RURAL LIVELIHOODS AND ADHERENCE TO HIV AND AIDS ANTIRETROVIRAL THERAPY IN CHIVANHU SETTLEMENT, NEMAMWA VILLAGE IN MASVINGO DISTRICT, ZIMBABWE

A thesis submitted in fulfillment of the requirements for the degree of Master of Arts of Rhodes University by

TENDAI WAPINDUKA

December 2012

Supervisor: Dr. K. Helliker
Department of Sociology
I would like to extend my gratitude to my supervisor Dr. Kirk Helliker for his unwavering intellectual support, and his kind and invaluable contribution to this research. I would like to thank the Department of Sociology, Rhodes University for financial support. A special thank you goes to Juanita Fuller and staff in the Sociology Department at Rhodes.

To God, I thank for giving me the strength, wisdom, knowledge, understanding and making this dream come true. With Him nothing is impossible for I am living proof of His love and grace.

I also take this opportunity to thank my parents for bringing me up. Mrs. Sharon Chatikobo, I thank you for being not only a friend, rather you were a sister and a mother to my daughter Nicole Musemwa; she was always there to support me when I needed her most. To all the following individuals, Loveness Makonese, Dr Lovemore Musemwa, Dr Bridget Jari, Takunda John Chirau, Fortunate Gunzo, Paidashe Chamuka, Blessing Chabaya, I thank you for all the love, support, encouragement, motivation and inspiration. With regard to all the participants in this study, the research assistants (Joseph and Mr. Machokoto) and all key informants, thank you for your willingness to cooperate in the execution of this study.
DEDICATION

This work is dedicated to my family and my lovely daughter Nicole Musemwa for making it worthwhile, and to my parents for the grounding they provided for me while growing up.
The Human Immunodeficiency Virus (HIV) and Acquired Immuno Deficiency Syndrome (AIDS) epidemic has had massive detrimental impacts on rural communities across Africa including in Zimbabwe. In response to the HIV and AIDS epidemic, the government of Zimbabwe has developed and adopted comprehensive programmes to address HIV and AIDS prevention, care and support. One of the critical components of these programmes relates specifically to treatment of the HIV infected given that HIV and AIDS is increasingly seen as a manageable threatening disease. However the success and effectiveness of the treatment regimen (involving antiretroviral drugs or ARVs) is dependent heavily on complete adherence to the rigid and complex regimens.

It is against this background that this thesis studies a particular rural community in Zimbabwe called Chivanhu (in Masvingo Province) in terms of the relationship between rural livelihoods and HIV and AIDS (particularly HIV treatment and treatment adherence). Unlike other rural communities (notably in communal areas), Chivanhu is an informal and unstable community with a turbulent history. Most rural studies of HIV and AIDS in Zimbabwe and elsewhere in the region have focused on well-established and stable communities in which agricultural production is still of some significance. In such communities, the impact of HIV and AIDS on livelihoods is severe but, in more informal settlements, the vulnerability of households to the epidemic (and challenges pertaining to treatment adherence) is even more pronounced. Using a rural livelihoods framework, this thesis seeks to identify, understand and analyse the conditions which shape levels of adherence to HIV and AIDS in the informal settlement of Chivanhu in Zimbabwe.
TABLE OF CONTENTS

Acknowledgements ....................................................................................... i
Dedication ...................................................................................................... ii
Abstract ........................................................................................................ iii
Lists of Figures and Tables ........................................................................... xiii
Acronyms ........................................................................................................ ix

CHAPTER 1: INTRODUCTION AND METHODOLOGY ........................................... 1
  1.1 Introduction ........................................................................................... 1
  1.2 Background to the study ...................................................................... 2
  1.3 Significance of study .......................................................................... 3
  1.4 Theoretical Framework of the thesis .................................................... 3
  1.5 Objectives of the research .................................................................... 4
  1.6 Research Methodology ........................................................................ 4
  1.7 Definition of key concepts ................................................................... 7
  1.8 Outline of the chapters ........................................................................ 7

CHAPTER 2: REVIEW OF THE RURAL LIVELIHOODS FRAMEWORK .. 9
  2.1 Introduction ............................................................................................ 9
  2.2 Background to the Rural livelihoods framework .................................... 9
  2.3 Key elements of the framework .............................................................. 10
    2.3.1 Livelihoods sustainability ................................................................. 10
    2.3.2 Livelihoods resources ..................................................................... 11
      2.3.2.1 Human Capital ........................................................................ 11
      2.3.2.2 Social Capital .......................................................................... 12
      2.3.2.3 Natural Capital ......................................................................... 14
      2.3.2.4 Physical Capital ........................................................................ 15
      2.3.2.5 Financial Capital ....................................................................... 15
  2.4 Livelihoods Strategies .......................................................................... 16
  2.5 HIV and AIDS prevalence and challenges ............................................ 18
  2.6 Rural Livelihoods and HIV and AIDS .................................................... 19
  2.7 Impact of HIV and AIDS on rural livelihoods ....................................... 20
    2.7.1 Food security and HIV and AIDS ................................................... 21
    2.7.2 Labour Supply and HIV and AIDS ............................................... 22
CHAPTER 5: CHIVANHU AND LOCAL LIVELIHOODS

5.1 Introduction ................................................................................... 71

5.2 Location, history and infrastructure of Chivanhu ................................................ 71

5.3 Profile of Chivanhu households ........................................................................ 75

5.3.1 Gender, age and education of household heads ............................................. 76

5.3.2 Household size ................................................................................ 78

5.3.3 Land ownership and use ........................................................................ 79

5.4 Household livelihoods and income ..................................................................... 80

5.4.1 Household food security ........................................................................... 83

5.5 Social capital and networks ......................................................................... 86

5.5.1 Fushai-Mukando Society ........................................................................ 86

5.5.2 Community gardening ........................................................................... 88

5.5.3 Burial society ........................................................................................ 90

5.6 Conclusion ....................................................................................... 92

CHAPTER 6: ADHERENCE TO HIV AND AIDS ANTIRETROVIRAL TREATMENT AND LIVELIHOODS IN CHIVANHU

6.1 Introduction ................................................................................... 94

6.2 HIV and AIDS in Chivanhu ......................................................................... 94

6.3 Adherence to antiretroviral therapy .................................................................. 95

6.4 Barriers to ART adherence in Chivanhu ....................................................... 98

6.4.1 Household food insecurity ........................................................................ 99

6.4.2 Household income and costs of treatment ................................................ 102

6.4.3 Interruption in supply of ARV drugs ........................................................ 104

6.4.4 Social safety nets ................................................................................ 105

6.4.5 HIV and AIDS stigma ........................................................................... 107

6.5 Facilitators of ART adherence ....................................................................... 110

6.5.1 Power of prayer ................................................................................... 111

6.5.2 Participation in support groups .................................................................... 112

6.5.3 Health care providers support .................................................................... 112

6.5.4 Obligation to live longer .......................................................................... 113

6.5.5 Improved health ................................................................................... 113

6.6 Conclusion ....................................................................................... 114
CHAPTER 7: CONCLUSION.................................................................116

7.1 Introduction............................................................................116

7.2 Factors that influence adherence to ART................................116

7.2.1 Social safety nets.................................................................117

7.2.2 Stigma and discrimination ...............................................117

7.2.3 Household income level....................................................118

7.2.4 Household food insecurity..................................................118

7.3 Livelihoods Framework and treatment adherence in Chivanhu...........119

REFERENCES...............................................................................121

Appendix 1: Interview schedule.....................................................134
Appendix 2: Survey questionnaire..................................................137
Appendix 3: Oral informed Consent form........................................145
LIST OF FIGURES

Figure 4.1: Regional comparison of HIV prevalence rates ............................................. 45
Figure 4.2: Adult HIV prevalence by province in Zimbabwe (2005/6) ............................ 46
Figure 4.3: ART coverage by province in Zimbabwe in June 2010 ............................... 60
Figure 4.4: HIV and AIDS impact on household ......................................................... 67
Figure 5.1: The ages of household heads ................................................................. 77
Figure 5.2: Major sources of income in Chivanhu ...................................................... 81
Figure 5.3: Composition of household meals ............................................................. 85
Figure 5.4: Household involvement in Social groupings in Chivanhu ......................... 87
Figure 6.1: Barriers to antiretroviral therapy adherence by ART users in Chivanhu .... 99
Figure 6.2: Experiences after disclosure of HIV status .............................................. 108
Figure 6.3: Facilitators of adherence to ART ......................................................... 111

LIST OF TABLES

Table 5.1: Origins of households ................................................................................. 74
ACRONYMS

- AIDS: Acquired Immuno-deficiency Syndrome
- HIV: Human Immuno-deficiency Virus
- ART: Antiretroviral Therapy
- ARVs: Antiretroviral Drugs
- WHO: World Health Organization
- PMTCT: Prevention of Mother to Child Transmission
- UNAIDS: The Joint United Nations Programme on AIDS
- FTLRL: Fast Track Land Reform Programme
- MoHCW: Ministry of Health and Child Welfare
- ZNASP: Zimbabwe National AIDS Strategic Plan
- NATF: National AIDS Trust Fund
- NAC: National AIDS Council
- ESP: Expanded Support Programme
- UNGASS: United Nations General Assembly Special Session
- HTC: HIV Testing and Counseling
- BC: Behavior Change
- SPSS: Statistical Package for Social Sciences
- USAID: United States Agency for International Development
- Ha: Hectare
- ZNNP+: Zimbabwe National Networking of People Living with HIV
CHAPTER 1

INTRODUCTION AND METHODOLOGY

1.1 INTRODUCTION

The increasing incidence and prevalence of HIV infection in the world since the early 1980s has attracted the attention of many African governments and has encouraged them to implement the recommendations of the World Health Organisation with regard to treatment. Zimbabwe is no exception in this regard. The main objective with regard to treatment is to reach the goal of universal access to antiretroviral therapy (ART) for those suffering from HIV and AIDS. To date in many countries in Africa, substantial progress has been made in achieving universal access to ART. Nonetheless, in order to achieve successful viral suppression, ART users must always strive to comply and adhere to the treatment regimens of which some are very complex and rigid. Considering the complex interactions between poverty and HIV and AIDS for HIV infected and affected households, complying and adhering to treatment is not an easy journey. In resource poor settings and marginalised areas in particular, many people find it cumbersome and problematic to maintain treatment adherence. Because antiretroviral therapy is a life-long endeavour, understanding the factors underlying adherence and non-adherence is especially important.

The thesis examines adherence to HIV and AIDS antiretroviral therapy (ART) in Chivanhu, a small rural informal settlement located in Masvingo District in Zimbabwe. The focus includes the levels and forms of adherence, as well as factors that facilitate or act as barriers to adherence. A rural livelihoods perspective frames the research in order to identify and analyse the complex linkages between rural livelihood strategies on the one hand and adherence to HIV and AIDS treatment on the other.

This introductory chapter presents the background to this particular study and indicates its potential significance in adding to the existing body of knowledge on adherence to HIV and AIDS treatment. In doing so, it introduces the conceptual framework animating the study, notes the thesis objective and outlines the research methodology. It ends by providing the chapter outline for the thesis.
1.2 BACKGROUND TO THE STUDY

The number of people living with HIV and AIDS worldwide was estimated to be 33.3 million at the end of 2009, of which 2.5 million are children. Approximately 22.5 million people, or 68% of the global total of people living with HIV and AIDS, are found in sub-Saharan Africa (UNAIDS 2010). Although the rate of new HIV infections globally decreased from 2.2 million in 2001 to 1.8 million in 2009, the total number of people living with HIV continues to rise. The estimated 1.3 million people who died of HIV-related illnesses in sub-Saharan Africa in 2009 comprised 72% of the global total of 1.8 million deaths attributable to the epidemic. Out of the estimated number of people living with HIV in sub-Saharan Africa (22.5 million), anywhere from 1.2 to 1.6 million reside in Zimbabwe (WHO 2010, UNAIDS 2010). The adult prevalence rate in Zimbabwe was 23.7% in 2001, and fell to 14.3% in 2010 (Mwauyakufa 2010). However, infection rates in Zimbabwe continue to be among the highest in the world.

HIV and AIDS is certainly one of the most challenging health issues globally and places immense social and economic burdens on those infected with HIV and AIDS and those affected by the syndrome (Okuro 2007). A range of socio-economic conditions contribute to the prevalence and distribution of HIV infections, and infections have a marked feed-back effect on socio-economic livelihoods. Because of the worsening conditions of this chronic disease, many households are faced with challenges, risks and vulnerabilities that regularly undermine efforts to access and maintain HIV and AIDS treatment and care. In addition, the livelihood changes brought about by HIV and AIDS add to the difficulties in maintaining sustained adherence to ART, especially by working people in resource-deficient settings. Although HIV and AIDS are manageable from a therapy perspective, it alters social relations, deepens poverty and puts a brake on socio-economic development, notably in many African countries (Weiser et al. 2010, Hilhorst et al. 2006).

With the introduction of the ART regime, HIV and AIDS is now considered a manageable threatening (or chronic) disease. However, antiretroviral drugs are costly and as a result are difficult to access in many underdeveloped countries. The government of Zimbabwe introduced ART in April 2004, with the Ministry of Health and Child Welfare being responsible for HIV and AIDS prevention, care and treatment services. Universal access to treatment is the official policy of the Zimbabwean National Aids Council and its partners (Skovdal et al. 2011a). The government has decentralized the provision of antiretroviral
therapy to district and mission hospitals across the country. More than seventy mission hospitals are currently providing ART services. There were 260,000 people receiving antiretroviral therapy in Zimbabwe in December 2010 while a further 593,000 needed access (Mwauyakufa 2010).

1.3 SIGNIFICANCE OF STUDY
Numerous studies have taken place over the past decade in identifying and assessing factors that create challenges for adherence inside and outside Africa (Mills et al. 2006, Weiser et al. 2003, Weiser et al. 2010, Abel and Painter 2003, Miller et al. 2010, Skovdal et al. 2011a, Nam et al. 2008, Peltzer et al. 2010). Many of the existing studies have been guided and influenced by behavioural models which emphasise agency: health behavioural theories such as the information, motivation and behavioural skills model (Peltzer et al. 2010), the health belief model (Wringe et al. 2009) and social cognitive theory (Watt et al. 2009). Such theories often fail to address adequately the broader structured processes which make HIV infected and affected households particularly susceptible and vulnerable to the pandemic and within which make decisions about coping, treatment and care arise. This thesis tries to consider both structure and agency so that the pandemic is not reduced to a simple problem of behaviour.

In addition, in relation to Zimbabwe, the question of adherence to treatment is an under-researched topic. Insofar as this topic has been pursued within Zimbabwe studies, it has often involved a focus on either urban areas or stable rural communities. In this respect, the research site for the thesis (Chivanhu settlement) is especially intriguing. The agrarian space in Zimbabwe presently consists mainly of commercial farms, resettlement areas and communal areas – Chivanhu is an informal rural settlement which falls outside all of these categories. It is thus useful to broaden the spatial understanding of treatment adherence in Zimbabwe by focusing on a site which has a turbulent history and a fluid and unstable existence.

1.4 THEORETICAL FRAMEWORK OF THE THESIS
In seeking to pursue a study of treatment adherence with sensitivity to both structure and agency, a rural livelihoods framework is adopted. As Seeley and Pringle (2001) note, HIV and AIDS is not simply a health issue but is more broadly a livelihoods dilemma. The framework demands a holistic approach to the epidemic and posits that households make a
living through accessing or displaying a range of livelihood resources including natural, social, financial, economic and human capital (Chimhowu and Hulme 2006). The framework is able to capture changes in livelihoods, as well as the mutual interaction between livelihoods on the one hand and HIV infections and treatment adherence on the other.

HIV and AIDS have brought with it many challenges and livelihood changes (Jayne et al. 2004). Among these are the undermining of social relations and networks, ongoing economic crises experienced at household level and increased poverty especially in rural areas (De Waal and Whiteside 2003, Drimie 2002, Okuro 2007, Zwane 2001). HIV and AIDS diminish household livelihoods and renders households vulnerable to future collapse through the erosion of assets and reduced capacity to employ sustainable livelihoods strategies (Himmelgreen et al. 2010). It contributes to high levels of food insecurity and low levels of social cohesion (Loevinson and Gillespie 2003). In the face of changes in livelihoods and challenges posed by HIV and AIDS, it is hard for those on ART to maintain HIV and AIDS treatment, even when the treatment is subsidised (Himmelgreen et al. 2010, De Waal and Whiteside 2003, Hilhorst et al. 2006).

1.5 OBJECTIVES OF THE RESEARCH
The main objective of the thesis is to identify, understand and analyse the conditions which shape levels of adherence to HIV and AIDS in the informal settlement of Chivanhu in Zimbabwe. Subsidiary objectives include:

a) Determine the levels and forms of adherence in the community;
b) Isolate and interrelate the barriers to and facilitators of adherence; and
c) Demonstrate the mutually-interacting linkages between livelihoods and treatment adherence.

1.6 RESEARCH METHODOLOGY
The thesis involves a study of HIV-positive men and women from Chivanhu informal settlement who collect their antiretroviral treatment from nearby Morgenster Mission Hospital and Nemamwa Clinic. In order to pursue the main thesis objective, I needed to obtain a comprehensible picture of the epidemic in Chivanhu, its linkages to the livelihood activities of the HIV and AIDS infected and affected, and their perceptions and experiences in relation to treatment adherence. The triangulation of methods, involving quantitative and qualitative methods (Babbie 2001, De Vos 2005) seemed suitable to this because the
combined methods would capture both structure (including vulnerability contexts for the infected and affected) and the experiences and agency of the infected and affected. The data collection took place in June 2012; a survey questionnaire was administered first, and then informal interviews and focus group discussions.

A survey questionnaire was used to collect quantitative data (see Appendix 2). The questionnaire was administered within Chivanhu village which is ‘part’ of Chivanhu settlement. Chivanhu village is not a spatially-separated area within the settlement but rather refers to the households within the settlement who fall under one of the seven settlement heads (the head, in their case, is named Chivanhu). Thirty-six households within the village were selected through purposeful sampling, as facilitated by the village head. The questionnaire was administered by the researcher to the heads of these households (with the assistance of two field assistants). The questionnaire provided me with an overall profile of the village, including household composition, HIV and AIDS prevalence and treatment, land usage, assets, agricultural production and livelihood strategies.

In terms of more qualitative data focusing on questions pertaining to the vulnerability context, HIV and AIDS and treatment adherence, in-depth interviews were conducted with ten household heads, both those which have HIV-infected individuals in their households and those which do not. Compared to the questionnaires, these interviews provided a richer and more nuanced account of adherence themes (Creswell 2003). All interviews, like the questionnaire, were conducted in the local indigenous language Shona in which I am fluent (and they were tape-recorded). This enabled me to gain a deeper understanding of the lived experiences of those who are on ART and those who are not, as well as facilitating insight into adherence factors. To keep the interviews focused, I used a semi-structured interview guide (see Appendix 1).

I held two focus group discussions, one consisting of six household heads and one of six key informants. In the first group, questions were asked in an interactive group setting where participants were free to talk with other group members unpacking their perceptions, opinions and beliefs concerning adherence to ART. The second focus group consisted of members of the Zimbabwe National Networking of People Living with HIV. The group discussions were important in allowing participants to listen and respond to others’ verbalized experiences (Lindlof and Taylor 2002). Group members, through interacting, tended to discover a
common language to describe similar experiences leading to a kind of "native language" about vulnerability and adherence.

The quantitative data in this research was analysed using the Statistical Package for the Social Sciences (SPSS), which included capturing, editing and analysing the data. The data collected through the survey questionnaire was presented in the form of percentages and frequencies, and by means of tables, bar charts and pie charts according to the various sub-sections in the questionnaire. The qualitative data was classified and coded thematically in terms of recurring ideas, patterns and beliefs; the number of themes identified was of a manageable number to facilitate analysis.

Undoubtedly, HIV and AIDS research raises a host of ethical issues, notably around disclosure of HIV status. Access to Chivanhu settlement had been facilitated by Ms Loveness Makonese, a part-time doctoral student in the Department of Sociology at Rhodes University and a leading HIV and AIDS professional in Zimbabwe. She is studying HIV and AIDS in Chivanhu, without however addressing the question of adherence. This thesis followed the avenue that she pursued in successfully identifying HIV positive individuals, namely, a series of interlinking questions around the health of household members. Therefore, at no stage in this research was any individual directly questioned about their HIV status. Throughout this study the researcher, at all times, upheld the basic principles of informed consent and voluntary participation, without deception and harm to participants. A written signed consent was obtained from each respondent before the interview and before engaging in the focus group discussion (see Appendix 3). I strived to uphold confidentiality by arranging for the survey questioning and interviews to be held privately.

Research that concerns HIV and AIDS issues is challenging. Respondents were generally uneasy with revealing certain details about themselves as they thought this might lead to being ill-treated and more vulnerable to victimization. This was not only the case because of HIV sensitivities but because of the political climate in rural Zimbabwe at the time of the study. However, it was made clear to them that the researcher was not involved politically and that the study was for academic purposes only. Due to severe poverty, other respondents thought the researcher was there to provide them with food; since some few months before, it is reported that names were compiled for those who needed help in terms of food. The researcher explained and clarified the main purpose of the study and they understood. The
interviews were time-consuming since the researcher had to debrief some respondents and interviewees during and after the research interaction as memories of their past and losing their loved ones arose. I am a Social Worker so I sought to counsel them which helped them to cope and minimized the emotional harm to the respondents.

Like in any other research, this study has its limitations. Two can be mentioned. First of all, the adherence reported by ART users in this study needs to be interpreted with caution in light of the possibility of self-reporting adherence bias. Secondly, the sampling procedure does not allow for generalization beyond the sample, though it may allow for transferability of results to the entire community or other similar communities. However, the main point of the study is to empirically capture certain social trends pertinent to HIV adherence levels and, in this regard, the research methods adopted were suitable given the main thesis objective.

1.7 DEFINITION OF KEY CONCEPTS
Before concluding this chapter with the thesis chapter outline, I offer definitions of key HIV and AIDS terms used in the thesis to avoid any un-clarity.

Acquired Immune Deficiency Syndrome (AIDS) is an infectious disease caused by the Human Immunodeficiency Virus (HIV). HIV is the name of the virus that causes AIDS. HIV is a life-long infection which weakens the body’s natural ability to fight off diseases. Generally it takes between two to fifteen years before the HIV infection results in AIDS. AIDS thus is a syndrome that affects the patient’s immune system and ability to fight disease. Since the possession of HIV does not mean that one has AIDS, the correct way of referring to the terms is ‘HIV and AIDS’ rather than say ‘HIV/AIDS’. This highlights the fact that AIDS is a particular stage in the process marked by chronic illnesses. Antiretroviral drugs (ARVs) are any type of treatment regime used in treating patients with HIV and may inhibit the progression to the AIDS stage (WHO 2008b). They reduce the viral load in the blood of a person infected by HIV. Adherence is defined as the act or quality of faithfully observing a rule or instruction in this adherence to the ARV treatment regimen.

1.8 OUTLINE OF THE CHAPTERS
Chapter two provides an overview of the rural livelihoods approach. In this chapter, I outline the main components of the framework with particular reference to sustainable livelihoods assets and the linkages between rural livelihoods and HIV and AIDS. Chapter three examines
rural livelihoods amongst smallholders in contemporary Zimbabwe and looks at the effects of notably structural adjustment programmes and fast track land reform on these livelihoods. Clear challenges exist for smallholders in terms of agricultural production, income-generating activities and food security. Chapter four reviews the status of HIV and AIDS in contemporary Zimbabwe. It considers the government programmes for HIV prevention and care as well as specifically treatment. The relationship between HIV and AIDS and rural livelihoods in Zimbabwe is also detailed. Chapter five profiles the study area (Chivanhu), including the formation of the settlement, household composition, livelihood activities and social networks. Chapter six details the extent of HIV and AIDS in Chivanhu and focuses primarily on the factors which impact on adherence in the settlement. The final chapter seeks to integrate the chapters of the thesis into a comprehensive whole and speaks to the main thesis objective.
CHAPTER 2
REVIEW OF THE RURAL LIVELIHOODS FRAMEWORK

2.1 INTRODUCTION
This chapter presents the theoretical framework which is used to underpin and animate this thesis, namely, the rural livelihoods framework. In presenting it, I focus on its key components including livelihoods sustainability, livelihood resources and livelihood strategies. In particular, I detail the various forms of capital or resources which are available to rural livelihoods though access to these are often uneven and negligible in resource-deficient communities like the one under study in this thesis. The chapter ends with a review of the impact of HIV and AIDS on rural household livelihoods.

2.2 BACKGROUND TO THE RURAL LIVELIHOODS FRAMEWORK
The livelihoods framework emerged in the mid-1990s as an integrated, people-centred approach to social research and policy formulation, and it has had a significant influence on rural development policies (Reader 2005). The framework is prominent in recent development programmes which aim to reduce poverty and vulnerability in primarily rural communities but also in urban communities. In this regard, the primary concern of the approach focuses on improving the level and reliability of household entitlements to material goods and services and on identifying opportunities available in the near- to medium-term. More importantly for this thesis is that it is used as a conceptual basis for understanding rural lives in their totality, including varied lived experiences of continuity and change. The approach is based on the identification and analysis of capital assets or resources which provide a foundation for building and sustaining livelihoods (Salam 2009). From the livelihoods perspective, all households are seen as utilising changing patterns of natural, human, financial and social wealth to produce livelihoods (Salam 2009, Chimhowu and Hulme 2006). People’s choices of livelihood strategies and the ensuing livelihood outcomes depend on a complex combination of different forms of assets.

The approach has been defined differently by various development theorists but, for this thesis, livelihood practices comprise people, their capabilities and activities, as well as their means of living including food, income and assets broadly (including both material and social resources). The main emphasis is on household-based productive and income-generating activities and (generally to a lesser extent) with risk management and social protection. A
livelihood is considerable sustainable, in terms of outcomes, when it can cope with and recover from stresses and shocks, and maintain or enhance capabilities and assets both now and in the future, while not undermining the natural resource base within which the community is located (Chambers and Conway 1991 as cited by Okuro 2007). A rural livelihoods perspective frames this research so as to identify and analyse the complex linkages between rural livelihood strategies on the one hand and adherence to HIV and AIDS treatment on the other.

2.3 KEY ELEMENTS OF THE FRAMEWORK
The most important elements of the framework are livelihood outcomes and sustainability, livelihood resources in the form of assets (capitals or resources), and livelihood strategies such as livelihood diversification, migration and agricultural intensification or extensification.

2.3.1 Livelihoods sustainability
Scoones (1998) views sustainability as the capacity of elements of a livelihoods system (entailing people, institutions, environment and economy) to withstand shocks and crises and to adapt successfully to change without compromising the integrity of household survival. Livelihood sustainability is affected by a range of external factors (referred to broadly as the vulnerability context) which include social and economic trends and shocks which are beyond the household’s control. Trends might include decreasing levels of agricultural production and increasing prices due to inflation for food, medicines and other basic commodities. Shocks, which unlike trends are abrupt and dramatic, include drought, theft of key assets, the chronic illness or death of a family member who is the breadwinner, and sudden loss of employment and household income due to downsizing of enterprises or retrenchments.

Programmatically, seeking to understand the ways in which households succeed or often fail in sustaining their livelihoods in the face of shocks, trends and more seasonal changes (arising from the annual agricultural cycle) may assist in designing development policies and interventions which strengthen peoples’ existing coping and adaptive strategies. These may include improving access to education and health care facilities, strengthening social network systems and consolidating rights to land for settlement and agriculture.
2.3.2 Livelihood resources
According to Ferguson and Murray (2001), assets or resources are the building blocks of - and stepping stones to - a sustainable livelihood built through productive and other income-generating activities. By way of assets, individuals and households develop their capacity to cope with the challenges they encounter daily and to meet their needs on a regular basis; sometimes this entails mutual interaction with other households. The livelihoods framework draws attention to a variety of assets which contribute to constructing sustainable livelihoods and to the ways by which these resources interrelate. Households make use of assets to generate strategies and activities which are geared towards sustaining their material well-being and survival. Assets therefore form the core of the rural livelihoods framework (Aliber et al. 2006, Babbington 1999). Different assets or capitals are discussed by different theorists, but I adopt the common categorisation (Scoones 1998) of human capital, social capital, natural capital, physical capital and financial capital. These are discussed in turn in the following sub-sections.

2.3.2.1 Human capital
Human capital designates the skills, knowledge, capacity to work and good health which together contribute significantly to individuals and households pursuing different livelihood strategies and achieving their livelihood outcomes. As noted by Mullins (2001), human capital is important in its own right in helping in create sustainable livelihoods; but it also is necessary in the deployment of the other key assets. Human capital includes the labour power (or capacity to labour) available to households and this depends on education, skills and health (Ellis and Freeman 2004). As a result, the capacity and ability of households to secure a livelihood are directly affected by the presence or otherwise of human capital and the forms of human capital available.

Ellis and Freeman (2004) posit that the human capital composition of a particular household is not static in character, as it changes persistently due to factors at household, local and national levels. Among these factors include births, deaths, marriage, migration and children growing older (Chaumba et al. 2003, Freeney 2001). In times of distress, poor rural people (on the basis of the available human capital) engage in multiple livelihood activities as they seek to maximize their earnings through both on-farm and off-farm activities and thereby shore-up their consumption patterns. The HIV and AIDS pandemic is regularly noted as a
critical factor and indeed shock which affects human capital detrimentally and makes households extremely vulnerable to breakup and un-sustainability.

2.3.2.2 Social capital
According to Salam (2009), social capital is defined as the social resources upon which people draw in pursuit of their livelihood objectives. These social resources are developed through interactions which increase people's ability to work together, facilitate membership in more formalised groups governed by accepted rules and norms, and consolidate relationships of trust, all leading to heightened levels of co-operation, informal safety nets and social cohesion.

Social capital is defined in a wide range of ways by different researchers. Drimie (2002) for instance argues that social capital consists of reciprocal social network systems within a community and between households based on pronounced forms of trust. The support systems and safety nets may include close relatives, support groups, clubs, neighbours and institutions. Ellis and Freeman (2004) speak about social capital taking the form of associations, clubs, and voluntary agencies in communities that bring individuals together to pursue one or more objectives in which they have a common interest. According to Chimhowu and Hulme (2006), social networks also take on the form of stockvel groups of people (who regularly pool resources in the form of either money or groceries) and burial schemes in communities, and these empower people both economically and socially in acting as safety nets and survival strategies.

Social capital consists of social networks with norms and values which often enhance levels of agricultural productivity in rural communities. These networks also bring local individuals and households together in the form of mutual assistance in times of need as well as developing a sense of affection and belongingness. They play a significant role in helping households to cope with stresses and shocks in terms of emotional, financial and physical support (Drimie 2002, and Chaumba et al. 2003). The type of social capital exhibited by rural households is often made possible by the fact that they share similar histories and cultures which enable them to downplay or even sacrifice individual interests for the good of the group. Households can therefore count on others when a financial emergency exists, and this provides a sense of relief and reassurance to people whose meagre financial saving has almost been depleted by a particular crisis such as caring for a sick family member due to the
progression of AIDS-related illnesses. Social safety networks though do not only assist in terms of the rallying of immediate financial and human capital at times of shocks, because the time and resources devoted to extending and nurturing social networks imply that they are an investment in future livelihood security for rural households and individuals (Aliber and Walker 2006).

This type of support system is especially noticeable in more stable rural communities in which lineage forms of organisation prevail. In communities with more dispersed household histories, stockvelds may be of particular value in this respect, as they assure the necessary resources to bury a loved one and therefore comfort households often already consumed by financial problems and emotional turmoil. However, many informal settlements like Chivanhu — with truncated histories and with considerable in- and out-migration — may not be conducive to the emergence of supportive social arrangements. ‘Weak’ forms of social capital may exist in such settlements.

Informal and formal networks have played a prominent role amongst rural communities. However, the undercutting of rural livelihoods in the context of structural adjustment programmes and neo-liberal macro-economic programmes more generally have torn many communities asunder. These changes, along with the impact of HIV and AIDS, have brought about livelihood changes and have affected detrimentally family, household and community ties as migration (for instance) in search of alternative livelihoods dissolves and disintegrates networks (Loewenson and Whiteside 2001). Much of the literature on the AIDS pandemic nevertheless gives central importance to social network systems (such as extended families, neighbours and other non-formal relations) in reducing the strain caused by the impact of HIV and AIDS. This support may include provision of labour, care of dependents and financial loans or gifts (White and Robinson, 2000, Salam 2009, Aliber and Walker 2006, Zwane 2001).

Two final points are worth highlighting. First of all, Babbington (1999) argues that, in comparison to other assets described as enhancements for livelihood construction, social capital is clearly the most difficult to describe in other than broad qualitative terms. The reason for this is that a great deal of social and mutual reciprocity is hidden and is often discovered only by in-depth ethnographic research or only emerges into the open at times of serious livelihood crisis. Therefore, social capital is difficult to identify and ‘measure’ and its
significance may be underestimated. But it clearly is of immense significance in the face of the HIV and AIDS pandemic (Loevinson and Gillespie 2003, Hilhorst et al. 2006).

The second point is that social capital and the communities within which it 'operates' should not be romanticised. All communities, and certainly communities involving informal settlements are no exception, are marked by a range of social inequalities and power relations. In this respect, social capital may act as a form of exclusion rather than one of inclusion. This is connected to what some theorists (Salam 2009) consider as a separate form of capital, namely, political capital, and which I subsume under social capital. Political capital is the power and capacity to influence political decision-making through formal and informal participation or access to political processes. It therefore includes the ability to represent oneself or others and the freedom and capacity to become collectively organised to claim rights and to negotiate access to resources and services. It also extends to the right to hold government and service providers accountable for quality and access. Political capital is a sub-type of social capital for the purposes of this thesis, as it entails the usage (and sometimes manipulation) of social relations and networks to access power. It can easily lead to elites gaining power-over other community members and hence marginalising these members.

2.3.2.3 Natural capital

Natural capital is the term used for the natural resource stocks (including land, water, forests, clean air and coastal resources) upon which people rely to generate means of survival (Salam 2009). In rural areas, natural resources are a critical resource base (Mullins 2001). In fact, rural development agencies consistently report that natural capital appears as the primary and most utilized resource in rural spaces for constructing and sustaining livelihoods (Jayne et al. 2004). In urban areas, in contrast, livelihoods are largely monetized and more commodified, though rural households still depend in many ways on wage labour and commodity markets.

Natural capital consists of both renewable and non-renewable resources. Renewable resources comprise those that replenish themselves over time (such as fishery stocks, trees used for firewood or water levels in underground aquifers), or that are managed to ensure their renewal (such as soils in farmers' field or water flows in irrigation canals). As outlined by Drimie (2002), non-renewable resources are also pertinent to rural livelihoods in some locations and in indirect ways. These are principally extractive resources such as metal ores.
and oil stocks which in a particular location may be permanently depleted according to the rate of extraction by human agency. Given that sustainability is a central concept embedded in the livelihoods framework, understanding the usages of both renewable and non-renewable resources is critical to identifying the durability and life-span of local communities (Scoones 1998). An undermining of both renewable and non-renewable resources has a negative impact on rural development interventions in a long run as it hampers efforts to eradicate or minimize poverty levels and, at the same time, leads to increasing dependency on outside agencies. Therefore natural capital is the core and principal foundation for the construction of rural livelihoods and its full utilization results in sustainable outcomes if brought under wise and thoughtful human control.

2.3.2.4 Physical capital
Physical capital comprises the basic infrastructure and physical goods which support livelihoods. These consist of changes made to the physical environment (entailing possibly additions to it) that help people to meet their basic needs and to be more productive (Salam 2009). Physical assets take the form of commodities created by economic production processes including canals, roads, tools and machines. These resources often enhance the building of rural livelihoods and the pursuit of livelihood outcomes (Seeley and Pringle 2001) by complementing and adding value to existing natural capital since both at times are inadequate or deficient on their own.

For instance, the construction and development of road and communication networks improves the prospects for the marketing of farm produce and also facilitates the movement of rural people for services such as health and education (White and Robinson 2000). In that sense, the success of agriculture as one of the major livelihood sources is not only enhanced by the availability of land and water but also by the availability of use of physical assets like farm machinery (such as tractors and ploughs) and irrigation schemes. A developed physical capital base therefore increases the effectiveness and efficiency of sustainable livelihood outcomes.

2.3.2.5 Financial capital
Financial capital is defined as the financial resources that people use to achieve their livelihood outcomes. These are resources in the form of a household’s available holdings of funds and regular inflows of money (for example, ongoing crop sales and a healthy cash
flow) (Salam 2009). Selling labour either in off-farm or on-farm activities depicts the desire for an income for basic consumption needs. At times, and this is open to considerable temporal and spatial variation, labour power may be sold in exchange for food and other necessities in the form of bartering. Financial capital chiefly includes savings from employment access, marketable produce and credit facilities in the form of loans.

In some rural communities, the absence of financial markets or the distrust of any accessible financial institutions results in savings being held in other forms. Cattle are critical in this regard. The rearing of livestock has been viewed as an important way in most African countries to store wealth and to buffer households against dwindling resources even under conditions not marked by shocks and crisis. Evidence from the Masai people in Kenya indicates that their wealth is measured by the number of cattle owned and that this translates into cash income after sales. Ellis (2000) argues that while cattle (and goats) are considerably less liquid as a form of savings than a cash deposit in a rural financial institution, they possess the same attribute when sold, namely, of being convertible into other forms of capital or into consumption.

Regularly, poor rural households are unable to access credit loans (even when motivated to do so), and this is attributed to the lack of security as collateral which might lead to default in the repayment of loans and credits. Other, more informal, saving arrangements often therefore exist. The failure to access loans is one reason why many African rural farmers fail to venture into commercial agriculture or agricultural intensification. The availability of land and human labour alone is not sufficient to fully venture into farming businesses which allow for accumulation, as the provision of financial backup ensures the purchase and possession of physical assets such as farming equipment which can be used as production investments and tools. Finally, as argued by Hilhorst et al. (2006), financial capital becomes important for poor rural households to cover life expenses such as medical costs related to caring for the sick and funeral expenses; the AIDS pandemic has served only to heighten this requirement.

2.4 LIVELIHOOD STRATEGIES

Households partake in a number of different strategies in order to enhance their livelihoods. These include agricultural intensification, livelihood diversification and migration. In doing so, they use whatever resources are at their disposal, though sometimes the strategies arise because of deficiencies in one or more asset. Agricultural extensification (entailing placing
more land under cultivation) is rarely an option for poor rural communities in contemporary Africa, particularly given shortages of land generally and the increasing concentration and centralisation of land holdings by elite commercial farmers.

Agricultural intensification involves households aiming at increasing their level of agricultural production or maximising agricultural productivity (Ellis 2000). This can be done through increasing the scale of inputs into agriculture (such as labour or capital investment on their current agricultural land), thereby increasing the value of output per hectare. Agricultural intensification is therefore associated with other processes such as increased frequency of cultivation of a fixed piece of land or a change in technologies.

Carswell (1997) argues that agricultural intensification takes place in three ways. First of all, it can occur as a result of an increase in gross agricultural output due to inputs expanding proportionally with or without technological changes (thereby increasing yields per hectare). Secondly, it may entail a shift to more valuable agricultural commodities through a change in land usage patterns, such as from maize to cotton. Thirdly, agricultural intensification occurs when more than one crop is grown on the available land; this entails intensifying cropping per unit of land. All forms of intensification may entail changes in inputs and assets, including the increased use of artificial fertilizers, improved seeds, mechanised irrigation and soil conversation measures.

Livelihood diversification takes place when households embark on different activities that generate income for survival. According to Ellis (2000), the diverse activities include farm (or agricultural) activities, on-farm activities and off-farm activities (though the first activity may overlap with the notion of intensification). On their own land (or ‘farm’), households are involved in livestock production and/or crop production and they sometimes generate commodities for the market. Insofar as they branch into different agricultural activities on their existing landholding, this involves agricultural diversification. They may also diversity into on-farm non-agricultural activities (that is, centred on their own landholding) such as petty trading and brick-making. Off-farm activities (beyond their landholding) could involve households exchanging their labour for wages on other farms, non-farm rural wage employment (in nearby towns), off-farm rural self-employment, urban-to-rural remittances arising from within national boundaries or even international remittances involving cross-border migration (such as between Zimbabwe and South Africa).
Finally, migration as a livelihood strategy can be temporary or permanent, to another rural region or urban centre within national borders or beyond the borders. Migration in this case is explicitly pursued as a livelihood strategy and directly benefits the migrant or migrants. However, any household members remaining in the rural area of origin will often (but not invariably) benefit insofar as the migrant contributes in some way to the household’s sources of income.

2.5 HIV AND AIDS PREVALENCE AND CHALLENGES

The Human Immunodeficiency Virus (HIV) prevalence now stands at over 26% in some countries in sub-Saharan Africa. Presently HIV and AIDS have the highest recorded death rate outweighing that from other killer diseases such as malaria (UNAIDS 2010). The number of people living with HIV and AIDS worldwide was estimated to be 33.3 million at the end of 2009, of which 2.5 million are children. Approximately 22.5 million people, or 68% of the global total number of people living with HIV and AIDS, are found in sub-Saharan Africa (UNAIDS 2010). A range of socio-economic conditions contribute to the prevalence and distribution of HIV and AIDS infections and infections have a marked feedback effect on socio-economic livelihoods. Because of the serious implications of this chronic disease, households are faced with challenges, risks and vulnerabilities which regularly undermine efforts to access and maintain HIV and AIDS treatment and care (Weiser et al. 2010, Hilhorst et al. 2006). The most significantly affected and prone to sickness and death from HIV and AIDS are adults. And due to HIV and AIDS, an increasing number of children have been orphaned and made more vulnerable to the epidemic.

Unlike diseases that often hit poorer households the hardest, HIV prevalence rates are also high in economically better-off households; indeed, it pervades all socioeconomic classes. The epidemic was originally understood principally to affect urban populations (White and Robinson 2000). However, the prevalence of HIV and AIDS continues to increase in the rural zones of many countries in Africa, due in part to migration patterns, trading activities, refugee movements and other rural-urban linkages (Zwane 2001, Mullins 2001, Adam and Mwakalobo 2007). In sub-Saharan Africa, the epidemic is spreading in some rural areas at an alarming rate and is affecting all populations, particularly people in their most productive years between the ages of 15 and 45 (UNAIDS 2010).
HIV and AIDS needs to be understood in relation to wider social processes such as livelihood changes, migration (voluntary and enforced), gender relations, and local perceptions of causality and risk. Because of this, HIV and AIDS is a matter of concern beyond the fields of biomedicine and preventive and curative health, fields where – traditionally – the lion’s share of HIV and AIDS-related donor funds has been channelled (Loewenson and Whiteside 2001). At the same time, as stressed by White and Robinson (2000), the capacity of bodies and organisations whose task is to support the poorest communities affected by HIV and AIDS are themselves constrained by the impact of the epidemic. The functioning of government departments, non-government organisations and community support organizations is already being adversely affected by increasing staff absenteeism due to HIV-related sickness and attendance at funerals as well as the death of some staff.

2.6 RURAL LIVELIHOODS AND HIV AND AIDS

The rural livelihoods perspective adopts a holistic approach to the HIV and AIDS pandemic, recognising that the pandemic is not simply a health issue but is more broadly a livelihoods dilemma (Seeley and Pringle 2001). The epidemic is now deeply entrenched in African countries (notably southern Africa) and it is having a detrimental impact on socio-economic development (Chimhowu and Hulme 2006). This is supported by Loewenson and Whiteside (2001) in arguing that HIV and AIDS have become increasingly understood as a development challenge and, moreover, that there is a “bi-directional” relationship between the HIV and AIDS pandemic and development processes.

On the one hand, HIV and AIDS have an effect on the socio-economic conditions and dynamics of individuals, households and communities. Therefore, the livelihoods of individuals, households and communities infected and affected by HIV and AIDS are profoundly influenced and often compromised by the epidemic. On the other hand, households pursue a living through accessing and displaying a range of livelihood resources, such as natural, social, financial, economic and human capital; in doing so, a number of social, political economic factors impact on the possibilities of HIV susceptibility and AIDS vulnerability (including the treatment and care of HIV and AIDS).

HIV and AIDS have brought in their wake a host of social and economic burdens to households seeking to secure viable livelihoods strategies (Loevinson and Gillespie 2003, Seeley and Pringle 2001). Indeed, HIV and AIDS impacts on every aspect of life and changes
all elements of existing livelihoods (Drimie 2002). The ways in which households infected and affected by HIV and AIDS cope with the ensuing challenges depend in large part on the livelihood systems in place, including pre-existing patterns of food insecurity, capacity to labour and the character of social safety nets. The systems in place also are often fundamental to how infected individuals in a household access HIV and AIDS treatment and care (if they do at all), and how they respond to the treatment. Depending in part on the individual or individuals infected with HIV, rural households are impacted crucially in (amongst other things) their agricultural labour supply, household resources and social networks; these impacts may enhance the progression from HIV to AIDS and undercut household sustainability (through reducing agricultural production and income sources) and even household cohesion (Loevinsohn and Gillespie 2003).

It is quite likely that HIV and AIDS-affected households are not able to engage in any of the three strategies (discussed previously). In fact, enhanced sustainability is rarely an option in such households – at least amongst poor rural households. Even maintaining current levels of sustainability is hugely problematic. This is because the pandemic is a shock different to any other types of shocks, such as loss of employment, and it may be impossible for the household affected to recover at all from the shock of HIV and AIDS. The pandemic has massive short-term and long-term implications at both micro- and macro-levels. It is rightly regarded as a long-wave disaster with pervasive and systematic impact on rural livelihoods (White and Robinson 2000). And, to emphasise, the deterioration in the livelihood building blocks experienced by HIV and AIDS-affected households normally has a feedback affect on the focus of this thesis, namely, on treatment and care. In this respect, Okuro (2007) argues that the worsening socio-economic conditions brought about by HIV and AIDS makes specific households at risk and vulnerable to the epidemic (including inhibiting proper treatment); but these conditions often sabotage national efforts to improve treatment and care for HIV-infected individuals.

2.7 IMPACT OF HIV AND AIDS ON RURAL LIVELIHOODS
In this section, I focus on one dimension in the relationship in the rural livelihoods-HIV and AIDS nexus by focusing specifically on the impact of the pandemic on livelihoods. This element in the bi-directional relationship is particularly important for the thesis because of my emphasis on treatment and care, and adherence to HIV treatment. The pandemic’s wide-
ranging impact on livelihoods (as will be shown later in the thesis) significantly conditions access to the treatment regime and adherence to it.

The pandemic has substantial economic and social impacts on the affected communities. Economic impacts occur when there is a diversion of resources to other uses (which would not have been necessary in the absence of HIV and AIDS) and also when production declines due to the disease. The social impacts emanating from the pandemic entail disruptions to the existing systems of social support because of the sudden shock or the slow-acting and cumulative series of excruciating events that the pandemic brings about (UNAIDS 2010, Adam and Mwakalobo 2007). The social and economic impacts of HIV and AIDS are transmitted through intermediary economic and social factors which affect households’ economic and social conditions.

The impacts of HIV and AIDS takes place at different spatial levels, including the individual, household, community and national levels. Households and individuals (which are the main unit of analysis for this thesis) suffer loss of productive labour, loss of income, and loss of food reserves, savings and assets, which are diverted to meet health care and funeral costs (Adam and Mwakalobo 2007). Additionally, educational opportunities are reduced as children are withdrawn from school to care for the sick or to engage in casual labour for extra household income. Reduced levels of nutrition because of the pandemic have been found in poor households. Labour may be diverted from economically productive activities (such as paid employment or cash-crop production) to care for the sick individual. Money is needed for medication and to pay funeral costs in the case of death (White and Robinson 2000) and savings may be divested and tangible assets sold for these purposes (Mullins 2001). The following sub-sections elaborate on the effects of HIV and AIDS on rural livelihoods by focusing on food security, labour supply, economic security and social capital.

2.7.1 Food security and HIV and AIDS
It has been widely shown that HIV and AIDS-affected households generally have less access to labour, less capital to invest in agriculture and are less productive agriculturally due to dwindling financial and human resources, as indicated in studies in rural South Africa and elsewhere (Drimie 2002, Adam and Mwakalobo 2007, Jayne et al. 2004). The issue of land use becomes extremely important as a result of the pandemic’s impact on mortality and resultant loss of skills, knowledge and the diversion of scarce resources. A range of
livelihood strategies, often involving land, has been directly affected as the pandemic compounds issues surrounding poverty. This has entailed a number of changes in livelihood strategies, including away from agriculture, with a range of consequences for rural economies and food security.

It is not surprising then that HIV and AIDS negatively impacts on the food security of rural households. In most rural areas, due to the absence of more reliable livelihood sources, agricultural production remains the main livelihood source even for the households that are affected by the epidemic (Drimie 2002). The pandemic has a significant detrimental influence on agricultural yields since many households tend to abandon crop activities in order to look after the sick. It also has a feedback effect on the productivity of small home vegetable gardens which many households depend upon, which further exacerbates household food insecurity. This is particularly problematic because those infected with HIV have increased nutritional requirements.

In fact, individuals who are taking ARVs need a healthy balanced diet and they are urged to eat prior to taking their medication (Drinkwater 2003). Failure to maintain a suitable level of nutritional status weakens immunity and increases susceptibility to infectious diseases, which in turn undermines nutritional status and hastens the onset of full-blown AIDS (Piwoz and Preble 2000). HIV and AIDS therefore strain already meagre diets and push many individuals and households into a vicious circle which may result in progression to AIDS-related illnesses. In general, then, infected individuals face severe challenges with regard to ART sustainability because of questions around food security.

Overall, the epidemic is intensifying existing labour bottlenecks in agriculture, increasing malnutrition and adding to the burden on rural households infected and affected by HIV and AIDS. Reduced food production is already being reported in some parts of the world, and the development goal of halving the proportion of people suffering from hunger by 2015 is under threat as a result of HIV and AIDS in some counties (UNAIDS 2010).

### 2.7.2 Labour supply and HIV and AIDS

White and Robinson (2000) note that the most immediate implication for HIV and AIDS is the human capital base principally in terms of the availability and allocation of labour. At the household level, the HIV-infected patient’s labour output gradually diminishes as the patient...
succumbs to sickness, and the labour of other household and extended family members is often diverted to care for AIDS patients. The most critical impact occurs when the patient becomes incapacitated just before death. This affects agricultural and non-agricultural productivity as a result of labour shortages (Adam and Mwakalobo 2003, Kargbo 2006).

The loss of adult labour leads to a suite of changes in affected and infected households’ use of resources such as land, leading to a significant effect on levels of production and undermining the nutritional status of household members as a result. As indicated previously, rural households face the challenge of food insecurity due to a decline in produce for home consumption (Piwoz and Preble 2000). In northern Zambia, affected households have reduced the total area under cultivation due to labour shortages (FAO 2004 as cited in Kargbo 2006). Adequate and proper use of land contributes positively to the dietary diversity of affected households. The erosion of human capital in affected households (entailing the loss of skilled and experienced people) for agricultural and other livelihood purposes reduces productivity and income, and thus involves a critical mismatch between human resources and labour requirements (Tsai et al. 2009).

Inability to maintain labour by households infected and affected with HIV and AIDS leads to abandonment of cash and subsistence crops. As a result, households may shift their focus to crops that require less labour input (in terms of land preparation and weeding for instance), to drought resistant crops or to crops that can be cultivated annually rather than throughout the year. These kinds of crops though may contain lower nutritional values which are unsuitable for infected individuals on the HIV treatment regime. At the same time, as households become more vulnerable to HIV and AIDS, they are less able and willing to take and afford risks. Caregivers may switch completely away from agriculture (a risky venture given the significance of ran-fed crops and the unpredictability of droughts) to less risky survival strategies, but these may be lower-profit income-generating activities. This further contributes to the deterioration of the household’s ability to pursue future earning potentials.

2.7.3 Economic security and HIV and AIDS

A host of household expenses are incurred during AIDS-related illnesses, at a time when income is also reduced. Households are deprived of their savings and investments (insofar as they existed in the first place) due to medical costs and various customs surrounding funerals which dry up scarce resources (Piwoz and Preble 2000, Drimie 2002, Tsai et al. 2009). The
direct consequences of illness and death, such as the loss of labour and income, in combination with high costs for medical treatment and funerals, can trigger a household’s downward spiral into poverty. Diverting savings and investments into medical care and funerals therefore intensifies vulnerability of households and communities, as there may be no incoming income to rely upon (Hilhorst et al. 2006). Thus, as noted in a study in southern Africa by Drimie (2002), the pervasive presence of the HIV and AIDS pandemic places an almost unbearable pressure on affected households emotionally and psychologically but also economically.

In both rural and urban areas, HIV and AIDS pushes people into deeper levels of income poverty, as many households lose their breadwinners to AIDS and livelihoods are highly compromised. But the sustainability of rural households may be doubly jeopardised, as many urban dwellers affected by HIV and AIDS send their children to relatives in rural areas to minimise urban costs, or return to their villages of origin when they become seriously ill. So caring and support costs of the wider extended family are frequently borne by rural communities (White and Robinson 2000). This is at time when rural households may themselves have their own HIV-infected members and when rural incomes are compromised, leading to altered and erratic consumption patterns. For example, in some villages in Kagera region in Tanzania, food consumption has been reduced by 41% (Isaksen et al. 2002 cited by White and Robinson 2000) and by 15% in other villages (UNAIDS 2010).

2.7.4 Social capital and HIV and AIDS
Loevinson and Gillespie (2003) argue that the increasing mortality and growth in the number of orphans pose unprecedented social welfare demands for countries already burdened by huge development challenges. The AIDS pandemic increases strain on state institutions and resources, and undermines formal and informal social systems which become unable to assist people in coping with adversity. As parents and workers succumb to AIDS-related illnesses, even the structures and divisions of labour in households, families, workplaces and communities are disrupted, with women bearing an especially heavy responsibility – beyond the standard responsibilities in rural settings of both farm labourers and domestic care-givers (Okuro 2007, Tsai et al.2009, Kargbo 2006).

Households with few financial assets at the best of times rely heavily on social capital (such as social networks focused on the extended family, neighbours and fellow church members)
to sustain themselves. As AIDS-related diseases affect more and more families, these social networks come under increasing strain in seeking to meet the increasing demands for farm labour assistance, caring for the ill, costs of medical fees and the need to look after growing numbers of orphans. In such cases, most infected and affected household members simply become more vulnerable and destitute, with social networks collapsing and households themselves breaking up and even dissolving. Under these conditions, having access to land as a major natural capital asset is of little comfort if it remains fallow.

The pandemic, because of its systemic nature and the sheer depth of its socio-economic implications, therefore often disrupts the social capital sustaining many communities (White and Robinson 2000). Indeed, as the scale of the epidemic increases, the social asset base may collapse irreversibly and traditional coping strategies become no longer viable. This may not be apparent immediately or in the short-term; however, the epidemic represents an insidious process which has accumulative effects over time and this may only be captured in longitudinal studies over generations.

2.8. CONCLUSION

The rural livelihoods approach is used to frame this thesis to understand the link between rural livelihoods, HIV and AIDS and adherence to treatment. The perspective demands a holistic approach to the HIV and AIDS epidemic and posits that households make a living through accessing and displaying a range of livelihoods resources, such as natural, social, financial, economic, political and human capital. However, households affected by HIV and AIDS are frequently impoverished and hence very vulnerable in terms of the impacts of the pandemic. As HIV and AIDS impact on livelihoods, rural households become more and more susceptible to the epidemic and coping strategies are endangered. Even if the family retains its land, options for using it productively can be severely reduced in the context of HIV and AIDS. It is at this stage that HIV-infected individuals and AIDS-affected households face severe challenges as far as food security and social security are concerned, and households may begin to dissolve. In this context, it may seem that any notion of sustainability, as a notion central to the livelihoods framework, is of no analytical or empirical significance. But at times households do show some level of resilience. At the same time, the framework per se does not assume or posit the existence of sustainability. Rather it treats sustainability as a process which may or may not be attainable. The next chapter looks at rural livelihoods in contemporary Zimbabwe and notes the critical challenges facing smallholder farmers.
CHAPTER 3
RURAL LIVELIHOODS IN CONTEMPORARY ZIMBABWE

3.1 INTRODUCTION
Historically, Zimbabwean rural society has been divided between white commercial farming areas and African communal lands. Rural society in Zimbabwe, including under colonial times, has in fact been dominated historically (at least numerically) by small-scale communal farmers who make up the majority of the rural populace. Since the emergence of colonialism, the agrarian livelihoods of pre-colonial African farmers have been dramatically affected by various colonial policies and programmes which have been mostly geared towards building and consolidating white settler commercial agriculture and creating a reserve pool of African labour (confined to rural reserves or tribal trust lands) to serve commercial farms as well as mines and manufacturing industry in urban areas. This so-called dualistic agrarian structure was only finally confronted in any meaningful manner by fast track land reform starting in the year 2000. Some land redistribution did take place in the early years after independence (in 1980), leading to resettlement lands scattered throughout the countryside. These are now referred to as ‘old’ resettlement areas, compared to the new resettlement farms established on a massive scale under fast track over the past decade (these include A1 subsistence plots and A2 commercial farmlands). The size of the white commercial farming sector has declined considerably under fast track, with small-scale African farmers now found in the long-established communal areas and on old and new (namely, A1) resettlement lands. The study site for this thesis (as will be outlined later) sits uncomfortably within the current agrarian structure.

This chapter gives an overview of rural livelihoods after independence in Zimbabwe, as well as post-independence land reform and its effects on livelihoods. It is argued that the process of land reform in Zimbabwe (and other post-independence events like structural adjustment) has been accompanied by various socio-economic challenges which in turn had serious effects on the livelihood systems of rural households in contemporary Zimbabwe. These effects on agricultural production systems include notably low levels of crop production and food insecurity. In the context of ongoing challenges, the lives of smallholders have been marked by increasing diversification of livelihood strategies.
3.2 RURAL LIVELIHOODS AND LANDHOLDING STRUCTURES PRIOR TO INDEPENDENCE

Before the white settlers arrived in Zimbabwe in 1890, livestock was the major agricultural activity of African farmers. Shona and Ndebele farmers, however, also grew a wide variety of crops which included finger millet, sorghum, maize, groundnuts, potatoes, rice, sweet potatoes, pumpkins, cowpeas, cucumber, tomatoes, yams and cassava. The arrival of settlers saw a marked increase in demand for agricultural products leading to enhanced production of food crops by African farmers. During this time, the majority African populace was increasingly relocated into (often) ecologically-marginal areas known as Native Reserves, which undercut competition from African farmers for emerging white farmers. The land Apportionment Act of 1930 (amended many times) became the overarching law for governing land distribution in colonial Zimbabwe (originally Southern Rhodesia, then Rhodesia). With the implementation of this act, African farmers were officially condemned to reserves (now called communal areas), which accounted for only 21% of the land surface of the country, with almost half of the country allocated to white settlers.

These areas were in fact not adequate for the economic and subsistence needs of the rural African population (Rukuni 1994, Mbiba 2001), in large part because of the poor soils and adverse climatic conditions but also because the colonial state ignored these areas as sites of social and economic development. The colonial policies (as implemented) generated conditions which forced rural African households to turn to wage employment (as cheap labour in white-owned enterprises) and which prevented them from merely relying on farming as a livelihood strategy. Many communal households depended on migrant labour (normally in the mines, including in South Africa) as a key source of income; the migrant labourers in the main were men within the reproductive age group. This led to split households, with mostly women, children and the elderly left behind in the communal areas as agricultural producers and labourers; this, of course, further added to the agricultural woes in these areas. The African smallholders became increasingly subject to processes of poverty and pauperisation, to exclusion from utilization of the productive resources of the country, and to a seemingly state of serfdom.

Agricultural productivity in the communal areas continued to decline under colonial rule, with an expanding population contributing to over-crowding (or an increasingly land-short population) and with crop and stock production (cattle, sheep and goats) leading to soil
exhaustion and overstocking. The settler government though viewed the agricultural decline as arising from the traditional and out-dated agricultural practices of African farmers rather than from the state’s segregationist practices; for instance, soil erosion in the reserves was said to be a necessary product of such supposedly African farming techniques as such shifting cultivation. As these problems within the reserves persisted and intensified, the settler government in 1951 enacted the Land Husbandry Act in order to alleviate the environmental challenges within the reserves. The act explicitly regulated farming practices and stocking rates, and these conservation measures were harshly enforced often resulting in fines and imprisonment for those who failed to comply (Rukuni 1994).

African smallholder agriculture continued to collapse until the 1970s (the decade leading up to independence), with further out-migration and limited or no opportunities for either agricultural intensification or diversification. To complicate matters, African farmers received no state support, unlike white commercial farmers who had facilities such as agricultural research stations, the Land Bank (established in 1912) which provided credit, and agricultural marketing boards to control prices and maintain profit levels. White farmers – using mechanised irrigation – dominated agricultural production, including maize which is the staple crop in Zimbabwe. Smallholder farmers, relying on rainfall and focusing on maize production, participated marginally in crop production for the domestic market (Moyo 1995). Commercial farmers regularly sold between 70% and 75% of their maize to the Grain Marketing Board and used the balance for stock feed and to feed farm workers. For smallholder production, 95% of maize grown was retained for home consumption or for localised inter-household sales (Rohrbach 1989).

Rural smallholder communities are not homogenous as social differentiation has always existed. Even during the height of settler colonialism there was a pronounced degree of differentiation on the basis of land and stock holdings. As well, the colonial state introduced a master farmer programme which fed into and enhanced differentiation amongst communal farmers. The programme allowed selected communal farmers to undergo rigorous modern farming techniques prescribed by agricultural extension officers, and the former were able to increase production levels of both staple food crops and cash crops. The farmers formed local farmers clubs and extended their land claims, and generally evolved into a distinct socio-economic grouping considered as important communal area agricultural producers. Their
increased levels of production also enabled them to purchase land in the Native Purchase Areas outside communal lands (Rukuni 1994).

The agrarian structure in Zimbabwe prior to independence saw the minority White population owning large tracts of the most productive land (under freehold title) notably in the highly productive Natural Regions I and II. The few African farmers who managed to acquire small pieces of land in the Native Purchase Areas became known as small-scale (mainly commercial) farmers. Households in communal areas did not own their plots, as the land is state-owned and farmers have usufruct rights only; the land was not subject to market sales (at least legally), though it could be inherited. The racially-biased, unequal land holding structure and dualistic agricultural system at independence saw 6,000 white commercial farmers owning 15.5 million hectares of land, 8,500 small-scale African farmers accessing 1.4 million hectares in purchase areas and one million communal subsistence households on 16.4 million hectares (or 42% of Zimbabwe’s land size) (Kinsey 1999, Moyo and Yeros 2005). Overall, 75% of communal land was located within the drier Natural Regions IV and V and only 15% was in the fertile Natural Regions I and II (Sachikonye, 2003).

3.3 AGRARIAN AND LAND REFORM IN INDEPENDENT ZIMBABWE

I examine agrarian and land reform in three periods: the early phase of the 1980s, the 1990s (dominated by structural adjustment) and fast track Zimbabwe (from the year 2000).

3.3.1 The Early Phase

In 1980, the Zimbabwean government was faced with a dilemma with respect to agrarian and land issues. In rectifying historical injustices, it had to meet the redistribution demands of communal farmers; in this regard, land-use experts were arguing that over 66% of communal lands had excess populations of more than double their assessed carrying capacities (Whitlow 1980), with the lands subject to significant degradation, deforestation, siltation, over-grazing, stream bank degradation and general loss of biodiversity. At the same time, the state had to maintain the commercial farming sector so as to sustain production and prevent the collapse of the economy. Indeed, domestic food needs were being met primarily by commercial farmers who contributed to at least 90% of the country’s domestic food requirements (Murisa 2008). These farmers also dominated the export crop sector (including tobacco, coffee and sugar), making commercial agriculture the second largest foreign currency earner after mining (Palmer 1990). In general, up until the year 2000, the agrarian structure remained
intact as the state tended to sacrifice agrarian reform and redistribution of land (particularly the latter) on the altar of the further commercialisation of agriculture (which benefited only a limited number of African farmers).

After independence, there was a significant expansion of state support for the previously disadvantaged communal sector, and this opened up the sector’s access to suitable technologies and inputs (for example, seeds and fertilizers). Discriminatory marketing policies and produce pricing programmes vis-à-vis communal farmers were also redressed (Stanning 1989), as were the imbalances between white commercial farmers and African smallholder farmers in terms of the latter’s access to agricultural services such as extension and credit (Cliffe 1988, Karumbidza 2004). Pre-set producer prices (for maize for instance) became fixed across the countryside and this represented a considerable increase in profit for African farmers living in the more remote communal locations. As well, the Ministry of Agriculture promoted a maize production package based on high yielding hybrid varieties, with fertiliser application to capture the yield potential. And the number of loans given to communal area farmers increased dramatically; for instance, between 1980 and 1985, from 18,000 to 64,000 (Cliffe 1988). The effects of these changes on agricultural productivity in communal areas have been the subject of intense debate (Karumbidza 2004), with some writers speaking about a maize miracle in the 1980s.

These early changes in agrarian policy coincided with the government’s first attempts at addressing the skewed landholding pattern through the implementation of land reform. Land reform (in the form of redistribution) was supposed to sustain national self-sufficiency in food but, more importantly, to ensure food security and self-reliance at household levels (notably in communal lands and on new redistributed farms) (Moyo 2000, Buckle 2002). In this context, in the 1980s, government embarked on a market-based land reform programme, i.e. based on the willing-buyer willing-seller principle, as enshrined in the Lancaster House agreement of 1979. The programme began officially in September 1980 with the initial objective of resettling 18,000 families from communal areas onto one million hectares over three years. This was designed to relieve population pressure in the communal areas and thereby improve the standards of living of the landless, land-short and destitute, while also bringing under-utilised commercial land into full production through land distribution (Kinsey 1999). The main resettlement model was Model A, which replicated communal area arrangements. This model therefore meant resettling individual households into clustered
villages and allocating each household a 0.4 hectare residential plot, five hectares of arable land and the right to use grazing land on a communal basis. However, actual redistribution during the 1980s fell far short of official government targets.

3.3.2 The Structural Adjustment Phase

The second phase of reform, in the 1990s, occurred during the implementation of the Economic Structural Adjustment Programme (ESAP), a standard World Bank-type adjustment programme. ESAP effectively put a halt to agrarian reform. It therefore required the Zimbabwean government to eliminate agricultural and food security subsidies, to liberalise local agricultural markets and to open up the country’s economy to the international influence of the global agro-industrial system. ESAP placed great emphasis on developing a vigorous export programme in order to earn foreign currency, especially within the agricultural sector. White commercial farmers responded favourably to state and market incentives by diversifying into wildlife and horticultural ventures (Moyo 2000). At the same time, ESAP reduced state support to smallholder farmers (compared to the 1980s) and reiterated the market-driven land reform strategy – but with a focus increasingly on commercial viability and maximising productivity on redistributed farms. The amount of land redistributed during the 1990s was less than in the 1980s.

Despite the introduction of structural adjustment in 1991 and the deficient land holdings, communal farmers continued to play an important role within agriculture in terms of minimising localised food insecurity. Like their counterparts within the commercial sector, communal farmers were able (in the more productive agro-ecological areas) to diversify into – and increase production in – higher value crops such as tobacco, coffee and horticulture. The degree of their participation remained very limited, as commercial farmers (with their considerable capital base) were in a stronger position to respond favourably to the neo-liberal programme. And any success and progress made by small-scale farmers hid the regrettable story of poverty and vulnerability in the communal areas (Scoones et al. 2011). The vulnerability of smallholders was further complicated by a series of droughts and food shortfalls during the 1990s. This was a time when the government, on the advice of the World Bank, sold off most of its substantial grain reserves to cut down on public spending. During this period, Zimbabwe began importing food for the first time since independence (Masanganise 2002).
As a general tendency, it seems that the land and agrarian policies adopted under structural adjustment involved favouring the accumulation of wealth in the hands of a few local elites and foreigners, and thereby simply perpetuated the unequal agrarian economy. This was the historical and social context within which fast track land reform arose.

3.3.3 The Fast Track Phase

In the late 1990s, the government did seek to radicalise the land reform programme by moving beyond the market-led process. It therefore attempted to confiscate a large number of white commercial farms in 1997, but backed-down from this given major resistance from white farmers. Simultaneously, because of the government’s ongoing failure to address the land needs of the rural poor, sporadic land occupations of white farms by communal area farmers intensified during the late 1990s (Thomas 2003). In early 2000, nation-wide land occupations occurred, literally engulfing the countryside.

In response to the occupations, the government launched the Fast Track Land Reform Programme in July 2000 which effectively legitimised the land occupations. The government initially enacted the Rural Land Occupiers (Protection) Act in June 2001 to protect land occupiers on white commercial land not yet acquired by government. Then, over the next few years under fast track, it turned much of the white-owned countryside into state-owned redistributed land through compulsory acquisition and without compensation to farmers or due regard for any court action against acquisition (Human Rights Watch 2002). Farms were redistributed and allocated without state support in relation to necessary infrastructure (such as housing, boreholes and clinics) and agricultural extension services.

Considerable discussion exists in the literature about fast track farms with respect to such matters as the identity of beneficiaries and the extent of agricultural production (Scoones et al. 2011). In the case of beneficiaries, although there has been considerable elite capture of A2 commercial land, it seems clear that most recipients of A1 subsistence plots were landless or land-short Africans (often from communal lands). In relation to agricultural productivity, despite state failures with regard to agricultural support, A1 farmers are significantly more productive than their smallholder counterparts in communal lands. Certainly, in comparison to the pre-fast track days, agricultural production nationally has dropped dramatically although there are certain signs of agricultural recovery in the last few years.
Because of the significance of agriculture to the Zimbabwean economy and the existence of substantial upstream and downstream industries dependent upon agriculture (effectively, an agro-industrial complex), the economy has gone into decline and deep crisis and has contracted since the year 2000. Though the Government of National Unity from 2008 has had some stabilising effects, the Zimbabwean economy has been characterised by high inflation, shortages of foreign currency, inadequate investment, budget deficits and stagnating employment (Paradza 2009). All this has had major consequences for livelihoods in both urban and rural areas (including growing poverty, chronic food shortages and insecurity, and breakdowns in state delivery of health services) (Mazzeo 2011).

In the following section, I provide some insight into Zimbabwean livelihoods (in particular rural livelihoods) since the year 2000 in the context of economic decline. In doing so, there is no suggestion that all the tendencies outlined are effects simply of fast track.

3.4 ECONOMIC DECLINE AND FOOD INSECURITY SINCE THE YEAR 2000
Zimbabwe’s economic decline started in the late 1990s, led by the failed policies of structural adjustment, and combined with a complex mix of economic mismanagement, unbudgeted payments of gratuities to war veterans (former guerrillas), military involvement in the civil war in Democratic of Congo, and growing corruption amongst political and military elites (Scoones et al. 2011). Fast track land redistribution added significantly to the existing economic woes, because of the importance of the agro-industrial complex to the Zimbabwean economy. In 2005, another controversial state programme (this time focusing on urban centres) caused further economic disruption. This programme (called Operation Murambatsvina and literally meaning ‘clean-up the filth’) saw the dramatic displacement of tens of thousands of urban Zimbabweans as informal housing structures and informal economic activities were destroyed by the state (Tibaijuka 2005).

The rate of inflation soon reached an astronomical figure and the Zimbabwean dollar went out of circulation as the state printed bearer cheques as a replacement. There were ongoing shortages of basic food commodities, and these commodities were often only available on a spiralling informal (or black) goods market (Scoones et al. 2011). Prices of commodities increased daily, often beyond the financial reach of the urban and rural poor, and money devalued overnight. The real value of salaries and wages plummeted and cash savings were wiped out (Moyo 2004, Chimhowu 2009), which affected also middle-class professionals.
Money-based transactions became more difficult and barter arrangements became the order of the day in many cases. An illegal parallel market for foreign currency also emerged and, though this became an important source of foreign currency for companies dependent on imported supplies, the state sought to curb it. There were indeed huge economic uncertainties for companies, with overnight devaluations and massive inflation hikes disrupting even the best business plan. By 2008, most businesses were unable to function in a normal manner. Their production declined considerably (in part because of the reduced availability of raw materials) and this in turn led to further shortages of essential commodities (for example, maize meal, bread, cooking oil and sugar). Reduced foreign currency inflows also forced businesses to downscale their production, leading to increased retrenchments and rises in rates of unemployment, with unemployment in Zimbabwe estimated to be between 70% and 80% (Richardson 2005). Statistics vary, but Zimbabwe’s formal Gross Domestic Product likely declined by 40% between 2000 and 2008.

Despite the great adversities (including shortages in agricultural inputs such as seeds), all farmers on fast track farms were able to pursue crop production and livestock holdings to reasonable (but not sufficient) levels. But the balance of the urban and rural poor encountered dwindling livelihood options in the face of the economic meltdown, and this in part reflected the fact that urban and rural economies (and livelihoods) are deeply intertwined in Zimbabwe (Davies 2004). For instance, urban-based household members and relatives of communal households regularly sent remittances to – or financially assisted – their communal farmer brethren. But spiralling unemployment and dwindling real wages in urban centres undercut this flow to rural areas. At the same time, rural unemployment amongst farm workers previously employed on white commercial farms (now fast track farms) arose dramatically and the vast majority of these workers and their families endure a precarious existence (often in informal settlements as internally displaced people), (Moyo 2004). Many communal residents, mainly women, were also engaged as seasonable labourers on nearby white commercial farms. Meanwhile, the urban poor were faced with loss of formal employment. Monthly salaries had decreased in real terms to such an extent that urban workers (living in high-density areas on the outskirts of cities) became weekly commuters, travelling to work on Monday and returning home on Friday because they could not afford the daily transport costs. Urban workers and their households have been experiencing critical food shortages and sharp price increases of basic food stuffs such as bread, milk and cooking oil.
In this respect, food insecurity became a major challenge in both urban and rural Zimbabwe, with some groups being food insecure constantly. Imports of basic food commodities by the state did not compensate for shortfalls in agricultural produce, leading to significant price increases for these commodities. And there were accusations that the state politicised the distribution of food by providing it only to supporters of the ruling party and by denying food aid to rural (and urban) areas with significant opposition support (Mashingaidze 2006, Human Rights Watch 2004). In the year 2002, the President of Zimbabwe declared a State of Disaster in all communal lands, resettlement areas and urban areas as a result of the drought.

For the 2003/2004 agricultural season, the assessments of the Zimbabwe Vulnerability Assessment Committee (ZIMVac) showed that 4.4 million rural people (56% of the rural population) would fall short of their minimum cereal requirements. In the 2005/2006 season, the corresponding figure was 2.9 million people or 36% of the rural population (ZIMVac 2005). During this period, the main cereal crops (maize, wheat and sorghum) and the key nutritional commodities (groundnuts, milk, beef and soya beans) remained in short supply nationally (Moyo 2004, Moyo and Yeros 2005). These shortfalls emerged because of droughts and erratic rainfalls, fast track land reform and broader macro-economic challenges.

Particularly in communal lands, large numbers of households in many rural districts experienced food insecurity for four or more agricultural seasons and hence were considered as living under chronic food insecurity conditions; in addition, the sheer level of food insecurity and intensity was increasing throughout much of the countryside. Fast track sought to increase the number of rural smallholders with entitlement to sufficient pieces of better-quality land in order to produce their own food, but even these land entitlements have failed to reach adequate levels of food security through own-consumption or market-based production.

3.5 AGRICULTURALLY-BASED LIVELIHOODS UNDER THREAT

Agricultural production has been the mainstay of the Zimbabwean national economy historically. Fast track land reform was meant to redistribute agricultural wealth throughout the countryside and thereby build a vibrant home economy to spur on economic growth and development on a national level. Fast track reform though was not accompanied by comprehensive programmes of agrarian reform including access to inputs, credit, savings and markets in rural areas; and this drawback has been a critical shortcoming of fast track. While the agrarian structure has shifted fundamentally (and perhaps irreversibly) because of fast
track, and though (formerly land-short) A1 farmers are undertaking productive agricultural activities, agricultural gains have been limited (at least until now). The substantial changes to the agrarian economy are reflected for instance in the decline in agriculture’s contribution to the generation of foreign currency earnings: the share of agricultural exports to the country’s total exports hence decreased from 39% in 2000 to 21% in 2006 (FAO/WFP 2007). This is correlated to an overall decrease in agricultural production, to shifts from foreign markets to national (or even more localised) markets, and to changes in land utilisation on fast track farms.

There have been declines in levels of production for all the major crops in Zimbabwe. Major declines are seen in grain crops (such as maize) and export crops like tobacco, coffee and soya beans, which in the deepest troughs dropped by at least 70%. Richardson (2007) states that the major crops affected have been tobacco, wheat, soya beans, coffee and sunflowers (which have dropped between 25% and 70%). However it is important to note that there are signs of a process of recovery with levels of production having stabilised or increased steadily subsequent to the early 2000s, although levels are still below the annual figures for the 1990s.

Debates exist about the reasons for the declines. Certainly though, in the 2000/2001 season, the land occupation movement seriously disrupted farm operations (World Bank 2006), and the implementation of fast track from 2001 meant that widespread farm acquisitions began (which stopped production altogether or led to land under-utilisation on a large number of commercial farms). The decline in agricultural production though has been prolonged given that the bulk of resettlement had taken place by 2004. Other longer-term problems ensued. For instance, A2 (commercial) fast track farmers, because of insecure forms of tenure granted by the state, could not secure loans from formal credit institutions and banks and they were unable or reluctant to pursue major capital investments on their acquired farms. The declines are also linked to the agricultural policies adopted by the state such as the re-introduction of price-controls on most food commodities (World Bank 2006), as these controls led to lower producer prices for most food crops and encouraged shifts to less-controlled agricultural products. Continuing and increasing overevaluation of the Zimbabwean currency also negatively impacted upon the competitiveness of most export crops (Scoones et al. 2011). Coupled with this have been the low supplies of tillage services, seeds, fertilizers and stock
feeds, leading to reduced plantings and yields for smallholder farmers in both A1 fast track farms and communal lands.

The agrarian restructuring has had a massive impact on the livelihoods of the rural proletariat formerly engaged on white commercial farmers. Prior to 2000, these farm employees were admittedly a highly vulnerable and exploited group working for extremely low wages and housed on white farms often under deplorable living conditions, including in relation to health and education. Residence on farms was explicitly contingent on employment. A significant minority of permanent farm workers had dual livelihoods straddling the communal and white farming areas (i.e. maintaining households in both areas) (Hartnack 2005, Chambati and Magaramombe 2008). Historically, but even recently under the post-colonial state, the development needs of farm worker households have been excluded from the national agenda, with the state regarding farm workers as the local responsibility of commercial farmers.

The vulnerable and marginalised existence of these agricultural labourers was reinforced and heightened in many cases through fast track. Major internal displacement within Zimbabwe of these workers took place, but external displacement also occurred given the foreign origins of large numbers of agricultural labourers. The patterns of displacement and resettlement of farm worker households vary dramatically across the country, depending in part on whether the farm labourers supported the occupation of their particular farm. In limited cases, farm workers became recipients of A1 plots; they amount to about 5% of all fast track beneficiaries (Moyo and Yeros 2005). Other ex-farm labourers ended up establishing off-farm informal settlements under diverse tenure conditions, or moved to urban centres, or moved to communal lands by returning to their existing plot or seeking land from local village headman. Their livelihoods have been complicated by the fact that, though entitled to severance packages from their previous farm employers, the vast majority of these ex-workers have not received these packages. This is because white farmers left their land without paying out these benefits or indicated that they will only pay benefits after receiving compensation by the state for their farm (Chidziva 2007).

According to Moyo (2009), land reform has brought with it a new pattern of farm labour utilisation on fast track farms with farm workers of many different types. In this respect, many ex-labourers who failed to secure land through fast track (or by moving away)
remained on the former white farm along with the new A1 (or A2) farmers. In doing so, they have tried to eke out a living as part-time agricultural labourers or through other activities such as illicit mining. As part-time or casual labourers, they may work in exchange for a cash income, access to milk or foodstuffs and very often for the provision of accommodation. Much of the paid farm labour on redistributed farms (that is, besides unpaid household labour notably on the A1 farms) is casual, seasonal, underpaid and often female. These paid labourers are in constant search of alternative livelihood activities to supplement their meagre, either cash or in-kind, remuneration (Moyo 2009) and they remain deeply impoverished.

The tenure status of ex-labourer households on redistributed farms is also problematic. Residence is no longer conditional on employment as it was prior to fast track. In addition, there are thousands of ex-worker households on fast track farms which are not engaged in any form of employment on their farm of residence and these households are even more deeply impoverished. Current government policy states that former farm workers who have not been re-employed by resettled farmers (or who have not been absorbed elsewhere in the economy or moved to communal areas) are entitled to temporary residence in fast track farm compounds (Chambati and Magaramombe 2008). This policy is not implemented uniformly or widely amongst new farmers, especially amongst A2 farmers who have preferred to house only their employees in the worker compounds.

New A1 farmers and old communal farmers live under similar tenure conditions and face similar agricultural conditions such as primarily (if not exclusively) non-mechanised rain-fed irrigation. They also face similar immediate challenges, including input problems like the shortages of seeds. In this regard, seed maize production and supply has decreased substantially since the year 2000 with the major seed companies (involved in producing high-quality maize seed) finding it very difficult to identify suitable seed multiplication sites in Zimbabwe. Interventions by the government in setting producer prices, including for maize seed also meant that seed production became increasingly un-economical and, as a result, most companies cut down on production. All smallholder farmers, with their dependence on the early and late rains in October and November, have regularly found themselves without sufficient seed or with late and untimely delivery of seeds. Despite such common challenges, as an overall tendency it seems clear that A1 farmers – in terms of the sheer scale of production – compare favourably to communal farmers. For instance, they have greater
access to fertile lands and to state agricultural extension support, and this has been manifested in significant differences in agricultural output compared to communal farmers.

At the same time, there have been changes in land utilisation on particularly the redistributed farms (and hence a different product portfolio emerging compared to white-owned farms) as well as the disruption of long-standing national and local market commodity chains in the context of the economic downturn. Because of these factors, new kinds of markets have arisen which are often informal, hybrid in character and transitory and which fit more neatly into the changed production patterns. These have been complicated by producer price controls and marketing restrictions imposed by the state on certain essential food commodities such as maize and beef, which have led to distortions in the agricultural economy. Nevertheless, new localised rural economies exist which are characterised by distinctive production-market nexuses and new methods of transaction and payment. At times these transactions border on illegality and these include cross-border trading and smuggling for purposes of generating foreign exchange at household level.

The urgent need to produce enough maize to feed the nation, and to restrict the expenditures on food imports, resulted in a series of rushed and apparently desperate policies. Most farmers were forced to produce maize (and winter wheat if mechanised irrigation was available) to meet pre-defined national targets. In some parts of the country, armies were deployed to coordinate the programme and ensure that irrigation plot holders produced for the state. Harvested produce was purchased by the state’s Grain Marketing Board at a fixed price without significant profit ensured for farmers (Mushongah 2009, Mujere 2010). Arbitrary fines, confiscation of produce and intimidation of informal traders engaged in food commodities were commonplace, leading not only to the politicisation of food production and marketing but effectively to their militarisation. Like other disturbing trends, this reached its peak in 2008 during parliamentary and presidential election times and immediately before the formation of the Government of National Unity.

Smallholder production on A1 farms and in communal lands remains focused on the household unit which is organised on the basis of patriarchy. Female-headed households however are on the rise in large part because of the effects of the HIV and AIDS pandemic, an issue which is addressed in the following chapter. Generally, the major crops grown by smallholders are labelled as men’s crops while minor crops are called women’s crops. Men
tend to dominate the decision-making process when it comes to production, distribution and consumption, and women regularly work in both the fields and the homesteads (i.e. in both economic production and social reproduction). Despite the prevalence of patriarchy and its codification in chieftainship systems in rural Zimbabwe, women have some space and autonomy to negotiate access to land and crops for the benefit of themselves and the children.

In the case of well-entrenched communal areas, there is considerable lineage-based community assistance in times of chronic food insecurity, based on the ethos of mutual support. In some instances, specific households form part of a larger unit of lineage-related households and live in a single homestead or compound under the patriarchal authority of the eldest male. This larger unit allows for the combining of labour capacity for agricultural purposes and protects its individual and household members during times of crisis (Mazzeo 2011). With regard to A1 farms, normally the plot holders come from diverse social backgrounds and spatial origins without any lineage-based connections and – having been together for just over ten years – they are still building social networks for purposes of consolidating inter-household communal solidarity for times of crises and insecurity.

The vast majority of households in communal lands and A1 farms in rural Zimbabwe rely upon dry land cropping of particularly maize (mainly for own consumption in making the staple food sadza) and cotton (as a cash crop), with some evidence of diversification into tobacco; in the drier regions there is greater reliance on large and small livestock and more drought-resistant crops. Good maize harvests in 2006 and 2009 meant that rural households managed to produce both for subsistence (or own-consumption) and the market, with household production levels on average higher in the new resettlements than in communal area settings. Cotton production for smallholders is suitable for drier rural districts such as Gokwe, Masvingo and Chiredzi, but it is also important for other districts during drier years. The relative significance of cotton since the year 2000 has increased because of A1 plot contributions and it has overtaken tobacco in terms of foreign currency earnings (smallholders have historically made an important contribution in this respect). It is estimated that over 250,000 smallholders are involved in cotton production (Poulton and Hanyani-Mlambo 2009).

Small mechanised irrigation schemes, where they exist, also provide households with the opportunity of multiple crops throughout the year and off-season (winter) sales of green
maize and vegetables. Women often play a key role in these schemes. Erratic electricity supplies (and thus interrupted water supplies) in recent years, as well as stolen irrigation equipment (such as pumps and pipes), are key challenges for these schemes. In addition, vegetable gardening on a small-scale is practiced amongst smallholders under diverse conditions. Gardens may be found next to the homestead (insofar as there is a nearby source of water), or along rivers and streams or adjacent to other water sources such as dams, springs and wells. During drought seasons, households normally depend upon manually-dug shallow wells for their gardens. With manual irrigation even on a small-scale, garden produce has a varied but significant impact on household livelihoods in supplementing food and income in chronically water-deficit areas. Women play the crucial role in vegetable gardening.

3.6 LIVELIHOODS DIVERSIFICATION AND MIGRATION

Livelihoods in rural Africa are highly diversified and Zimbabwe is no exception. Though agriculture is the mainstay it is not the only option, as a whole range of off-farm activities are pursued. This of course is not a new phenomenon and has deep historical roots. For example, for the past century, rural Zimbabweans have been formally employed in areas far from their communal lands including in urban-based manufacturing industries and on mines (Gregson et al. 2006). Cross-border migration for employment purposes has also been an important feature, as members of rural Zimbabwean households moved to South Africa, Botswana, Zambia and elsewhere. This led to the notion of the ‘worker-peasant’ to designate households straddling two seemingly very different livelihood options (with one foot ‘on the land’ and one foot ‘in the city’). In many cases, it may be that agriculture is not the main source of livelihood for such households. For a numbers of years, since independence in 1980, numerous studies have documented the importance of livelihood diversification in rural Zimbabwe both in communal areas and old resettlement areas (Scoones et al. 1996, Kinsey 1999, Chimhowu 2002).

For those involved in smallholder farming in Zimbabwe, a diverse livelihoods portfolio is often vital in offsetting the impact of shortfalls in agricultural production and unexpected shocks. Such diversity though does not necessarily improve the socio-economic conditions of rural households; rather, it may simply allow the household to avoid destitution or starvation. Livelihood diversification involves a range of on-farm, off-farm or non-farm activities which are not rooted in agricultural activities (and some of these may be highly risky and illegal). These include sex work, pottery making, roof thatching, hunting wild pigs, petty trading and
beer brewing, with considerable regional and district variation in the Zimbabwean countryside. In the drought of 2008, muchakata, (wild fruit) became a vital source of food for many rural households (as it did during previous drought years). As well, the discovery of diamonds in the Chiadzwa area a few years ago attracted a significant number of rural inhabitants. Fish resources, in areas where there are large dams (many of which were built by white commercial farmers and therefore exist on A1 farms), also supplement agricultural production and income.

For HIV and AIDS-affected households, diversity can become extremely important because of the additional income needed to cover expenses pertaining to health care; but these households are often the ones less able to expand labour for supplementary income generation. Because of this, in the faces of stresses and shocks, these households (as well as other households without viable non-agricultural options) resort to the following: drawing down on savings, off-loading food stocks, relying on inter-household transfers at community level, and sales of livestock and other assets. Enforced asset sales enacted under household stress often fundamentally alter a household’s future livelihood prospects, as there is no basis on which to effectively compensate for the loss of such an asset or assets. HIV and AIDS-affected households in rural Zimbabwe may resort to asset sales in the case of the death of a household member or in the absence of any funeral policies (Mazzeo 2011).

Migration is not a form of diversification as such but is a livelihood strategy on its own and is important for rural livelihoods. Migration of Zimbabweans beyond the border of the country on a massive scale over the past decade is generally acknowledged, though pinning down exact figures is problematic. South Africa seems to be the main country of destination and it is particularly relevant for my study because the research site sits close to the main national highway from Harare to Beitbridge (along the Zimbabwe-South Africa border). These movements may be long-term (involving permanent work, albeit illegal, in South Africa) or more short-term (entailing buying and selling as petty traders between Zimbabwe and South Africa, and also Mozambique, Botswana and Zambia). In the case of South Africa, there is significant ‘border-jumping’ taking place by crossing the Limpopo River and cutting through the fences along South Africa’s northern border: these ‘wet-backs’ may take up employment on the farms of Limpopo province or beyond, or engage in barter trade and commodity exchange. They of course are subject to deportation from South Africa. Further afield (outside Africa), migration also takes place. This includes to Europe, notably the United
Kingdom (referred to as ‘Harare North’), although this often comprises professional urban Zimbabweans.

Despite the risks involved in migration, it is seen by many rural Zimbabweans as a preferable alternative to eking out a living in Zimbabwe. Particularly before dollarization, with the Zimbabwe dollar devaluing daily and the value of the local currency increasingly worthless, the need for foreign exchange meant that the cross-border activity was an essential part of many people’s livelihoods (Scoones et al. 2011). In this context, the flow of remittances from outside the country became increasingly important to rural Zimbabweans (Tevera and Chikanda 2009), whether in the form of cash, basic commodities for household consumption of agricultural inputs.

3.7 CONCLUSION

This chapter outlined rural livelihoods in Zimbabwe before but particularly after independence in the context of political and economic crisis. In doing so, it discussed a number of events which have impacted on rural livelihoods either directly or indirectly, notably structural adjustment and fast track land reform. Though fast track land reform opened up a range of possibilities for small-scale farmers in terms of agricultural production, a significant proportion of the rural population remains confined to communal areas where production levels are extremely low. Certainly, serious opportunities for agricultural intensification in communal areas do not exist. Smallholders, whether in fast track or communal areas, seek in many ways to diversify their livelihoods in order to sustain themselves but often diversification is restricted. Abject poverty exists in many areas and this has implications for vulnerability to HIV and AIDS. Less stable communities like Chivanhu (an informal settlement) have even more serious challenges. The next chapter provides an overview of HIV and AIDS and raises, amongst other things, the relationship between livelihoods and HIV and AIDS in rural Zimbabwe broadly.
CHAPTER 4
HIV AND AIDS IN ZIMBABWE

4.1 INTRODUCTION
This chapter provides an overview of HIV and AIDS in Zimbabwe. The discussion begins with statistical details pertinent to the pandemic in the country and then examines the national response to HIV and AIDS through outlining the range of official programmes in place. These programmes deal with questions of prevention and treatment, including a programme specifically on adherence to treatment which is the central focus of the thesis. The many challenges that these programmes face are also stressed. The emphasis on existing programmes is critical because it raises questions about programme effectiveness in relation to the lived realities of—in this case—the rural community of Chivanhu. In other words, solid programmes may exist, but it is critical to determine if they filter down into rural areas like Chivanhu, specifically with regard to adherence. The chapter then goes on to discuss the relationship between rural livelihoods in Zimbabwe (as discussed in the previous chapter) and HIV and AIDS. It highlights in particular the vulnerabilities that HIV-affected households face in the light of the pandemic, including questions about loss of household income, household food insecurity, weak social networks and mortality. Livelihoods, HIV and AIDS and treatment adherence is touched on in this chapter, but a fuller discussion is reserved for Chapter 6.

4.2 HIV AND AIDS SITUATION IN ZIMBABWE
Zimbabwe ranks among the countries with the highest HIV infection rates in the world, having an estimated infection rate currently standing at 15,7% (UNAIDS 2011). Zimbabwe’s estimated number of people presently living with HIV is 1,134,919 of which 980,061 are adults (MOHCW 2012). The deaths due to the epidemic have increased; a total of 83,000 people died in 2009 and 97,000 people died in the year 2011. In 2010 alone, 59,318 adults and 11,981 children died of AIDS-related illnesses (Tapfumaneyi 2011). AIDS is the leading cause of deaths in the country (ZNASP 2010). HIV and AIDS has in fact reduced life expectancy in Zimbabwe to 39 years (MOHCW 2008a, UNAIDS 2010). The epidemic also accounts for about 1,3 million orphans presently in Zimbabwe, with this number having increased dramatically over the past decade (MOHCW 2010). The effects of the pandemic on Zimbabwean economy and society have been dramatic and reached crisis point, and it is has
impacted negatively on both urban and rural livelihoods because of its depth, severity and duration.

In Zimbabwe, the HIV epidemic began in the early and mid-1980s. The first case of HIV and AIDS was reported in 1985, and the rate of infection rose from (an estimated) 10% in the 1980s to 26.5% in 1997. This increase in the prevalence of the HIV and AIDS epidemic is often attributed to the delay by the Zimbabwean government in properly responding to the crisis. However, Zimbabwe has achieved one of the sharpest declines in HIV prevalence in southern Africa, from 26.5% in 1997 to 23.7% in 2001 to only 14.3% in 2010; with the prevalence rate for adults between 15 and 49 being 15.7% (Zimbabwe Ministry of Health and Child Welfare 2009, UNAIDS 2011). Figure 4.1 shows the trends of HIV and AIDS prevalence in the southern Africa region since the late 1990s to 2007; this figure clearly shows Zimbabwe’s prevalence rate decline in absolute terms and also comparatively speaking. It is believed that, in the region, only Mozambique has a lower rate of prevalence than Zimbabwe.

**Figure 4.1: Regional comparison of HIV prevalence rates**

![Graph showing HIV prevalence rates in Southern Africa](image)

Although there is clear evidence of a declining prevalence rate in Zimbabwe, the rate of new infections (primarily through heterosexual sex and mother-to-child transmission) is alarming and seems to be increasing. For example, the estimated number of new infections among
adults increased from 63,247 in 2007 to 66,156 in 2009 (a figure amounting to 182 new infections amongst Zimbabwean residents daily).

In Zimbabwe, the HIV rate of prevalence does not vary significantly between provinces (see Figure 4.2). The highest rate is found in Matabeleland South province (20.8%) and the lowest rate is in Masvingo province (15.1%); the research site for this thesis is located in Masvingo.

Figure 4.2: Adult HIV prevalence by province in Zimbabwe (2005/6)


The reasons for the decline in the prevalence rate in Zimbabwe over a number of years are highly complex. Some studies (Gregson et al. 2006, Halperin et al. 2011) attribute the decline to comprehensive education-based prevention programmes initiated in the country by both the state and Non-Governmental Organisations. These programmes, it is argued, have led to behavioural changes reducing the risks of infection: these changes include an increase in the use of condoms by males, delays in engaging in sexual intercourse by young adults, and involvement with fewer sexual partners at any one time.

Of course, high rates of mortality due to AIDS-linked diseases also may lead to reduction in the prevalence rate. This should be recognised as being of great importance, given that the economic and political crisis in contemporary Zimbabwe has led to a major deterioration in health facilities and services throughout the country (and particularly in rural areas) and hence to an incapacity to prevent or inhibit the progression from HIV to AIDS and then to death. The unavailability of HIV and AIDS treatment and failure by HIV-infected individuals
to access treatment should therefore not be ignored when explaining the decreasing prevalence rate.

In this regard, the fact that the absolute numbers of new infections in Zimbabwe shows no sign of declining may be a better measure of the state of the pandemic in the country. Irrespective of the most accurate indicator for the status of the pandemic, it is important to consider the state’s response to the pandemic because this links to the key focus of the thesis, namely, availability and access to treatment for HIV and AIDS.

4.3 OVERVIEW OF STATE RESPONSE TO HIV AND AIDS IN ZIMBABWE

In a country like Zimbabwe marked by a deep economic and political crisis over an extended period, responding to a social health crisis of the depth and breadth of HIV and AIDS is a particularly difficult task for any state. In the specific case of Zimbabwe, it is generally recognised that the state was slow to acknowledge the character and extent of the problem and that it delayed in taking suitable and sufficient action to advert or address the accumulating crisis (Zimbabwe Human Development Report 2003). As a result, and like other states, the government of Zimbabwe faced severe criticism by significant international bodies for not identifying and treating the epidemic as an urgent matter demanding urgent attention. This contributed further to the isolation that Zimbabwe was experiencing both politically and economically for fast track land reform (UNAIDS 2010).

Any serious comprehensive response to the epidemic surfaced only in December 1999 with the declaration of a National HIV and AIDS Policy. This was implemented in 2000 under the auspices of the National AIDS Council (NAC), which was formed in 2000 through an act of parliament. The NAC is at the forefront of the state’s response, as it is given the responsibility to coordinate and facilitate a national multi-sectoral response to HIV and AIDS (ZNASP 2010). This national response to the pandemic involved the government of Zimbabwe, Non-Governmental Organisations (NGOs) and other stakeholders, all mobilising their particular set of resources in order to fight the epidemic. With guidelines from the National HIV/AIDS Strategic Framework and under the influence of the national HIV and AIDS policy, the Government of Zimbabwe (GoZ) and other institutions (led by the NAC) managed to put into place specific HIV and AIDS programmes focusing on HIV and AIDS education, treatment, care and support.
The national strategic framework stipulated the principles and guidelines which any and all programmes should follow in addressing the HIV and AIDS epidemic. According to the framework, HIV and AIDS would be addressed by the NAC through a multi-sectoral approach because the pandemic was seen not as a health problem alone but as a broader socio-economic challenge. All sectors, organisations and communities participating in HIV and AIDS programmes would need to prioritise this broad recognition of the character of the pandemic’s challenge.

The framework also indicates and stipulates that all programmes linked to HIV and AIDS (and to sexually transmitted diseases) would need to understand the gendered dimension of the pandemic, such that programme implementation would need to be gender-sensitive. This particular stipulation would prove to be critical given the pronounced patriarchal-based systems, practices and ideologies pervasive throughout Zimbabwean society. In addition to gender-sensitivity the framework also incorporates, into the Zimbabwean response, the promotion and protection of the human rights, dignity and worth of people living with HIV and AIDS. This principle hence highlights the importance of all programmes avoiding at all times the existence of stigmatisation and discrimination against HIV-infected and HIV-affected people. In this respect, special emphasis is placed on upholding the rights of children and young people. In combating the pandemic, HIV and AIDS programmes would focus mainly on prevention, that is, on lessening the rate of HIV and AIDS transmission and decreasing new infections. Nevertheless, the framework also underlined the need for the availability of comprehensive, cost effective and affordable health care for people living with HIV and AIDS.

The national response to HIV and AIDS in Zimbabwe has made possible through various funding mechanisms. The government has raised funds primarily through the national budget and the establishment of the National AIDS Trust Fund (NATF). In trying to generate domestic resources and to mitigate the impact of HIV and AIDS, the state introduced (in 1999) a tax known as the HIV and AIDS levy, which is linked to the NATF. This levy is collected from taxable income on a monthly basis from all residents of Zimbabwe; it amounts to 3% of both payee and corporate tax. The tax is collected by the Zimbabwe Revenue Authority and is directly credited on a monthly basis to the NAC that manages the trust fund.
Due to the major economic challenges the country was facing up until the years 2007 and 2008, including the hyperinflationary environment which drastically undercut the value of local currency and cash, the AIDS levy was not of great significance for the first decade of its existence. Substantial contributions from the levy to the state’s HIV and AIDS policy were provided only from 2009. In 2009, the fund contributed USD5.7 million to the state’s response to the pandemic and in 2010 the corresponding figure was USD15.9 (Tapfumaneyi 2011). This innovative approach enabled Zimbabwe to diversify its domestic funding for its AIDS response, raising an estimated US$26 million in 2011 and an expected US$30 million during 2012 (Kachere 2012a, Machivenyika 2012, ZNASP 2010). Exactly half of the contributions (50%) are used for the procurement of antiretroviral medication and the rest are channeled to various programmes and their administrative support. Currently the AIDS levy is the major contributor of domestic funding to the national AIDS programmes.

Another source of funding for the response to HIV and AIDS is the Expanded Support Programme (ESP). The ESP provides additional (in this case, international) resources in support of the national HIV response and contributed USD 66 million from 2007 to 2010; half of this amount was used for treatment, care and support of HIV-infected people (Tapfumaneyi 2011). The ESP consists of Norwegian Aid, Irish Aid, Swedish International Development Cooperating Agency, Canadian International Development Agency and Department for International Development. The activities of the Expanded Support Programme are meant to enhance and build local capacity for prevention, treatment and care; and, where necessary, efforts are made to identify and mitigate obstacles to accessing HIV and AIDS services. The Expanded Support Programme is also linked to the United Nations International Migration Office in offering a range of services to migrant workers inside Zimbabwe, including HIV testing, counseling and treatment (ZNASP 2010).

The National AIDS Council (NAC), as intimated already, is central to the state’s response. The NAC has put a variety of structures in place at the national, provincial and district levels to ensure institutional and operational environments conducive for pursuing the HIV and AIDS multi-sectoral response (ZNASP 2010). Besides coordinating these state bodies, the National AIDS Council also seeks to incorporate and coordinate other stakeholders into the national response to maximize processes of decentralization in decision-making and implementation. In this respect, it seeks to ensure genuine participation by civil society, including community organizations and people living with HIV; and it encourages
relationships based on partnership within the state, within civil society and between state and civil society bodies. The council advocates for communities across Zimbabwe to have full universal access to HIV and AIDS services and to empower them in reducing the rate of HIV transmission locally (Tapfumaneyi 2011).

The NAC is responsible for mobilizing financial, human and organizational resources in support of the national response, and for making sure that AIDS service organizations from all across civil society are participating fully. In this regard, the NAC has succeeded in attracting a significant amount of external and internal resources (as noted previously). The NAC is also responsible for monitoring and evaluating the different components and elements of the programme. Despite the ongoing economic and political challenges facing Zimbabwe, there is no doubt that – at the general level – the national response to the pandemic has had some noticeable positive effects. However, there is often a great divergence between policy intent and policy implementation and (later in the thesis) I will follow this up with specific reference to my research site in Masvingo Province.

4.4 HIV AND AIDS PROGRAMMES IN ZIMBABWE
Zimbabwe is one of the African countries that have adopted the United Nations General Assembly Special Session (UNGASS) declaration on HIV and AIDS made in 2001. Among other things, the UNGASS declaration – as a commitment to addressing the pandemic – is targeted at reducing the HIV infection rate, improving education about HIV and AIDS, and providing universal care and treatment. The Zimbabwean state’s HIV and AIDS policy and strategic framework are in line with this commitment, as are the many programmes that flow from these. In partnership with other stakeholders, the government of Zimbabwe has therefore worked towards the goal of mitigating the impact of HIV and AIDS in accordance to UNGASS. And it has done this in the context of economic and political crisis and indeed turmoil. The specific programmes implemented focus on prevention and treatment and are at times directed towards specific target groups based on vulnerability and risk. This section gives a brief overview of some of these programmes.

4.4.1 HIV and AIDS Counselling and Testing Services (HCT)
In response to HIV and AIDS, the GoZ in 1999 developed a manual detailing the guidelines and procedures to be followed with reference to counselling and testing. HIV counselling and testing (known by the acronym HCT) have in fact been identified in the government’s
strategic framework as critical components of the national response to HIV and AIDS (Chevo
and Bhatasara 2012).

In this respect, the Zimbabwe National HIV Testing and Counselling Strategic Plan (2008–
2010) was launched in 2008 in an attempt to scale up the national response. It entailed the
development and production of numerous HCT guidelines, documents, packages and
materials which were released in 2008 and 2009. These include the national HCT training
manual for health workers; the Zimbabwe national guidelines for HCT for children; a training
course for counsellors on HCT for children; and HIV counselling and testing training
manuals (ZNASP 2010). The key objective of the HCT strategic plan is to encourage and
stimulate members of the Zimbabwean public to know their HIV status through what is called
Client-Initiated Counselling and Testing (CICT), formerly labelled as Voluntary Counselling
and Testing (VCT) (ZNASP 2010). Because of this counselling and testing, Zimbabweans
(through knowing their status) have had the chance to plan for the future realistically and
with foreknowledge, and have been able to access appropriate health and support services if
chosen to do so. This has been seen as a cost-effective preventative measure especially with
regard to high-prevalence communities and high-risk groups (Chevo and Bhatasara 2012).

According to the joint United Nations Programme for AIDS (UNAIDS 2011), there are a
number of well-established and well-developed entry points within the national health system
which offer counselling and testing in both urban and rural Zimbabwe; though the presence in
rural areas is not as significant. These include standard outpatient departments and wards in
public hospitals and clinics as well as more specialised and decentralised sites which are
registered by the state. To varying degrees, these sites provide both voluntary counselling and
testing services and provider-initiated counselling testing and counselling services, as well as
services related to the prevention of mother-to-child transmission of HIV, early infant
diagnosis of HIV, family planning, and community and home based care. In addition, there
are mobile outreach units, workplace programmes and family planning clinics. According to
the NAC (2012), there has been a significant increase in the number of registered testing and
counselling sites, from 940 sites by 2009 to 1,200 a year later. By the end of 2011, 1,390
testing and counselling sites were reported to be operational (MOHCW 2010). Counsellors at
the sites are trained in terms of regulations set out by the Ministry of Health and Child
Welfare (MOHCW 2008a), and make referrals with reference to care, treatment and
psychosocial support.
Through the nation-wide HCT programme, it is believed that the majority of Zimbabwean residents are now aware of their HIV status. For instance, a total number of 1,653,603 clients were tested in 2010 and the corresponding figure for 2011 was expected to be over 1.8 million (MOHCW 2010). This may seem to indicate overwhelming success. But despite significant achievements, the HCT programme encountered serious challenges which were aggravated by the long-term economic crisis. For example, the outreach programmes have been exceedingly limited because of the costs of transport and this has inhibited the provision of (and hence access to) counselling and testing especially in rural areas (NAC 2012). Due to serious budgetary constraints, the government could not secure new or at least reliable vehicles for the programme and it has had to rely on an aging fleet of vehicles. The limited number of qualified counsellors has also had a detrimental impact on the effective delivery of quality HIV and AIDS counselling and testing (NAC 2012). This programme though remains as a key cornerstone for Zimbabwe’s national response to HIV and AIDS.

### 4.4.2 Social and Behaviour Change Communication Programme (SBCC)

The national response to HIV and AIDS is aimed at the prevention of new infections. The Social and Behaviour Change Communication Strategy (SBCC) therefore was established in 2006 to coordinate and strengthen the HIV prevention process and expedite the country’s critical goal of reducing the HIV prevalence rate to less than 10% by 2010. As indicated earlier, the prevalence rate has been on a downward trajectory for a number of years but, in 2010, the rate was 14.3%. The main focus of the Social and Behaviour Change Communication Strategy is guiding and implementing programmes which promote behavioural change in terms of preventing HIV transmission or lessening the risk of infection. Under the SBCC strategy, the National Behaviour Change Programme (NBCP) emerged as coordinated by National AIDS Council and it is extensively supported by the internationally-funded Expanded Support Programme and the European Union. This programme has been implemented in twenty-six districts from 2007 to 2009 with funding for sixteen districts coming from the Expanded Support Programme and ten districts being funded by European Union.

The primary objective of Zimbabwe’s behaviour change programme is reducing the sexual transmission of HIV rather than focusing on mother-to-child transmissions. Because of this, some of the issues targeted include multiple concurrent sexual partnerships, sexual relationships with significant age differentials between partners, and consistent and correct
use of condoms. The National AIDS Council has paid particular attention to the ready availability of condoms in diverse settings, both urban and rural, because of the potential significance of condoms as an effective HIV prevention strategy (Pinkerton and Abrahamson 1997). Community-based behaviour change facilitators demonstrate to both females and males the correct usage of condoms. In relation to the distribution of condoms, specific high risk groups are targeted, such as truck drivers, sex workers, cross border traders, soldiers and homosexual men (they are also receive information about HIV treatment, care and support.).

In 2009 alone, 89,956,552 male condoms (and 4,491,916 female condoms) were distributed without charge.

Emphasis has also been placed on educating people about the stigma and discrimination regularly associated with HIV and AIDS. In pursuing this programme, NAC officials place substantial emphasis on community-owned processes and self-assessments; they thus work alongside identified community leaders in coordinating and facilitating community dialogues. These dialogues invariably raise critical questions about culture and gender in seeking to bring about behavioural change (UNGASS 2010). In relation to this, participants are taught about the importance of solid interpersonal communication, with a ‘love and respect’ manual used by community members with the assistance of community volunteers known as behaviour change facilitators. No stone seems to have been left unturned in identifying target groups, such that the behaviour change programme has been implemented in prisons for both prison officers and prisoners. Youth who are outside training institutions (schools and other educational facilities) are also subjected to special attention.

The behaviour change programme has reached a considerable number of Zimbabwean communities and groups through the mass media and more direct forms of communication (for instance, in schools). It is estimated that more than five million people have been reached and thereby equipped with knowledge regarding necessary behavioural change to inhibit the risk of transmission of HIV and AIDS through safe sexual encounters (ZNASP 2010). However, the programme faces major challenges with regard to its financial sustainability since funding for the programme diminished over the past few years, notably from 2009 (UNGASS 2010, Chevo and Bhatasara 2012). The European Union funding of the programme ended in 2010 and support for the programme under Expanded Support Programme ended in early 2012. A shortage of staff and voluntary workers has also plagued the programme since its inception – this is particularly the case with reference to the
promotion and distribution of condoms to distant rural areas and new rural settlements such
as the fast track land resettlement areas. Another group for which there has been insufficient
coverage is youth outside of any educational institution, as these interventions have tended to
be of low intensity and duration.

4.4.3 Life Skills Based HIV and AIDS Education Programme
The Zimbabwe Ministry of Education, Arts, Sports and Culture (as part of the multi-sectoral
approach to tackling the pandemic) has also intervened in significant ways. In this context, a
policy and programme has been formulated and developed in which all schools are obliged to
provide a life skill based HIV and AIDS education course (UNGASS 2010). As far back as
1994, then, school teachers were urged to offer such a course and, in support of this
endeavour, every provincial office of the Ministry appointed an Education Officer (EO) who
was to be responsible for HIV and AIDS-related life skills, guidance and counselling. The
HIV and AIDS life skills syllabus introduced in 1994 provided students with general
knowledge about HIV and AIDS, highlighted the modes of transmission of the HIV virus,
and indicated ways of minimising risk and preventing HIV infection. It also sought to counter
many of the myths and misconceptions about HIV and AIDS and stressed the importance of
care and support for people living with HIV and AIDS.

In relation to tertiary educational institutions, life skills and prevention programmes have
been initiated and operated primarily by NGOs such as Students and Youths Working on
Reproductive Health Action Team (SAYWHAT) and Sustainability, Hope, Action,
Prevention Education (SHAPE). Themes covered include promotion of condoms, HIV testing
and counselling, and ways of disclosing one’s HIV positive status. The NAC is running HIV
and AIDS life skills educational programmes with youths out of training institutions, funded
by the European Union (NAC 2012).

A national Adolescent Sexual and Reproductive Health Strategy for 2010-2015 was launched
and the Zimbabwe National Young People’s Network on HIV and AIDS has been recently
established to work towards coordinating activities for all youths, both inside and outside
educational facilities. As well, even ‘youth friendly corners’ (in public spaces) are now used
to reach youth from all walks of life. But serious problems still remain with the life skills
programme (Masvaure 2009). Again, funding challenges and limited qualified personnel
characterise the programme. Monitoring and evaluation of the programme also is
problematic. Vast numbers of schools are not submitting regular reports on progress or shortfalls; hence it is difficult to assess the effectiveness of the programme and to make necessary changes to it. This weakness also marks the programmes as implemented in tertiary educational institutions.

4.4.4 Post Exposure Prophylaxis Programme
National guidelines were established in the year 2007 for a post-exposure prophylaxis (PEP) programme. This programme exists for individuals (normally women) who were accidentally infected through rape, injury with a sharp object or sexual assault. Post-exposure prophylaxis therefore refers to a course of anti-retroviral medication immediately administered to someone who was exposed to the risk of HIV-infection through contact with an HIV positive person; this exposure may occur either through blood or genital secretions (Calum and Baeten 2012). The treatment is regularly effective within an hour of infection and still possibly effective up until seventy-two hours after exposure to the HIV virus. This PEP programme at first was only available at or through Zimbabwe’s major provincial hospitals like Chitungwiza, Harare Central, Mpilo and Parirenyatwa. However, recently through decentralisation of HIV and AIDS treatment services to more localised sites, these sites are now equipped to provide PEP (MOHCW 2008b).

Serious shortages of qualified staff once again arise in relation to a Zimbabwean state programme on HIV and AIDS, this time in relation to the PEP programme. And, once again, rural areas tend to feel the major effects of the programme’s weaknesses. More fundamentally, there is inadequate awareness of the PEP programme amongst at-risk individuals who may fall under the mandate of the programme. In addition, major and widespread stigma associated with HIV and rape, as well as late presentation for the PEP treatment, is a major barrier to a successful programme. The majority of rape survivors for instance report late (after 72 hours) and therefore are no longer eligible for PEP. A survey of adult rape clinics indicates that only 40% of women raped reported the incident within 72 hours (MOHCW 2012).

4.4.5 Prevention of Mother to Child Transmission (PMTCT)
Mother-to-child transmission (MTCT) is regarded as the second most significant source of new HIV infections in Zimbabwe, after sexual relations. In Zimbabwe, approximately one in three infants born to HIV-infected mothers is HIV-infected (Tapfumaneyi 2011). The
PMTCT programme therefore is critical to the Zimbabwean state's national response to the pandemic. Because of its significance, PMTCT is incorporated within the broader national framework of reproductive health service provision and it also forms part of a multi-sectoral PMTCT partnership forum (MOHCW 2012). In this regard, treatment guidelines provided by the World Health Organisation (WHO) have been circulated to Provincial Medical Directors, City Health Directors, Zimbabwean association of church hospitals, the Zimbabwe Nurses Association, the Zimbabwe Medical Association and other relevant implementing partners (MOHCW 2008a). The main funders for the programme include the United States Government, Elizabeth Glaser Paediatric AIDS Foundation, World Health Organisation, Canadian International Development Agency, United Nations Children’s Emergency Fund, Clinton Health Access Initiative and National AIDS Council.

The key purpose of the PMTCT programme is to prevent any further HIV infections among infants and to ensure that HIV-positive mothers do not progress to full-blown AIDS and die as a result. The coverage of the programme has been significant, with 95% (1560) of all public sector facilities now implementing PMTCT. The total number of sites in Zimbabwe involved in the programme has nearly doubled in recent years, from 920 in 2008 to 1,560 in 2010 (MOHCW 2012). Initially, when the programme began, treatment was based on the single dose Nevirapine (sdNVP) but a multi-dose regimen has subsequently been implemented from the year 2008 (ZNASP 2010). By 2008, 76 primary care counsellors had been trained in PMTCT, and more health workers continue to be trained in the hope of totally eliminating mother-to-child transmission (UNAIDS 2011).

Approximately 86% of all HIV-positive pregnant women in the country accessed antiretroviral prophylaxis in 2010, which is a huge increase compared to only 17% in 2008 (UNAIDS 2012). By the end of 2011, the figure had increased to 98% (MOHCW 2012). Therefore Zimbabwe is close to achieving universal access to ARVs for PMTCT prophylaxis. Furthermore, and consistent with the trend for HIV positive mothers, a substantial increase occurred in the proportion of HIV-exposed infants on ARV prophylaxis from 2010 to 2011 (from 74% to 94%).

These figures are highly impressive, given the deterioration of health services generally in Zimbabwe over the past decade and more. However, like all other HIV and AIDS programmes outlined already, the PMTCT programme encountered challenges. Once again,
shortages of highly qualified health workers impacted negatively on service delivery. In this regard, health care workers were putting only limited numbers of treatment-eligible mothers on ART because they were unfamiliar with World Health Organisation clinical staging (which entails making decisions based on patient’s clinical features for patient’s eligibility for treatment) especially in resource limited settings (MOHCW 2012). In addition, some health service sites are without CD4 machines, some encountered problems with maintaining adequate supplies of ARVs and some failed to do proper follow-ups of HIV-exposed infants.

The many programmes outlined above represent significant efforts by the Zimbabwean state in tackling the pandemic which has caused wide-ranging crises and shocks at individual, household and community levels throughout the country. The National Aids Policy (and the programmes emanating from it) has undoubtedly had a positive impact. But the state’s response to HIV and AIDS in a sense has been subordinated (or has taken a back-seat) to the economic, political and social crises which have gripped the country and dominated the policy agendas over the past ten years.

The epidemic continues to have devastating effects on HIV-infected and HIV-affected urban and rural households and, as a result, it has placed incredible levels of strain on livelihood systems and the prospects of household food security. Even the most stable of urban and rural communities have not been able to cope with the devastation brought about by the pandemic. Hence, the effects on less stable (and more mobile) communities such as my research site in rural Masvingo province are absolutely staggering (as will be discussed in following chapters). To end this overview of Zimbabwean state programmes on HIV and AIDS, I outline a programme which is particularly pertinent to the main theme of this thesis.

4.4.6 Antiretroviral Therapy Programme (ART)
While important gains in access to antiretroviral medication in Zimbabwe and other African countries have occurred, there is growing concern that, unless the prevention of further HIV infection and transmission becomes more pervasive, the pandemic will continue without let up. In other words, maintaining millions of people on ongoing treatment throughout the rest of their lives is not a viable or sustainable solution to the pandemic (Halperin et al 2011). Nevertheless, treatment and care (along with programmes seeking to prevent new infections) are necessary components of any realistic state response to HIV and AIDS, as seen in the
case of Zimbabwe. This subsection therefore focuses specifically on the Zimbabwean state’s antiretroviral therapy programme.

In 2004, the Ministry of Health and Child Welfare launched a plan to prioritise the distribution of antiretroviral therapy (ART) throughout the country. The aim was to ensure universal access to ART drugs through a diverse set of sites in both urban and rural centres and, in doing so, to reduce morbidity and mortality arising from the HIV and AIDS epidemic and to improve the quality of life of people living with HIV in a way which also enhances their dignity. Funding was to emanate from United Nations Children’s Emergency Fund, United States Government, Global Fund to fight AIDS, Clinton Foundation, National Pharmaceutical Body and the National AIDS Council. Foreign funding accounts for more than half the total funding for this programme (Mtomba 2012).

In the year of the launch (2004), the number of sites offering full ART services was a mere five. This increased over the next few years such that 337 sites existed by the end of 2009 (WHO 2010, MOHCW 2009), 510 sites in 2010 and 590 by the end of 2011 (MOHCW 2012). The upward trend in coverage is primarily attributed to processes of scaling-up and decentralisation of the ART programme (notably to rural health centres) and to an increase in coverage by smaller public health facilities offering comprehensive ART services (both initiating treatment and follow up) (ZNASP 2010).

In determining eligibility and issuing treatment to HIV-positive individuals, the Ministry Of Health and Child Welfare adopted in 2004 the then-existing WHO recommendation of a CD4 count of less than 200. In 2010, the WHO revised its recommendation by arguing for initiation of treatment when the CD4 account reaches 350; the Zimbabwean state immediately followed this revised treatment regimen. This revision suddenly increased the number of HIV-infected individuals eligible for treatment and increased the necessary coverage in Zimbabwe in terms of the absolute number of individuals required to be on HIV and AIDS therapy. For instance, there was an increase in actual coverage, in relation to adults only, of 15% in 2007 to 80% in 2011. Coverage of antiretroviral treatment among eligible individuals in Zimbabwe has also increased though in line with the process of service decentralisation and hence increased state capacity.
The total number of individuals in need of anti-retroviral treatment was recently estimated as 611,264 (including 518,810 adults and 92,454 children) (Kachere 2012b). By the end of 2011, over half a million people in the country were receiving this (potentially) lifesaving HIV treatment and care. It seems that coverage of adults is far greater than coverage of children. For instance, by December 2011, it is estimated that 79.7% of all eligible adults (or 436,181 adults) and 46.1% of eligible children (or 40,140 children) were receiving treatment (NAC 2012). The coverage rate is not as high as it possibly could have been had the Zimbabwean state not adopted the revised WHO recommendations. The main point though is that large numbers of HIV-infected adults and adolescents remain on the waiting list for treatment, and this is even more so the case with regard to children. This lagging behind of children in accessing ART is of great concern to the Ministry of Health and Child Welfare.

The biggest ARV support comes from the Global Fund which is supporting (44%) of the total number of all individuals on ART. The Zimbabwean state, through specifically the AIDS levy, accounts for 23%, the United States government caters for 18%, the British DFID for 10% and the Expanded Support Programme is providing for 5% of the total estimated number of people on HIV and AIDS therapy. This demonstrates a heavy reliance on international partners, some of whom are highly critical of Zimbabwean state policies on land reform and whose relationship with the Zimbabwean government is very acrimonious. While the GoZ has been lauded for successfully fundraising from international partners to supply ARV drugs, it has been criticised for failing to adequately fund the programme from own sources. In this context, the GoZ is seeking ways to increase its own procurement of ARV drugs and therefore enhance self-reliance in case one more international partner withdraws suddenly from this critical treatment programme.

Figure 4.3 shows ART coverage in Zimbabwe by province in June 2010. Coverage is highest in Bulawayo and Midlands (over 80%); Masvingo, Harare, Mashonaland Central and the two Matabeleland provinces are between 50% and 70%; and coverage for Mashonaland West, Manicaland and Mashonaland East are under 50%. These disaggregated provincial figures may hide important intra-provincial differences. Based on the provincial figures, it does not appear that rural areas are necessarily disadvantaged in terms of coverage and access. For instance, the two Matabeleland provinces (largely rural) do not have significantly less coverage than Harare province (which is almost entirely urban).
In addition to the revised WHO recommendations implemented in 2010, Zimbabwe has more recently moved therapy-taking patients onto less toxic regimens. Thus, from April 2011 onwards, health workers were told to replace the therapy Zidovudine for Stavudine among children and to substitute Tenofovir for Stavudine among adolescents and adults. By December 2011, about 78% of children were on the Zidovudine based-regimen and about 9.5% of adults and adolescents had adopted the Tenofovir-based regimen (though the target for adults and adolescents by this date had only been 20% of patients) (MOHCW 2012). This change-over for existing patients may have hindered the process of increasing coverage for other eligible HIV-positive patients.

The ART programme has demonstrated significant levels of state competency in the roll-out of HIV and AIDS therapy. Insofar as it has been a success, then this success has taken place in collaboration with some of the other programmes already mentioned, notably the HTC and PMTCT programmes. In spite of these apparent successes, the ART programme faces similar problems to those of the other programmes, including severe staff shortages, limited financial resources, and inadequate and faulty CD4 technology. These challenges to ART programme effectiveness have been widely discussed in the academic literature in relation to Zimbabwe and large parts of the rest of Africa (Skovdal et al. 2011a, Mills et al. 2006, Peltzer et al. 2010, Nam et al. 2008, Veenstra et al. 2010, Weiser et al. 2010, Watt et al. 2009). The study
by Skovdal et al. (2011a) of Manicaland Province, for example, highlights that ART users have to pay $1(US) ever time they collect their ARVs and this fee even applies to HIV-positive individuals on the waiting list. This raises the question of adherence to the therapy. Coverage alone is not a full indicator of the effectiveness of the programme, as adherence is critical if the therapy is to be effective. And adherence is contingent on a range of factors, such as the ongoing availability of drugs, proper counselling and advice, and a committed and qualified workforce of health care delivers (UNAIDS 2010, Skovdal et al. 2011a).

4.5 MAJOR CHALLENGES
This section provides an overview of critical challenges faced by the various Zimbabwean state programmes on HIV and AIDS, with a particular focus on the ART programme; in the main, these challenges have been touched upon already in passing. There are discussions here about human resources, financial resources, and stigma and discrimination.

4.5.1 Human resource challenge
Greater efforts have been made in Zimbabwe as far as decentralisation of facilities to offer treatment is concerned (MOHCW 2012). However, a critical shortage of qualified health care providers and doctors at sites offering ART services is a major hindrance to effective service delivery and ART coverage (Kachere 2012a, MOHCW 2012). Most of the health centres in Zimbabwe do not have readily available doctors working at the centre on a full-time basis. According to the Modes of Transmission report for Zimbabwe, up until now only physicians are legally allowed to start a patient on ART in Zimbabwe. As a result, doctors employed by the public district hospitals move from one hospital to another providing ART services, and this clearly limits the expansion of ART services in the country (UNAIDS 2012).

The shortage of staff is associated with the ongoing economic hardships be-devilling Zimbabwe, which has led to a significant exodus of nurses and other health professionals to neighbouring countries and beyond. The migration of health professionals is attributed to the erosion of real wages or salaries in Zimbabwe, poor conditions of service and increasing workloads (Mudyarabikwa and Mbengwa 2006). The quality of service delivery with regard to ART is therefore adversely affected by the high turnover of health staff. According to the Ministry of Health (WHO 2008, MOHCW 2008a), an estimated 2,825 work permits were processed in 2005 for health professionals from Zimbabwe to enter the
United Kingdom alone; this figure represents 25% of professional health workers in Zimbabwe’s public health sector.

Given that these staff shortages are not temporary but are likely to continue over the long-term, the government of Zimbabwe acknowledges and notes that tasks related to combating the HIV and AIDS pandemic which are customarily performed by physicians will have to be delegated to junior health-care providers such as clinical officers and nurses (MOHCW 2012). However, funds necessary for equipping these staff with appropriate and specialised knowledge so as to upgrade their capacity has yet to be identified. Further to this, in a survey with health care providers, it was concluded that clinical officers, nurses and other health personnel are already expressing excessive burnout and stress because of a high caseload of patients; hence adding further responsibilities onto their daily work schedule will only exacerbate the problem (WHO 2008, MOHCW 2002). As it stands, the quality of HIV and AIDS service delivery (mostly treatment and care to patients) is already seriously compromised, as is the sheer quantity and quality of follow-up activities to ensure adherence to medication.

4.5.2 Limited funding
Due to the internal economic situation in Zimbabwe, including a dwindling of the tax base for central budget expenditure, as well as limited donor funding from the international community, the country’s efforts in responding to the epidemic has been seriously affected and the coverage of most HIV/AIDS preventative, treatment and care programmes has been severely compromised (ZNASP 2010). The donor community is the main source of funding but, even then, the ongoing political and economic crisis in Zimbabwe has tended to deter foreign donors because of concerns about state incapacity in health service provision. There have also been reports of corruption and mismanagement of donor funds and, at times, donors have threatened to withdraw from the various programmes. The government of Zimbabwe has simultaneously criticised the role of NGOs and other foreign donors in the national response to HIV and AIDS, claiming that it is politically motivated (Kachere 2012). The state-donor interface and the squabbles along this interface have contributed to gaps in for instance the coverage of eligible HIV-infected individuals, with tens of thousands remaining on the waiting list; hence universal access is still to be achieved (ZNASP 2010). In addition, the number of adults, adolescents and infants newly placed on
ART is still not keeping pace with the number of those newly infected as a result of failure to prevent new infections because of funding shortfalls.

4.5.3 Stigma and discrimination

Stigma and discrimination of HIV-infected and HIV-affected individuals and households has been a critical barrier (in Zimbabwe and elsewhere) in inhibiting effective HIV/AIDS prevention, treatment, care and support. Fear of stigma has been found to be a barrier to accessing voluntary counselling and testing and other HIV/AIDS-related support programmes and services such as ART (MOHCW 2010 2012). Many groups in society hold a multiplicity of negative beliefs about the pandemic and those who suffer from HIV and AIDS, and this is manifested in practices which perpetuate discriminatory processes of exclusion and marginalisation.

Stigma in relation to HIV and AIDS therefore entails a set of beliefs which lead to rejection, isolation and marginalisation, and ultimately to emotional and material harm (Parker and Birdsall 2005, Sambisa et al 2010). It can be directed towards both infected and affected individuals and even occur within households. Hence, it may involve isolated everyday activities which take place in the private sphere (such as the separation of eating utensils between HIV-positive and HIV-negative individuals) or public displays leading to the diminished standing of HIV-positive individuals as productive and loyal members of the community. The significant stigma attached to HIV and AIDS, for the men and women who are victims of stigma, is expressed through a range of feelings, self-conceptions and practices, including denial of one’s HIV positive status, fear of reprisals, guilt, depression, withdrawal, loss of hope, worthlessness and sometimes suicidal thoughts and indeed suicidal actions.

In a recent study by Campbell et al. (2011b) about a rural area in Manicaland province in Zimbabwe, it was shown that stigma interferes with open acknowledgement of one’s HIV-positive status (and undermines adherence to the ART regimen). Another study in Manicaland province on the barriers to ART adherence also highlighted the role of stigma; male ART users reported being fearful of being recognized as AIDS patients (Skovdal et al. 2011a). In many parts of Zimbabwe, people are still ignorant about the main sexual modes of HIV transmission and HIV and AIDS is often associated un-problematically with sexual immorality and promiscuity; the stigma arises on this basis. In other words, HIV-infection
is seen as occurring outside marriage or long-term partnerships (Campbell et al. 2011a, Skovdal et al. 2011c). Because of this, the progression from HIV to AIDS and the many severe and painful diseases associated with full-blown AIDS, as well as pending death, are interpreted and thereby identified as necessary punishment for illicit sexual relations. Although ART, because of its capacity to control HIV progression to AIDS, might seem to normalize the HIV and AIDS situation (as a chronic health condition with which to live), HIV and AIDS remains highly stigmatised as a “moral disease”, a classification prevalent in rural Zimbabwe which serves to undermine the state’s many HIV and AIDS programmes (Campbell et al. 2011b).

In many rural communities in Zimbabwe, women in particular are understood as responsible for HIV-infection and transmission through these immoral relations and they suffer the public humiliation as a result. In fact, in the context of polygamy in many parts of rural Zimbabwe, illicit relations by men are not necessarily frowned upon and denounced, as they are when women engage in them. A study by Patel et al (2009), at one of the national roll-out ART sites in Harare (namely, Chitungwiza Hospital), highlights that stigma is a key psycho-social factor impacting on the wellbeing of notably HIV positive women in Zimbabwe (Patel et al. 2009). It seems then that stigma has in many cases a gendered quality to it. In this context, women’s adherence to ART has been reported to be influenced by men and masculinity, with women fearing to disclose their HIV-positive status to their husbands (Skovdal et al. 2011c). Clearly, this stigma and discrimination is a manifestation of broader relations and practices of patriarchy embedded in Zimbabwean state and society.

The government of Zimbabwe, like other countries in southern Africa, has adopted certain strategies to reduce stigma and minimise its effects. These in large part entail campaigns which disseminate accurate information about modes of HIV transmission which may go contrary to locally-held cultural beliefs (Campbell et al. 2010). This is being done on a community-driven basis through awareness campaigns and support groups (NAC 2012, Rodlach 2009). A number of faith-based organisations are playing a critical role in the struggle against HIV and AIDS and stigma and, doing so, they highlight the importance of supporting orphans and vulnerable children in HIV-infected and HIV-affected households (Foster 2004).
The balance of this chapter looks at HIV and AIDS and rural livelihoods in contemporary Zimbabwe, so as to set the context more specifically for the study in Masvingo Province covered in the next chapters.

4.6 HIV AND AIDS AND RURAL LIVELIHOODS IN ZIMBABWE

Apart from being a health issue, HIV/AIDS is a major social and economic challenge to the development process in Zimbabwe and other African countries (Chimhowu and Hulme 2006). Zimbabwe continues to suffer a severe socioeconomic and political crisis, including unprecedented rates of inflation, a crumbling health sector and the exodus of Zimbabwe’s health care professionals. Zimbabwe’s HIV crisis also is aggravated by chronic food insecurity (Makonese 2006, Mazzeo 2011). Sub-optimal nutrition increases the vulnerability of individuals with compromised immune systems to life-threatening opportunistic infections. As the economy deteriorates and farming communities struggle to recover from the land reform programme, food shortages have escalated. Sickness and death from AIDS has caused a reduction in agricultural output, especially since women (who form the bulk of agricultural labour in Zimbabwe) are so vulnerable to HIV infection. Women are also expected to care for relatives who have AIDS, forcing many to abandon their agricultural work. In this regard, it is estimated that the prevalence rate among females in Zimbabwe is 59.7% and for males it is 40.1% (UNAIDS 2010).

As Zimbabwe’s economy and agricultural production deteriorates, the resulting food shortages have increased the number of deaths from AIDS (Campbell et al. 2012). Malnutrition has caused people living with HIV to develop AIDS faster, and it is likely to have decreased the effectiveness of ARVs for those who are receiving treatment. While it is essential that those on ARVs receive adequate nutrition for the drugs to work effectively, there are reports of HIV positive patients in such desperation that they are actually selling their ARV medication in order to buy food (Kachere 2012, Veenstra et al. 2011). Many household members employ coping strategies which may increase the risk of HIV infection like prostitution and migration (to urban areas and other countries to look for employment) to sustain livelihoods.

The epidemic has considerable socio-economic impacts on affected households. The epidemic is pronounced in rural areas that are drought prone and marginalised. The epidemic also has had a severe impact on the food security of households that solely depend on farming.
as a livelihood resource in order to meet household livelihood needs (Babbington 1999, Makonese 2006, Mazzeo 2011). Recent studies in Zimbabwe have indicated the ways in which HIV and AIDS impacts on the livelihood systems of the rural population (Chizororo 2010, Mazzeo 2011) and how it facilitates and hinders ART adherence (Skovdal et al. 2011a, Campbell et al. 2012, Campbell et al. 2010, Rodlach 2009, Freeney 2001). The pandemic intensifies poverty through reduced agricultural production, it undermines household labour supply and it disrupts social safety nets in communities. The livelihoods of rural households are also exposed to the ongoing economic crisis in the country making them more vulnerable to the epidemic and its effects (Halperin et al. 2011, Mazzeo 2011).

The following sub-sections are based on the available literature on HIV and AIDS and its impact on rural livelihoods in Zimbabwe. It is presented in terms of four themes which were found to be relevant to the research study. In this regard, Figure 4.4 illustrates how HIV and AIDS impacts on the infected and affected households and how they cope in the face of the epidemic.

4.6.1 Disruption of social network system

In a study by Campbell et al. in Manicaland province, it was noted that households with little social capital on which to draw may be highly vulnerable (Campbell et al. 2002, Campbell et al. 2012). As illustrated in Figure 4.4, families caring for a sick person encounter demands and costs related to medical treatment and this poses a great challenge to the household due to limited resources. The affected family will be left struggling to cope with no support due to a collapsed or strained social network system. With unlimited demands posed by the sick person, the household will become more vulnerable without adequate support (since the burden of care will drive away those who may be otherwise willing to assist).

Social relationships have been noted as central to adherence to antiretroviral therapy among ART users in Zimbabwe. ART adherence is heavily influenced by the social relationships that exist between ART users and the people they interact with on a daily basis, including family and community members as well as service providers (Skovdal et al. 2011a). In this case it is apparent that households that have a deficient social capital base are more vulnerable to the epidemic’s effects to livelihoods. In a recent study on children’s adherence to ART in the south eastern parts of Zimbabwe, children whose families were supportive were reported to be coping and complying with ART more successfully than other children.
Broadly speaking, ART patients from households in rural Zimbabwe are managing ART adherence by drawing on support from community members and friends (Skovdal et al. 2011a).

**Figure 4.4: HIV and AIDS Impact on Households**

![Diagram showing the impact of HIV and AIDS on households](image)

*Source: Diagram extracted from (White & Robinson 2000)*

**4.6.2 Loss of household income**

Failure by household members to support the sick person financially (especially for travelling costs to and from the local health centre) might have a great impact on access to the treatment that need to be collected on monthly basis. Usually, given the low household income of affected households, the sick person will not be able to afford to pay for the costs charged to collect the medicine, hence missing doses during these times. Participants in a study in the rural areas of Manicaland province in Zimbabwe stressed greatly transport costs and other costs related to HIV and AIDS care and treatment. For example ART users reported being charged $1(US) in order to collect their monthly treatment.
The diversion of saved money for HIV care leads to the household’s downward spiral into poverty affecting the economic development of the household and intensifying household vulnerability (Drimie and Gandure 2005, Mazzeo 2011). Furthermore, since the epidemic affects also the urban areas, many urban dwellers affected by HIV and AIDS send their children to relatives in rural areas when times are hard. They themselves also return to their villages of origin when they become seriously ill, so that the caring and support costs of the wider family are frequently borne by rural communities (Rodlach 2009).

4.6.3 Household food insecurity

Recently studies have shown that most adults are infected during their prime productive years. Figure 4.4 illustrates how HIV and AIDS impacts on household food security levels. The onset of sickness of one household member marks the beginning of problems with household labour supply (Mazzeo 2011, Campbell et al. 2011a). HIV and AIDS impact on household food security in different ways. Household labour supply is reduced when one member is sick and stops working. In this light, another member needs to spend and devote more time caring for the sick adult and less time to farming. Reduced labour would mean reduced household agricultural production leading to deterioration in nutritional status for the HIV-infected (as shown in Figure 4.4). Therefore, this results in the reduction of cultivated areas leading to food insecurity and under-nutrition (Gillespie and Kadiyala 2005).

Decline in food production as a result of reduced labour adversely impacts on household food security since farming is the major livelihood activity that most rural households in Zimbabwe depend upon (Kwaramba 1997, Mazzeo 2011, Campbell et al. 2012). Sometimes food produced does not last until the next harvest. Households’ farming switches to less labour intensive crops and farming systems, and households sell off some assets for funds to improve their livelihood status (Skovdal et al. 2011a). Farmers often abandon any idea of market-oriented and high external input agricultural practices and shift over to subsistence farming due to the epidemic.

4.6.4 Mortality

Human labour is the main asset that most rural households have control over and productivity depends on the skills and knowledge possessed. Human capital thus is often regarded as the chief resource available to households in most of rural Zimbabwe (Mazzeo 2011). In poor rural households, HIV and AIDS cause severe labour shortages and economic constraints that
disrupt agricultural activities (Drimie and Gandure 2005, Mutangadura and Muchopa 1999). Households with adults in their prime production years tend to cope well in the face of shocks such as HIV and AIDS, unless these adults are chronically-ill and die themselves. The epidemic may cause the sickness and ultimate death of one or more economically productive members within a household who is more likely to be a parent and responsible for certain dependents. This has significant repercussions at household level and the community level at large (Freeney 2001). A recent study by Chizororo (2010), in Mhondoro North district of Mashonaland West Province, indicates that one devastating impact of the HIV and AIDS epidemic is the development of more child-headed households in Zimbabwe.

Shocks such as the death of the breadwinner also result in increased vulnerability of the households that are left with no choice other than depending on members who lack the skills and adequate knowledge to perform agricultural and other economic activities (Freeney 2001, Rodlach 2009, Mazzeo 2011). This results in increasing numbers of children dropping out of school due to failure by family members to meet the financial demands (as depicted in Figure 4.4). HIV and AIDS have led to a growing number of child-headed households and households headed by elderly people who are no longer fit to work in the fields (Freeney 2001). Instead of these child-headed families being assisted by the social networks existing at community level, these networks or social safety nets are already overly-strained by the epidemic (Chizororo 2010). There is also greater loss of indigenous methods and knowledge of specialized farming skills as more adults die and young people are left to manage farms.

4.7 CONCLUSION

Though comparatively speaking it may be said that the prevalence of the pandemic in Zimbabwe is not as great as it is in other countries in the region, the country faces a serious socio-health problem. Initially the government was slow to respond but it subsequently put in place a range of national programmes including with specific reference to treatment and adherence to treatment. It has done this in the face of a major economic crisis which, as the previous chapter showed, has compromised the livelihoods of rural Zimbabweans. Though the programmes seem comprehensive and are laudable, the effectiveness at local sites (notably rural sites) requires investigation. This will be pursued later with reference to Chivanhu and adherence specifically. The chapter also sought to show the interrelations between HIV and AIDS on the one hand and rural livelihood vulnerability on the other by referring to some of the available Zimbabwean literature on the topic. It touched on
livelihoods and treatment adherence but a fuller account of this is provided in Chapter six. Before doing this, the next chapter provides an introduction to Chivanhu settlement and the lives and the livelihoods of its residents.
5.1 INTRODUCTION
The thesis so far has set the stage for the two research-based chapters on Chivanhu. It has set out the theoretical framework for the study, namely the rural livelihoods framework and how the framework speaks to HIV and AIDS vulnerability and livelihoods. It has described the contemporary Zimbabwean crisis and the impact this has on rural spaces in terms of livelihood activities and food security. And it has detailed the pandemic in Zimbabwe, including the state’s HIV and AIDS programmes and the relationship between the pandemic and vulnerability of HIV-affected rural households. This current chapter discusses Chivanhu and livelihoods in Chivanhu. It provides a profile of Chivanhu in terms of land usage, household income and social networks. The following chapter looks specifically at treatment and adherence to treatment in Chivanhu.

5.2 LOCATION, HISTORY AND INFRASTRUCTURE OF CHIVANHU
Chivanhu is a settlement located in Masvingo Rural District in the south-eastern part of Masvingo Province. Masvingo rural district is composed of small-scale commercial farms, large-scale commercial farms, informal settlements, resettlement areas and communal areas. Chivanhu settlement is an informal settlement situated in Ward 12 of the district. In the settlement, there are seven village heads, namely, Chirengarenga, Muzoroza, Sani, Muzvimwe, Masvaya, Chivanhu and Masocha. Within the settlement, there are no clear spatially-demarcated village boundaries, but each headman is aware of the households which fall under his authority. Only one of the village headmen is a resident of the settlement (headman Chivanhu), as the balance stay in nearby communal areas.

Chivanhu falls within the semi-arid agro-ecological regions IV and V marked by low and erratic rainfall. Owing to the unpredictable rainfall patterns (including significant annual droughts and severe dry spells during the rainy season), it is a marginal agricultural area unsuitable for crop production such as maize; though maize is grown in the area, its production is a risky venture. The area is more suitable for cattle production, game ranching and drought tolerant crops including certain varieties of maize, sorghum, pearl millet (mhunga) and finger millet (rapoko or rukweza) (Vincent and Thomas 1960). In this regard, the small portions of land allocated to individual households in Chivanhu settlement are
characterised by deficient and infertile soils which require significant amounts of fertilizer to enhance productivity, such that agriculturally-based livelihoods and food security are major challenges. As will be discussed later, this has serious implications on coping strategies in the face of the HIV and AIDS pandemic.

Chivanhu is composed of households with different places of origin and diverse socio-economic backgrounds, and they are in large part disconnected in terms of kinship histories and relations. Most of the surveyed population in Chivanhu is originally from nearby communal areas in Masvingo Province such as Chivi, Zaka, Masvingo and Gutu. On arrival at Chivanhu, households were settled and established with the assistance of a particular headman. The household then falls under the authority of the headman who facilitated its settlement, such that households of a particular headman – though scattered throughout the settlement – are aware of under whose authority they fall. Each headman in fact keeps some kind of temporary village register or records of those households said to be under his (and all headmen are men) control. This is not an official or legally-recognised system of settlement and registration; for instance, there does not seem to be any authorization from the local chiefs giving permission to headman to settle households in the area. As a result, insofar as the chiefs maintain and submit lists of households in an official register, which is forwarded to the district council, these households do not appear on the list. In this sense, Chivanhu is considered as an informal settlement.

Prior to the establishment of the settlement, the land on which the settlement is located was the property of both Morgenster Mission and a white commercial farmer known as Barney. Previously the land was used by Morgenster Mission as a cattle farm and was later offered to Chief Mugabe in 1978 during the height of the civil war in then Rhodesia. The area was occupied soon after independence in 1980. In the beginning, people settled themselves on land near Lake Mutirikwi (former Lake Kyle) which is currently demarcated as part of Zimbabwe National Park. Those who settled in the first half of the 1980s were forced to move away from the area by the government in 1987. Some of the settlers were relocated to an area known as Sikato and others close to the nearby Nemamwa Growth Point. The area now falling specifically within Chivanhu settlement was at the time set aside as a grazing area for the relocated people. The local village headmen then started to settle many more households in the general area (also encroaching on current Chivanhu settlement land) and thereby expanded the area of occupation beyond the 1987 places of relocation. This was done
through private arrangements including land sales by headman without approval by local chiefs and the local state authorities.

The population in the area, including on Chivanhu settlement land, continued to increase through the illegal land sales. One of the local chiefs, Chief Charumbira, secured a court order and forced the settlers to move and leave the settlement area in 1999. It is alleged that the chief moved them with the idea and intention establishing an irrigation scheme. During interviews with the Chivanhu village headmen, it was alleged that the homesteads of the settlers were burnt down to expedite their departure. However, with the beginning of the fast track land reform programme a year later (2000), the traditional authorities (headman and chiefs) used the uncertainty and fluidity of the period to once again allow the settlement of households, even onto fields previously used as grazing lands. The traditional leaders (headman and chiefs) used the powers entrusted to them by the Traditional Leaders Act, or at least the confusion surrounding the responsibility of certain land allocation responsibilities to both district councils and traditional authorities, to facilitate this settlement process.

Chivanhu settlement therefore has a very complicated and turbulent recent history with successive movements of households into the area as well as displacements from the area. Currently, the total number of households in the settlement is just under 250 though this is subject to fluctuation. However this study is based on the households which fall under the authority of Headman Chivanhu. There are between 60 and 65 households within his so-called village – ‘so-called’ because, as indicated earlier, these households do not reside in a separate physical space from other households in Chivanhu settlement. Like the settlement more broadly, households specifically in Chivanhu village are diverse in terms of their historical, social, ethnic and cultural backgrounds with minimal kinship relationships between them.

The households, as sampled for the purpose of this study (36 households), emanate from diverse places and the distances from their places of origin range from four to 110 kilometres (see Table 5.1).
Table 5.1: Origins of households

<table>
<thead>
<tr>
<th>Area of Origin</th>
<th>Chivi</th>
<th>Masvingo</th>
<th>Nyajena</th>
<th>Gutu</th>
<th>Zimuto</th>
<th>Sikato</th>
<th>Togarepi</th>
<th>Banga</th>
<th>Muchakata</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance from the settlement</td>
<td>85</td>
<td>20</td>
<td>25</td>
<td>110</td>
<td>25</td>
<td>4</td>
<td>4</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Total surveyed</td>
<td>4</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

*Source: Field Work June 2012*

As shown from the table, sixteen out of thirty-six households (or about 45%) could be considered as ‘locals’, having lived previously within four kilometres of the settlement (from Nemamwa, Sikato and Togarepi). Six households (or about 17%) had come from 85 kilometres or more away (from Chivi and Gutu). Most households, irrespective of their places of origin, indicated that they had moved to and settled in Chivanhu in search of larger or more fertile pieces of land for crops and animals. For many households, this move was spurred on by the experience of serious drought in the last few years in their previous place of residence, as emphasised for instance by the households from Chivi.

Though this was not their expectation, Chivanhu certainly did not turn out to be a land of ‘milk and honey’ for these households in terms of crop and livestock production and rural livelihoods more broadly. In fact, in most cases, there is reason to believe that livelihoods have deteriorated since their arrival in Chivanhu. In this semi-arid area, households were generally allocated very small portions of land to build a homestead and to cultivate, making even subsistence farming hugely problematic. In many ways, Chivanhu settlement (and Chivanhu village) is socially and spatially marginalised, and is marked by food insecurity, unavailability of physical and social infrastructure, low levels of social cohesion, human rights violations and gender inequalities. These conditions and characteristics make Chivanhu households vulnerable to HIV susceptibility (or infection) and AIDS vulnerability (or the progression to AIDS-related diseases and death), as this and the following chapter make abundantly clear. The capacity of Chivanhu households to cope in the face of the pandemic, let alone to show any signs of resilience, may seem dubious in this context.

Chivanhu settlement is characterised mainly by brick houses; some have asbestos for roofing and some roofs are grass thatched. The main water sources in the settlement are borehole water and family wells (which are open and not protected). There is also a dam which some
of the residents in the settlement depend upon especially in times of difficulty. However, very few households reported that they had access to the dam, as it was only open to households who were beneficiaries of the community garden run by CARE International. Nemamwa Growth Point is about four kilometres from Chivanhu settlement and serves as the main shopping centre for residents in purchasing foodstuffs, clothing and other basic necessities. However, not all essential commodities are there and, therefore, at times residents have to travel to Masvingo town which is about twenty kilometres away from Nemamwa for shopping. Even those residents involved in petty trading locally travel to Nemamwa and beyond for household purchases.

There are two public primary schools which children from the settlement attend. These are Chirichoga Primary School which is about seven kilometres away from the settlement and Sikato Primary School which is about 4 kilometres away. These schools cover grade 1 to grade 7 only. As for older children, there is one secondary school which is about seven kilometres away from Chivanhu and offers both secondary and high level education. Of the surveyed household heads, about half of them reported having children of school going age but not all of them were attending school at the time of the study because they had dropped out of school. The main reason raised for dropping out was insufficient funds to pay the school fees due to economic hardships. It was also noted that they were unable to pay for transport costs for their children to attend school daily and that the majority of children (with the exception of a few with bicycles) walked to and from school daily or a total of between eight and fourteen kilometres a day depending on the school.

Nemamwa also has a clinic which provides health services to the settlement and other nearby communities. The services offered include primary health care as well as HIV and AIDS-specific services, including voluntary testing for HIV and treatment and counselling services for those on Antiretroviral Therapy. The Nemamwa Clinic also does referrals to Morgenster Mission and Masvingo General Hospital.

5.3 PROFILE OF CHIVANHU HOUSEHOLDS
In this section, I offer an overview of the Chivanhu village households which I surveyed, including age, gender and education of households heads, household sizes and land ownership and usages.
5.3.1 Gender, age and education of household heads

The majority of household heads (61%) are female-headed and 39% are male-headed. Of the female household heads (22), six were married, four were widows, seven woman were divorced or separated and five reported to be single. Of the fourteen male household heads, five males were married and six were widowed. There were three male household heads who were eighteen years of age or younger, effectively meaning that these households were child-headed. The existence of married female-headed households reflected the prevalence of migration of males out of Chivanhu in search of employment elsewhere. This can also be attributed to the deaths of husbands from AIDS-related illnesses, leaving women looking after families. The large number of widowed heads (both men and women) and the child-headed households reflects, at least in part, the prevalence and impact of the HIV and AIDS on the Chivanhu settlement.

Clearly, there is a major burden placed on women in Chivanhu in terms of household livelihoods and sustenance, as major household decisions in female-headed households become the responsibility of women who not only need to generate household income and food security but also act as nurturers and care-givers for dependents in their respective households. Even in male-headed households in which the head is married, the wife regularly plays a critical role in household survival particularly if the husband is infected with HIV. Interviewed heads from the settlement raised this constantly, namely, that HIV and AIDS is playing a significant role in restructuring the very constitution and composition of households in Chivanhu. In the following passage a fifty-year old widow head expresses the effects of her husband’s death from AIDS on her household responsibilities:

Its now six years after he has died, I’m the head of this family. I am not working and am looking after our seven children; they look up to me for everything, school fees, food and clothes. Though am struggling, I need to see to it that I try my best (interviewed on 08-06-2012).

Female heads of households, compared to their male counterparts, have less education and fewer marketable and entrepreneurial skills because they have been traditionally confined to the domestic sphere in rural small holdings in communal areas where their main productive activity has involved acting as unpaid labour in their household’s communal landholding. Suddenly or even slowly becoming fully responsible for household livelihoods is a major burden which Chivanhu women bear, as the above quotation indicates.
In relation to the ages of household heads, 39% are between thirty-six and forty-five, 18.5% are in the twenty-six to thirty-five age grouping and 19% are between forty-six and fifty-five (see Figure 5.1).

**Figure 5.1 The ages of household heads**

![Bar chart showing the distribution of ages of household heads.](image)

*Source: Field Work June 2012*

In addition, only two out of the thirty-six households (or about 3%) are over fifty-five years of age and eight (or about 21%) are under the age of twenty-six. The large percentage of young household heads and the low percentage of older household heads is a result in part of the deaths which have occurred in Chivanhu because of AIDS. A large percentage of household heads fall within the economically active age categories and hence should be able to partake in agricultural activities but, as will be shown below, in practice such activities are not taking place to any significant extent; as a result, other livelihood activities are being pursued.

Most of the household heads (thirty four or 97%) had not progressed further than secondary school, but approximately half of them had completed secondary schooling. The balance had a primary school education only. Overall, male household heads had reached higher levels of education than female household heads. This relates to traditional cultural values whereby the education of sons is valued over the education of daughters such that the latter are discriminated against in this regard (Chirimuuta 2006). Daughters, once married, become part of their husband’s kinship network and leave their households of origin to become the responsibility of the husband and his lineage; hence, parents tend to devalue the importance
of education for daughters and rather focus on the education of sons who remain within the lineage. A forty-four year old married woman therefore noted:

I have grade seven, I didn't have the opportunity to continue with my education. My father favoured my young brother; he didn't even listen to my request that I wanted to continue with my education. I was told that I was going to get married and my husband will be responsible to support the family, but now I am not employed and my husband passed away a year ago. It's very difficult to support my children, and I will never be employed, because I don't have the qualifications, I cannot even work in a shop because my counting is so bad (Interviewed 12-06-2012).

Women’s educational levels therefore impact on livelihood activities of particularly female-headed households.

5.3.2 Household size

In most (52%) of the surveyed households, there were between six and eight persons per household, followed by 30% of households with three to five members, 10% with only one member (the household head) and 8% with two persons. Clearly, the average household size in Chivanhu is quite considerable. On the one hand, a large household size provides for significant labour capacity for agriculture insofar as the household members are physically capable of this type of labour and perhaps for the diversification of livelihood activities by different adult members. On the other hand, such large households place significant pressure upon household consumption and expenditure given the sheer number of dependents. Of course, this is significant especially for those households with at least six members. In the case of all households, small and large, agricultural and other livelihood activities were pursued by household members only with no hired labour because it was unaffordable. One thirty-five year old married man, who is the head of a household of six, noted the significance of household labour in terms of household size:

I can say it is better with me and my family; usually we finish cultivating our land at the right time. When it's time for weeding, it doesn't take us long. We work very hard together, knowing that we only depend on the farm produce. The worry is only if it's not raining. My neighbour sometimes leaves a piece of land uncultivated because it’s only him and his two sons; they struggle (Interviewed: 09-06-2012).

Heads who reported having few household members indeed highlighted their inability to fully utilize the land they owned, leaving some parts of the land uncultivated or even failing to
plant the prepared land. As a result, though having proportionally less food consumption needs compared to larger households, the absence of significant labour resources seemed to impact disproportionally on these smaller households. In this regard, one forty-two year old woman (widow) said:

*It has never been easy for my family, we are only three. It’s hard to cultivate a bigger piece of land because we are using hoes to create the holes to plant the maize seeds, and it takes a long time even to finish a small piece of land. Sometimes you feel like you are making yourself a slave (interview: 11-06-2012).*

### 5.3.3 Land ownership and use

Households in Chivanhu settlement were motivated to move to Chivanhu in search of better quality land or larger tracts of land. On arrival, each household though was allocated a small piece of land by the respective headman (*Sahhuku*) which was suitable, at best, for subsistence farming. The average size of the land allocated was about one acre, with plots ranging from 0.5 acres to 1.5 acres per household; but, in the case of the surveyed households in Chivanhu village, the average piece was smaller at about 0.6 acres of land. Though the allocation seemed to entail some sort of purchase of the plot, the households do not have any documentation indicating that they even possess the land let alone own it. The headmen keep whatever written records exist.

In terms of land usage, most households grow – or seek to grow – farm crops including maize, round nuts, peanuts, rapoko and sorghum. Nearly 90% also indicated that they have established small gardens for vegetables. Because of the adverse climatic conditions (such as excessive heat) and the deficient soils, households are struggling in relation to crop production even for the more drought resistant crops like sorghum and rapoko. The end result is perennial food shortages even seemingly for the most productive farmers. Besides the climate and soils, household heads highlighted labour shortages and insufficient seeds and fertilisers as reasons behind underutilisation of land and unproductive use of land. As noted by a thirty-two year old married man with three children during a focus group discussion:

*I was so happy that I now own a piece of land, but ... I only managed to cultivate this land two years ago with my two brothers. Now with my wife only it’s different; we now only manage to cultivate a small piece of our land even if it’s raining (focus group discussion: 20-06-2012).*
Because of under-production, households often need to purchase basic foodstuffs (in addition to other basic commodities) with the meagre household income available.

Households in Chivanhu settlement do not have access to significant stretches of land for grazing domestic animals and in fact less than 10% own livestock (including cattle, sheep, goats and chickens). Cattle are used as a source of milk (and meat occasionally) in Chivanhu. Household heads emphasised as well the importance of livestock as a measure of wealth and its value in paying bride price, or slaughtering at ceremonies, rituals and festivals. Cattle are also often an important source of draught power in rural areas in Zimbabwe and hence Chivanhu households are unable to make use of cattle for cultivation, ploughing and weeding. They also rarely have ploughs for cattle usage. Households who own ploughs (or scotch carts) may hire them out, but they do so only when there is a clear payment agreement in place which may involve a bartering arrangement in which food crops are the source of payment. Households generally resort to the use of hoes for instance in planting their fields. One focus group member expressed how she, as a thirty-nine year old widow, struggles with her family in this respect:

*It's only me and my two sons; when the time arrives for everyone to work preparing the field for planting, I will use a hoe to dig holes in a straight line, one of my sons will be placing the seeds in the holes and the other covering the seeds with the soil; it's tiresome. We only manage a small piece of land and the rest is left uncultivated (interview: 15-06-2012).*

As will be discussed below, Chivanhu households regularly resort to non-agricultural livelihood activities to supplement any foodstuffs produced through agriculture or to generate household income.

5.4 HOUSEHOLD LIVELIHOODS AND INCOME

As highlighted in a previous chapter, agricultural-based activities remain central to the livelihoods of households in vast stretches of rural Zimbabwe; however, they invariably also turn to non-agricultural and non-farm based endeavours to enhance household sustenance including through the generation of income. Any crops and vegetables grown in Chivanhu are primarily for home consumption but at times small surpluses are sold. In addition, households seek to generate income through a variety of activities for the purchase of basic food commodities (such as cooking oil, mealie-meal, rice, sugar and salt) and for other household expenses such as school and health fees. My study did not identify the specific contribution
which household consumption of own-grown vegetables and crops made to household sustenance and in the discussion below I focus on different sources of income generation.

I outline the main activities which generate income for the surveyed households in Chivanhu (see Figure 5.2), though I do not provide actual monetary figures for each activity. The percentages indicated refer to the percentage of households which are involved in the particular income-generation activity sometime during the year. Households, as a general trend, are involved in a number of income-generating activities simultaneously (and thus seek to diversify their income base) but sometimes there is considerable seasonal variation in the significance of different activities for a particular household.

Figure 5.2 Major sources of income in Chivanhu

Given the present economic crisis in Zimbabwe and the resulting downsizing of the economy and rise in unemployment (Rodlach 2011), the prospects of formal employment for rural households in Chivanhu is exceedingly limited. In fact, only 8% of the households in Chivanhu rely upon full-time formal employment as an income source. Nearly thirty percent of households rely upon non-standard or irregular forms of employment including casual and seasonal labour. Instead of spending vast amounts of time and energy working with unfertile and deficient soils on small plots, some household members look for part-time or temporary work in nearby communities on the former Agricultural Rural Development Authority
resettlement scheme or in former commercial farming areas (now fast track land farms) to earn income. This farm-based work includes planting, weeding and harvest crops, as well as repairing homesteads, constructing chicken kraals and brick-laying. These are notoriously unreliable and insecure forms of employment and frequently workers are not paid in cash but in the form of food and perhaps clothing. A small percentage (3%) of households also received pension arising from former employment.

Remittances are also received by 8% of households. Remittances historically have been an important income source for rural Zimbabweans (Maphosa 2005). Remittances in the form of cash to Chivanhu are often from household members, relatives or even friends who are formally employed elsewhere, such as domestic workers in South Africa. A thirty year old divorced woman looking after her two children lamented:

*I really hardly have cash with me, the rand is really scarce. When I have it, it will be from my friend only when he is from South Africa (focus group discussion 20-06-2012)*

In a slight twist to this, cross border petty traders (notably those involved in a local knitting project) sell their products in South Africa and some of the cash earned is sent back to their families in Chivanhu. Remittances to Chivanhu also sometimes take the form of commodities mainly foodstuffs such as rice, cooking oil and beans. Cash remittances were particularly crucial before the process of dollarization as it allowed households access to scarce foreign currency, normally the South African Rand.

Vegetables (25%) and crop sales (11%) make a significant contribution to a number of Chivanhu households, and livestock sales (0.6%) much less so. Those who reported owning livestock indicated that they only depend on livestock sales when their other sources of income fail to sustain the family. Besides the irregular sale of crops, households also engage in selling vegetables from either the community gardening project (for those who belonged to the project) or, in far fewer cases, personal gardens located at homesteads. In the small homestead gardens, leafy vegetables, tomatoes and beans were grown. The garden products (mainly from the community garden) were sold within Chivanhu or at bus stops and the market place at Nemamwa Growth Point.

Petty trading activities (14%) of different kinds (sometimes involving cross border trading) are pervasive, including selling the following items: cooked or roasted foodstuffs which they grew themselves (and also consumed) such as peanuts and round nuts; natural resources such
as firewood and wild fruits from ‘the bush’ (which they also consumed); as well as cellular phone airtime, sweets, biscuits, chips, watches and second-hand clothes (often brought back from household members working in South Africa). Places of sale, besides Chivanhu itself, included Nemamwa Growth Point, Morgenster Mission and tourist attractions such as the Great Zimbabwe Monuments.

Focus group discussions raised other income sources which were not captured in the survey. Two focus group participants indicated that fishing was an additional livelihood on which they drew income. However this is mostly done illegally since it is very expensive to apply for fishing permits for use in official national parks. Also, mention was made of gold panning; it was claimed that some people especially young school dropouts from Chivanhu are involved in this.

Despite a range of different income streams, it is abundantly clear that Chivanhu households are forced to minimise even basic household expenditures to stay afloat. As well, once the most fundamental expenditures are covered, there may not be sufficient income to plough back funds into for instance petty trading activities – household heads therefore spoke about insufficient income at times to purchase airtime and second-hand clothes for resale. This is exacerbated by the fact that traders often allow customers to purchase on credit. For example, an older woman (56 year old widow) who relies on selling clothes as her main livelihood activity reported that sometimes she is stuck financially when people are not paying for the clothes they took on credit and she has insufficient cash to continue running her business. She noted that:

*I can sell my clothes in a ‘three month to pay’ agreement, but if they don’t pay then it’s a problem. It is a challenge to my business, as I have to wait until I collect all the debts. The prices [cost prices for purchasing more second-hand clothes for resale] will already have increased by then, and then it really stresses me because no one will give out money to restart the business (interviewed on 15-06-2012)*

Beyond cash, durable assets remain limited in Chivanhu households. Farming equipment for instance consisted primarily of small tools like hoes, spade forks and wheel barrows.

**5.4.1 Household food security**

Household food insecurity is pervasive within Chivanhu, with the vast majority (95.4 %) of survey respondents indicating that the available food (as grown by the household) at the time
of the survey was not sufficient to sustain them until the next harvest season. Household heads in fact spoke about constantly struggling to find enough food to feed themselves and their families. A mere 5.6% reported to have had harvested food from the previous agricultural season in stock. It is important to note that the survey was undertaken in June, a time which is only two or three months after the harvesting of crops; at that time, most households had already started to purchase mealie-meal because of depletion of their maize stock.

Only 19.4% of households surveyed indicated that they could financially afford to eat an average of three meals per day, 38.9% of the households normally had two meals and a very significant minority (41.7%) depends upon usually one meal per day. These of course are shocking statistics. But, as will be shown in greater detail later, it is particularly problematic for infected individuals on the ART regimen and for care-givers of HIV-infected individuals. A thirty-eight year-old man whose wife had just passed away and is on ART explained how he struggles with his medicine in the face of inadequate food in his household:

*The treatment is good, but sometimes it's very difficult when I know that I am supposed to take my treatment but there is nothing ready for me to eat. Sometimes I have to wait until that time when everyone is eating. I cannot have my own food left for me to eat when the time for my medicine arrives; it's a challenge especially that I take my medicine three times a day (interview: 12-06-2012).*

The composition of the meals consumed is also troublesome as the meals do not seem to meet minimal daily nutritional requirements (see Figure 5.3). Overall, 85% of respondents surveyed indicated that their meals are mainly composed of starch in the form of *sadza* or cooked mealie-meal (supplemented primarily by vegetables at 79%) or, to a lesser extent, in the form of bread.

The nutritional deficiencies were also highlighted in the focus group discussions. *Sadza* with vegetables as relish was the staple meal, and beef, poultry, beans and fish (and protein broadly) were consumed much less often if at all.
A fifty-three year old married woman with a large number of dependents expressed her feelings about food insecurity in the following vivid way:

With my five children, and three left behind by my brother, I am supposed to see that they have ate; then I will eat the leftovers. They are still growing and need more food; as head of the family, I cannot leave them unsatisfied. It’s not even enough, but it’s better just to keep them going (interview: 11-06-2012).

Reliance purely on agricultural production is not possible in Chivanhu and households need to (and do often) find ways and means to earn income in order to purchase basic commodities in the quest for some sort of limited food security. Despite the deep food security difficulties, none of the households surveyed reported receiving let alone relying on food aid or obtaining additional cereal or grain from the state or NGOs. However, further exploration revealed that a limited number of households (ten or less) do in fact receive food assistance from the state (and CARE International in the case of the community garden). This selectivity in state and NGO assistance has brought about serious conflict in the community since there are between 60 and 65 households in Chivanhu village and hence many households are excluded from these outside interventions. This raises questions about social relationships and networks within the village.
5.5 SOCIAL CAPITAL AND NETWORKS

At a community level, social capital entails relationships and networks which govern interactions between households; it may contribute to social belonging and cohesion by binding households together or may undermine cordial relations between households and heighten local conflicts (Grootaert and Bastelaer 2001). As noted previously, Chivanhu settlement broadly (and Chivanhu village specifically) has a turbulent and troubled history marked by a series of movements in and displacements out; as well, households come from diverse spatial origins and social backgrounds such that strong kinship relations across numerous households is not in evidence. For these reasons, Chivanhu tends to be an unstable and disparate community and, in this context, the existence of social capital which binds households together seems unlikely. As a general rule, this seems to be the general rule in Chivanhu. Households tend to rely, almost exclusively, on their own independently-generated income and they survive using their own wits and resources (even during the most difficult times). It was reported for instance that households in the settlement do not even work in the fields together (called *humwe*), a practice of collective labour sharing which has strong historical roots in the area and which continues to be practiced in many parts of rural Zimbabwe.

However, there are certain initiatives within Chivanhu village which indicate attempts by households to form inter-household social groups for the mutual benefit of households. In this respect, Figure 5.4 shows the involvement of households surveyed in social groups in Chivanhu. The groups include a burial society, the Fushai/Mukando project, a community gardening project, a knitting project, and a support group for HIV and AIDS-affected people.

5.5.1 Fushai-Mukando Society

Of the surveyed households (n=36), 29% indicated that they are members of the Fushai-Mukando Society. The society has members involved in sharing ideas and knowledge about starting and managing income-generating projects to supplement household income. The household heads also pool together small amounts of money (which is then saved) for purposes of initiating a project but the funds accumulated may be used for household expenses such as school fees.
A 39-year old separated woman who is currently a member of the Fushai society expressed her appreciation for the help and support she is getting from the association. She stated:

*If I compare my family before I joined the project, I can say I have noticed changes that I couldn’t make on my own. When I joined, just after three months we shared the money since almost all of the members wanted to be assisted with school fees. I bought a complete uniform for my daughter. Even if sometimes there are problems, I am happy with the project. I can borrow money if I am stranded* (interview: 11-06-2012).

One of the problems alluded to by the women, which came out in focus group discussions, was the mishandling of the accumulated cash and even corruption. One member of Fushai (who holds the cash) – the treasurer so to speak – was involved in money-lending. This member used the society’s funds without the knowledge and consent of other members; the money-lender in fact charged interest on the money dispersed and retained the interest accrued.

In this regard another member of the society indicated that he could not obtain a clear and straight answer when enquiring from ‘the treasurer’ at one time about the total funds accumulated, and the treasurer was evasive. In fact a forty-two year old married man, who was once a member, left the society because of alleged corruption.

---

*Source: Field Work June 2012*
It’s very easy to collect money from members at the beginning, with everyone seemingly committed. But I was surprised to hear that one of our members had used a portion of the money for his personal business. I had to leave the project because that was unacceptable and I could not help it ... Only when there is a problem [with the accumulated cash], will you then be informed (focus group discussion: 20-06-2012).

The amount of cash generated through the society is exceedingly limited and this was raised as an even greater challenge than the corruption, as the funds generated are insufficient for starting any significant income-generating project.

There was however a small project consisting of six household heads initiated through the Fushai Mukando society, namely, a knitting project. It created informal employment for those without formal employment and provided supplementary though meagre income. Cross border traders (two women and one man) were important to the project because the project’s products were being sold in South Africa. But it only operated for nearly two years as marketing problems led to its failure. During the duration of the project, its members did benefit. A widow in her late forties, during an in-depth interview, reported how the project benefited her household:

From crocheting to a cross border trader, I cannot imagine how I and my family have benefited; my children could eat before and after school, I had reduced stress; it was much better, affording to at least have a meat meal (interview: 10-06-2012).

Therefore this project was an attempt to diversity household incomes and in fact – at least in the case of this woman’s household – it did enable some level of food security.

However, despite the massive food insecurity problems existing within Chivanhu, the Fushai society (and its one project) was unable to sustain any project over the long-term which would generate income or enhance local food production. For this reason, and because of past corruption, focus group discussions indicated that very few households remain as members of the society. In this sense, this informal association was not particularly successful as a form of social networking within Chivanhu.

5.5.2 Community gardening
Like most rural communities, households in Chivanhu settlement engage in gardening as an important source of food and possibly income through sales. Besides homestead gardens,
there is one big community garden in the settlement which was initiated by CARE. Though discussed briefly already, I outline this initiative here as well in relation to social networking.

In this project, individual households are allocated pieces of land to plant vegetables, tomatoes, beans and onions. Not all households from Chivanhu settlement are members of this project since it serves other communities around the Nemamwa Growth Point, and preference is given to those who are HIV-infected and AIDS-affected. An estimated 29% of Chivanhu village households are part of the community gardening project, based on the survey. By working in the community garden, members acquire knowledge, ideas and skills pertinent to gardening such as crop rotation. Part of the produce from the community garden is shared among the members in the form of food parcels containing a small portion of each crop or vegetable produced from the garden, including leafy vegetables like covo and rape as well as sweet cabbage, potatoes or beans. The vegetables are perishable therefore they are consumed quickly and are often used in place of meat particularly when cooking and eating sadza (which is typically daily). In addition to food parcels, households sometimes sold the vegetables from the garden to meet basic household expenses.

Community-garden challenges raised during focus group discussions include marketing, water and rainfall shortages, and lack of access to pesticides, seeds and fertilizers. A twenty-eight year old married man noted in frustration:

*I can say this, the soil in this area is not good at all, the soil is poor and it's been known even before this project was started. So many times we are promised that we will get fertilizers and pesticides, but that only happened once. The produce is not going to be better at all, yet most of us are relying on the project for support* (interview:09-06-2012).

Water problems were repeatedly emphasised. The headman of the surveyed area (the Chivanhu village headman) highlighted this as critical:

*It's a pity really that no one can control climate related challenges, most of the people here rely on subsistence farming, and also gardening. When you plant crops, water is needed to make them grow; if there is no water, and then as you can see now in the community garden, crops are drying up. It's not a joke when there is no rain when it's expected, most of the time; every year we are struggling. As you can see, we don't have any kind of system in place at the moment to say we can rely on, no irrigation system. We are still waiting for the tank that was promised long time ago by the CARE...*
organisation, but I tell you even if they organise a tank for us, what if it doesn't rain, it's a very big challenge in this area (interview: 10-06-2012).

At the time of survey, the crops in the community garden (including maize, vegetables and tomatoes) were almost dry and had been also severely affected by the cold June weather.

Participants in the community garden expressed no hope of obtaining any food parcels in the near future because of the state of the garden at the time of my study. However, participants indicated that, through working in the community garden, they had acquired skills which assisted in the setting up of their own individual homestead gardens. Though the garden did provide some form of group ethos in terms of collectively pursuing a common goal, the garden is also a form of exclusion (as most Chivanhu village households do not form part of it). In this regard, those excluded raised concerns about their failure to benefit directly from the proceeds of the community garden.

5.5.3 Burial Society

Burial societies in rural communities play an important role especially when a household has lost a member through death. Rural communities in Zimbabwe normally have burial societies established for the mandate of financial, social and emotional support to the society members (Hall 1987). According to the Chivanhu village headman, there is only one local burial society which was established in 2006 and it had between twenty-five and thirty-five members. According to the survey, 62% of Chivanhu village households are members of the society. When asked about the joining criteria, the headman reported that the society is open to every member in Chivanhu. The stipulated joining fee was reported to be USD15 and it appeared to be the same for both man and women as long as there is only one breadwinner in the household. The monthly payment was recently raised and it currently sits at USD3. If a member fails to make his or her monthly payments, the headman said that the membership is terminated and that there is no full refund of previous payments made (only a partial refund is given).

With the scourge of HIV and AIDS hitting Chivanhu hard, the costs of medical care and funerals place an increasing burden on local households. The burial society in Chivanhu is therefore seen as a source of financial security in particular for HIV-affected households and, as a social support network, it also eases stress in the event of death of a household member. The burial society in Chivanhu has brought members in the village closer together in sharing
bureaucratic burdens and providing emotional support during the extremely difficult time of bereavement, despite their diverse spatial and social origins. The burial society helps the household of the deceased to facilitate the funeral arrangements and to meet all the major costs of the burial. Though the emotional support is important, financial security to cover the burial costs was the major motivation and reason for many members to join the society. When asked about what the society provided in the event that a member or dependent of a member passed away, a thirty-seven year old divorced man stated:

*It’s like, even today if I die, I know that this society will do everything, from informing my family that I am dead and consulting with them about what the funeral plans are and also help them to plan. I am assured that the society will buy a coffin for my body, make sure that there is food for the mourners who will come to the funeral; they will purchase fuel-wood to make sure the food is well-cooked and that it takes place. Remember that men are going to prepare the grave and it’s a difficult job and their stomachs must be full (focus group discussion: 20-06-2012).*

The society purchases the coffin for the deceased body and groceries to feed the burial attendees, and ensures that the grave is dug and prepared. Therefore, the society assured its members of financial security in the case of death, though no finances beyond the burial are provided. In addition it is a norm (for every member of the Chivanhu area who attends the burial) to bring two kilograms of mealie-meal to assist in feeding community members at the funeral.

The focus group discussions emphasised that a decent and respectable burial is important culturally and that this dignifies and honours both the household concerned and the community as a whole. This was also an important reason for joining the burial society according to survey participants, as was simply a sense of belonging which arose from participating in society-based activities. In this respect, one fifty-three year old HIV positive widow said:

*I don’t have any worries, as long as I am a member of the society. I know everything will be catered for; they are like my family in the event of death as they comfort and support me (interview: 09-06-2012).*

However, like the Fushai-Mukando Society, the burial society faced challenges of fraud and maladministration. It was also reported that there was a time when the society had insufficient funds due to increased deaths mainly arising from HIV and AIDS. At this time
households which lost a member in death went through a traumatic time in trying to meet funeral and burial expenses. One thirty-seven year old married man lamented:

'It's not easy, when I know that my monthly payments are up to date, but I was told (and as a member I knew) that the society didn't have enough money. I could not demand the money because there were even other people who were very sick in the community and there was no hope that they will make it with life. And then I had to rely on that little amount I received [from the society]; at least the society managed to buy the coffin (interview: 13-06-2012).

At the same time, because of insufficient funds, many members are unable to maintain payment of monthly burial society fees or subscriptions over extended periods. This also leads to unexpected shortfalls in burial society funds in trying to meet funeral expenses. The headman noted:

If I can check the records, others have last contributed almost six months ago; what is going to happen if people are going to die and the society does not have enough money, and who is going to provides fund for the funeral? I don't know really, people must think of the burial fees before any other thing; death is an unseen event, no one knows, even I don't know when I will die (interview: 13-06-2012).

Despite the many challenges, members of the society reported getting practical, financial and emotional support. This even extended to members visiting the bereaving household to assist by cleaning the homestead and taking over certain responsibilities (such as washing the children) to give the household members enough time to deal with their immediate problems and to heal emotionally. Certainly, compared to the Fushai-Mukando Society and the community garden, the burial society was an important form of bonding social capital which facilitated social cohesion.

5.6 CONCLUSION

Rural households in Chivanhu embark mostly in sub-subsistence agriculture in the form of small vegetable gardens for tomatoes, cabbage and onions, and small pieces of land for growing maize. Very few households indicated that they own and keep livestock as part of their livelihood activities. They also engage though in informal trade activities and other livelihood strategies, though diversification does not allow Chivanhu households to rise above abject poverty. As a whole, the households are food insecure as manifested most vividly in the irregularly of meals on a daily basis. The profile of the household heads
(including many female-headed and child-headed households) gives a good indication of the prevalence of the pandemic and its effects on households. The extent of HIV in Chivanhu is raised in the next chapter. In terms of inter-household relations, there are social networks in existence but these generally speaking have not brought about any significant social cohesion (though the burial society is of some significance). Clearly, then, Chivanhu is a highly vulnerable community in which the pandemic seemingly would have a devastating effect. This comes out clearly in the following chapter focusing on HIV and treatment adherence in Chivanhu.
CHAPTER 6
ADHERENCE TO HIV AND AIDS ANTIRETROVIRAL TREATMENT AND LIVELIHOODS IN CHIVANHU

6.1 INTRODUCTION
This chapter discusses adherence to treatment by HIV-infected individuals in Chivanhu. I start off by first indicating the scale of the pandemic in Chivanhu in terms of prevalence rates and deaths to highlight the potential significance of treatment for HIV and AIDS in this settlement. More stable and well-established rural communities are vulnerable to HIV and AIDS but the situation in Chivanhu, as an informal and fluid settlement, is more critical. Adherence in Chivanhu though is reasonably high and a range of factors account for this. But the HIV-infected individuals brought to the fore a number of factors acting as barriers to adherence of which stigma and discrimination and expenses incurred were very important. Before outlining the facilitators and barriers regarding adherence in Chivanhu, I provide a discussion of some of the available literature on adherence in Zimbabwe and elsewhere in the region.

6.2 HIV AND AIDS IN CHIVANHU
HIV and AIDS have devastated many rural communities in Zimbabwe. Chivanhu settlement in no exception to this; in fact, HIV-susceptibility and AIDS vulnerability are heightened in Chivanhu because of the settlement’s turbulent history and unstable and marginalised status.

Some basic data vividly demonstrate this. At the time of the study (in mid-2012), 65% of the surveyed households in Chivanhu village acknowledged having at least one member of their household die due to the pandemic, with 62% currently having at least one member infected with HIV. Nearly all (89%) of the household heads surveyed (32 out of 36) declared that they were presently suffering from HIV-related illnesses at the time of the survey. All of these heads declaring HIV-illnesses acknowledged going for voluntary HIV and AIDS testing and counselling, but only 78% (25 out of 32) of them explicitly admitted to me that they tested positive for HIV. Of those who explicitly admitted being HIV positive, only 68% (17 out of 25) have disclosed their status to either a trusted friend or family member (32% have not, due primarily to stigma and discrimination). Of the surveyed heads opening declaring their HIV-positive status, 80% (20 out of 25) reported to be on antiretroviral treatment, with 62% collecting their monthly medication at Morgenster Mission Hospital and 38% from
Nemamwa Clinic. While the vast majority of the infected heads surveyed were on treatment (80%), only 65% took their medication as per scheduled doses, 20% acknowledged that they had missed single doses for the past three months, and 15% reported missing their doses constantly. This means that the level of adherence of the sampled population in Chivanhu is moderately high.

The National AIDS Council (NAC) has the mandate to coordinate the multi-sectoral response to HIV and AIDS, including prevention and treatment programmes, throughout the country including in Chivanhu. Masvingo district and Chivanhu settlement specifically has experienced the expansion and improved delivery of state-driven ART facilities and services (including counselling), with Nemamwa Clinic (which is four kilometres from Chivanhu) providing medical services to Chivanhu. Patients from Chivanhu settlement can collect their medicine from the clinic on a monthly basis, although the initiation of ART services in the area is still centralised at Morgenster Mission Hospital which is twenty kilometres from the settlement. Currently, the Morgenster Mission Hospital is mainly funded by the government of Zimbabwe and partially by donors. Outreach programmes are coordinated by the NAC to reach out to all local clinics (such as Nemamwa) to enhance HIV and AIDS services and to lessen the travelling costs incurred in treatment and care of those infected. Morgenster Hospital, in addition, facilitates ART drug adherence programmes to encourage patients to fully adhere to their medication.

6.3 ADHERENCE TO ANTIRETROVIRAL THERAPY

Globally, antiretroviral therapy has improved the health of many HIV positive individuals who otherwise would have developed full-blown AIDS or died long time ago. However, ART effectiveness relies very heavily on proper and sustained adherence and conditions which facilitate adherence. Given the ongoing socio-economic conditions and experiences in many rural households in Zimbabwe, sustaining adherence is a challenge for ART patients and their household and family care-givers. Despite efforts at the national level in Zimbabwe to reach the goal of universal access to treatment, access still falls short of this goal and problems with adherence abound. This, I have noted, is the case in Chivanhu.

In responding to the epidemic, the government of Zimbabwe has embarked on thorough HIV and AIDS prevention and treatment programmes which were discussed previously (in Chapter Four). Zimbabwe has made remarkable strides towards the fight against HIV and
AIDS through the various programmes including ART. Antiretroviral treatment therapy was first introduced in 2004 in Zimbabwe with the intention of inhibiting the transmission of HIV, improving the quality of life of HIV-infected individuals and reducing HIV-related morbidity and mortality (UNAIDS 2004). Due to the increasing number of people in need of antiretroviral drugs (Kachere 2012a), since 2004 the government has made greater efforts in expanding the number of antiretroviral therapy sites across the country including within resource-deficient settings like Chivanhu. However, despite the availability of antiretroviral drugs to those who are eligible, the effectiveness of ART therapy, as indicated above, lies in strict and proper adherence to the treatment. Strict adherence to ART (at least 90% adherence) is recommended for all regimens. Adherence is considered essential to maintain long-term health benefits and avoid the development of resistance to the medication.

This section highlights some of the conditions facilitating proper adherence and the conditions undermining adherence, as discussed in the prevailing literature on Zimbabwe and elsewhere in Africa. This provides the basis for the later discussion of adherence specifically in Chivanhu.

From the literature studied, the most commonly cited barrier to sustained ART adherence is expenses related to both the actual cost of antiretroviral drugs and physical efforts to obtain the drugs. In studies carried out in Zimbabwe (Skovdal et al. 2011, Campbell et al. 2011a, Campbell et al. 2011b), costs related to the treatment was cited as a common barrier to proper adherence. In research carried out in Botswana, 70% of the study participants indicated that the costs of obtaining ARVs interfered with their ability to collect the pills regularly and 48% claimed that the actual costs of the medication impeded their adherence to treatment (Nam et al. 2008). In this regard, household economic and financial insecurity was noted as a major challenge for individuals maintaining treatment programmes in KwaZulu-Natal province in South Africa (Peltzer et al. 2010, Miller et al. 2010). Research in Manicaland province in Zimbabwe highlighted that the ongoing economic crisis in the country existed as a critical barrier to sustained adherence to ART; patients on ART are spending $1(US) in order simply to collect the pills (Skovdal et al. 2011a). Finances for transport, for purchasing of drugs and even for bribes are widely reported as significant problems in many studies in Africa (Nam et al. 2008, Drimie et al. 2002).
Stigma and discrimination associated with HIV and AIDS have also been highlighted as major barriers to complete adherence to antiretroviral therapy (Sambisa et al. 2010, Campbell et al. 2011b), particularly in rural settings. In rural settings, women who are HIV positive are often condemned, sometimes publicly, for promiscuous behaviour and for undermining the stability of marriages, households and the community at large. Most patients, whether in urban or rural areas, have in fact internalised the stigma surrounding HIV infections (Watt et al. 2009, Abel et al. 2003, and Weiser et al. 2003). The significance of stigma and discrimination is further brought to the fore when one considers that complex drug regimens are a challenge to follow and they disrupt daily routines making it difficult to sustain adherence to treatment (Abel et al. 2003). Even without stigma and discrimination, the regimen requires a degree of surveillance to ensure compliance to the treatment programme. This implies constant monitoring of patients and strong social support for the treatment users from the patient’s family, health care providers and the community at large.

Thus, an additional problem for adherence is weak social support mechanisms. In a study in rural Zimbabwe, supportive social relationships were cited to have an important impact on adherence to ART particularly in the presence of stigma and under-resourced households (Campbell et al. 2011b, Skovdal et al. 2011). This is also evidenced in a study conducted in Kwazulu-Natal province where social networks were reported to have a huge influence on continued adherence to ART (Ncama 2008). Supportive social environments such as church groups, sports clubs and care groups often enable infected people to adopt positive attitudes and ways of living. Further, in HIV-support groups, individuals are provided with a setting for sharing mutual disclosure and establishing relationships based on trust (Nam et al. 2008). This is particularly important given that, in general, people infected with HIV and AIDS feel embarrassed and suffer discrimination, and there is state of hopelessness and depression after being diagnosed with HIV because of the belief that HIV and AIDS is a death sentence.

Food insecurity in resource poor settings is identified as a major negative influence on sustained antiretroviral treatment as it leads to the interruption of treatment and undermines the effectiveness of the treatment (Weiser et al. 2010, Drimie 2002). In a Zimbabwean study conducted in some parts of Midlands province (Gweru and Chirumanzu) and parts of Masvingo province (Zaka and Masvingo), the HIV and AIDS pandemic has had a severe impact on household vulnerability to food insecurity due to loss of labour and reduced production (Mazzeo 2011). In this light, food scarcity leads individuals to skip doses, which
exacerbates and worsens the side effects of ARVs (Skovdal et al. 2011a). Individuals who are taking ARVs need a healthy balanced diet and they are urged to eat prior to taking their medication (Drinkwater 2003).

Forced relocation or voluntary transfer of patients from one area to another can also influence adherence to ART (Miller et al. 2010, Weiser et al. 2003, Veenstra et al. 2010). For instance, the Zimbabwean government-driven Operation Murambatsvina (known as “operation restore order”) which took place in 2005 saw the forced internal displacement of 700,000 people from urban areas to mainly rural areas. In the process, it is estimated that 79,500 HIV-positive adults receiving antiretroviral drugs were displaced. This became a serious threat to adherence since many were relocated to communities where there was a marked shortage of functioning treatment centres (Skovdal et al. 2011a, Veenstra et al. 2010). In a South African follow-up study of a particular community, Miller et al. (2010) note significant transfers out of the community by patients on ART, and they suggest that patients on the move may experience problems with transport and other related costs for sustaining treatment.

Overall, then a range of studies have looked at the factors that created challenges for adherence inside and outside Zimbabwe (Mills et al. 2006, Weiser et al. 2003, Weiser et al. 2010, Abel et al. 2003, Miller et al. 2010, Skovdal et al. 2011a, Nam et al. 2008, Peltzer et al. 2010, Campbell et al. 2011a, Campbell et al. 2011b). The existing studies have been, in general, of comparatively stable communities. Chivanhu is considerably less stable and informal, and very fluid in terms of its history and contemporary dynamics. In this light, the following sections of the chapter focus on both the barriers and facilitators of ART adherence in Chivanhu based on my fieldwork.

6.4 BARRIERS TO ART ADHERENCE IN CHIVANHU

Like most of the rural areas in Zimbabwe, the impact of HIV and AIDS is widespread and severe in Chivanhu settlement (as outlined earlier). Food security and livelihoods broadly have been compromised and in a state of crisis throughout the country in recent years, and clear linkages exist between HIV susceptibility and AIDS vulnerability on the one hand and household-based livelihood strategies and practices on the other hand (Bird and Andrew 2003, Makonese 2006); this is also the case with specific reference to adherence to HIV treatment. In this section, I discuss the major barriers to adherence in Chivanhu as indicated by the twenty heads who indicated that they on HIV treatment (see Figure 6.1) under five
headings: food insecurity, household income, interruptions in supply, social safety nets and stigma.

Figure 6.1: Barriers to Antiretroviral Therapy adherence by ART users in Chivanhu

6.4.1 Household food insecurity

Household food insecurity weakens livelihood coping strategies and makes HIV-infected and -affected households more vulnerable to the pandemic. Insufficient food supply and nutrition in the presence of HIV and AIDS has a compounding effect as it lowers a person’s capacity to recover from infections and leads to even further reductions in a household’s food supply. The chances of a HIV-infected person becoming involved in strenuous work-related activities are already exceedingly limited and this impacts on household labour resulting in reduced food production (Mazzeo 2011); this, in turn, has a negative feed-back effect on the food intake of the HIV-infected person. In general, the deterioration in the immune system of those infected with HIV and AIDS requires increased nutritional demands in order to boost the weakened immune system and this is problematic in a food insecure environment. As indicated previously, households in Chivanhu face massive economic hardships and experience great difficulty in obtaining sufficient food to meet the nutritional needs of even healthy household members. Household food insecurity occurred throughout Chivanhu village, with 95.4 % of households indicating that the available food at the time of the survey
was not enough to sustain them until the next harvest season (which was about nine months away).

Owing to the AIDS-related death of a member or AIDS-related illness of at least one member in a household, and both situations are prevalent across households in the village, household labour in Chivanhu has been impacted significantly. It has meant, proportionally speaking, less productive labour for agriculture and other income-generating activities; but it has also resulted in the re-allocation of productive labour to un-productive labour in the case of households where surviving HIV and AIDS members exist, as time and energy is spent in emotional labour in caring for the sick member. As well, prolonged AIDS-related sickness (because of labour shortages) leads to a shift in productive labour to less labour intensive activities such as petty trading, and agricultural activities and food production are delayed or outright abandoned. This pattern is also evidenced in other parts of Zimbabwe such as Manicaland rural communities (Skovdal et al. 2011a). The current status of the community garden in Chivanhu at the time of my study, in which the crops were suffering stress, only complicated matters. Because of reduced food production, respondents in Chivanhu reported scrambling to find alternative means of accessing food through pursuing income-generating activities (such as the knitting group) by which basic foodstuffs could then be purchased.

In this food-insecure context, one 27-year old HIV-positive married woman in a focus group discussion highlighted:

Since he became sick, from last year, I never had time to work in the fields or to go to do piece jobs since I spend most of my time monitoring the sick person, (my husband) washing clothes, bathing him and preparing food for him. Even now I am HIV positive, though am taking my medication, it’s not easy for me to work in the field, and instead I go to collect some firewood to sell (Focus group discussion: 12-06-2012).

A 50-year old woman related how the illness of her husband – who was once the household breadwinner – distresses her and places a massive responsibility on her to see to it that the family has something to eat. During the interview she noted:

Everything changed; I mean everything up to now. I am struggling with the children and there is not enough food to feed the whole family. Now he is always asleep because of the sickness, I have to be there looking after him. I cannot do anything to raise money to pay fees and to purchase food to provide for the family. What about me, I am
HIV positive and it’s hard for me to work in the field; and this medicine, these pills, make me to like food more (interview: 13-06-2012).

In some instances in Chivanhu, where the infected member is on antiretroviral treatment and spends increasing time in a number of activities in order to support the family, adherence becomes a problem – with the ART-user working and sometimes forgetting to take the medication. As well, as a result of insufficient food readily available, some Chivanhu individuals on treatment choose to skip doses. Food insecurity therefore, for different reasons, has become an important barrier to adherence in Chivanhu, with 69.4% of respondents highlighting this factor.

The treatment regimens used in Zimbabwe currently may not insist that the medication is taken on a full stomach, but food and medication were raised constantly by the Chivanhu residents. For instance, ART users reported that if the medication is taken on an empty stomach, the pills gave them great discomfort and they experienced acute side effects (for example headaches, stomach pains, vomiting, sweating and dizziness). This led some HIV-infected individuals to interrupt or discontinue the treatment. A 30-year old man narrated his experiences soon after he initiated antiretroviral treatment in stating:

It’s difficult and painful my sister; if I haven’t eaten anything, I will think twice before I take my medicine. I felt uncomfortable at the beginning and sometimes sweating, at one time I had serious stomach cramps, then I tell myself, no, I must take food otherwise this medicine is going to do me bad (interview: 15-06-2012).

Of course, this requires that food be available, which often it is not. In this regard, occasional food supplements are reported to be offered to ART patients at Morgenster Mission Hospital but, due to the ongoing economic crisis in the country, participants in my study acknowledged that they rarely received food supplements at the hospital and this has emerged as a great challenge to ART adherence. Participants argued that the drugs are powerful and they need a very strong immune system which is enhanced by eating health food. Insofar as the non-availability of food or the side-effects of the medicine on an empty stomach undermined adherence, then the reduced food intake undercut efforts by ART users to maintain or improve their health as well as the individual’s capacity for productive labour. The focus group discussion with key informants also highlighted these problems. The informants reported that ARVs were associated with increased appetite which placed
additional pressure on those already experiencing severe food shortages and struggling to feed their families. As stated by a 40-year old widow:

_Sometimes I don’t have a choice, even if the food is not enough, I felt I needed something to eat every time and again (interview: 09-06-2012)._ 

An interview with a couple (both who are HIV positive) at one household illustrates the trauma associated with food and medicine. Thus, the 37-year old wife expressed her feelings about hunger and how it distresses and inhibits her ability to continually adhere to her treatment:

_When I have to work in the garden in the morning, I can’t take my medicine, I have to wait until its mid-day when we eat as a whole family. If I take it without having something to eat, my body becomes weak, it causes so much pain; other times you are carried away trying to work for extra income in order to be able to feed the family, only to see that the time has already passed (interview: 10-06-2012)._ 

The partner also went on to report how he feels about complying with medication given the difficulties presented as a result of food shortages. He noted:

_I tell you what, if you want to enjoy life when taking antiretroviral treatment, then you make sure you have food to eat. The pills only work for me nicely when I eat something; even a small amount of food is better. If I don’t eat, it’s a big problem, I feel like dying (interview: 13-06-2012)._ 

### 6.4.2 Household income and costs of treatment

HIV and AIDS are believed to have greater negative impacts on income levels of households in resource-deficient rural settings such as Chivanhu. Participants reported severe falls in household income as a result of the death of a member due to HIV and AIDS or the presence of a household head (usually the breadwinner) suffering with AIDS-related sicknesses; in either case, the household livelihood base is weakened. Treatment, care and support costs related to caring for the HIV-infected person and costs incurred during the funeral of an AIDS sufferer (particularly for those not part of the burial society) surfaced as major challenges. A 35-year old HIV-positive widowed woman stated during an interview:

_When he [my husband] passed away, the family was left with no one to provide. My children and I were depending on him, he was providing for us; now we are going to only have the little farm produce. What about school fees? I also need cash to collect_
my medicine. I don’t have money, I mean cash with me to say when the mealie-meal is finished then I buy something, no (interview: 15-06-2012).

Household resources are drained during long periods of AIDS-related sicknesses.

Besides standard household expenses such as food, Chivanhu respondents put emphasis on the expenses incurred sometimes hiring trained health care workers to look after the sick member or members; the special materials such as cleaning kits needed for caring for the HIV-positive patient; and the travelling costs to and from the Morgenster Hospital for collecting the medicine on a monthly basis. In this regard, 86.4% of the surveyed households who had a member on ART reported costs related to treatment and care as a barrier to ART adherence – despite the fact that the ARVs themselves are believed to be available for free. Monthly transport costs for the medicine were probably the most significant barrier in relation to household income. One of the interviewees explained:

My problem is that I collect my ARVs at Morgenster Mission Hospital; it costs me a lot to go there. When I have no money like last month, I went to collect only five days after the date of collection; the pills were finished, and money is the stress for me (A forty-seven year old man on ART- interview: 09-06-2012).

Distances to Morgenster Mission Hospital (and the associated travelling costs of USD5 for a return trip) impacted upon 62% of surveyed respondents on treatment. Only 38% collected their monthly suppliers of drugs at the local Nemamwa Clinic, which is four kilometres from Chivanhu. When money was not available for transport at the required time for replenishment, then the trip to the clinic or hospital would be delayed until such time as funds became available; this clearly interrupted the treatment regime and adherence to it. In this context, the survey results also indicate that 66.7% of the ART users reported that disruptions in treatment arose specifically because of the costs of transport to and from the site of dispensing the medicine at Morgenster or Nemamwa.

HIV-affected households sought all sorts of ways of accessing additional income, as noted earlier by the significant diversification of livelihood strategies existing amongst these households. But invariably this additional income had competing demands placed upon it, as households constantly sought to prioritise their limited income base in the face of multiple expenses needing to be incurred. When a HIV-affected household in Chivanhu was experiencing particularly low levels of income availability, household members looking after
the sick member reported pursuing other actions (such as disposing assets) in order to cover the costs associated with the HIV treatment regimen. However, asset disposal is a limited option because of the absence of high-value assets amongst the majority of households in Chivanhu village.

6.4.3 Interruption in supply of ARV drugs
The ongoing socio-economic crisis in the country also has a significant impact on the actual supply of antiretroviral drugs. The country is currently suffering severe shortages or erratic supplies of ARVs because of the withdrawal of funding by some of its donors or delays in funding (Machivenyika 2012). The acute shortage of antiretroviral drugs leads to people switching from one particular regimen to another regimen as, sometimes in retrieving their monthly supply, patients are provided with the only drug that is available at that time of collection. This has been reported to be compromising the health of ART users (Machivenyika 2012, Kachere 2012a). Of the surveyed participants who reported to be on ART, 52.8% acknowledged interruption in supply as a common barrier to ART adherence. Morgenster Hospital is the only ART-registered centre in the Masvingo Rural District and serves patients from all across the district. On this note, one 47-year old man whose wife recently passed away reported about a visit to the hospital:

I was not sure of the type of the pills because that was my first time to get that type. When I asked why they are different, the nurse asked me if I had gone there to collect the pills or to ask questions. I could see that they were different, but because I didn’t want to lose my life I went back home and continued with the pills. The next time I went to collect, another man in the queue whispered saying the nurse had just told him for the past two weeks they have been giving the drugs that are there, not necessarily looking at which type (Focus group discussion: 10-06-2012).

Morgenster Mission Hospital was reported to be experiencing low stocks due to interruption in supply from the donors, and the donors themselves are also facing financial challenges and setbacks. In reiterating the supply problems, a 44-year old man on ART articulated:

When the time has arrived for me to go and collect my pills, I went there, at Morgenster Mission Hospital. When I was there I was told that the batch of the pills is only arriving tomorrow; the nurse told me that she is sorry only, what about my money? If I was working then it’s better. I have to look for taxi fare again, and collect after two weeks, and by then I skipped so many doses (Focus group: 12-06-2012).
Participants reported defaulting on their regimen as a result of drugs not being readily available or available at the appropriate time. As the quotation indicates, this may feed into financial concerns pertaining to transport costs.

6.4.4 Social safety nets

Because of the burden of treatment, care and support, HIV and AIDS have a great impact on the existing social security system of rural households. Traditionally, the burden of caring for the sick person has been shared among household members, relatives and the community at large. And, in the case of HIV-affected households, such an environment becomes absolutely essential for social, financial and emotional support. More specifically, adherence to the HIV and AIDS treatment regimen may be strongly correlated to the prevalence of a support system, particularly in the midst of the stigma related to the pandemic. Broadly speaking, as the burden and demands for care and support for the HIV-infected increase, any existing social support system (from the household itself to the community as a whole) becomes under serious strain. In fact, the increased demands for resources such as additional money, food and emotional care may drive supporters away. A weak social safety net or support system undermines the prospects for proper adherence notably when the HIV-infected person is fully cognisant of the absence of support. The problems are compounded when, in rural communities such as Chivanhu, strong support networks never existed in the first place. In the case of Chivanhu, 80% indicated that absence of social support contributed to non-adherence.

In this context, only 68% of the surveyed participants in Chivanhu village who reported to have tested HIV positive indicated that their status was known to their family or anyone else, and one-third (32%) have not disclosed it to anyone. During focus group discussions, participants highlighted the prevailing absence of social support for the HIV-infected in Chivanhu (as perceived by HIV-infected individuals), and the anticipated absence of support by household members, as a factor leading to hesitation to disclose. For HIV-positive respondents on treatment who openly acknowledged their status, adherence to treatment was greater amongst those respondents who claimed significant social and emotional support. In this regard, both material and non-material support for ART users in Chivanhu seems to be problematic and impacts on adherence. For instance, 43% of surveyed participants on ART reported missing doses due to lack motivation from family members.
Additionally, 67.8% reported not having motivational visits from the community at large while another 19.4% spoke about receiving visits from community members only once in a while. This is attributed to the historically limited social ties between households in Chivanhu and the limited presence of kinship relations within the community. When asked about visits and support from neighbours, only 38.9% spoke about the prevalence of this. Only rarely did neighbours or the community at large provide foodstuffs to a household suffering severely from the pandemic, and this food was only for immediate consumption. A 44-year old woman who had lost her husband in death a few weeks before the survey noted how she struggled in the absence of support from her relatives and the community:

> For the last month before he passed away, no one visited, even the family members. It’s not like I asked for help from them but just to come and see how I am managing with him [would be appreciated], as I am also HIV positive. Yes I needed help in a normal situation, I could not really ask directly. I was on my own. I didn’t have any idea why, I had to be very strong during this time (interview: 11-06-2012).

The level of social support among households is low and an enabling social environment does not exist, and this eventually impacts on the general level of adherence for those on ART treatment. But social relationships within households also become under tremendous strain. Households with a sick member encounter increased emotional and financial demands due to the prolonged period of sickness and because they have normally suffered a loss of resources, assets and income in the face of the pandemic. Insofar as conflict arises in such circumstances, this may have certain consequences on the will and desire of the HIV-infected to maintain the treatment regimen.

When asked about the services that formal care workers provide in the area for the households-affected and individuals-infected, the key informants in the focus group discussion indicated that care workers were last seen nearly three years ago in Chivanhu. The Red Cross organisation was reported to have had training programmes for home-based care services for those infected. The trained care workers were meant to be providing services freely to community members as they were to be paid by the organisation. However, during interviews, it became clear that household members caring for a sick person had to make sure that some form of payment (either by way of cash or food items) were given to these care workers. In other cases, it was reported that the household had to buy the necessary cleaning material kits for the treatment of wounds.
Health care workers are meant to be assisting and equipping household members of the HIV-positive person with knowledge regarding HIV and AIDS with specific reference to supporting, caring and administering the medication in the prescribed manner. However, the general failure to provide this assistance to affected-households had the consequence of disheartening the sick person who often felt isolated and marginalised. This is in part because household members sometimes acted in a manner inconsistent with existing knowledge about HIV and AIDS, such as assuming that the transmission of HIV could take place through eating from the same plate as the person infected. Though this may not have a direct causal impact on adherence to treatment, it certainly undermined support for the infected person and made that person uncomfortable in taking the medication.

6.4.5 HIV and AIDS stigma

Stigma and discrimination have often been identified as a critical barrier impeding effective HIV and AIDS prevention as well as provision of treatment, care and support (Campbell et al. 2011b). More specifically, stigma and discrimination impact negatively on willingness to disclose one’s HIV-positive status and on adherence to the treatment regimen; and this was very pervasive in Chivanhu. The non-disclosure of HIV-positive status (admitted to by 32% of HIV-positive people in Chivanhu) was largely attributed to fear of stigma and discrimination in the community and it led to the HIV-positive person excluding him or herself from participation in community gatherings and household social gatherings. One male key informant expressed and shared his experience:

> When I told my friend that I was positive, he went on to tell his wife. Within a week, the headman approached me to inform me that I was supposed to come the following morning to his house, where names of the HIV positive persons were compiled for [food] rations. I was surprised (focus group: 12-06-2012).

These types of negative experiences were rampant after disclosure of one’s HIV-positive status. Further, stigma and discrimination associated with one’s HIV positive status were reported by 78.2% of the surveyed participants in Chivanhu as a challenge to ART adherence.

Figure 6.2 shows the aftermath for the HIV-infected person in Chivanhu of disclosure of status and how the negative responses from family and community members (mainly arising from stigma) affected the individuals concerned. The HIV-infected and ART users reported post-disclosure differences in treatment by others, rejection by family members, being chased away from home, being denied access to causal work, difficulties in asking for care and
support, broken marriages and a pre-occupation with suicidal thoughts. This explains why such a significant minority of HIV-infected individuals (32%) refused to disclose their status after being tested positive and kept it a closely-guarded secret. Many of those whose status remained secret were on HIV treatment and hence they had to hide this from others. But even for those who disclosed their status, ongoing stigma jeopardised adherence for a variety of reasons, including embarrassment of taking the medication openly and a general fear of loss of dignity and respect within the household and beyond.

Figure 6.2 Experiences after disclosure of HIV status

![Aftermath of disclosure of HIV status](image)

*Source: Field Work June 2012*

It was reported that, when undertaking casual work, it was embarrassing to be seen taking medicine and to be recognised as an AIDS patient; so patients strove to hide the medicine. This hiding of medicine was a more general problem, particularly for those who had failed to disclose their status. A 51-year old man stated:
I am still not comfortable, I can't be seen at the AIDS clinic, it's so embarrassing and frustrating, what will I say to my family (Interview: 14-06-2012).

The hiding of medicine, and not taking it in the presence of others, at times led to ART users defaulting on their treatment regimen. Also, HIV-positive individuals reported that infected individuals are treated differently by others (19%), including being excluded from programmes in the community and not being allowed to take part in funerals. A number of community members believe this that this type of interaction with HIV-positive individuals might cause the transmission of HIV throughout the community. It was evident that the community itself had not yet accepted the epidemic as a mainstream and acceptable illness, as stated by a 29-year old woman:

It's hard to talk about HIV and AIDS around here, sometimes you just think I should keep this to myself; otherwise, none will believe, the response is difficult to bear (interview: 09-06-2012).

Emotional stress associated with HIV and AIDS was very deep such that 25% of individuals diagnosed with HIV at times contemplated suicide.

It was revealed that, due to stigma associated with HIV and AIDS and the treatment regimen, many people were depending on the traditional herb known as moringa for treatment and sometimes replacing this herb for ARVs. Instead of being seen collecting their medicine at Morgenster hospital or Nemamwa clinic, infected individuals would visit traditional healers for the moringa herb. However, the herb is not effective at all (as many infected individuals realised sometime down the road) and many people in Chivanhu have reportedly died having first used the herb and then only much later shifting to ARVs. The widespread use of the moringa herb (which is readily available) hence is related to the stigma attached to HIV and prevents individuals from taking ARVs in the first place or leads at times to non-adherence as HIV-infected individuals turn to the herb when stress levels become unbearable (in the hope that maybe the herb will work for them). One of the key informants reported:

Moringa, yes I also thought it's helpful, but that was before I witnessed one of my neighbour's serious illness which lead, or I can say contributed to his death; I don't want to lie or hide anything. Moringa herb kills, it did him no good at all; he invited more sickness and death only. Maybe he could have lived longer if he was using ARVs, and we need to tell one another about these so-called traditional healers. I cannot leave someone to use the herb, I cannot either (focus group 12-06-2012).
Although there is a nearby clinic (Nemamwa) for the collection of medicine, the majority of HIV-positive individuals from Chivanhu (as noted earlier) go to Morgenster Hospital for their medicine, which is further away. They do this despite the higher travelling costs involved in going to and from Morgenster. When asked why they go to Morgenster, many patients raised the issue of stigma. Attending the local clinic, where the Chivanhu resident is more than likely known by other patients, raises the prospects of being identified in Chivanhu as HIV-positive; hence, the desire to attend Morgenster where one can get lost in the crowd so to speak and remain anonymous.

In this regard Nemamwa clinic, in addition to supplying ARVs, provides support services to HIV-infected patients such as counselling sessions on ART drug adherence (even for those who acquire their drugs from Morgenster). Clinics throughout rural Zimbabwe such as Nemamwa are seen as critical to de-centralising HIV and AIDS prevention and treatment services in the country and in eventually reaching the goal of universal access to treatment. This is designed also to minimise transport costs for rural dwellers. However of the ART users who reported attending counselling sessions with health care providers (80%), only a minority (35%) of ART users reported attending counselling sessions at the local clinic and, again, this was largely attributed to stigma associated with HIV and AIDS. This country-wide problem has been noted by the NAC in a recent administrative report (NAC 2011).

6.5 FACILITATORS OF ART ADHERENCE

Clearly, as outlined in the previous section, serious barriers exist in ensuring proper adherence to the HIV and AIDS treatment regimen in Chivanhu. Despite these barriers (or potential barriers) to ART adherence, considerable adherence to treatment does in fact take place in Chivanhu. Thus, 65% of individuals on treatment reported that, during the three months previous to my fieldwork, they had never missed a dose and hence adhered fully to the regimen. This can be explained by the existence of certain local factors which facilitate adherence – if not complete adherence, then only partial and irregular non-adherence. Some of these factors are simply the reverse of barriers highlighted. For example, just as insufficient social support may undermine adherence, sufficient social support may lead to adherence. But some of the factors identified which provide a basis for adherence go beyond these simple reversals, such as the power of prayer (see Figure 6.3). Factors highlighted by those on ARVs included participation in support groups of people living with Human Deficiency Virus (PLWHIV), an obligation to live longer, power of faith and prayer,
attending counselling sessions at Nemamwa Clinic and Morgenster Mission Hospital, support from family and community members, improved health, and knowledge about HIV and AIDS. Below I discuss some of these facilitating factors.

### 6.5.1 Power of prayer
Religion emerged as one of the sources of encouragement for ART users, with 63.3% reporting on the significance of power of prayer and faith as a basis for hope. Those who had faith ground in prayer reported better adherence with the hope that they become healthier through adherence. There was a strong belief that God will keep them safe no matter how bad the situation may become. Only 38.9% of the twenty HIV-positive individuals on ARVs indicated that they received help and support from the community in the form of prayer for comforting and strengthening them to adhere to treatment.

**Figure 6.3: Facilitators of adherence to ART**

![Bar chart showing facilitators of adherence to ART](chart)

**FACILITATORS OF ADHERENCE TO ART**

- Participating in support group
- Obligation to prolong life
- Power of faith and prayer
- Attending counselling sessions
- Support & care from health care providers
- Getting support from family and community
- Improved health
- Adequate knowledge about HIV AIDS

Source: Field Work June 2012
6.5.2 Participation in support groups

Support gained from support groups of people infected with HIV and AIDS also motivated ART users who have joined these groups in order to ensure that they take their treatment properly. There are two known support groups for people who are living with HIV and AIDS noted in the fieldwork. These are Kuspinga (Be strong) at Nemamwa Clinic and Kubatana (Let’s work together) at Morgenster Mission Hospital. The focus group discussion with the members of Zimbabwe National Networking of People Living with HIV (some from Chivanhu settlement) highlighted that being part of this group enabled development of a sense of belongingness in them. Just over 60% (61.1%) report better adherence to treatment due to their participation in such support groups. Participants reported that the support group gave them the platform to share the burdens of their HIV status, and to exchange words of hope and encouragement with one another. As stated by a 50-year old woman:

*I never thought I will be able to talk about my status so openly, now I am relieved. It’s good and I felt and developed a sense of belongingness; it’s like a family doing things together in one accord and with people who understand me better [focus group: 20-06-2012].*

These groups facilitated the establishment of very strong relationships where participants shared ideas and experiences and generally encouraged one another to be positive despite their HIV positive status. Hence, the groups provided an enabling environment for adherence to treatment.

6.5.3 Health care providers support

In addition, accurate information about HIV and AIDS and considerable emotional support was reported from health care providers themselves through counselling when the HIV-positive individuals visited Nemamwa Clinic and Morgenster Hospital to collect their medication; with 80% of the surveyed participants on ART reporting attending counselling sessions with health care providers as illustrated in figure 6.3. Furthermore, health workers provided motivation and encouragement to live a more positive life and facilitated a perception that being HIV-positive is not an abnormality. Health care providers thus equipped them with correct HIV and AIDS information and 77.8% reported better adherence due to adequate knowledge about the epidemic. This lessened the fear of stigma attached to HIV and AIDS and offered a strong basis for adherence in the face of stigma and discrimination emanating from the community in Chivanhu.
6.5.4 Obligation to live longer
The vast majority of HIV-positive individuals in Chivanhu (83.3%) had a deep desire to live as long as possible, and often this became translated into an obligation to survive and live long. This obligation became stronger as the benefits of ARVs became increasingly apparent to those on treatment and reinforced compliance to the medication regimen. This was despite the serious side-effects which arose, as mentioned previously, with some individuals associating side-effects with improper adherence. To reiterate this, one young man in his thirties said:

My body became so weak and I could not withstand the medicine; instead, I had serious wounds on my head, and had serious headaches (Interview: 13-06-2012).

Overcoming these side-effects spurred individuals on in fulfilling their household duties.

HIV-positive individuals on ART who were breadwinners at the time of the survey highlighted the obligation to live for the sake of their family and particularly the children. They wanted to be able to continue working to feed their family and to see their children grow, and hence they refused to miss a dose or skipped a dose rarely. This motivation to adhere was prevalent for both males and females, though mothers more than fathers in Chivanhu were generally more concerned about the welfare of the households. Interviewed participants acknowledged children as a key motivation for them to keep on living and they were far from giving up on the struggle to survive. A 35-year old woman stated:

Now I realise that there is every reason for me to be alive. I could not think straight when I was sick; if I had not continued taking the pills, I could have been dead by now. But look, though I am struggling, I think it’s better because my children have someone to look up to for support, food, clothing and school fees (interview: 10-06-2012).

6.5.5 Improved health
Improved health by adhering to the treatment was acknowledged as a factor by 88.9%, as it motivated individuals to continue taking their treatment. This was largely reported during interviews with HIV-positive individuals and key informants who were members of the Zimbabwe National Networking of People Living with HIV (ZNNP+). Individuals developed trust, hope and confidence for a future healthier life as contrasted to the severe illnesses experienced before initiating ART. One 33-year old woman reported:

I feel I have gained my life back again. Without them, the pills, I will die anytime. I cannot see myself thinking twice or hesitating to take my medication. Some here cannot
identify me now. I have gained weight, I look very different now (focus group discussion 12-06-2012).

It was almost universally reported and agreed that refusing to take treatment or interrupting treatment only serves to weaken the body physically (and emotionally).

Many HIV-positive individuals (44.4%) did report increased sickness as soon as they started taking the treatment and intermittent side-effects throughout. But, generally, the positive effects (increased weight and energy for instance) significantly overshadowed any negative physical experiences. A 36-year old man highlighted:

*If it weren't the pills, I could have died long time ago. I can't imagine myself stopping taking them any time, I really count on them. The ARVs are my life. Yes I was sick but I gained my life back; I feel that I am normal now and can also work though I don't have a job (focus group: 20-06-2012)*.

Another 24-year old man reported on his experiences soon after initiating ART and went on to explain how his attitude to the treatment regime has altered with time:

*When I started taking the medication, I was almost dying, I got very sick. I could not stand on my own and people were thinking my time has come to die ... In fact I could not figure out what I was suffering from. Now if I think of it, as you can see, I will never stop taking my medication. I do make sure every day I take my pills at the right time because they are good (interview: 10-06-2012).*

In overcoming any initial hesitations about the treatment regimen, most HIV-positive individuals in Chivanhu – by persevering with the regimen – eventually experienced the physical benefits and this has motivated them further to adhere to treatment.

**6.6 CONCLUSION**

The HIV and AIDS pandemic has devastated the Zimbabwe countryside over the last two decades and Chivanhu settlement has not been spared in this regard. I have not provided comparative evidence in relation to communal lands and fast track farms, but it seems that informal settlements like Chivanhu are particularly vulnerable because of the lower levels of agricultural production and food security and the relative absence of long-term and close-knit social networks (though the problem of social networks is also relevant to fast track farms). This has implications specifically for adherence to treatment. Many of the factors facilitating adherence and acting as barriers to treatment prevail in other parts of Zimbabwe and in the region, but each localised site has its unique combination of factors which mark the historical
and spatial specificity of the locale. Not all factors, either as facilitators or barriers, are relevant to all infected individuals and affected households. Though there are commonalities and trends evident in Chivanhu, HIV and AIDS are regularly experienced and handled in very unique ways based on personal life histories.
CHAPTER 7
CONCLUSION

7.1 INTRODUCTION

Zimbabwe is among other African countries that have had made great strides insofar as responding to the HIV and AIDS epidemic and HIV treatment is concerned. Although there has been substantial improvement in the affordability and availability of antiretroviral therapy in recent years in Zimbabwe, the health care system is facing enormous challenges because of the ongoing economic and political crises in the country and the tremendous demand for treatment given the high rate of prevalence. The main objective of this study, with specific reference to an informal settlement in rural Masvingo province (Chivanhu), was to identify, understand and analyse the conditions which shape levels of adherence to HIV and AIDS. This entailed examining the relationship between the HIV and AIDS pandemic and rural livelihoods with particular reference to HIV susceptibility and AIDS vulnerability. To do this, I adopted a rural livelihoods framework because of its sensitivity to structured processes but also because it enables an understanding of the daily experiences and decisions of households and individuals in rural settings. On this basis, I was able to offer an in-depth portrait of treatment adherence and the factors which influence adherence in Chivanhu. In this concluding chapter, I summarise the adherence factors and relate my Chivanhu study to the rural livelihoods framework.

7.2 FACTORS THAT INFLUENCE ADHERENCE TO ART

The key themes which arose from the study in relation to adherence are the following: costs related to treatment medication, social safety nets, participation in support groups, the role of health care providers, interruptions in supply of drugs, positive living, power of faith, stigma and discrimination, household income level and food insecurity. In any particular case of a HIV infected person in Chivanhu, the relevance of these factors is open to considerable variation as is their combination. But, overall, these are the main factors impinging upon HIV infected and affected households in the settlement, and they operate at different levels. For instance, stigma and discrimination are often pervasive at the inter-household or community level as are questions about social networking through support groups. Income and food insecurity are felt primarily at household level. Factors such as positive living and the power of faith are intimately bound up with the individual him- or herself. Whether individual, household or community, it is clear that many of the factors arise in the context of (and are
shaped by) broader economic and political processes and challenges in contemporary Zimbabwe. This section does not go into detail in relation to all the factors but rather isolates a few for special attention, in part because of their clear links to points emphasized by the rural livelihoods framework (notably resources or capitals).

7.2.1 Social safety nets
Social safety nets, as an important component of the rural livelihoods framework, assist in understanding the relationship between social support networks and the HIV and AIDS epidemic. The epidemic has had serious effects on the social capital base of rural communities as households become disrupted by the loss of members (including household heads) through AIDS-related chronic illness. The HIV and AIDS epidemic constrains and erode social ties and security, leaving the infected and affected without an adequate supporting environment and making them more vulnerable. Social networks therefore are already weakened when it comes to a situation where further care and support is required. In this context, the burden of providing even more support services chases away potential supporters due to high extra demands on resources. Yet, as my study in Chivanhu shows, those on antiretroviral treatment require a considerable degree of support from family, friends, neighbours and the community at large. Social support is critical and essential to those living with HIV and ART users. In Chivanhu, there are few networks which offer support for the HIV infected in terms of facilitating adherence and, in many instances, it seems that existing networks or the often atomized nature of life discourage adherence (albeit not intentionally). Specifically HIV and AIDS support groups in Chivanhu are though a source of encouragement and motivation to continue adhering to treatment. Both women and men with HIV and AIDS indicated finding someone to communicate with made them feel that they are cared for and improves their ability to cope with their treatment.

7.2.2 Stigma and discrimination
In relation to a supportive social environmental system, the HIV and AIDS epidemic is associated with serious stigma and discrimination and this has always been commonly cited as a barrier to effective HIV prevention. Despite the efforts by health professionals to destigmatise the HIV and AIDS disease, the issues of stigma and discrimination associated with the epidemic remain a concern. In this study, HIV and AIDS-related stigma has shown to have a negative influence on ART adherence. Despite the pervasiveness of the epidemic in Chivanhu this may seem surprising. Almost all, if not all, households in the community are
affected households. Yet community members seemingly have not come to terms with the pandemic or have not accepted it for what it is: an infection to which all are susceptible and vulnerable though precautions can be taken. Due to fear of stigma and discrimination, feelings of being uncomfortable overwhelmed those infected in Chivanhu, making it even more difficult to disclose their HIV status to family and friends. This is especially difficult for women, who may be labeled as promiscuous if identified publicly as HIV positive; in the case of men, this label does not often arise at least in a negative tone. Stigma in Chivanhu thus led to loss of dignity and respect, and the undermining of existing relationships. In this context, HIV-infected individuals refrained from wanting to be seen at the nearby health clinic, often hiding their medication and even skipping doses. Other infected and ART users diverted to the traditional herb (Moringa), a well known herb used in Zimbabwe, as a substitute for antiretroviral drugs. Some though through the power of faith and prayer were able to persevere in the face of this discrimination.

### 7.2.3 Household income level
The HIV and AIDS pandemic has had a great impact on the survival strategies and income levels of rural households. For different reasons, such as the loss of labour power through chronic illness and death, it undermines the capacity of households to be productive and sustainable. In the case of particularly informal settlements like Chivanhu, the productive and income capacity of households even prior to the impacts of HIV and AIDS is minimal; in this way, in terms of sustainability as viable functioning units, they are extremely vulnerable. Once sustainability is further undercut because of the impacts of the pandemic, then coping on a day-to-day basis becomes an arduous and almost impossible task. Households desperately try to diversity their livelihood portfolio but doing so in a rural site like Chivanhu is going against all odds. In addition to this are the emotional and financial costs that come with HIV, including treatment costs. In Chivanhu, lack of finances was raised as a major barrier to motivation in adhering to treatment. Even though the government of Zimbabwe has succeeded in the decentralisation of ART services and the drugs themselves come at no cost, transport fees and associated health costs may at times lead to an interruption in drug supply and adherence.

### 7.2.4 Household food insecurity
Food insecurity is pervasive in rural Zimbabwe and particularly in informal sites like Chivanhu. Food insecurity, in the case of Chivanhu as elsewhere, is clearly a negative factor
influencing adherence to ART. It weakens though even those individuals who are not infected, yet (as affected individuals) they carry heavy productive and caring responsibilities due to the loss of economically-active household members in death and the need for supporting the chronically-ill. Comparatively speaking, the lives of the HIV-infected are particularly problematic because of the need for a nutritious and healthy diet in support of the immune system and in light of the treatment programme they are on. Normally, the drugs require food to be taken and digested just before or after the treatment, otherwise complications and side-effects may arise. With limited agricultural goods being produced in Chivanhu, affected households need to access food through the pursuit of income-generating activities. These are exceedingly limited in Chivanhu, leading to insufficient basic foodstuffs for affected households as reflected in the skipping of one or two meals a day. This has a knock-on effect in relation to adherence.

7.3 LIVELIHOODS FRAMEWORK AND TREATMENT ADHERENCE IN CHIVANHU

The question of treatment adherence in Chivanhu is embodied in systemic problems locally in relation to HIV susceptibility and AIDS vulnerability. Failures in adherence are a manifestation of the deficient assets and resources which characterize the community. The many barriers to adherence invariably refer back to capital shortfalls in Chivanhu, notably in relation to social capital and financial capital as highlighted in the previous section. These shortfalls inhibit livelihood strategies and lead to livelihood portfolios which are anything but sustainable. In this regard, in speaking about the livelihoods framework deployed in this study, I have tended to drop the word ‘sustainable’ from it. A sustainable livelihoods framework though does not automatically posit the existence or eventuality of sustainable households. Rather, it emphasizes livelihoods as a process involving activities, adaptations and coping mechanisms.

Perhaps what is most surprising about adherence is Chivanhu is the significant presence of adherence, including high levels of complete adherence. Hence, though the economic and political crisis in Zimbabwe has led to structural conditions undermining rural livelihoods, Chivanhu residents have – in some sense – risen above the constraints and pressures which seem to hem them in without any way out. In other words, a focus on human agency as reflected in livelihoods as a process is critical in understanding the quest for and practice of adherence in Chivanhu. The livelihoods framework, because of its analytical capacity to
understand micro-level experiences, relations and practices, was particularly suitable for recognizing and understanding this key component of adherence and in addressing the main thesis objective more broadly.
REFERENCES


consumption and Nutrition Division Discussion Paper number 157- Washington D.C 20006-U.S.A.


Masvaure, T. B . 2009. Living of Sex: Male Students and Pimping at a Zimbabwean University Campus.


127

Mushongah, J. (2009). Rethinking vulnerability: Livelihoods Change in Southern Zimbabwe, Avebury, Aldershot, UK


129


When masculinity interferes with women’s treatment of HIV infection: A qualitative study about adherence to antiretroviral therapy in Zimbabwe. Journal of the international AIDS society, Volume 14 (29). ISSN pp 1758-2652


White, J. & Robinson, E. (2000). HIV/AIDS and Rural Livelihoods in Sub Saharan Africa. Policy Series Number 6; Natural Resources Institute, University of Greenwich Policy Series.6, (Social Sciences Department, NRI) Natural Resources Institute University of Greenwich


Appendix 1

INTERVIEW GUIDE ON RURAL LIVELIHOODS AND ADHERENCE TO HIV AND AIDS ANTIRETROVIRAL TREATMENT STUDY

1. Identifying details
   - Gender (identified through observation)
   - Number of people in the household during the interview and their relationship to the interviewee
   - What are the education level and livelihoods activities (farming, gardening, fishing, petty trade, pension, and formal salary (etc) of the all members of the household?

2. Background to the family history
   - Where have you been staying before you settled in this area (Chivanhu informal Settlement), for the past 10 years?
   - In what ways have your lives changed since you were settled – what are the major changes have you encountered in your lives?
   - What are the major challenges that you have faced since you moved to the resettlement areas? (Not agricultural production related)?
   - What social services are provided for in this settlement? What else do you wish could have been provided in the Settlement and how will this improve household / community livelihoods? (The services wished for)
   - Where else are you getting support other than the formal support services?

3. Livelihoods assessment

   Assets
   - What material assets does the household have access to, possess or own? List all the assets
   - Explain how the assets are used for the benefit of the household? Please comment on their quality

   Social groupings
   - Do any of the family members have access to social groupings such as Burial Society, Mukando, Mushandirapamwe (community garden) etc?
   - What benefits do the household or member receive for being part of the support group?
Comment on the quality of each of these social groupings services? (household and community at large)

**Financial capital**
- Apart from farming, what other activities that brings food within the household and income generating activities the household is involved in?
- What is the income from these activities used for?
- What financial capital does the household possess or have access to? List all.
- Who in the household has access to each of these financial assets and how are they used for the benefit of the household
- Comment on the quality of each of these assets.

4. **Food Security**
- What is the major source of food in your house?
- What are your major household food purchases?
- Before moving onto your plots where did you get the cereal consumed in your household?
- How long does your cereal and grain store last after harvest?
- Where do you get additional cereal and grain for the household till the next harvest or in times of emergency?
- Aside from cereal crops, what other crops do you grow to supplement your household’s food requirements? (Looking for issues such as vegetables, beans, wild fruits, remittances, etc).

5. **Shocks and stresses (Impact of HIV/AIDS)**
- How many members of the household died in the recent past years or are currently suffering from a chronic illness?
- What illnesses were or are they suffering from?
- What does the household attribute the illness or death to?
- What changes have been seen in the household since the illness and or death of the family member or members?
- What has been or is the impact of the illness and or death of a family member or members on the household’s well being?
- Has any of the family members passed away due to or is suffering from HIV/AIDS related sicknesses. What kind of support is provided by the household and community at large?
What difficulties were and or are being encountered, in terms of treatment adherence?

In terms of complying with the treatment, what would you consider to be things that can make one not to take the treatment as prescribed, (challenges, side effects brought with taking the treatment)

What would you consider to be the motivation behind commitment to complying with the treatment? (Any positive changes noticed?)

6. Coping and building Resilience

How is the household coping with the current situation? List the coping strategies and the role of each household member.

How would the household like to prepare itself to a handle similar situation in future? List the suggested interventions and the role of each household member.

How would the household like the community to prepare itself to assist the households affected with chronic illness and death of family members?

In terms of treatment adherence, what measures are in place or can be implemented in order to improve ART adherence?
Appendix 2

QUESTIONNAIRE FOR RURAL LIVELIHOODS AND ADHERENCE TO HIV AND AIDS ANTIRETROVIRAL TREATMENT STUDY

SECTION A: Household details (please tick in the little box where applicable)

1. Gender of respondent
   - Male
   - Female

2. Age
   - 15-30
   - 30-35
   - 35-50

3. Relationship of respondent to the Household
   - Mother
   - Grandfather
   - Son
   - Uncle
   - Other (specify)

   - Father
   - Grandmother
   - Daughter
   - Aunt

4. Family Type
   - Child headed
   - Female headed (Widow)
   - Female headed (unmarried)
   - Female headed (married)
   - Male headed (widower)
   - Male headed (unmarried)

5. Indicate the livelihoods activities the household engage in household header
   - Livelihood activities
   - Selling foodstuffs, biscuits, sweets, boiled eggs, etc
   - Airtime
   - Clothes (mabhero- second hand)
   - Fruits and vegetables
   - Farm products (Nzungu, Roasted mealie, Nyimo, etc)
   - Human piece (weave, braiding etc)
   - Selling Firewood
   - Other (Specify)

6. Indicate the highest level of education of the household header
   - Below grade 6
7. Indicate the religion of the household

<table>
<thead>
<tr>
<th>Religion</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Christianity</td>
<td></td>
</tr>
<tr>
<td>Muslim</td>
<td></td>
</tr>
<tr>
<td>Hindu</td>
<td></td>
</tr>
<tr>
<td>traditional</td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
</tr>
</tbody>
</table>

8. Indicate the main sources of income in the household

<table>
<thead>
<tr>
<th>Source of income</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remittances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wages from formal employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wages from part time employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crop sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetables sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Livestock sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold Panning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petty trade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION B: Food consumption of households
1. What was the composition of the household meals for the past three days? Check food item if consumed at least once in the past three days by anyone)

<table>
<thead>
<tr>
<th>Qn</th>
<th>Food item</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Sadza</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td>Other cereals (<em>rapoko, millet</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td>Cassava / Potato /Other tubers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d)</td>
<td>Sugar / Sugar products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e)</td>
<td>Legumes (<em>beans, peas, ground, nuts</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f)</td>
<td>Vegetables / Leaves (<em>include wild</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(g)</td>
<td>Bread</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(h)</td>
<td>Fish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i)</td>
<td>Cooking Oil / Fat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(j)</td>
<td>Milk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(k)</td>
<td>Meat (<em>include wild</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(l)</td>
<td>Fruits (<em>include wild</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(m)</td>
<td>Eggs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n)</td>
<td>Mahewu</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Do you have enough food to last you until the next season harvest?
   Yes  No

4. How many meals are consumed per day by the household? Circle the correct answer
   (i) one  (ii) two  (iii) three  (iv) > three

5. Do you own a piece of land?
   Yes  No

SECTION C: Household social support and coping strategies (tick the applicable response)
1. Which basic amenities do you have access to? Indicate the rating of quality of service

<table>
<thead>
<tr>
<th>Amenity</th>
<th>Quality of service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>bad</td>
</tr>
<tr>
<td>Clinic</td>
<td></td>
</tr>
<tr>
<td>Banks</td>
<td></td>
</tr>
<tr>
<td>Shops</td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td></td>
</tr>
</tbody>
</table>
2. Do any of the family members have access to any of the following social groups? *(for example, clubs, support groups etc)*

<table>
<thead>
<tr>
<th>Social Group</th>
<th>Tick where applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Society (Mukando)</td>
<td></td>
</tr>
<tr>
<td>Burial society</td>
<td></td>
</tr>
<tr>
<td>Community garden)</td>
<td></td>
</tr>
<tr>
<td>Crouching &amp; Knitting</td>
<td></td>
</tr>
</tbody>
</table>

3. Which type of support do you rely on from the social groups you belong to?

<table>
<thead>
<tr>
<th>Type of support</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School fees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funeral support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical/Hospital expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional support/counselling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm labour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other(specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Which of the following services are provided by the primary caregiver? *(Tick if applicable)*

<table>
<thead>
<tr>
<th>Service</th>
<th>tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand Feeding</td>
<td></td>
</tr>
<tr>
<td>Bed bathing</td>
<td></td>
</tr>
<tr>
<td>Treating wounds</td>
<td></td>
</tr>
<tr>
<td>Care for their children</td>
<td></td>
</tr>
</tbody>
</table>
Cook for them
Clean-up their living area
Help them get around
Administer medicine
Accompany to clinic/hospital
Provide emotional comforting and prayer

5. Does anyone provide care to the sick from the community? (not living in the household)
   Yes  No

6. If there is someone outside of the household who provides care, how often have they visited in the past week?
   (i) One  (ii) two  (iii) three  (iv) other (specify)

7. Which of the following services are currently provided by the community member to the sick? (check ALL that apply)

<table>
<thead>
<tr>
<th>Service</th>
<th>tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand Feeding</td>
<td></td>
</tr>
<tr>
<td>Bed bathing</td>
<td></td>
</tr>
<tr>
<td>Treating wounds</td>
<td></td>
</tr>
<tr>
<td>Care for their children</td>
<td></td>
</tr>
<tr>
<td>Cook for them</td>
<td></td>
</tr>
<tr>
<td>Clean-up their living area</td>
<td></td>
</tr>
<tr>
<td>Help them get around</td>
<td></td>
</tr>
<tr>
<td>Administer medicine</td>
<td></td>
</tr>
<tr>
<td>Accompany to clinic/hospital</td>
<td></td>
</tr>
<tr>
<td>Provide emotional comforting and prayer</td>
<td></td>
</tr>
</tbody>
</table>

SECTION D: Health
1. Is there any family member who is/was chronically ill?
2. Has this person had an HIV test  
   Yes ☐ No ☐

3. If they are willing to disclose, what is their HIV status  
   positive ☐ Negative ☐

4. What happened when you tested HIV+ or have disclosed your status,  

<table>
<thead>
<tr>
<th>Response</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Been treated differently</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lost a job</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lost a place to stay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chased away from home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficult to ask for support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. If they are willing to disclose, are they taking anti-retro-viral therapy (ART)  
   Yes ☐ No ☐

6. Who advised you to take the treatment (ARVs)?  

<table>
<thead>
<tr>
<th>Service</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health care provider</td>
<td></td>
</tr>
<tr>
<td>Family member</td>
<td></td>
</tr>
<tr>
<td>friend</td>
<td></td>
</tr>
</tbody>
</table>

7. Do people at home know that you are positive and taking the treatment?  
   Yes ☐ No ☐

8. What type of organization is providing ART drugs? (check ALL that apply)  

<table>
<thead>
<tr>
<th>Organization</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinic</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION E: Treatment and adherence

1. How can you best describe the way you have been taking the treatment description

<table>
<thead>
<tr>
<th>Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Had not missed a pill in the past 3 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Missed a single pill/dose in the past 3 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Missing doses most of the time</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. If yes on (1a) above, would you consider the following having contributed to the kind of behavior factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate knowledge about HIV treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved health after initiating the treatment which lead to confident</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting material and emotional support from the family, and community members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support and advice from healthcare providers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attending counseling sessions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religion plays an important role – power of faith and prayer is the hope</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A sense of obligation to prolong life to be able to see children growing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating in a support group</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. If yes on (1b & 1c) above, would you consider the following having contributed to the kind of behavior factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate knowledge about HIV treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deterioration in terms of health (increased sicknesses) after initiating the treatment which lead to confident</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of social, material and emotional support from the family, and community members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs related to the treatment, (traveling, obtaining food etc)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficult to sustain a balanced diet and sometimes lack of food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of supportive staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complexity of treatment regimens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forgetfulness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stigma related to disclosure and discrimination related to HIV/AIDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of disclosure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belongs to a restrictive religion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Which of the following have you experienced after initiating the treatment (*tick where applicable*)

<table>
<thead>
<tr>
<th></th>
<th>tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Losing weight</td>
<td></td>
</tr>
<tr>
<td>Improved health</td>
<td></td>
</tr>
<tr>
<td>Increased weight</td>
<td></td>
</tr>
<tr>
<td>Became very sick</td>
<td></td>
</tr>
</tbody>
</table>

5. Which of the following constraints in accessing drugs are they experiencing any of these? (*Tick all that are applicable to you*)

<table>
<thead>
<tr>
<th>Constraint</th>
<th>Yes</th>
<th>No</th>
<th>Ranking/importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interruption in supply</td>
<td></td>
<td></td>
<td>more</td>
</tr>
<tr>
<td>Lack of money</td>
<td></td>
<td></td>
<td>less</td>
</tr>
<tr>
<td>Transport problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disruptions due to mobility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The end ............... Thank you for your help

Prepared by Tendai Wapinduka (Student-Rhodes University) in fulfilment of a Master of Arts Degree

Edited by Mrs. Loveness Makonese: Assistant HIV/AIDS and Livelihoods Officer-Food and Agricultural Organisation-FAO-Zimbabwe &

Dr. Kirk Helliker: Supervisor (Rhodes University)
Appendix 3

RURAL LIVELIHOODS AND ADHERENCE TO HIV AND AIDS ANTIRETROVIRAL THERAPY: A STUDY OF CHIVANHU SETTLEMENT: NEMAMWA VILLAGE IN MASVINGO DISTRICT, ZIMBABWE.

Oral Informed Consent Form

This interview is for a research that is done by Tendai Wapinduka, an M.A student registered with the Rhodes University, South Africa.

The research interview will gather information on the rural livelihoods of HIV and AIDS infected and affected and how households are coping with HIV and AIDS. The research is also going to ask information on the institutions working on HIV and AIDS in the village and what they are doing for the infected and affected. Special emphasis will be given to how the livelihoods of HIV and AIDS infected and affected facilitate and or hinder treatment adherence. I am going to talk to individuals, households and people in groups.

The names of the people who agree to be interviewed will not be recorded without their permission and after data analysis on presenting the research findings the names are going to be changed.

Your participation is voluntary and there is no penalty for refusing to take part (if you do not take part, it will not affect any support you would normally receive). You may refuse to answer any question in the interview or stop the interview at any time.

Signature..................................................Date........................................

Every aspect of the research outlined above has been fully explained to the respondent in Shona language (local language spoken in Chivanhu, Nemamwa) and my contact numbers given for further questions and issues that may arise.