South African farm workers: a challenge for post-apartheid health sector transformation. *Drug and Alcohol Dependence,* 59 (2000): 199–206.

LRS (Labour Research Services), WFP (Women on Farms Project) & PLAAS (the Programme for Land and Agrarian Studies), School of Government, UWC. 2004. *Behind the label. A workers' audit of the working and living conditions on selected wine farms in the Western Cape.* Cape Town: Labour Research Services, Women on Farms Project and PLAAS (Programme for Land and Agrarian Studies), School of Government, UWC.

Mabry, L. 2008. Case study in social research. In *The Sage handbook of social research methods*. Alasuutari, P., Bickman, L. & Bruner, J. Eds. London: SAGE Publications Inc. 214–227.

Magasela, W. 2007. Towards a constitution-based definition of poverty in post-apartheid South Africa. In *State of the nation. South Africa 2005 - 2006*. Buhlungu, S., Daniel, J., Southall, R. & Lutchman, J. Eds. Cape Town: Human Science Research Council. 46–66.

Marais, H. 2000. A paucity of social theory. In *To the edge. AIDS Review 2000*. Marais, H. Pretoria: University of Pretoria. 54-59.

Mathews, C. 2005. Reducing sexual risky behaviours: theory and research, success and challenges. In *HIV/AIDS in South Africa*. Abdool Karim, S.S. & Abdool Karim, Q. Eds. Cape Town: Cambridge University Press. 143–165.

Mbeki, T. 1-7 October 2004. Letter from the President. When is good news bad news? *ANC Today*. 4(39).

Morrell, R. 2001. The times of change: men and masculinity in South Africa. In *Changing Men in Southern Africa*. Morrell, R. Ed. Pietermaritzburg: University of Natal Press. 3-37.

Nattrass, N. 2006. *AIDS, gender and access to antriretroviral treatment in South Africa*. CSSR Working Paper no. 178, December 2006. Cape Town: Centre for Social Science Research, University of Cape Town.

Nattrass, N. 2007. *Modelling the relationship between antiretroviral treatment and HIV prevention: The limits of Spectrum's AIDS impact model in a changing policy environment*. CSSR Working Paper no. 92, May 2007. Cape Town: AIDS & Society Research Unit (ASRU) Centre for Social Science Research, University of Cape Town.

Neuman, W. L. 2006. *Social research methods. Qualitative and quantitative approaches.* 6th ed. Boston: Pearson Education/Ally & Bacon.

Parry, C.D.H. & Abdool Karim Q. 1999. *Country report: Substance abuse and HIV/AIDS in South Africa.* Second Annual Meeting of the Global Research Network on HIV Prevention in Drug-using Populations. 1999, August 26–28. Atlanta, Georgia. 81–88.

Phorano, O.D., Nthomang, K. & Ntseane, D. 2005. Alcohol abuse, gender-based violence and HIV/AIDS in Botswana: establishing the link based on empirical evidence. *Journal of Social Aspects of HIV/AIDS*, April 2005 2(1): 188-202.

Pisani, E. 2008. *The wisdom of whores. Bureaucrats, brothels and the business of AIDS.* London: Granta Books.

Puoane, T. & Hutchings, C. 2009. Understanding health and illness. In *Primary health care. Fresh perspectives.* Zweigenthal, V., Puoane, T., Reynolds, L., London, L., Coetzee, D., Alperstein, M., Duncan, M., Atkins, S., Loveday, M., Hutchings, C., Geiger, M., Petersen, L. & Ferguson, G. Cape Town: Pearson Education and Prentice Hall. 23-48.

Ratele, K. 2001. Between ouens: everyday makings of black masculinity. In *Changing Men in Southern Africa*. Morrell, R. Ed. Pietermaritzburg: University of Natal Press. 239-253.

Richter, L. M., Hassim, A. & Berger, M. 2007. Gender & Health. In *Health and democracy*. Hassim, A., Heywood, M. & Berger, J. Cape Town: SiberInk. 348–382.

Rudnet. 2008. [Online]. Available from Dopstop: www.rudnet.org.za. [2008, December 7].

SAHRC (South African Human Rights Commission). 2003. *Final report on the inquiry into human rights violations in farming communities – August 2003.* Pretoria: South African Human Rights Commission.

SAHRC (South African Human Rights Commission). 2008. *Progress made in terms of land tenure security, safety and labour relations in farming communities since 2003.* Pretoria: South African Human Rights Commission.

SAPA. 2003. *HIV stats causing friction* (11 September, 2003). [Online]. Available from Health Systems Trust: http://www.hst.org.za/news/20030907 [2008, December 7].

Sathiparsad, R. 2005. 'It is better to beat her': male youth in rural KwaZulu-Natal speak on violence in relationships. *Agenda*, 66:79-88.

Schefer, T., Ratele, K., Strebel, A. & Shabalala N. 2005. In *Rethinking masculinities, violence and AIDS*. Gibson, D. & Hardon A Eds. Volume 1 in the AIDS series of the ASSR. Amsterdam: Het Spinhuis. 73-86.

Schneider, M., Norman, R., Parry, C.D.L., Bradshaw, D. & Plüddemann, A. 2007. *Estimating the burden of alcohol abuse in South Africa in 2000. Methodological Note*. Cape Town: South African Medical Research Council.

Sen, A. 1999. *Development as freedom*. Oxford: Oxford University Press.

Shaikh, N. 2008. Population, HIV/AIDS and the provision of healthcare in the Western Cape. In *The state of the population in the Western Cape province.* Marindo, R., Groenewald, C. & Gaisie, S. Eds. Cape Town: Human Science Research Council 175–195.

Shaikh, N., Abdullah, F., Lombard, C.J., Smit, L., Bradshaw, D. & Makubalo, L. 2006. Masking through averages – intraprovincial heterogeneity in HIV prevalence within the Western Cape. *South African Medical Journal*, 96(6): 538–543.

Sharma, R.R. Undated. *An Introduction to Advocacy – Training Guide*. (Place unstated): SARA/HHRAA/USAID.

Shefer, T., Ratele, K., Strebel, A. & Shabalala, N. 2005. Masculinities in South Africa. A critical review of contemporary literature on men's sexuality. In *Rethinking masculinities, violence and AIDS.* Gibson, D. & Hardon, A. Eds. Amsterdam: Het Spinhuis. 73-86.

Shisana, O. & Simbayi, L. 2002. *Nelson Mandela/ HSRC study of HIV/AIDS: South African National HIV prevalence, Behavioural Risks and Mass Media Household survey 2002. Executive Summary.* Cape Town: HSRC Press.

Shisana, O., Rehle, T., Simbayi, L.C., Parker, W., Zuma, K., Bhana, A., Connoly, C., Jooste, S. & Pillay, V. 2005. *National HIV prevalence, HIV Incidence, Behaviour and Communication Survey, 2005.* Cape Town: Human Sciences Research Council.

Silverman, D. 2006. What is qualitative research? In *Interpreting qualitative data*. 3rd ed. Silverman, D. London: SAGE Publications Inc. 33–56.

Stall, R. & Leigh, B. 1994. Understanding the relationship between drug or alcohol use and high risk sexual activity for HIV transmission: where do we go from here? Editorial. *Addiction,* 89: 131-134.

StatsSA (Statistics South Africa). 2003. *Census 2001. The census in brief.* Pretoria: Statistics South Africa.

Stats SA (Statistics South Africa). 2005a. *Census 2001. Primary tables Western Cape. Census '96 and 2001 compared.* Report no 03-02-13 (2001). Pretoria: Statistics South Africa.

StatsSA (Statistics South Africa). 2005b. *Mid-year population estimates, South Africa: 2005. Statistical release PO302.* [Online]. Available from StatsSA: http://www.statssa.gov.za/publications/P0302/P03022005.pdf [2008, July 31].

StatsSA (Statistics South Africa). 2006. *Mid-year population estimates, South Africa: 2006. Statistical release PO302.* [Online]. Available from StatsSA: http://www.statssa.gov.za/publications/P0302/P03022006.pdf [2008, July 31].

StatsSA (Statistics South Africa). 2007. *Mid-year population estimates, South Africa: 2007. Statistical release PO302.* [Online]. Available from StatsSA: http://www.statssa.gov.za/PublicationsHTML/P03022007/html/P03022007.html [2008, July 31].

Stellenbosch Hospice. 2008. *Annual report 2007 – 2008. "No end to caring".* Stellenbosch.

Stillwagon, E. August 2002. HIV/AIDS in Africa: fertile terrain. *The Journal of Development Studies.* 38(6):1-22.

TAC (Treatment Action Campaign). 2008. *Treatment Action Campaign on 2007 Antenatal Survey. 8 September 2008.* [Online]. Available from TAC: http://www.tac.org.za/community/node/2410 [2008, December 6].

UNAIDS. Undated. *South Africa.* [Online]. Available from UNAIDS: www.unaids.org/en/CountryResponses/Countries/south_africa.asp. [2008, November 10].

UNAIDS & WHO. 2007. *AIDS epidemic update. December 2007.* Geneva: Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organisation (WHO)

UNAIDS/UNFPA/UNIFEM. 2004. *Women and HIV/AIDS: Confronting the crisis.* Executive summary. Geneva: UNAIDS. [Online]. Available from UNFPA: http://www.unfpa.org/hiv/docs/women-aids-sum.pdf [2008, December 8].

Vetten, L. 2007. Violence against women in South Africa. In *State of the nation. South Africa 2007*. Buhlungu, S., Daniel, J., Southall, R. & Lutchman, J. Eds. Cape Town: Human Sciences Research Council. 425–447.

Waldman, L. 1994. *Here you will remain: gender, violence and movement on farms in the Western Cape.* Stellenbosch: Centre for Rural Legal Studies.

Ward, V. March 2007. Networks, NGOs and Public Health: Responses to HIV/AIDS in the Cape Winelands. MPhil. Thesis. Department of Sociology and Social Anthropology, University of Stellenbosch.

WCDEADP (Western Cape Department of Environmental Affairs and Development Planning). 2005. *Western Cape spatial development framework. The Western Province today. Prepared for the Provincial Government of the* Western Cape, Department of Environmental Affairs and Development Planning by CndVAfrica. *27 October 2005.* [Online]. Available from Western Cape Provincial Government: http://www.capegateway.gov.za/Text/2005/12/1-3_cfgdtc_pages_1-50_web.pdf [2008, June 30].

WCDoA (Western Cape Department of Agriculture). 2006. *Western Cape Department of Agriculture budget vote 2006/07 presented by Minister Cobus Dowry,* 19 May 2006. [Online]. Available from South African Government Information: http://www.info.gov.za/speeches/2006/06052213151001.htm [2007, September 10].

WCDoH (Western Cape Department of Health). 2006. *The 2005 HIV antenatal provincial and area surveys. Western Cape*. Cape Town: Department of Health, Western Cape.

WCDoH (Western Cape Department of Health). 2007. *HIV prevalence in the Western Cape. Results of the 2006 HIV antenatal provincial and area surveys*. Cape Town: Western Cape Provincial Department of Health.

Wechsberg, W.M., Luseno, W.K., Karg, R.S., Young, S., Rodman, N., Myers, B. & Parry, C.D.H. 2008. Alcohol, cannabis, and methamphetamine use and other risk behaviours among Black and Coloured South African women: a small randomized trial in the Western Cape. *International Journal of Drug Policy,* 19: 130–139.

Wegerif, M., Russell, B. & Grundling, I. 2005. *Still searching for security. The reality of farm dweller evictions in South* Africa. Polokwane: Nkuzi Development Association.

Weiser, S.D., Leiter, K., Heisler, M., McFarland, W., Percy-de Korte, F., DeMonner, S.M., Tlou, S., Phaladze, N. Iacopino, V. & Bangsberg, D.R. 2006. A population-based study on alcohol and high-risk sexual behaviors in Botswana. *Public Library of Science Medicine,* 3(10): 1940-1948. DOI: 10.1371/journal. pmed.0030392.

Westerhaus, M. 2007. Linking anthropological analysis and epidemiological evidence: formulating a narrative of HIV transmission in Acholiland of northern Uganda. *Journal of Social Aspects of HIV/AIDS*, August 2007, 4(2):590-605.

WFP (Women on Farms Project). 2004. *Women workers exploring together. The story of the Women on Farms Conference. September 2003.* Stellenbosch: Women on Farms Project.

WFP (Women on Farms Project). 2005. *Behind the Label II.* Stellenbosch: Women on Farms Project.

WFP (Women on Farms Project). 2007. Director's overview. Women on Farms Project. *Annual report 2007.* Stellenbosch: Women on Farms Project. [Online]. Available from Women on Farms Project: http://www.wfp.org.za/sublist/XID14-wfp_annual_reports.html [2008, December 6].

WFP (Women on Farms Project). 2008. [Online]. Available from Women on Farms Project: http://www.wfp.org.za/content/XID11-mission_vision.html [2008, October 26].

Whiteside, A. 2008. *HIV/AIDS. A very short introduction.* New York: Oxford University Press.

Wood, K. and Jewkes, R. 2001. 'Dangerous' love: reflections on violence among Xhosa township youth. In *Changing Men in Southern Africa.* Morrell, R. Ed. Pietermaritzburg: University of Natal Press. 317-336.

Wright, G., Noble, M. & Magasela, W. 2008. *Towards a democratic definition of poverty.* Cape Town: Human Science Research Council.

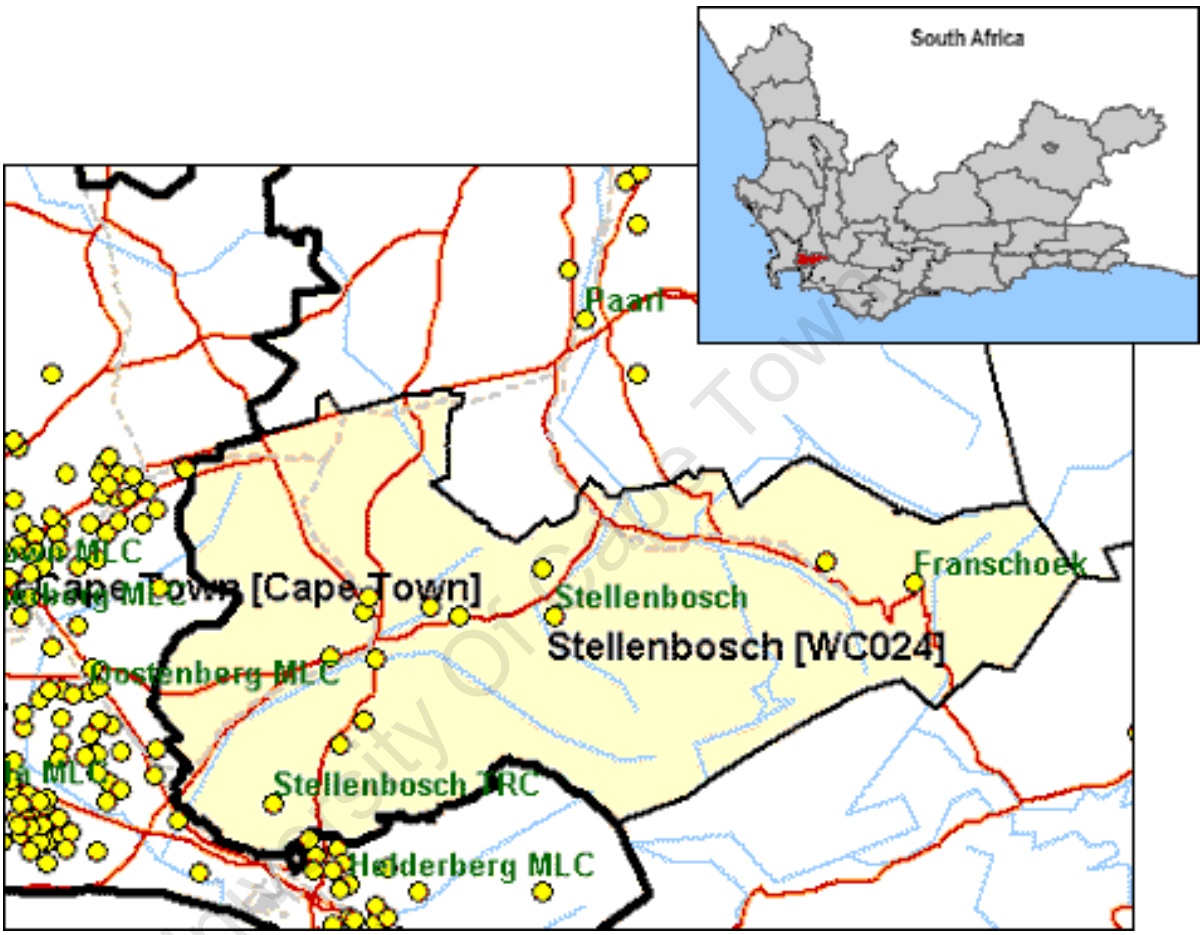
Zablotska, I.B., Gray, R.H., Serwadda, D., Nalugoda, F., Kigozi, G., Sewankambo, N., Lutalo T., Mangen, F.W. & Wawer, M. 2006. Alcohol use before sex and HIV acquisition: A longitudinal study in Rakai, Uganda. *AIDS,* 20:1191–1196.

Zweigenthal, V. 2009. Measurement in health and disease. In *Primary health care. Fresh perspectives.* Zweigenthal, V., Puoane, T., Reynolds, L., London, L., Coetzee, D., Alperstein, M., Duncan, M., Atkins, S., Loveday, M., Hutchings, C., Geiger, M., Petersen, L. & Ferguson, G. Cape Town: Pearson Education and Prentice Hall. 81-112.

6. APPENDICES

APPENDIX A:

MAP: STELLENBOSCH LOCAL MUNICIPALITY



http://www.capegateway.gov.za/eng/your_gov/12458

APPENDIX B:

ANALYSIS OF PATIENT DATA: MAY – OCTOBER 2007

(Data for 2006 - when the issue of on-farm communities dwellers was first formally raised within the Hospice - are not easily accessible.)

Patient profiles

During the six months May to October 2007 - at the time the Farms Project was being designed and funding raised - three quarters (73,6%–75,9%) of all palliative patients being cared for by the Hospice were AIDS-ill. At the same time, only between a third and nearly a half (37,5%–45%) of palliative patients from farms were AIDS-ill – although there was a marked jump from 11,1% in May to 38,9% in June 2007, whereafter it climbed steadily to 45%. So among the patients, farm patients were less infected with HIV than the other patients.

Palliative patients from farms comprised 15,4%–17,0% of all palliative patients at that time – but they only accounted for 2,6%–9,5% of all palliative patients who were AIDS-sick, with the rest coming from the greater Stellenbosch area.

In short AIDS-sick people on farms were under-represented in relation to the average – but the numbers were climbing substantially at the time the Farms Project was being designed. This does not necessarily imply an increase in levels of infection, however, but could also have resulted from people who had been HIV-positive becoming ill, and /or an increase in referrals for care, among others.

These figures are also not simply cumulative, as movement within patients numbers is caused by deaths and new patients. Data for the deaths in this period proved unreliable due to a data capture error.

APPENDIX C:

RESEARCH BY NON-GOVERNMENTAL ORGANISATIONS

Noting the lack of statistics about farms and that 'most government data does not make distinctions between urban and rural communities or distinctions within rural communities as to who lives on farms and who does not', the Human Rights Commission's 2003 Inquiry into human rights violations on farms attributed the 'lack of independent research being conducted by NGOs and other institutions' to consistent reports 'confirmed by AgriSA that to obtain access to farms is problematic' (SAHRC, 2003:5).

This is not entirely the case in the Western Cape, where a number of organisations with a history of working on farms have published a fairly extensive body of material on aspects of the farming community. Surveys have been undertaken and reported, and there is also qualitative research which is often richly descriptive with accompanying analysis. For some organisations, producing research is central to the way they work, while others offer their work as a site for others to research.[284] Examples of research generated by organisations and which relate to conditions on wine farms are as follows.

Among organisations which work with farm workers, the Women on Farms Project (WFP) regularly undertakes and publishes research, both on their own work and on the context in which they work. These are published in hard copy and are made available on their website. Commenting in 2007 on their current research, the director noted that '[l]ike all WFP's research, the findings of the following research activities will fill identified information gaps which will inform campaigns, advocacy and policy initiatives in 2008' (WFP, 2007:5).[285] In contrast perhaps, and indicative of their orientation and

284 See Appendix G for descriptions of these organisations. In terms of my own role as researcher, the origins of this are described in Chapter 2 – but in short, the Hospice and its Farms Project is a site for research.

285 The topics to be researched were the role and impact of labour brokers in agriculture in the Western Cape; farm workers' access to ARVs in the Western Cape and the situation of female farm workers in wine and deciduous fruit global value chains. In

smaller capacity, Dopstop is a site for more occasional and scholarly research not undertaken by staff, a list of completed work being given on their website (Dopstop, 2008).

The website of Rudnet (the Rural Development Network), which works in the rural areas of the Western Cape, lists 'research and information' as one of its five strategies. They say they found it 'necessary for Rudnet to engage or facilitate engagement in the research of industry specific social development phenomena to ensure that the organisation and its members is always abreast and duly informed about dimensions in the field it is operating' (Rudnet, 2008). There were no publications or research reports listed on/available through their website however, nor were the findings of a comprehensive assessment of conditions on farms which results in an annual Farm Health Award.

The Centre for Rural Legal Studies (CRLS), on the other hand, expressly commissioned a substantial qualitative research project on HIV/AIDS on farms in the Eden and Overberg districts in the southern Cape. Published in 2006, *Straight Talk. HIV/AIDS on farms in the Western Cape* provides a detailed report of perceptions and experiences of farm workers and farmers regarding various aspects of their lives as affected by HIV/AIDS. They also produce discussion and briefing papers on aspects of conditions in rural area and on farms.

addition, they intend to 'feed its 2008 research findings on the impacts of pesticides on farm workers into the People's Health Movement' (WFP, 2007:5&6).

These pieces of research are vital to understanding both local conditions, as well as the initiatives being undertaken by sister organisations working in the same field or area. I draw substantially on these, where they are available.

This local research on farming conditions and communities is complemented by work produced by organisations in other parts of the country [286] to which this thesis does not refer, however, given the specificity of the conditions in Stellenbosch farms.

286 One example would be the national Gauteng-based organisation, AgriAIDS, which was founded in 2005 to '[r]aise awareness of the impact of HIV/Aids in the agricultural industry and support the industry in its efforts to actively address the problem of HIV/Aids; [and] to promote an integrated approach where awareness as well as treatment are considered essential to fight the epidemic'. While their main focus is on farm workers, their objectives are to '[r]educe the economical and social vulnerability of South African agribusiness, farm workers and rural communities to the impact of HIV/Aids; and increase the Corporate Social Responsibility (CSR) within the agricultural sector of South Africa' (AgriAIDS, 2008). In 2007/08 they commissioned research on the economic impacts of HIV/AIDS on agriculture.

APPENDIX D:

PROFILES OF KEY INFORMANTS

Dr Chrisna Andersen is a medical doctor who has specialised in HIV/AIDS. Since 2004 (when antiretroviral treatment became more generally available through state hospitals in the Western Cape), she has worked in a number of provincial HIV clinics in the winelands, including in Stellenbosch, Wellington and Franschhoek. She has worked for a hospice and has participated as a researcher in microbicide trials undertaken by a research organisation, Be Part Community Research Services, based in Mbekweni outside Paarl. *(Interviewed 8 October 2008.)*

Lynette Bosman is the director of the non-profit organisation @Heart (previously Stellenbosch AIDS Action) which provides HIV testing on farms and other workplaces in the Western Cape. She is a qualified social worker and lives on a farm in the Stellenbosch area. *(Interviewed 6 September 2007.)*

Sr Ansie Breytenbach has worked as a professional nurse in palliative care for about 17 years, six of which have been at the Stellenbosch Hospice - during which time she has worked with patients on farms and in peri-urban and urban areas in Stellenbosch, along with a team of home-based carers. She has provided clinical services to the Farms Project. *(Interviewed 31 October 2008.)*

Delilah Cupido has lived on Middelvlei farm for over 40 years where she has been the community worker for about thirty of these. In 2008 she won the Sanlam Farm Worker of the Year award for the Cape Winelands district. She is married to Ghandi Cupido (the senior supervisor on the farm, until his recent retirement) and has raised her children on the farm. *(Interviewed 3 October 2008.)*

Leila Falletisch is a qualified social worker and has been the director of the Meerlust Foundation - on Meerlust farm, owned for over 250 years by the Myburgh family - where she worked for seven years 'managing all the services to children and families'. Her Masters dissertation was on *Understanding the legacy of dependency and powerless experienced by farm workers on wine farms in the Western Cape. (Interviewed 11 January and 26 November 2008.)*

Sr Erika Fischer is a palliative care nurse who has been responsible for the Stellenbosch Hospice's six-bed in-patient unit within the Stellenbosch Hospital. She has worked at the Hospice for just over three years. *(Interviewed 3 October 2008.)*

Tania Gaia was the co-ordinator of the Farms Project in the first year of its implementation. Prior to working at the Hospice she worked in community development for the Catholic Justice and Peace Commission. *(Interviewed 28 August 2008.)*

Dr Nelis Grobelaar has been the chief medical officer for the West Coast-Cape Winelands district of the Western Cape Department of Health, focussing mainly on the Drakenstein District where he worked for 15 years. He has been very active in promoting access to HIV treatment, especially to mitigate transmission to children during birth. He is active in local NGOs, and is on the board of the Drakenstein Hospice. Dr Grobelaar lives on a wine farm in Paarl which has been farmed by the family for over a hundred years. *(Interviewed 30 September 2008.)*

Dr Lize Hellström has been the medical director of the Stellenbosch Hospice and the project leader of two outreach projects – the Farms Project and the After Hours Clinics (which offers HIV-related services on selected weekday evenings in Stellenbosch and Mbekweni, Paarl). She is also the principal investigator for clinical microbicides trials at Be Part Community Research Services, a research unit in Mbekweni. Speciliased in palliative care, Dr Hellström has also worked in the Drakenstein and Franschhoek hospices. *(Interviewed 30 September 2008.)*

Madge Jackson was a founding member of Dopstop for which has became the director. During the 35 years in which she worked for the state health services prior to 2005, she was located in the Cape Winelands district and was responsible for, among other things, the mobile clinics in the Stellenbosch area that offer primary health services on farms and in rural areas generally. She also has an intimate worked knowledge of HIV data from antenatal clinics. *(Interviewed 17 September 2008.)*

Dr Rachel Jewkes is a medical doctor with a particular interest in gender-based violence and in HIV, on which she has published extensively. She is the director of the Gender and Health Unit at the Medical Research Council which, among many other things, hosts the global Sexual Violence Research Initiative whose aim is to network sexual violence researchers globally. Her own work includes foci on men and masculinity, on intimate partner violence and rape as well as the importance of gender-based violence in women's risk of HIV infection. She is a member of various local and international committees and working groups on matters relating to gender and health, and reviews manuscripts and proposals for many organisations and journals sitting on and some of their editorial boards (of the *The Lancet* and *African Journal of AIDS Research,* among others). *(Interviewed 6 September 2008.)*

Roelie Joubert has worked for about eight years as the viticulturist on Meerlust farm. While in the South African Defence Force, he worked in human resources and plays an active role in staffing and welfare issues on the farm. *(Interviewed 10 July 2008.)*

Prof Leslie London is a senior specialist and professor in Public Health at the School of Public Health and Family Medicine at the University of Cape Town where he is also the director of the School. He has a particular interest in health and human rights and has published extensively on, among other things, the health of farm workers particularly regarding occupational health and alcohol abuse. He was a founder member and chairperson of the Board of Dopstop. *(Interviewed 26 September 2008.)*

Geraldine Nicol has managed the Stellenbosch Hospice since 2005, following over 30 years of community development work. As a trained teacher, she was involved in education in rural areas in the Eastern Cape where she started and worked for INTEC (Institute for Training and Education for Capacity Building). More recently she was manager of the Resource and Development Foundation (RDF) in Stellenbosch, which was instrumental in establishing Rudnet, the Rural Development Network. This is the third organisation in which she has worked which has had a project focussing on farms. *(Interviewed 1 October 2008.)*

Glynis Rhodes has worked at the Women on Farms Project (WFP) in Stellenbosch since March 2007 where she has been the co-ordinator of the Women's Health and Empowerment Programme. The five focus areas of the programme are HIV/AIDS, gender-based violence, alcohol and substance abuse, occupational health and safety; and health as a human right. Glynis Rhodes has a history of working in women's organisations, including Rape Crisis which was 'probably one of the first organisations that was aware of AIDS in the 80s' (GR). *(Interviewed 9 October 2008.)*

Tjuks Roos has managed Rust en Vrede with his brothers for 25 years. He is actively involved in initiatives to improve the lives of the people who live and work on the farm - which has been in the family for over 150 years – with a view to this contributing to changing the whole Stellenbosch area. Rust en Vrede has had two lay health workers for over ten years, and particular emphasis is placed on the wellbeing of children. Among other things, Tjuks Roos was involved with Stellenbosch AIDS Action - now @Heart – for three years. *(Interviewed 16 September 2008.)*

Sr Carol Swanepoel joined the Stellenbosch Hospice from the provincial primary health care clinics and has been the dedicated professional nurse for the Farms Project, working almost exclusively on farms. She has specialised in primary health care and has worked in mostly rural primary health care clinics in the Western Cape, particularly while living on a nature reserve for 20 years. *(Interviewed 3 July and 9 October 2008.)*

Magdalene Thys has provided home-based care to members of the farming community, either on farms or in local peri-urban areas, since September 2006, when she started working at the Stellenbosch Hospice. As a member of the Farms Project she has participated in Farm Health days in a variety of ways, including doing TB testing and counselling people testing for HIV. *(Interviewed 1 October 2008.)*

Schalk Visser runs Nagenoeg - which has been farmed by his family since 1950 - where he undertakes a large variety of community projects like the development of crèches and schools, clinic and library facilities and, most recently, a satellite police station. He works participatively with the people who live on his farm, and contributes to projects in the broader farming community - including being a board member of Dopstop for 14 years. *(Interviewed 1 September 2008.)*

Dr Virginia Zweigenthal is a medical doctor and has been the principal medical officer and manager for the TB-HIV-STI Programme for the Metro District Health Services in the Western Cape provincial Department of Health. Prior to this, she has worked in various capacities in her specialist area of public health, including at the University of Cape Town's School of Public Health and Family Medicine. *(Interviewed 26 September 2008.)*

APPENDIX E:

DESCRIPTORS OF KEY INFORMANTS

In alphabetical order – by descriptor

Given descriptor	Initials	Name
Academic doctor-researcher	LL	Prof Leslie London
Director of an NGO providing HIV testing on farms	LB	Lynette Bosman
Doctor-farmer	NG	Dr Nelis Grobelaar
Doctor-manager	VZ	Dr Virginia Zweigenthal
Doctor-researcher	DrRJ	Dr Rachel Jewkes
Farm manager	RJ	Roelie Joubert
Farm-based community worker	DC	Delilah Cupido
Farm-based social worker	LF	Leila Falletisch
Farmer	SV	Schalk Visser
Farmer	TR	Tjuks Roos
Farms-dedicated Hospice nurse	CS	Sr Carol Swanepoel
HIV doctor-researcher	CA	Dr Chrisna Andersen
Hospice home-based carer	MT	Magdalene Thys
Hospice manager	GN	Geraldine Nicol
Hospice nurse	AB	Sr Ansie Breytenbach
NGO co-ordinator of a women's farm health project	GR	Glynis Rhodes
NGO director (who used to work in the provincial health service in Stellenbosch	MJ	Madge Jackson
Nurse who managed the Hospice's in-patient unit	EF	Sr Erika Fisher
Project co-ordinator	TG	Tania Gaia
Project leader-doctor	LH	Dr Lize Hellström

In alphabetical order – by initials

Initials	Name	Given descriptor
AB	Sr Ansie Breytenbach	Hospice nurse
CA	Dr Chrisna Andersen	HIV doctor-researcher
CS	Sr Carol Swanepoel	Farms-dedicated Hospice nurse
DC	Delilah Cupido	Farm-based community worker
DrRJ	Dr Rachel Jewkes	Doctor-researcher
EF	Sr Erika Fisher	Nurse who managed the Hospice's in-patient unit
GN	Geraldine Nicol	Hospice manager
GR	Glynis Rhodes	NGO co-ordinator of a women's farm health project
LB	Lynette Bosman	Director of an NGO providing HIV testing on farms
LF	Leila Falletisch	Farm-based social worker
LH	Dr Lize Hellström	Project leader-doctor
LL	Prof Leslie London	Academic doctor-researcher
MJ	Madge Jackson	NGO director (who used to work in the provincial health service in Stellenbosch
MT	Magdalene Thys	Hospice home-based carer
NG	Dr Nelis Grobelaar	Doctor-farmer
RJ	Roelie Joubert	Farm manager
SV	Schalk Visser	Farmer
TG	Tania Gaia	Project co-ordinator
TR	Tjuks Roos	Farmer
VZ	Dr Virginia Zweigenthal	Doctor-manager

APPENDIX F:

INTERVIEW GUIDE /SCHEDULE

I began all interviews by explaining my position at the Hospice and in the Farms Project, followed by a brief description of the question being addressed in this thesis. I noted that there was no available evidence for HIV prevalence on wine farms and that the HIV testing being conducted by the Project on farms had given rise to the issue being addressed in this thesis. I was careful not to infer what the Project's findings were, however, given that this was the starting point of questions to the key informants.

While there was a set of core questions, I customised the interview schedule for each informant according to their areas of expertise – or about which they could be expected to make an educated guess. I therefore did not ask everyone all the questions. (So, for instance, I did not ask farmers for their views on the skewing of antenatal data, nor did I ask health professionals about the importance of religion on farms, unless they raised it in relation to their patients or research.) As mentioned in Chapter 2, I probed some responses in quite a lot of detail, both to find out what lay beneath high-level or generic answers as well as to check the logic of some responses. These follow-up questions are necessarily not listed here.

The semi-structured nature of the interview meant that the questions informed the interview, rather than led it. The questions are therefore listed in clusters – but after the first question (which I did ask first), I seldom followed the order in which they are listed here, preferring to work with what the key informant offered and then checking that key areas had been covered near the end of the interview.

Questions

Prevalence on farms, in relation to the average for Stellenbosch

1.1 If the average estimated HIV prevalence for people living in the Stellenbosch area in 2006 was around 12%, what do you think the HIV prevalence on wine farms in the Stellenbosch area might have been at that time? Would it be more than this average, the same, or less than the average?
1.2 Why do you say this?

Factors on farms related to HIV transmission/HIV and TB prevalence

2.1 What are the factors on farms that you would expect might affect HIV infection levels? How do they do this?
2.2 Are there any *other* factors that you think may be affecting HIV prevalence in the Stellenbosch farming community?

3.1 The Farms Project assumed there would be high prevalence, following farm-based patients coming into the Hospice's in–patient unit in advanced stages of AIDS-related illness. But the Project's experience of testing on farms was of low prevalence. What might this discrepancy be about?
3.2 We are finding low prevalences on the farms we have worked on. (These might well be the 'better' (more socially conscious) farms – given that they allowed us onto the farm to offer this service.) What might be the cause of these low prevalences?

Heterogeneity

To farm-based key informants:
4.1 Do you have any idea of how much HIV and TB there is on this farm? Why do you think this is the case?
4.2 Do you think the rates of HIV-infection on your farm are the same as other farms? Why/ why not?

Hospice experience

To project leader-doctor:

5.1 I understand that the Farms Project started with a concern expressed in the Hospice's 2006 strategic planning that there were patients from farms who were presenting with advanced stage AIDS-related illness and that this may be the tip of an iceberg. What was the evidence for this?

5.2 Do you know if the palliative AIDS-sick patients from farms who the Hospice cared for had been *living* on farms? Might they have returned home to be cared for or die?

5.3 At that time, did you have a sense of whether the prevalence on farms would be similar to the Stellenbosch prevalence – or more or less?

6.1 In the initial document you describe farm workers as 'victims of a sick system'. What did that mean?

7.1 What are the most common illnesses found on farms?

Prevalence in farming community and surrounding areas

8.1 Given your answer (of lower than average, the same, or higher than average), in what kinds of areas in Stellenbosch would prevalence lie that balanced your choice, for this average to be possible *(i.e. if you chose low for farms, where might it the prevalence be high)?*

8.2 Why - and how do you understand this?

9.1 Do you think there is any difference in prevalence within the farming community (those who work on farms), based on whether they live on or off farms? Why/why not? If a difference, which is higher – and why?

or

9.2 Do you think risky behaviour (for HIV) ***on*** farms is different to risky behaviour ***off*** farms? If so, in what ways?

And, if it has not arisen:

9.3 Are there places in the larger Stellenbosch area where you think that the infection rates may be higher than other areas? If so, what characterises these areas?

9.4 Do you have any experience of Klapmuts and Franschhoek? What are they?

10.1 According to the WC provincial antenatal survey of 2006, *within* the Cape Winelands district, the Stellenbosch sub-district had the highest HIV prevalence of the four health areas:

Stellenbosch	16,9%
Ceres/Tulbagh	12,7%
Worcester Robertson	10,6%
Paarl	12,6%

Have you any idea why this might be the case?

New infections

11.1 Do you think the rate of new infections is changing in the Stellenbosch area? If so, is it increasing or decreasing? What evidence is there - and what may be causing this?

11.2 *To the doctor-farmer:*
You have had particular success with ARV rollout and PMTCT. Do you think the rate of new infections is changing at all? If so, what evidence is there for this and what may be causing this?

Sexual practices and social contexts relating to transmission

12.1 What sexual behaviour is 'risky' for HIV? In what ways is it risky – (e.g. in what circumstances)? Why?

13.1 You work across a range of sites and areas. In your experience, which social conditions heighten levels of infection – and how do they do this? (*Race, age gender, housing, social behaviour, unemployment/boredom?)*

'Race'

14.1 What would you expect the prevalence in off-farmto 'Coloured' communities in the Stellenbosch area to be in relation to the average of 12%:higher than average/ the same/ less than area average? Why?

14.2 National statistics show HIV prevalence in the 'Coloured' community generally to be lower than that in 'Black African' population in general. What do you think about this evidence?

14.3 Do you think the HIV prevalence in the 'Coloured' community in the Stellenbosch area is lower than that in 'Black African' population in the area? Why – and what might the implications for HIV prevalence on farms be?

If 'Black African' people are identified as a vector of infection onto farms

15.1 When might these 'Black African' commuting workers have sex with the 'Coloured' workers.

15.2 Do you think that sex does take place cross the 'colour line' on wine farms? Do you think 'Coloured' farm dwellers have sex with 'Black African' workers?

Closed communities and movement on and off farms

16.1 There has been a sense that (some) farms are closed communities – so that while there may well be 'risky' behaviour taking place, there is a disease naiveté that results in low prevalence. What do you think of this?

17.1 How might the increased moving of families off farms and urban-rural migration affect HIV prevalence on farms, if at all?

17.2 How do you think migrancy on and off farms (of various kinds) might affect HIV prevalence rates – and how?

17.3 Some people say that infection is being brought onto the farms by other (seasonal/daily) workers - and also that the dwellers themselves are increasingly moving on and off farms.
What is your view?
How might this affect levels of HIV infection?

Alcohol

18.1 Given some attempts to shift patterns of alcohol distribution and consumption on some farms, how do you think things stand now –
- on 'good' farms?
- on less socially-conscious farms?

18.2 How does alcohol consumption affect social interactions on farms?

18.3 What do you think the relationship is between alcohol / substance abuse and sexual behaviour - and how is this related to putting people at risk of contracting HIV? Why?

And/or:

19.1 What association, if any, do you expect both the historical and current alcohol abuse on farms to have on HIV transmission? Why – and how does the transmission take place?

Violence

20.1 Wine farms have been characterised as having high levels of interpersonal violence – including sexual violence. This is often linked with alcohol consumption. What is your perception/knowledge/experience of this violence?

20.2 How might it be linked to HIV transmission, if at all?

Women

To those who work on farms in some way:

21.1 What are the most pressing issues for the women on the farm(s) on which you work?

21.2 Where do you think they rank HIV and AIDS in the list of issues that concern them? Why?

Religion

To farm-based key informants:

22.1 How important is religion on the farm – and how does this effect interactions within the farming community?

22.2 How do you think religion relates to sexual behaviour? (Might this protect people from vulnerability to HIV in any way?)

Farmers' leadership and investment in social services

23.1 Why do you think some farmers invest in the kind of social services they offer? *(Ask farm-based informants about their own farm in some detail.)*

23.2 What difference does this make to productivity or how the farm works?

23.3 What kinds of 'messages' do the workers and dwellers get from the farmer regarding their social interactions, alcohol consumption etc.? How does this affect life on the farm – and particular social/sexual behaviour?

24.1 *To project leader-doctor:*
When you were starting the Project, what *were* your assumptions, if any, about farmers vis-à-vis

- their knowledge of HIV/AIDS and their perceptions of this being a danger to their enterprise?
- their assumptions about prevalence on their own farm?

Prevalence statistics

To informants familiar with the provincial Department of Health system:

25.1 What data are currently being collected about HIV – and at what local geographical level is it publicly available? (For instance are they available at clinic level – e.g. Klapmuts c.f. Bird Street Clinic c.f. Mbekweni?)

25.2 What do you know about the reputation of the antenatal data which is modelled for the general population? That is, do people regard the modelling on which it is based as reliable? Why/why not?

25.3 There is currently considerable controversy surrounding the recently released 2007 national antenatal figures (released in August 2008 during interviewing). How do you understand the issues underlying the controversy?

And/or

25.4 How do you think the skewed results of the latest (2007) national antenatal survey will affect implementation of projects, particularly in the areas where there are reported to be significant changes in prevalence?

26.1 Given that the most local-level antenatal data that is publicly available is at sub-district level (e.g. the Stellenbosch sub-district) how would you advise a project working *within* a sub-district to use these data in designing appropriate interventions?

Finally

27.1 Anything else about HIV and wine farms that I have not asked about that you would like to comment on?

APPENDIX G:

PROFILES OF CIVIL SOCIETY ORGANISATIONS

@Heart

Since 1998, @Heart (previously Stellenbosch AIDS Action) has been offering HIV/AIDS-related services in Stellenbosch and beyond in neighbouring rural communities. They provide HIV testing – particularly to students and workplaces (including farms) - as well as training and capacity-building initiatives, both within their organisation and in others. This non-profit organisation's mission is 'to provide supportive services to those living with HIV/AIDS, to encourage an integrated and collaborative approach to service delivery and implement preventative measures to curb the spread of HIV/AIDS through person-centred counselling, effective networking and client-specific training programmes'.

Centre for Rural Legal Studies (CRLS)

The Centre for Rural Legal Studies (CRLS) - whose report is much quoted in this study - was established in 1991 as an NGO 'committed to the redistribution of power and resources in rural areas of the Western, Northern and Eastern Cape provinces of South Africa. The CRLS has developed considerable expertise in training, research and advocacy in the land and labour sectors with a specific gender emphasis.' The organisation 'promotes the land and labour interests of men and women farm workers' in these areas through 'training courses, information dissemination, research, advocacy, legal intervention and development facilitation' (CRLS, 2008). Its work with farm women in 1992 gave rise to the Women on Farms Project. Website: www.crls.org.za.

Dopstop

Established in Stellenbosch in 1995, Dopstop aims 'to enable people in rural communities in the Western Cape to take control over alcohol in their lives' towards realising their vision of 'the creation of sustainable and health rural communities'. The organisation was developed out of a concern regarding the effects of ongoing alcohol abuse on farms in the Western Cape expressed by nursing staff on the state's mobile clinics.

The approaches of this small non-profit organisation's comprise developing personal skills among members of affected communities, facilitating supportive environments, strengthening community action, re-orienting services and building healthy public policy. This includes monitoring, commenting on and advocating around the government's laws, policies and initiatives relating to alcohol and related conditions in farming communities. Its institutional members have included the schools of public health at the universities of Cape Town and the Western Cape, the Centre for Rural Legal Studies, and the Department of Health of the Cape Winelands/Boland District municipality.
Website: www.dopstop.org.za.

Stellenbosch Hospice

Founded in 1992, the Stellenbosch Hospice provides palliative and chronic care to people in their homes and in the Hospice's six-bed in-patient unit. Serving those in the Stellenbosch Health District, including those living on farms, the Hospice's mission statement is to provide 'facilities to respond to the physical, emotional, social and spiritual needs of individuals having an illness which no longer responds to curative treatment and having a short life expectancy; and co-ordinate and provide home-based care to the community who qualify for our service and to demonstrate, teach and promote values, skills and knowledge to this end within an interdisciplinary team approach' (Stellenbosch Hospice, 2008).

Women on Farms Project (WFP)

The Women on Farms Project (WFP) is a human rights-based NGO which has been working largely with women in farming communities in the Western Cape since 1996. It has five programmes through which it aims to 'strengthen the capacity of women who live and work on farms to claim their rights and fulfil their needs'. It does this 'through socio-economic rights-based and gender education, advocacy and lobbying, case work and support for the building of social movements of farmwomen', The WFP promotes 'self-reliance, accountability and sustainability of organisations so that women organise themselves, speak for themselves and mobilise resources to support their needs and dreams' – and the organisation believes 'that self-organisation counteracts the marginalisation, abuse and vulnerability experienced by women in the workplace, home and farming community and ensures their leading role in accessing services and securing employment, land and housing' (WFP, 2008).

One of the five programmes through which they realise their mission focuses on women's health and empowerment.
Website: www.wfp.org.za.

APPENDIX H:

DEMOGRAPHIC PROFILES:

PEOPLE WHO TESTED HIV-POSITIVE

IN FIRST YEAR OF FARMS PROJECT

Person ID	On / Off farm		Race		Gender		Age				
	On farm	Off farm	'Coloured'	'Black African'	Male	Female	15-25	26-35	36-45	46-55	56 +
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
	9	**16**	**11**	**14**	**6**	**19**	**6**	**10**	**8**	**0**	**1**

APPENDIX I: KEY INFORMANTS' ESTIMATES OF HIV PREVALENCE ON FARMS

- BY KNOWLEDGE OF HIV AND OF FARMS, AND BY LOCATION AND TYPE OF WORK

Name	Knowledge of HIV	Knowledge of farms	Location of work	Type of work
LOWER THAN AVERAGE (9)				
Schalk Visser	Attentive layperson and manager. Trained lay health worker on farm.	Lives & works on own farm – relates directly to other farmers and farms.	Farm	Farmer & ex-Board member of NGO
Roelie Joubert	Manager concerned with health as pertains to production.	Viticulturist on farm, but does not live there. Member of Agricultural Association Executive Committee.	Farm	Viticulturist – and human resources manager
Dr Nelis Grobelaar	HIV is primary professional focus – especially implementation of treatment and PMTCT - in provincial health system.	Lives & works on own farm – knows about other farms. Has provided medical care for farm patients.	Farm Clinics & hospitals in the provincial health dept	Farmer, doctor and health manager
Dr Leslie London	Public health specialist, interested in human rights, occupational health, HIV and TB et al	Has served on board of farm-related NGO and undertaken many health research projects on farms.	University & ex-NGO	Medical doctor, researcher & ex-Board member of NGO
Dr Virginia Zweigenthal	Public health specialist responsible for implementing antiretroviral therapy in the Cape Metro area	None.	Provincial health dept – ARV implementation	Medical doctor / public health researcher/ manager
Sr Carol Swanepoel	Extensive general practice and primary health training – inc HIV. Farms Project sister working on farm testing days.	Has provided care for patients in rural primary health clinics and on farms. Lived many years in rural Southern Cape.	Hospice – Farms Project. Ex primary health clinics, prov. health dept	Nurse
Magdalene Thys	Recent - farm-based lay health practice in HIV & on-the-job training	Has cared for patients in their homes on farms.	Hospice – inc Farms Project	Home-based carer
Lynette Bosman	Extensive experience of HIV testing in workplaces including farms	Has provided HIV testing on farms for many years - and lives on a farm.	NGO	Manager Social worker
Madge Jackson	Extensive general practice on provincial health department mobile and in ante-natal clinics	Ran mobile clinics – inc. on farms - for provincial health dept. Directed NGO focusing on alcohol abuse on farms.	NGO – ex provincial health dept	Manager and nurse

Name	Knowledge of HIV	Knowledge of farms	Location of work	Type of work
SAME AS THE AVERAGE (4)				
Dr Lize Hellström	HIV is major professional focus – as doctor in hospices and projects promoting access to testing and care. Principal investigator in microbicide trial.	Has cared for patients from farms. Conceptual overview & personal contact with farmers.	Hospice – Farms Project	Medical doctor & project leader-doctor
Sr Ansie Breytenbach	Extensive general palliative and chronic practice - inc HIV/AIDS.	Has cared for patients on farms for six years and lives on a farm.	Hospice – inc Farms Project	Professional nurse
Sr Erika Fischer	Extensive general palliative practice and palliative training - inc HIV/AIDS.	Has cared for farm patients in in-patient palliative unit.	Hospice	Professional nurse
Dr Rachel Jewkes	Research includes considerable research on gender and HIV.	Through research only.	Research institution	Medical doctor, researcher and research director: gender & health
HIGHER THAN THE AVERAGE (3)				
Leila Falletisch	General knowledge of HIV - and to ensure early access to healthcare	Only really knows farm where she works. Thesis on the legacy of dependency and powerlessness among workers on wine farms.	Farm	Social worker
Tjuks Roos	Served on board of AIDS-related NGO and actively informs himself. Both lay health workers trained.	Lives & works on own farm – knows about a few other farms.	Farm (& lives on farm)	Farmer
Tania Gaia	Learned on-the-job during six months' co-ordination of Farms Project.	Has partial overview from six months' in Farms Project.	Hospice – Farms Project	Project co-ordinator

Name	Knowledge of HIV	Knowledge of farms	Location of work	Type of work
DIVERSE (4)				
Geradine Nicol	General knowledge - through discussions in the Hospice, among others.	Worked in NGOs with farms projects or which serviced rural people.	Hospice	Manager
Dr Chrisna Andersen	Sole professional focus – doctor in state HIV clinics and researcher in microbicide trials.	Cared for farm patients.	Provincial health department & research organisation	Doctor & researcher
Delilah Cupido	Actively informs herself and persistent advocate of prevention and treatment on farm.	Lived and worked on same farm for 40 years.	Farm (& lives on farm)	Community worker
Glynis Rhodes	Intensive knowledge in context of health and empowerment of farmwomen.	Recent – NGO work.	NGO	Project co-ordinator – women's health

APPENDIX J:

HOUSING AND LABOUR

A national survey of evictions from farms published in 2005 (Wegerif et al) showed that laws designed to protect the security of tenure of farm dwellers, as well as the introduction of a minimum wage, had the unintended consequence of increasing the economic marginality of some of the people they were intended to help. While their introductions were symbolic gains towards the realisation of socio-economic rights, these laws nonetheless had the immediate effect of increased evictions from farms and the casualisation of labour.

In its 2008 report which followed an initial national enquiry into human rights violations on farms in 2003, the South African Human Rights Commission (SAHRC) noted that 'overall the sector has undergone rapid restructuring'. Between 1993 and 2002, there had been a decrease of 13,9% in 'the number of paid workers employed by the formal agricultural sector (a loss of 152 445 jobs - from 1 093 265 to 940 820)'. This followed an earlier (unexplained) loss of 20% in employment on farms between 1988 and 1998 (a loss of '140 000 regular jobs'). The SAHRC thought the 'retrenchments and evictions were driven more by concerns in the agricultural sector about land reform and impacts of future legislation' – although they conceded that job shedding had also resulted from 'market conditions and a mounting cost/price squeeze' (SAHRC, 2008:17).

Unintended consequences of the Extension of Security of Tenure Act (ESTA) in particular were noted by a number of organisations – including the Western Cape Spatial Development Plan of 2005 (WCDEADP, 2005:189) and the Centre for Rural Legal Studies, whose director commented that the retrenchments following the 2003 wage determination and evictions following ESTA were 'two steps forward and four steps back' (CRLS, 2003:3).

Agreeing with the Women on Farms Project's observations about the unintended and undesirable consequences of ESTA, and that '[i]ts promulgation contributed to large numbers of pre-emptive evictions', the SAHRC commented that '[a]ttempting to privilege tenure security in isolation from a larger development programme to address living and working conditions on farms, has practically extinguished many of the other rights of farm dwellers and their families – such as the rights to adequate housing, health and education. It has led to employers withdrawing rights of access and use of land and limiting occupational rights through employment contracts. It provides a disincentive to land owners and employers to improve on farm housing and facilities' (SAHRC, 2008:9).[287] They conclude that 'the current approach to tenure security with its narrow focus on securing occupational rights has not succeeded in creating an enabling environment for men, women and children living on farms whose rights, freedoms and future work opportunities, remain severely constrained in most instances' (SAHRC, 2008:9).

Evictions

Large number of evictions in 1995 and 1997 particularly followed the enactment of the Labour Reform (Labour Tenants) Act, Act 3 of 1996 (LTA) and the Extension of Security of Tenure Act, Act 62 of 1997 (ESTA) respectively.

The 2005 provincial Spatial Development Framework noted one of the effects of ESTA as being 'to have triggered a substantial move of farm labourers off farms to the nearest urban settlement, or to squat in well located areas where there are no nearby towns.' Although they note that 'to date there have been no detailed studies researching the extent of this shift' they quote 'anecdotal

287 Later in the same report they note that '[s]ince the Act was promulgated, available evidence indicates that it has largely failed to secure tenure. It rather regulates the eviction of farm workers through the courts. Evidence indicates that an increasing number of legal evictions are being obtained although it can be argued with reasonable certainty that many more people are evicted and displaced from farms without any legal protection' (SAHRC, 2008:25).

evidence' from the *Business Day* which 'suggests that this move might be greater than those moved under apartheid'. They conclude that this 'wave of "intramigration" is having the effect of shifting the burden of providing housing, services and facilities from farmers onto local municipalities. (WCDEADP, 2005:130). A 2005 national survey on farm evictions proposed that an increase in evictions 'might have been expected, given possible concerns of farmers (e.g. the cost of conforming to new legislation) and resistance of land owners' (Wegerif et al, 2005).

Housing

The movement of families to 'low-cost developments or informal settlements around small Western Cape country towns' (Du Toit, 2004:11) sometimes comprised adequate housing,[288] including in 'agri-villages' – while many families were moved into less satisfactory arrangements, leaving them ultimately to fend for themselves.[289]

This was not regarded as all negative however.[290] The SAHRC's 2003 inquiry noted that 'most parties [to the Inquiry] in the Western Cape appear to support the idea of the development of agri-villages to resolve the issues of tenure security … Most farming is of an intensive nature in the Western Cape and the distances between rural towns and the farms are not as great as in some of

288 In an informal conversation with a farm worker on a well-established estate in November 2008, I heard that he had been moved off the farm into a house in a nearby established area four years earlier, and that money was added to his pay to pay for the house whose price was R80 000. The ability to pay for a house presupposes sufficient monthly income to do so – which, in South Africa, usually means employment.

289 Hilda Philander, a farm worker evicted from a farm on which she and her father had permanent jobs and where she lived with her parents said: 'We had to move to a squatter camp where my father built a shack with two rooms. It is very cramped and we are constantly tripping over each other. On the farm we had enough space for the whole family. Each one had their own freedom. But it's not like that here in the squatter camp. I long for the freedom of farm life' (Hill, 2002:1).

290 The more optimistic view was expressed by key informant director of Dopstop: 'Before the farmer can put you out of his farm he will first see that you have a place to live. And I think that is good – that the person has his own house, and gets a key for his own house. I mean for years he didn't know, and he was so dependent on the farmer. The farmer is seeing to that. Once you have got your own house, you must look after the house and buy your own electricity and see that there is water. There is changes here, yes. If you look here in the Drakenstein area or Lanquedoc - those were all farm people that lives in their own houses. Now they live off the farm and work on the farm' (MJ).

the more remote provinces of South Africa. Thus the concept of agri-villages may embody a solution to the serious conflict that has developed over tenure security in the Western Cape' (SAHRC, 2003:69). That being said they also noted 'many considerations' – a few being that 'there is little or no land in some areas for these agri-villages to be built' and that '[p]eople cannot merely be "dumped" in housing villages without all the necessary infrastructure being provided, such as transport, health services, schooling, etc.'. They concluded that '[i]n order to realise this, the parties need to meet and talk, yet there is a deep mistrust of each other' (SAHRC, 2003:69).

Three of the six farm-based key informants for this thesis commented on the changes in the laws. The farm manager knew the laws and policies well and while complying with the letter of these, was proud of achievements to cut back on labour and move unproductive workers off the farm and into 'wendy' houses (RJ). The community worker noted that they knew they were not allowed to simply 'put people off the farm' (DC) while one farmer was committed to retaining the settled community on his farm, supplemented by the additional employment of the same small number of people as seasonal workers each year (TR). The other farmer – who employed a larger workforce of casuals – was also diligent about his existing housing and employment obligations (SV). All four invested considerably in infrastructure to improve social conditions on their farms - including crèches, after school care, library rooms etc.

Wages

Evictions from farms also spiked during 2003, following the first ever minimum wage determination for agricultural workers on 1 March 2003 which included the regulation of other basic conditions of their employment. In this year they were reported to be 'more than double that of any of the previous three years' (Wegerif et al, 2005:47). While this agreement applied to the workers who had permanent jobs, the many casual and seasonal workers employed on farms were only able to access the most basic of these provisions

- and, obviously, only when they were employed. While the new legislation had some benefits for those employed seasonally, contractually or casually - like maternity benefits and unemployment insurance in some instances - the CRLS commented that 'these laws have had little impact on improving the lot of "non-permanent" workers' (CRLS, 2003:12).

Comparing the wage increases formally promulgated with the rates of inflation, the Women on Farms Project reported in 2007 that 'the proclamation of minimum wage levels for farm workers by the Department of Labour for the 3-year period 2006 to 2009 set the annual increase at 4,5% per annum based on an anticipated inflation of below 4%. In reality, we now know that inflation far exceeded this rate and that the wages of farm workers are therefore decreasing in real terms at the same time that workers are spending larger proportions of their wages on food' (WFP, 2007:3). The Human Rights Commission's 2003 national inquiry into human rights violations on farms found that 'many farm dwellers do not have access to sufficient food' which they understood to be the result of 'low wages; high food prices; high cycles of debt; inflated food prices at some farm shops; abuse of alcohol that diverts money from being spent on purchasing food particularly in the Western and Northern Cape' (SAHRC, 2003:199; see also Schneider et al, 2007:5).

Beatrice Conradie noted that some farmers recognised that the employment of the wives of permanent workers was essential, given that both husband and wife needed to work 'in order to get by'. She nonetheless pointed to the contradiction inherent in the farmers' employment of these women only as casual labour, which effectively gave them irregular access to this minimum wage. She also noted that some farmers said they preferred to keep the wages on the farm, instead of 'paying it out to contract workers' (Conradie, 2004:18).

Implications for project design

While possibly more detailed than strictly necessary, this kind of overview can inform the way in which organisations identify a range of factors which may affect their proposed outcomes of their projects – and therefore their design.

A workplace strategy like the Farms Projects would need to recognise the possibly sporadic presence of off-farm people – and might consider how the movement of people might interact with vulnerability to infection and access to healthcare.

In preliminary work for this study I identified five types of movement of people in response to the idea of farms as closed communities - only the first of which is attributable to ESTA:

- off-farm workers commuting daily onto the farm to work (be this on a permanent or casual basis);
- off-farm workers who camp on the farm for a few weeks at a time (as 'seasonal' workers);
- adolescent and young adult children of farm families - who go to school, to work etc;
- farm dwellers - who move beyond the farm borders to shop, to socialise and to access services, among other things; and
- farm dwellers who commute to work elsewhere.

The organisation might also disaggregate the proposed beneficiary populations in terms of risks posed by the various housing and social conditions (on and off farms) – and propose different strategies to reach each of them. Or it might note its inability to do so and that this is a known limitation of their strategy.

The ongoing low income of farm workers might be considered with respect to nutrition, ability to access services (transport), resources available for care and income generation like engagement in transactional sex work (both with respect to buying and selling sex).