

**THE IMPACT OF HIV AND AIDS ON ACCESSIBILITY TO LAND UNDER
CUSTOMARY TENURE IN MALAWI:**

A Case Study of Lilongwe and Mzimba Districts

By

CHIMWEMWE WANYAMWANDIRA KAUNDA

BSc. AGRICULTURE (AGRICULTURAL ECONOMICS) MALAWI

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TABLE OF CONTENTS

TABLE OF CONTENTS-----	i
LIST OF TABLES-----	vi
DECLARATION-----	viii
CERTIFICATION OF APPROVAL-----	ix
ACKNOWLEDGEMENTS-----	x
DEDICATION-----	xi
ABSTRACT-----	xii
ABBREVIATIONS AND ACRONYMS-----	xv
GLOSSARY-----	xvi

CHAPTER ONE

1.0. INTRODUCTION-----	1
1.1. Land Tenure Systems-----	1
1.2. Customary Tenure Arrangements in Malawi-----	2
1.3. Relationship between HIV and AIDS and Land issues-----	3

CHAPTER TWO

2.0. LITERATURE REVIEW-----	5
2.1. Global and Regional Overview-----	5
2.2. HIV and AIDS Situation in the Sub-Saharan Region-----	6

2.3. Overview of HIV and AIDS Situation in Malawi-----	7
2.4. The Economic Impact of HIV/AIDS on Agricultural Production-----	9
2.4.1. Impact on Labour Supply-----	9
2.4.2. Impact on Farm Size-----	11
2.4.3. Impact on Cropping Systems-----	11
2.5. Land Access and Land Rights -----	12
2.6. Problem Statement-----	19
2.7. Objectives of the Study-----	21
2.7.1. General Objective -----	21
2.7.2. Specific Objectives-----	21
2.8. Hypotheses of the Study-..-----	21

CHAPTER THREE

3.0. RESEARCH METHODOLOGY

3.1. Introduction.....	22
3.2. Study Area	22
3.3. Sampling Design.....	23
3.4. Sampled Households	25
3.5. Sample Size Calculation	25
3.6. Sample Frame	27
3.7. Data Collection	27
3.7. Data Analysis.....	28

3.7.1. Logit Model of Land Tenure Security	29
3.7.2. Logit Model Specification	29
3.7.3. LOGIT MODEL	30
3.7.4. Determinants of Tenure Security	32
3.8.0. Conceptual Framework-----	36

CHAPTER FOUR

4.0. SOCIO-ECONOMIC CHARACTERISTICS OF THE SAMPLED HOUSEHOLDS

4.1. Sex of Household Head	38
4.2. Age of Household Heads	40
4.3. Marital Status of Household Heads	43
4.4. Education of the Household Head	46
4.5. Household Size	48
4.6. Occupation of Household Heads	49

CHAPTER FIVE

5.0. HIV AND AIDS AND LAND ISSUES- - -----	52
5.1. Customary Land Tenure-----	52
5.2. Land Holding Size-----	52
5.3. Land Cultivated by Households Heads-----	57
5.4.1. Land Lost by Household Heads.....	62

5.4.2. Chronic Illness and Land Loss	66
5.4.3. Land Loss by Affected Household Heads.	68
5.4.4. Coping Strategies of Households Affected by HIV and AIDS	70
5.5. Inheritance of Customary Land-----	71
5.5.1. Inheritance of Land by Orphans	75
5.5.2. Inheritance of land by spouses of landholder	79
5.6. In Whose Name is the Land Held-----	82
5.7. Land Rights of Women and Children.....	83
5.7.1. Protection of land Rights of Widows and Orphans	85
5.8.0. Land Acquisition by Household Head-----	86
5.8.1. Land Acquisition through family heads and traditional leaders.....	86
5.8.2. Land Acquisition through Buying	87

CHAPTER SIX

6.0. SOCIO-ECONOMIC FACTORS AFFECTING TENURE SECURITY-----	92
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CHAPTER SEVEN

7.0. CONCLUSIONS AND RECOMMENDATIONS-----	97
7.1. Conclusion-----	97
7.2. Recommendations-----	98
12.0. REFERENCE-----	99
APPENDICES-----	113

Appendix A: Household Questionnaire-----	113
Appendix B: Interview Guide for Traditional Leaders.....	126
Appendix C: Checklist for Community Members (Men, Women and Youths).....	127
Appendix D: Areas visited in Mzimba and number of households interviewed.....	128
Appendix E. Areas visited in Lilongwe and Number of Households Interviewed	129
Appendix F: Means of socio-economic characteristics of household heads in the study area.	129

LIST OF TABLES

Table 1: Proportional of sex of household heads.....	39
Table 2: Sex of the household heads	40
Table 3: Average age of household heads	41
Table 4: Age categories of household heads in the study area	42
Table 5: Marital status of household heads	44
Table 6: Marital status of household head and household category	45
Table 7: Education level of affected and non-affected household heads	47
Table 8: Mean household sizes for Mzimba and Lilongwe.....	48
Table 9: Occupation of household heads.....	50
Table 10: Mean land holding sizes of household heads	54
Table 11: Land holding sizes of household heads	55
Figure 12: Land holding sizes of household heads in Mzimba	56
Figure 13: Land holding sizes of household heads in Lilongwe	57
Table 14: Average land cultivated by affected and non-affected household heads	59
Table 15: Land cultivated and household heads in Mzimba	61
Table 16: Land cultivated by household heads in Lilongwe.	62
Table 17: Mean land lost by household heads in past three years.....	63
Table 18: Mean land lost by households in Lilongwe and Mzimba.....	64
Table 19: Chronic illness and land loss	67
Table 20: Reasons to why long time illness leads to land loss.....	68
Table 21: Coping strategies of affected households heads.....	71

Table 22: Heir of customary land in Mzimba.....	73
Table 23: Heir of customary land in Lilongwe.....	75
Table 24: Inheritance of land by orphans in the study area	76
Table 25: Land Inheritance by orphans in Mzimba.....	77
Table 26: Land inheritance by orphans in Lilongwe	78
Table 27: Land inheritance by spouses of landholder	79
Table 28: Land inheritance by spouses in the study area	80
Table 29: Inheritance of land by spouse(s).....	81
Table 30: Marriage type and land inheritance by spouse(s) in Lilongwe.....	82
Table 31: Protection land rights of orphans and widows	86
Table 32: Land allocation	87
Table 33: Incidences of land sales in Mzimba and Lilongwe	90
Table 34: Socio-economic factors associated with customary land tenure security	93

DECLARATION

I hereby declare that this thesis is my own work and effort and that it has not been submitted anywhere for any other award. Where other sources of information have been used, they have been acknowledged.

Signature _____

Chimwemwe Wanyamwandira Kaunda

Date _____

CERTIFICATION OF APPROVAL

We hereby declare that this thesis is from the student's own work and effort and all other sources of information used have been acknowledged. This thesis has been submitted with our approval.

Supervisor _____

Professor A.K. Edriss

Date _____

Supervisor _____

Dr. C. Masangano

Date _____

Supervisor _____

Dr. G. Malindi

Date _____

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DEDICATION

To my late grand parents and sister Agnes Theu.

ABSTRACT

Land in Malawi is a key asset not only as a source of livelihood but also the main vehicle for investment and accumulation of wealth. Due to the key role that the land plays, the way in which access of this resource is regulated has important implications on countries development. Changes in social patterns due to population pressure, market value of land and HIV and AIDS have changed the way in which customary land is accessed. Research conducted in Kenya, Lesotho and South Africa revealed that HIV and AIDS affected households were losing out their access to customary land. No research has been conducted in Malawi to quantify the impact of HIV and AIDS on land under customary tenure.

This study was conducted in Mzimba and Lilongwe districts to quantify the impact of HIV and AIDS on customary land. The study was carried out to find out if HIV and AIDS affected households were losing out their access to customary land. Secondly the study also identified coping strategies that were employed by HIV and AIDS affected households to avoid losing out their access to customary land and assessed the socio-economic factors that affect customary land tenure security in Malawi. The data were collected from a sample of 185 HIV and AIDS affected and 185 HIV and AIDS non-affected households. Mzimba district had a total sample of 160 of which 80 households were HIV and AIDS affected households and 80 non-affected while Lilongwe contributed 210 of which 105 households were HIV and AIDS affected, as well as, 105 non-affected. Using a structured questionnaire and information collected

were complemented by key informant interviews and Focus Group Discussions (FGD) collected data.

Logistic model was used to identify the socio-economic factors that affected customary land tenure security in Malawi and descriptive statistics (means, frequencies and percentages) were used to analyse other objectives.

The mean land lost by HIV and AIDS affected households was 0.39 hectares while that of non-affected households was 0.13 hectares in the study area. The result was statistically significant at 5 % level implying that there was significant difference in mean land lost between HIV and AIDS affected and non-affected households. The study found out that the mean land holding sizes for affected and non-affected households were not statistically different at 5% level. The coping strategies employed by HIV and AIDS affected household to avoid losing their access to customary land were renting out land (10%), lending land to neighbours and relatives (9%) and always farm the plots of land by using permanent labours (8%), casual labourers (21%) and school going children (43%). The study also found out that occupation, sex and land holding size of households affected tenure insecurity negatively while education level, land cultivated, household size and land cultivated affected tenure security positively while dummy for household category (affected and non-affected) had a positive parameter estimate but was not significant implying that tenure security was not influenced or affected by household category of HIV and AIDS infections

NAPHAM THAO and NAC should lobby for improvement on the ability for HIV and AIDS affected households to have secure access to land to avoid land loss through registration of customary land.

ABBREVIATIONS AND ACRONYMS

ADD	Agricultural Development Division
AIDS	Acquired Immune Deficiency Syndrome
DADO	District Agricultural Development Officer
EPA	Extension Planning Area
FAO	Food and Agricultural Organisation
GoM	Government of Malawi
HIV	Human immunodeficiency Virus
MHP	Ministry of Health and Population
NAC	National AIDS Commission
NGO	Non Governmental Organisation
NSO	National Statistical Office
UNAIDS	Joint United Nations Programme on AIDS
UNDP	United Nations Development Programme
WHO	World Health Organisation

GLOSSARY

Affected household: meant a household with an economically active member above 15 years of age living with HIV and AIDS i.e. member of support group

Customary Land Insecurity: is defined here as the perceived probability or likelihood of losing ownership of a part or the whole of one's land without his/her consent

Customary Land: all land falling within jurisdiction of a Traditional Authority, which has been granted to a person or group and used under customary law

Customary Law: Unwritten law established by long usage. Malawi define customary law as rules of law, which by custom are applicable to a particular communities

Epidemic: An unusual marked increase in cases in fairly short period of time

Land Tenure: is the term and conditions, under which land is held, used and transacted (Adam, 2001)

Matrilineal: Marriage system where rights to ownership of land are traced through the female line, as is the case in Southern and Central Regions of Malawi

Non-affected household: meant household where no member has ever experienced prolonged illness and had not lost an economically active member (household head) to HIV and AIDS related illness within the last three years by the time of the survey

Pandemic: A global or very widespread epidemic

Patrilineal: Marriage system where rights to ownership of land are traced through the male line, as is the case in the Northern Region of Malawi

Private land: Refers to land owned, held, used, or occupied under a freehold title, a leasehold title, or a certificate of claim, which is registered as private land

Public land: Land occupied, used, or acquired by the Government or any other land, which is neither customary nor private

Chitengwa: System of marriage where residence is virilocal, the man's village can become the matrimonial home and no lobola is paid but a gift called chiongo is paid to the parents

Chikamwini: System of marriage is that residence is uxirilocal, the wife's village is the matrimonial home, and no *lobola* is paid for the wife. Inheritance of property passes through the female line

Chiongo: A gift that is paid for the wife parents after agreements of Chitengwa marriage

Lobola: Bride price paid to the wife's parents to establish the right to take his wife to his village commonly practiced in patrilineal societies of northern region of Malawi

Virilocal: Marriage system where the man's village is the matrimonial home and the man pays *lobola*.

Uxirilocal: Marriage system where the wife's village is the matrimonial home

Traditional Authority: The area of indigenous geo-political and socio-economic jurisdiction; an indigenous state sometimes of a single lineage descent group that represents the source of authority of the chief. It is also the symbol of kinship unity and its responsibilities devolve upon its living representatives, the chief and his councillors.

CHAPTER ONE

1.0. INTRODUCTION

Malawi's economy is highly reliant on agriculture, which accounts for about 90% of its export earnings and 45% of its Gross Domestic Product and the sector employs about 85% of labour force (Malawi Government, 2005). This explains the importance of agricultural land to the economy of this country. Land in Malawi is not just a primary means for generating livelihood but also the main vehicle to invest and accumulate wealth. All Malawians rely upon access to land in one way or another. The land is used for food production and without land human beings cannot survive (Ericsson, 1999). Due to the key role that land plays, the way in which the resource is accessed has important implications on livelihoods of Malawians and development in general. Lack of access to land is one of the contributions to poverty in Malawi. In Malawi different land allocation systems have been developed to supply the population with land. The methods to land allocations under customary tenure have changed over the time and differ from one region to another. The basic objective, although, is the same, namely, to satisfy a growing population with enough space for food production and shelter (Ericsson, 1999).

1.1. Land Tenure Systems

The country has three legally recognized types of land tenure systems: public land which refers to land occupied, used, or acquired by the Government or any other land that is neither customary nor private and 21% of total landing area is under public (Government of Malawi, 1998). Private land, which refers to land, owned,

held, used, or occupied under a freehold title, a leasehold title, or with a certificate of claim that is registered as private land and only 13% of total land area, is under this tenure system. Customary land is all land falling within the jurisdiction of a recognized Traditional Authority, which has been granted to a person or group and used under customary law. A total of 65% is under customary tenure (Government of Malawi, 1998). Customary tenure is widespread tenure category and with sub-tenures that are practiced by customary tenure landholders such as renting, borrowing and selling but are not legally recognized by government (Government of Malawi, 2004a). Report by Malawi Government on the action plan of 2006 revealed that 1.6 million smallholder farm families operates under customary land tenure on 4.5 million hectares and produce 80% of Malawi's food and 10% of exports. It was further indicated that 77% of smallholder farming households cultivating less than 0.5 hectares (Government of Malawi, 2006).

1.2. Customary Tenure Arrangements in Malawi

Malawi has two distinct social, namely, matrilineal of the Southern and Central Regions where rights to ownership of land are traced through the female line. Most of the central region is matrilineal, with the exception of Kasungu, Ntcheu, and Dedza where pockets of patrilineal systems exist (Malawi Government, 1998). In matrilineal systems rights to customary land for women tend to be primary. User rights are held by, or through women. In matrilineal system we have Chikamwini and Chitengwa. Under Chikamwini a man gains access to land through his wife and under Chitengwa a woman goes to live in her husband's village. The whole of

Northern region except few areas of Nkhata bay is under patrilineal. The essential feature to this system is that descent is reckoned through the male line, and property and authority is passed through same line (Malawi Government, 1998). Traditionally land was regarded to have no market value, except for the value emanating from its capacity to produce crops. The right to occupy land under customary tenure depends upon being accepted as a member of the community (Mkandawire et al., 1987).

1.3. Relationship between HIV and AIDS and Land issues

HIV and AIDS have both direct and indirect impacts. Direct impacts are in the form of medical and funeral expenses. Indirect costs tend to be labour related; loss of income due to absenteeism resulting from illness or from care of the ill. In a rural setting, this result in labour diversions towards coping with the illness thereby reducing the household's efforts towards agricultural activity is it for subsistence or for market purposes. HIV and AIDS then impacts people options for using their landholdings productively. Customary land tenure is based on actual land following the principle of "use it or lose it" access to land is often linked to the farmer's ability to make use of the land. This means HIV and AIDS affects people ability to retain their holding. All these have implications on security of tenure and ultimately on systems of tenure themselves (Mbaya et al., 2002).

There is also gender element on the impact of HIV and AIDS. In patrilineal societies, a household head access to land is dependent upon the presence of an able male

adult. Hence, in cases where the headship of a household passes from a male to a female person due to HIV and AIDS, the ability of that household to access and retain land becomes uncertain. An additional development consequence of HIV and AIDS is the liquidation of assets as a coping strategy to generate income such as land.

In an attempt to ensure survival, many households resort to strategies that have a negative long-term implication for sustainable livelihoods that include land use conversions clearly motivated by economic pressures. HIV and AIDS aggravate these transactions such as land sales, which have seriously affected access to land, land use and agricultural productivity. Most importantly this implies that land will eventually be concentrated in the hands of a few rich people. This pessimism is due to the provision in the customary land laws for the reallocation of land left fallow for more than two successive years and to the Land Policy weakness, which indicate that land should be awarded to “those with the ability and resources” as a qualification for people to be awarded secure access to land. Most customary laws empower the traditional chiefs to reallocate all land remaining idle.

This study was then conducted to determine what has been the impact of HIV and AIDS on accessibility and acquisition of land under customary tenure since the first case of HIV in 1985 in Malawi.

CHAPTER TWO

2.0. LITERATURE REVIEW

2.1. Global and Regional Overview

According to a 1999 annual report for the World Health Organisation, AIDS is now the leading cause of death in Africa, responsible for one in every five deaths. Globally, it is the fourth most common cause of death. The virus is slow in acting with the incubation of many years; HIV and AIDS is a long slow event.

Report by UNAIDS indicated that HIV and AIDS is currently one of the greatest threats to global development and stability. Since the emergence of the epidemic in the early 1980s, more than 60 million people worldwide have been infected with the Human Immunodeficiency Virus (HIV) and over 20 million have died from AIDS. It was further reported that 42 million people were living with HIV and AIDS, of which 5 million acquired HIV and AIDS claimed more than 3 million lives in 2002 alone, most of them young adult who were breadwinners. UNAIDS report also indicted that year 2003 registered the greatest number of HIV and AIDS infection since the beginning of the epidemic in one year, where 5 million people became newly infected (UNAIDS, 2004).

According to report by UNAIDS, over 40 million people globally were reported to be living with HIV in 2005 and it was further indicated that AIDS epidemic claimed more than 3 million lives and close to 5 million people acquired the Human

Immunodeficiency Virus (HIV) in 2005 alone (UNAIDS, 2006). In 2004, report by UNAIDS indicated that the number of people living with HIV continue to grow from 35 million in 2001 to 38 million in 2003. It was also reported that over 20 million people have died since the first case of AIDS identified in 1980 (UNAIDS, 2004).

2.2. HIV and AIDS Situation in the Sub-Saharan Region

Sub-Saharan Africa is home to only 10 percent of the world's population and yet is home of two-thirds of all people living with HIV in the world. Report by UNAIDS indicated that 3 million people were infected in 2003 and 2.2 million died of AIDS and related illnesses (75 percent of the three million AIDS deaths globally that year). It was further reported that 25.8 million adults and children in sub-Saharan African are living with HIV and AIDS and 3.2 million adults and children with adult infection rate of 7.2 percent (UNAIDS, 2004).

It was projected by UNAIDS in 1992 that 9 million people in sub-Saharan Africa will be infected with HIV by 2000, and five million will die of AIDS. This was a roughly a threefold underestimation: by late 2000, it was reported that more than 25 million people in sub-Saharan Africa were living with HIV and over 17 million had died of AIDS and related illnesses. The magnitude of the epidemic and its systemic impact are affecting every sector (including industry, transport, tourism, education, health and agriculture). For this reason, a number of countries in the region have declared HIV and AIDS a national disaster (IFAD, 2003).

According to International Fund for Agricultural Development report (2003), AIDS has orphaned nearly 13 million children in sub-Saharan Africa. In Uganda alone, a country with a population of 21 million, 1.7 million children are orphans. The social cost of the epidemic in terms of human suffering, orphanhood and dislocation is incalculable. Further, HIV and AIDS is eroding the social fabric of African societies by unraveling socio-economic safety nets, exacerbating gender inequities and fragmenting or dissolving a growing number of households. Avert (2003) indicated that 12 million orphans live in this region and the number is expected to be 18 million in 2010 and half of children who have been orphan by AIDS comprise half or more of all orphans.

2.3. Overview of HIV and AIDS Situation in Malawi

AIDS was first identified in Malawi in May 1985. Since then, epidemiological data continues to show an escalating epidemic. According to a 2003 report by NAC, Malawi has urban adult HIV prevalence rate of 23 percent while that of rural is reported to be at 12.4 percent. The national HIV sera-prevalence (15-19, 20-24 and 25-49) is estimated at 14.4 percent (NAC, 2004). It was further indicates that over 720,768 adults and children have since died of HIV/AIDS related diseases between 1985 and 2004. Report by NAC Spectrum (2003) indicated that more than half of new HIV infections are occurring among young people of ages between 15 and 24 with annual deaths estimated at 60,823 AIDS deaths in 2004. It is also projected that by the year 2010, over one million people in Malawi would have died from AIDS and related illnesses (ibid).

According to the report by UNAIDS (2004), by the end of 2005 one million people in Malawi were living with HIV and most affected were in the age group 15-49 with the prevalence of 14.2%. The HIV sero-prevalence among the age group of 15-49 is highest among women representing 56% of HIV positive adults (Malawi Government, 2004). According to the report by NSO, 390,000 children have lost their parents since the beginning of the epidemic and 70,000 are orphaned each year (NSO, 2000). There is interplay between HIV and AIDS and other development challenges such as poverty and access to basic resources. HIV and AIDS tend to exacerbate existing development problems through catalytic effects and systematic impact. This is the reason why in addressing the impacts of HIV and AIDS it becomes important to address the root causes and consequences of the wider challenges of rural development rather than developing programmes that deal only with HIV and AIDS. The impact of HIV and AIDS in Malawi cannot be over-emphasized considering the high morbidity and mortality rates that continue to rise all the time. The HIV epidemic is changing the demographic structure of households and threatens the livelihood security of both rural and urban communities. It is also taking a heavy toll on human and financial resources of various institutions and organizations including Ministry of Agriculture and Food Security (UNDP/ Government of Malawi, 2002).

2.4. The Economic Impact of HIV/AIDS on Agricultural Production

2.4.1. Impact on Labour Supply

A healthy agricultural sector is essential for the well-being and food self-sufficiency of developing countries. Agriculture accounts for 24% of Africa's gross domestic product, 40% of its foreign exchange earnings and 70% of its employment. The epidemic is attacking the agricultural base of many countries, especially those most affected; it is estimated that by 2020 HIV and AIDS and related illnesses will claim the lives of one-fifth or more of agricultural workers in southern Africa (UNAIDS, 2004). The HIV and AIDS pandemic in Malawi is having serious negative impact on the productivity of the agricultural sector. HIV and AIDS impact mainly felt through the reduction of the productive work force, both among the extension staff and the farming community, which lead to decline in knowledge transfer and crop yields thereby posing a big threat to smallholder household food production, security and diversion of family resources.

HIV and AIDS affect the most active and productive segment of the rural society, thereby threatening agricultural productivity and food security. Many children and elderly people now head rural households. In addition, family members spend time, which can otherwise be invested in agriculture to care for the sick and to mourn the dead or attend funerals. The adverse effects of HIV and AIDS and related diseases on agriculture and rural development are manifested primarily as loss of labour supply, loss of on- and off-farm income and loss of assets. These contribute to reduction in labour productivity and reduction in agricultural output. According to a

survey conducted in Zimbabwe by the Zimbabwe Farmers' Union in 1997, agricultural output in communal areas declined by 50% among households affected by AIDS and related diseases in relation to households not affected by AIDS and related diseases. Maize production by smallholder farmers and commercial farms declined by 61% with HIV and AIDS related illness and death from AIDS as a major cause. Marketed outputs of cotton, vegetables, groundnut and sunflower crops were cut nearly in half, and cattle farming declined by almost a third (FAO, 2005). According to the report from Rwanda it was indicated that HIV/AIDS and related diseases reduce farm labor by 60% due to illness and death of infected members of the household (Gillespie et al., 2003).

The study conducted by FAO (2003) in Malawi reported that female-headed households keeping orphans have relatively fewer productive assets such as land (about 30% less than other households), ploughs, ox carts, cattle, goats and chickens. It was further reported that these households cultivate only 0.59 ha per economically active household member compared to 0.72 ha in male-headed households and households without orphans (FAO, 2003). Tibaijuka (1987) reported that households with AIDS patient lose 30 percent of household labour to AIDS-related matters (including care of patients and funeral duties). If two people are devoted to nursing the patient the resultant labour loss will be 43 percent on average and this leads to loss in agricultural productivity as agricultural fields are left unattended too (ibid).

2.4.2. Impact on Farm Size

Agriculture in most communities in developing countries like Malawi is dependent on human labor rather than machines. With less labor available, the areas cultivated in the predominantly peasant production system throughout most of Africa are greatly reduced to more manageable sizes. Remote fields are left to fallow or abandoned altogether. Cultivated areas may receive less timely attention either for tillage, planting or weeding (UNAIDS 2000; Guerny et al., 2000; and Over, 1998). It is also reported that as a result of AIDS and related diseases diversity of crops grown is declining, changes in cropping patterns are occurring and cash crops are being abandoned for less labor-intensive subsistence crops (Topouzis, 1998 and Guerny et al, 2000).

2.4.3. Impact on Cropping Systems

According to FAO (1995), it was indicated that farming families affected by HIV and AIDS and related illnesses substituted cash crops for crops which require less labor and for which little fertilizer or herbicides are required. Topouzis (1994) reported that households in Uganda abandoned coffee in favour of cultivated cassava and banana, which require less attention and care. Widows of AIDS victims also stopped cultivating rice and millet in favor of maize and cassava and Kwaramba reported that AIDS-affected farming families in Zimbabwe replaced cotton and groundnut with maize (Kwaramba, 1997).

FAO study (2003) in Uganda revealed that affected farming families reduced the overall cultivation of labour-intensive food crops as a result of labour constraints, thus leaving more land fallow while non-affected farming families were better equipped to respond to the plans for modernization of agriculture and were able to shift gradually from cultivating subsistence crops to cash crops, and they increased the area under maize (cash-crop), for which there was a ready market.

2.5. Land Access and Land Rights

The goal of the National Land Policy in Malawi is to ensure tenure security and equitable access to land, to facilitate the attainment of social harmony and broad based social and economic development through optimum and ecologically balanced use of land and land based resources (Presidential Commission on Land Policy Reform, 2002). The Government allows all customary land to be registered and protected by law against arbitrary conversion to public land. All customary landholders, defined to include entire communities, families or individuals are encouraged to register their holdings as private customary estates with land tenure rights that preserve the advantages of customary ownership but also ensures security of tenure. Private leasehold estates are created as subsidiary interests out of any private land, including registered customary estates without relinquishing the ownership of the customary landholder. This provision allows traditional leaders, family heads and individual holders of registered customary land to grant leases (Presidential Commission on Land Policy Reform, 2002). In Malawi, legislation pertaining to acquisition of freehold land does not discriminate between the sexes. In

fact, Malawi is one of only few countries in Southern Africa, which do not qualify their equality clauses. Women and men have de-jure access and control to land. However, due to the biases of those responsible for the administration of land, the de-facto position is that women do not enjoy equal access, control and ownership of land. Drimie (2003) indicated that in Lesotho, women's land rights, though clearly stipulated by the law, were not always protected in reality. Practices varied depending on the manner in which land rights were interpreted and tended to vary with circumstances pertaining to the level of understanding about HIV and AIDS, as well the fairness and compassion of the local authority overseeing land rights. It was further indicated that the situation of widows were often worsened by the community's perceptions of factors contributing to HIV and AIDS and the stigma attached to the disease, many of which placed the entire blame on women (Drimie, 2003).

The focus on land rights in this study considers the extent of the impact of HIV and AIDS on the terms and conditions in which households and individuals hold, use and transact land. This will be in particular reference to women and children's rights, which, in the context of rural power relations that are themselves falling under increasing pressure from the epidemic, are especially vulnerable to being usurped. Another particular concern is that HIV and AIDS compels households to divest themselves of land assets, which diminishes the resources the household has available to it to meet its needs. On the other hand, there are possibilities that under some circumstances land markets can function to the benefit of households that are

affected by HIV and AIDS. For example, by allowing households that has lost the labour power to make use of their land to earn some income from renting it out.

Land under customary tenure is considered to belong to a village and individuals in the community have the right to cultivate it and use the land. The individual in the community uses the land, and has the right to dispose of it although within the limits set up by the customary law of the tribe or clan. In this case, therefore, the individual does own the land. The chiefs, sub-chiefs, and village headmen are there to protect the customary land against outsiders, and this is what is often misinterpreted to mean that the land belongs to them (Nathole, 1985).

Kabuye (1997) found out that the Land Act is silent on gender and does not provide guidelines on how men or women may inherit land in case of death of a spouse or close relative. He further reported that the main legal instrument which provides guidelines on how property, including land, of a deceased may be disposed of is the Wills and Inheritance Act. This is particularly applicable to private land and not customary land. Women were reported to still face difficulties relating to the application of the law. The reason given was that most people in Malawi are not familiar with Wills. Malawi Government report indicated that despite the predominance of matrilineal and matrilineal access rules, which favour women, women's decision power over land use is generally weaker than men (Malawi Government, 2004a).

The FAO (2003) study on Women and Land in Southern Africa concluded that in Malawi rights to traditional land for women in matrilineal systems are primary in theory. While user rights are held by, and through women, with the husband accessing the land through his wife, the woman's tenure is at the discretion of her maternal uncle. Of particular significance to women in this situation is the fact that, the apparent primary rights to the land that she enjoys neither translate into the power to control the use of neither the land nor its products. In practice, husbands still claim that right for themselves. The observations that matrilineal operates in a patriarchal environment, men are still the main decision makers have been made by other (FAO, 1993). Report by Human Rights Watch (2003) revealed that unequal property and inheritance rights further exacerbate women's vulnerability to HIV. Reason given was that payment of bride price upon marriage tightens men's control over women and property. Women remain legal minors even in after marriage. The outcome of this a status quo that often fails to recognise or uphold women's property right that reduces women's economic security (HRW, 2003).

According to study by Drimie (2003), HIV and AIDS impacted on inheritance rights particularly those of widows and orphans. It was reported that in some cases, women were completely dispossessed of their inheritance to land and to property after their husbands' death. The prevailing practice of inheritance in study area was patriarchal with the result that in several cases land had been inherited or was being held in trust by male relatives. It was also reported that when a married man died of AIDS or became infected, the woman was often accused of having infected her husband.

Widows in cases where the deceased has died of HIV and AIDS were often condemned as the ones who have infected their husbands and were subsequently under massive pressure to leave their marital homes. It was further reported that child headed households were vulnerable to losing their land as many were holding land on default inheritance, so that the land was still formally unallocated after the death of the last holder. This uncertain status combined with the kind of poverty exacerbated by HIV and AIDS creates tenure vulnerability, and seems to encourage attempts at land grabbing. Unlike widows, whose households can continue to exist according to established practice, younger people who inherit prematurely seemingly tend not to become established households, and may remain for long periods without formal standing (Drimie, 2003).

Bosworth (1998) carried out the land utilization study in Malawi. The study revealed the following pressing problems on customary land utilisation: *Diminishing holding*, large number of households are experiencing diminishing holding sizes as a result of reallocation to relatives and children. *Landlessness*, only 3% of households in the customary sector (about 75, 000 households) had enough land for cultivation. *Land conflicts*, conflicts in the customary sector were on the increase mainly as a result of land pressure. *Land management practice*, the breakdown in the systems of managing natural resources has led to the degradation of natural resources. Study by Quan (1998) revealed that close to 30% of rural households in Malawi are headed by women who are divorced, separated, widowed, unmarried, married to polygamous husbands or married to husbands who are migrant workers.

Arntz (2002) indicated that HIV and AIDS affected households generally have less access to labour, less capital to invest in agriculture, and are less productive due to these limited financial and human resources. With regard to land, some of the HIV and AIDS affected households' abandon, rent out or sell land as a result of inability to utilise the land and/or the need to generate cash to buy medicine or to cover funeral expenses. He further explained that dispossession of AIDS widows by the deceased's family members is increasingly becoming a problem in the countries in Sub-Saharan region, in some cases leading to destitution of HIV-infected widows. Young widows were reported to be under pressure to return to their native home after their husbands' death.

In many communities, the custom of remarriage of the widow to her brother-in-law is gradually disappearing, partly due to a fear of HIV and AIDS infection, which in turn affects indigenous land tenure institutions. Increasing dispossession of women of land as a consequence of HIV and AIDS epidemic also affects agricultural productivity, as women are the major producers. Particularly when brothers-in-law grab land from AIDS widows and leave the land idle without any farming activities, this leads to under-utilization of land, resulting in decline in agricultural production (Arntz, 2002).

Arntz (2002) further reported that in the areas that were experiencing increasing land pressure, land scarcity, commercialisation of agriculture, high potential areas for investment and intensifying competition and conflicts over land; HIV and AIDS

epidemic adds another dimension, exposing vulnerable groups including women to even more vulnerable situations in relation to land. In relation to women's land rights, he reported two key issues in the impact of HIV and AIDS on women's land rights. The first is land grabbing by male relatives after the husband's death, which leaves women landless and destitute, taking away their means of livelihood. The second is whether the grabbed lands was used for productive purposes or underutilized or left idle for speculation purposes by male relatives (Arntz, 2002).

Drimie (2003) indicated that the household that is affected by the HIV and AIDS lacks the labour to make use of its own land, and also lacks cash and other resources to hire skills and labour and may undertake one of several strategies; leave land fallow, abandon land the family is unable to utilize out of fear that rental or leasing could result in loss of control, rent or lease out all or portions of land to others who can work it more easily in order to earn cash and to avoid leaving a productive resource lying idle, enter into sharecropping or other contractual arrangements, lend land to others, sell land formally or informally in order to earn cash, forcibly take land away from those who have it, a situation faced by many widows and orphans that can leave them completely impoverished, often as they begin to fall ill themselves and change land use as households move away from more to less labour intensive, and often less nutritious, type of crops (FAO, 2002).

Gavian et al., (1996) conducted study on land tenure and allocative efficiency, he found out that tenure insecurity incites farmers to divert scarce resources to more

secure fields whenever they can and it was concluded that security of tenure matters. They also found out that socio-economic variable such as; total farm size, household manpower, non-farm occupation, distance from compound, age of household head affected security of tenure of household head. They also found out that land tenure influence agricultural productivity through the security effects. According to Gavian et al., (1996), the user's uncertainty claim lessens expected future returns to current investments. Afraid of not recouping the investment made, the user hesitates to spend resources on-land improving inputs. The demand for investment declines and productivity suffers.

2.6. Problem Statement

Despite the high prevalence rate of HIV and AIDS, the impact of the epidemic on land access is not well known in Malawi. Land access for cultivation is an important factor in the determination of levels of livelihoods of about 80% of Malawians more especially given the fact that the main food crop, maize, is very land intensive. In fact, about 65% of total cultivable land is under customary tenure.

Research conducted in other countries such as Lesotho, South Africa, and Kenya has revealed that HIV and AIDS have devastating impact on land issues. The results of the empirical research have confirmed that as a direct result of very high infection rates in the region, HIV and AIDS seriously impacts on a range of land issues and livelihood strategies. It has been reported that different land use patterns have developed and HIV and AIDS affected households are losing out their access to

customary land and others are using shared cropping arrangements to work their fields and to avoid revocation of land left fallow (Drimie 2002; Kiai et al., 2002; Mphale et al., 2002). At present, the extent of the effects of HIV and AIDS on access to customary land is not known in Malawi. Research in the agricultural sector on the impacts of HIV and AIDS has concentrated on extension, food security, nutrition and agricultural productivity however; little research has been conducted on the impact of HIV and AIDS on land issues and very little is known about the impact of the pandemic on land access and acquisition under customary tenure.

This gap in information necessitated this particular study to document the impacts of the epidemic on land access under customary tenure. This study has documented the land related coping mechanisms that HIV and AIDS affected households follow to avoid land revocation. The study has also quantified the socio-economic factors attributing to customary land security in Malawi. Experiences of households regarding the issues of land inheritance and land use aggravated by HIV and AIDS and related illnesses were also documented. The information generated from this study will be useful in formulation of policy on the affected groups, as well as use to Policy Makers, Educators, Planners, International Organizations, Traditional Leaders, Students and Development Specialists.

2.7. Objectives of the Study

2.7.1. General Objective

The general objective of the study was to determine how HIV and AIDS was affecting land access under customary tenure.

2.7.2. Specific Objectives

1. To find out if HIV and AIDS affected households were losing out their customary land
2. To identify socio-economic factors that affect customary land tenure security in Malawi
3. To identify coping strategies that HIV and AIDS affected households use to avoid customary land loss
4. To identify the experiences of HIV and AIDS affected households regarding protection of the land rights of widows and orphans

2.8. Hypotheses of the Study

The study was carried out with the following hypotheses:

1. HIV and AIDS affected households were not losing out their access to customary land
2. Socio-economic factors do not affect customary land tenure security in Malawi
3. HIV and AIDS affected household head had no land related coping strategies

CHAPTER THREE

3.0. RESEARCH METHODOLOGY

3.1. Introduction

This chapter is about the sampling and analytical techniques used in this study. This chapter has the following sections; study area, sampling techniques and data collection procedures, analysis and the conceptual framework of the study

3.2. Study Area

The study population was HIV and AIDS affected and non-affected household heads. The study was conducted in Mzimba and Lilongwe Districts. Mzimba District is the largest in the country with 10,430 square kilometres. The district has a population of 757,105 people. The district had 33 Non-Governmental Organizations (NGOs), implementing HIV and AIDS activities with 21 Voluntary Counselling and Testing Centres. Lilongwe District is in the Central Region of Malawi. The district covers an area of 6,159 km² and has a population of 1,346,360. These two districts were chosen because they were active in main agricultural enterprises such as maize, and tobacco (Ministry of Agriculture, 2000) and because they are among the districts with high HIV and AIDS prevalence rate in the country. According to the report by Government of Malawi, prevalence rate for Mzimba is 14.4% and that of Lilongwe is 18.6% (Government of Malawi, 2005). The affected households were identified through the Umbrella organizations of National AIDS Commission in both Mzimba

and Lilongwe districts. In Mzimba the Support groups (centres established by Non-governmental Organization or government to facilitate group therapies for People Living with AIDS) were under Tovwirane HIV and AIDS Organization (THAO), NAPHAM and Katete AIDS Programme (Under District AIDS Coordinating Committee) while all Support Groups in Lilongwe were under NAPHAM.

3.3. Sampling Design

A multi-stage stratified sampling procedure involving a combination of purposeful, stratified and random sampling procedure was used to draw the sample. First stage was the purposive selection of Support Groups. Support Groups were centres established by Non-governmental Organisation or government department to facilitate group therapies for People Living with AIDS. In support groups members are only those who went for Voluntary Counselling and Testing (VCT) and were diagnosed positive described in this study as the affected. In Mzimba the following NGOs implementing HIV and AIDS activities purposively sampled were Tovwirane HIV and AIDS Organisation (THAO), NAPHAM and District AIDS Coordinating Committee. These implementing NGOs were purposively selected because they had well established centres for group therapies for People Living with AIDS (locally called support groups). Tovwirane HIV and AIDS Organisation had eight support groups namely; Zuwanyumo, Chaleza, Boma, Mhongo, Chanukha, Raiply, Solola and all eight support groups were purposively sampled; NAPHAM which had only one support group at Bulala and District AIDS Coordinating Committee which is funded by NAC had ten support groups; from the ten support groups two support

groups were randomly sampled and these were Katete and Ehleheni AIDS programmes.

The support groups formed stratum for HIV and AIDS affected household heads and proportional stratification was used to come up with a representative sample from each stratum (Appendix D). The final stage was selection of the households. Households were stratified as affected (A household with an economically active member above 15 years of age living with HIV and AIDS i.e. member of support group) and simple random sampling was used to select households from each stratum. All households in this stratum were given a number and table of random numbers were used to select the households. The sampled households represented the HIV and AIDS affected households in Mzimba.

The second assignment was to sample non-affected households (households where no member was experiencing prolonged illness and had not lost an economically active member to HIV and AIDS related illness within the last two years by the time of the survey). Villages that had members in the support groups were listed and all names of the household heads in villages that were not members of the support group were listed. Using the same proportional stratification number of households to represent each sampled village was identified and simple random sampling technique was used to sample out the non-affected households. Table of random numbers was used to sample out households.

The same procedure was used to sample out households in Lilongwe. In Lilongwe all NAPHAM support groups were purposively selected, namely, Nsundwe, Kamphata, Chileka, Chawantha, Nathenje and Nkhukwa from which the required sample was selected.

3.4. Sampled Households

The households that were sampled and interviewed were classified as follows:

- ***Affected household*** - meant household head above 15 years of age living with HIV and AIDS i.e. member of support group.
- ***Non-affected household*** - meant household head not experiencing prolonged illness and household that had not lost an economically active member (household head) to HIV and AIDS related illness within the last three years

The economically active members were regarded as household heads (male-headed or female-headed) because household heads are the custodians of farming land in Malawi.

3.5. Sample Size Calculation

Edriss (2003) reported that to calculate the sample size, n , needed to estimate a population proportion, p , the following formula is used: $n = [Z^2 (1-p) p] / e^2$. Where n is the desired sample size, Z is the z -value yielding the desired degree of confidence, p is an estimate of the population proportion, and e is the size of the error in estimating p that the researcher is willing to permit.

According to UNAIDS (2006) report, 14.1 % of the adult population (15-49) are living with HIV and AIDS in Malawi. This proportion is essential for the calculation of the sample size the study. Hence, for 95% ($Z = 1.96$, 2- tailed test) level of confidence, within $\pm 5\%$ ($e = 0.05$) margin of error and taking into account the proportion of HIV and AIDS prevalence in Malawi, the sample size is determined as

$$N = [Z^2 (1-p) p] / e^2$$

$$= [1.96^2 (1-0.141) 0.141] / 0.05^2 = 186.12 = 186$$

Adding 5% non-respondents the sample size is $n = 195$ for each household category. Thus, interviewing a total of 390 (with equal sample size of 195 affected and 195 non-affected households) respondents will provide the bulk of the information that is required. But a total sample of 370 households was interviewed due to some logistical problems.

The sample was divided between the two districts taking into consideration the districts' HIV and AIDS prevalence rates in the ratio of 14.4 to 18.6 for Mzimba and Lilongwe, respectively. The total sample for Mzimba was 170 but only 160 households were sampled and interviewed (80 HIV and AIDS affected and 80 non-affected) and that of Lilongwe was 220 but only 210 households (105 HIV and AIDS affected and 105 non-affected) were sampled and interviewed, making a total of 370 (185 HIV and AIDS affected and 185 non-affected).

3.6. Sample Frame

The sampling frame for the research is as follows:

- HIV/AIDS affected and non-affected households in Northern and Central Malawi.
- Mzimba and Lilongwe districts in the Northern and Central region of Malawi respectively.
- A total of 11 support groups in Mzimba districts and six support groups in Lilongwe district.
- A total of 370 households randomly selected, 185 HIV and AIDS affected from the selected support groups and 185 non-affected from sampled villages with members in support group.

3.7. Data Collection

Primary data were collected using two different tools. First, a structured questionnaire (Appendix 1) was administered to affected (185) and non-affected (185) households in sampled areas. Structured questionnaire was used to collect data pertaining to the socio-economic characteristics of households, land tenure security, land rights and HIV and AIDS issues. The questionnaire was administered to the household heads that were above 15 years of age at the time of the study.

Secondly, key informant interviews were conducted using checklist (Appendix 2) to collect information from traditional leaders and community caregivers where

information on land issues and HIV and AIDS were collected so as to supplement information collected using other methods.

Thirdly, Focus Group Discussions (FGD) were conducted in all sampled sites using a checklist in (Appendix 3) each of the sites to gather information on people's knowledge on HIV and AIDS and land issues. The FGDs were done separately in all sampled villages and groups were categorised according to social setting as men, women and the youth deliberately in order to gain as more information as possible within the groups and also to allow the views of the three groups to be heard separately. This was also done taking inconsideration the sensitivity of the HIV and AIDS issues in Malawi.

Prior to data collection, the research assistants were trained in the techniques for collecting data. To minimize interviewer bias and other errors each question was translated in local language Chichewa and Chitumbuka to make sure that both the interviewer and the interviewee understood the questions. This was followed by pre-testing, in order to detect any ambiguities that the questionnaire had. This was also important because the research assistants were exposed to the field situations, to get used to the questions, as well as, detecting problems in the wording of questions.

3.7. Data Analysis

Statistical Package for Social Scientists (SPSS) was used to analyse the data. To answer objectives 1, 3 and 4 descriptive statistics including cross-tabulations,

frequencies, percentages were employed and to answer objective 2, logit model was used for employing approaches based on single explanations; such as the use of models alone, leads to in appropriate narrow conclusions (Smale et al., 1994).

3.7.1. Logit Model of Land Tenure Security

To find out the socio-economic factors that affect customary land tenure security in Malawi, logit model was used. The ability of logit model to handle binary dependent variable and allow a mixture of categorical and continuous independent variables to predict one or more categorical dependent variables and its easiness to work with it in SPSS made logit model superior and most suitable choice for this empirical analysis (Ameniya 1981; Maddala 1983; Griffiths et al, 1993; Liao, 1994).

3.7.2. Logit Model Specification

The logit model used to find out the socio-economic factors affecting tenure security of household heads is under:

$$Y_i = F(Z_i) \text{ and}$$

$$Z_i = \alpha + \sum_{j=1}^n \beta_j X_{ji}$$

Where:

Y_i is observed response of the i^{th} household head (i.e. the binary variable, $y_i = 1$ for tenure insecure households, $= 0$ for tenure secure households)

Z_i is underlying and unobserved index for the i^{th} household.

X_1 = Age of head of household in years.

X_2 = Education level of household in years.

X_3 = Livestock holding of household head a proxy for wealth. If household keeps livestock such as Goats, cattle and sheep. Dummy variable (1= household with livestock, 0= otherwise)

X_4 = Household size. Number of people living under same household head, under same roof.

X_5 = Landholding size. Total number of hectares the household head own

X_6 = Dummy for position in a community. (1= household head is holding position in the community, 0 otherwise)

X_7 = Marriage system of household head (0= patrilineal, 1= matrilineal)

X_8 = Crops grown by the households. Farming capacity of the household in order to retain their land. House

X_9 = Land cultivated by household head (Ha)

X_{10} = household category dummy (1 =affected, 0= otherwise)

X_{11} =Occupation of household head (1= farmer, 0= otherwise)

X_{12} = Marital status of household head (1= married, 0 = otherwise)

X_{13} = Sex of household head (1= male, 0 = female)

3.7.3. LOGIT MODEL

The logit model is based on the cumulative logistic probability function and is specified as:

$$P_i = F(Z_i) = F\left(\alpha + \sum_{j=1}^n \beta_j X_{ji}\right) = \frac{1}{1 + e^{-Z_i}}$$

$$= \frac{1}{1 + e^{-\left(\alpha + \sum_{j=1}^n \beta_j X_{ji}\right)}}$$

Where e represents the base of natural logarithms, P_i is the probability that an individual will loss land.

The logit model assumes that Z_i is a random variable, which predicts the probability of household head to loss customary land.

$$P_i = \frac{\exp^{Z_i}}{1 + \exp^{Z_i}}$$

Therefore for an individual household head:

$$Z_i = \ln \frac{P_i}{1 - P_i} = \alpha + \sum_{j=1}^n \beta_j X_{ji}$$

This is the logit model (Pindyck et al, 1981)

The relative effect of each explanatory variable X_i , on land loss is measured by differentiating with respect to X_j . i.e. quotient rule (Sharma, 1997):

$$\frac{\partial P_i}{\partial X_{ji}} = \frac{\beta_j \exp^{Z_i}}{(1 + \exp^{Z_i})^2}$$

Where P_i is the probability of occurrence of dependent variable, and X_{ji} is the vector of explanatory variables.

3.7.4. Determinants of Tenure Security

3.7.4.1. Dependent Variable

The dependent variable was customary land tenure security in the study area. If the household head lost land in the past three years $y_i = 1$, tenure insecure households and $y_i = 0$ tenure secure households otherwise i.e. households that had not lost land for the past three years.

3.7.4.2. Education Level

This variable was measured as number of years spent in school by the household head. It was expected that the higher the number of years spent in school of the household head the more knowledgeable the household is about land issues and the more tenure secure the household is. The variable was expected to be positively correlated with tenure insecurity.

3.7.4.3. Age of Household Head

Age of the household heads was measured in years. Age variable was expected to have positive sign if the old aged were losing the influence in the community and may feel more tenure insecure about their tenure and negative if the old aged have influence in society and are less tenure secure.

3.7.4.4. Sex of Household Head

This variable was measured as 1 if a household head is male and 0 otherwise. In patrilineal societies, female-headed households have little influence in the community than their male counterparts and may feel more tenure insecure while in matrilineal societies male headed households may feel more tenure in secure than their female counterparts. Reader (1971) also revealed that individuals and families cultivating land belonging to the matrilineages enjoy high security of tenure. They cannot be removed arbitrarily by from their land by village headman or chief. Nankumba and Machika (1988) made similar observations.

3.7.4.5. Marital Status of Household head

Marital status was measured as a dummy for married and unmarried household heads. In most societies of Malawi for person to own land he/she must be married. Unmarried girls under patrilineal societies and those under Chitengwa were regarded as; on transit to the husbands home (Ngwira, 2003) hence by custom they own land. Married household heads feel more tenure secure than unmarried household head and the expected sign is negative. The variable was measured as 1 if household head is married and 0 otherwise.

3.7.4.6. Position in the Society

The variable was measured as 1 if the household heads holds influential position in that particular community and 0 otherwise. Influential positions that people hold in

society have direct effect on customary land tenure security; more powerful household succeeds in retaining more land. The household head was confident that nobody could grab his or her land because of the position the hold in society (Holden et al., 2006). We expect a negative sign, implying that powerful households feel more tenure secure than non-powerful households.

3.7.4.7. Land Holding Sizes

Land holding size was measured in hectares. Land holding size is an important factor in the security of customary land. All the household heads must demonstrate farming capacity in order to retain there land following the principle of use it or lose it. Households that fail to farm all of their land feel more tenure insecure and may resort to renting out part of or all land therefore still feel tenure secure. Researchers have found out that land holding sizes affect the tenure security of land (Holden et al., 2006).

3.7.4.8. Household Size

Household size was measured as number of people leaving under same roof, under the same household head by the time of the study. Majority of smallholder farmers in Malawi use family labour to farm their land. Security of tenure is guaranteed by the rural households' ability to utilize the land. Household that fail cultivate their land are likely to lose their land. Households with large families feel more tenure secure than households with small families.

3.7.4.9. Livestock holding

Livestock holding was measured as 1 if the household head owns cattle, goats or sheep and 0 otherwise. Livestock holding here was taken as proxy for wealth of household head because it is considered to be standing capital. Keeping livestock was an indicator of social status and influence of the household in the community. Those keeping livestock are of higher social status and hence they cannot lose their land easily to others, they are tenure secure (Holden et al, 2006). Reader also reported that the status of the landholder in a community influences the degree of the security enjoyed on the land (Reader, 1971). Wealth households use their influence to keep their holding and feel more confident that they cannot lose their land we expect negative sign.

3.7.4.10. Crops grown

Crops grown were measured as a dummy variable (1= when household planted cash crop in 2005/2006 growing season and 0 otherwise). Growing cash crops among smallholder farmers in rural areas may be a sign of wealth and influence in the community and this reduces tenure insecurity hence the expected sign is negative.

3.7.4.11. Household Category

Household category was measured as a dummy variable (1= HIV and AIDS affected household, 0 otherwise). It was expected that HIV and AIDS affected household would feel tenure insecure because they are usually weak and fail to farm all their

plots of land and much of funds are diverted from investing in agricultural inputs to caring for the sick while non-affected households would feel tenure secure.

3.8.0. Conceptual Framework

Figure 1 shows the hypothetical interaction among these variables as conceptual framework. HIV and AIDS affected households divert labour and funds to caring the sick as a result they either sell their agricultural land or rent it out to able households to avoid leaving their land to fallow. Death of landowner results in labour loss, which leads to plots of land to fallow. Death of household heads also creates orphan hood and widowhood. Death leads to property grabbing and one such property is land. Common victims are widows and orphans who lose their access to customary land. Households with chronically ill patients can also use coping strategies to avoid land revocation but floating of the rules of agreement also leads to land loss.

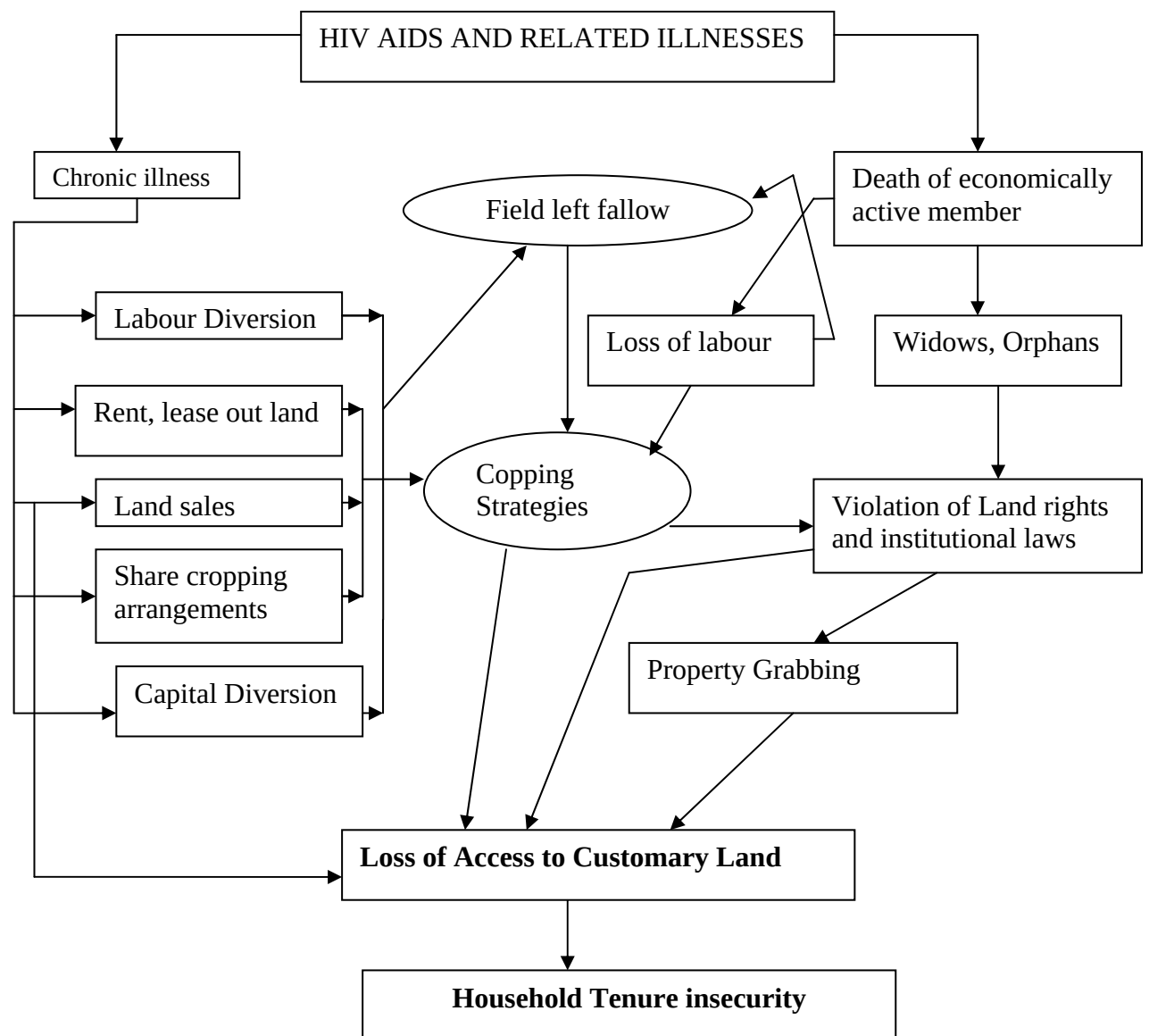


Figure 1: Impact of HIV and AIDS on customary land access and tenure Insecurity

Chapters four, five and six are composed of results and discussions. Chapter 4 is on socio-economic characteristics of the sampled household heads, whilst chapter five is on HIV and AIDS and land issues and chapter six is on the findings of logit model analysis on socio-economic factors that affect customary land tenure in Malawi.

CHAPTER FOUR

4.0. SOCIO-ECONOMIC CHARACTERISTICS OF THE SAMPLED HOUSEHOLDS

This section presents the major socio-economic characteristics of the sampled households interviewed in the study area. Focus was on household head's sex, age, marital status, years spent in school, occupation, land holding size and land cultivated.

4.1. Sex of Household Head

Majority of sampled households were male-headed (68%) accounting for 62% non-affected households and 38% HIV and AIDS affected households and only 32% of the household were female headed accounting for 24% non-affected household heads and 76% HIV and AIDS affected households.

Similar trends were evident in district specific data. In Mzimba, 63% of households were male-headed accounting for 36% affected households and 66% non-affected households while 37% of the households were female-headed. Female headed households accounted for 75% affected households and 25% non-affected households. Table 1 shows proportional of sex of household head. The percentage of female-headed households in Mzimba was above the national average of 25% (Government of Malawi, 2001). It was reported during FGDs that this was attributed to the fact that men in Mzimba during the study time were in South Africa working and also to the fact that most of the respondents were widows.

Table 1: Proportional of sex of household heads

<i>Sex of household head</i>	<i>Mzimba</i>		<i>Lilongwe</i>		<i>Total</i>	
	Frequency	%	Frequency	%	Frequency	%
Male	101	63.1	152	72.4	253	68.4
Female	59	36.9	58	27.6	117	31.6
Total	160	100	105	100	370	100

In Lilongwe, 72% of the households were male-headed accountings for 39% affected and 60.5% non-affected while 28 % were female-headed accounting for 78% affected and 22% non-affected. The percentage of female-headed households (28%) was also above the national average of female-headed households, (see Table 2). This implies that there is increase in number of female-headed households in the two study areas. It was further noted that in the two study areas there were more female-headed households that were affected as compared to male-headed households. This could be attributed to the fact that women are free to declare their stereo-status than men. This is also in agreement with MDHS that HIV prevalence rate is high amongst women (MDHS, 2004).

Table 2 indicates the cross tabulation between sex of household head and household category, the idea was to find out which gender category was highly affected with HIV and AIDS in the study areas.

Table 2: Sex of the household heads

Sex	<i>Mzimba</i>				<i>Lilongwe</i>			
	Non-affected		Affected		Non-affected		Affected	
	Freq	%	Freq	%	Freq	%	Freq	%
Male	65	66.4	36	35.6	92	60.5	60	39.5
Female	15	25.4	44	74.6	13	22.4	45	77.6
Total	80		80		105		105	
$\chi^2_{\text{cal}} = 22.281 > \chi^2_{\text{tab}} = 3.841$					$\chi^2_{\text{cal}} = 24.392 > \chi^2_{\text{tab}} = 3.841$			

The result in the table clearly shows that despite having greater percentage of total sample being men, greater percentage of female respondents interviewed was affected. This was in total agreement with MDHS findings that HIV sero-prevalence rate amongst the age group of 15-49 was highest amongst women (MHDS, 2004). These findings could also imply that women were free enough to disclose their HIV sero-positive status and were even free to join HIV and AIDS Support Groups in the study area. Analysis of variance (ANOVA) F-statistic for the sampled (370) and Chi-square test also indicated that sex of household head was statistically significant at 1 percent level.

4.2. Age of Household Heads

Table 3 shows that the average age for the non-affected household heads (n = 185) was 42 years and that of the affected household heads (n = 185) was 41years. Similar

results were evident from district wide data where average ages for non-affected (n = 80) and affected (n=80) household heads were 42 and 41 in Mzimba respectively, while that of Lilongwe was 43 and 41 for non-affected (n= 105) and affected (n=105) households respectively. The results were in total agreement with the MDHS findings that the age category with high prevalence rate is in the range 15-49 years.

Table 3: Average age of household heads

<i>Households</i>	<i>Mzimba</i>	<i>Lilongwe</i>	Total
Non –affected (Mean)	42.28	42.5	42.44
Affected (Mean)	40.55	40.69	40.59

t -value calculated = 0.023 < t -value tabulated = 1.645 at 5% level of significance

A t-test was used to determine if there was a significant difference between mean ages of HIV and AIDS affected and non-affected households. The hypothesis of no difference in means ages between affected and non-affected was not rejected. It is therefore, concluded that there was no significant difference between mean ages of affected and non-affected households.

Table 4 shows that from the total sample 18% of household heads interviewed were aged between 15-29 years and 32% were aged 30-39 years. Only 4% of the household heads were above the age of 70 years. It was evident from the finding that the study area had a young population by the time of the study. For more details refer to table 4.

Table 4: Age categories of household heads in the study area

Age in years	Non-affected		Affected		Total	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
15-29	46	24.9	22	11.9	68	18.4
30-39	48	25.9	70	37.8	118	31.9
40-49	29	15.7	57	30.8	86	23.2
50-59	28	15.1	25	13.5	53	14.3
60-69	21	11.4	11	5.9	32	8.6
70-79	10	5.4	-	-	10	2.7
80-89	3	1.6	-	-	3	0.8
Total	185	100	185	100	370	100

Figure 2 shows that the most affected age group for the whole sample was that of age bracket of 30-39 years (38%) followed by 40-49 years (31%). Only 6% of the affected household heads were in the age group 60-69 years. There was no case of affected household for the household heads above the age of 70, which clearly indicated that HIV and AIDS affected households, were common amongst the economically active age group in the study area. Eighty one percent of HIV and AIDS affected households heads were in the age category 15-49 years. The results from this study were in total agreement with the national statistics findings that the age bracket that is heavily affected by HIV and AIDS in Malawi is that of 15-49 years (NSO, 2004 and Mwafulirwa, 2007).

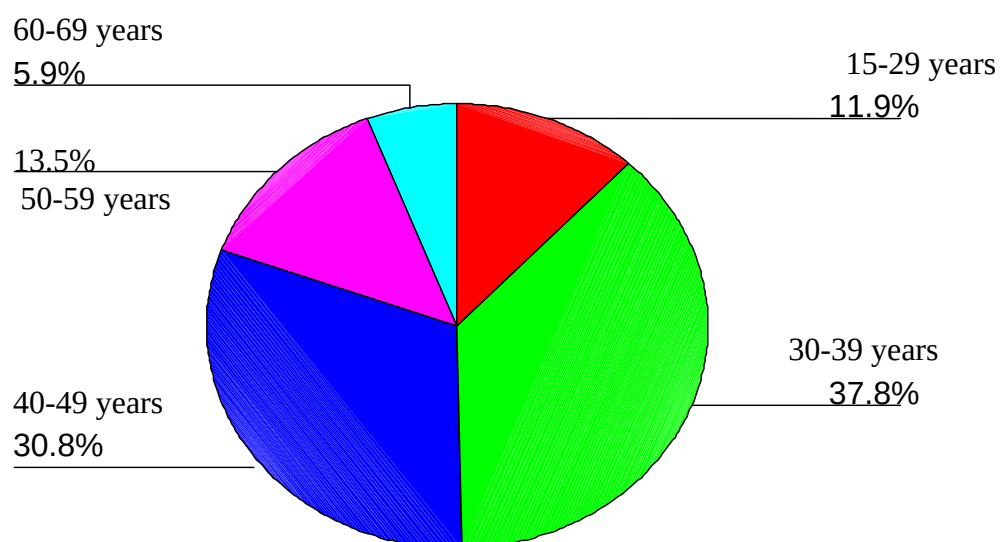


Figure 2: Age categories of affected household heads in the study area

4.3. Marital Status of Household Heads

Table 5 shows that 67 % of the household heads in the study area were married followed by the widowed (25%). Only 1% of household heads were single by the time of the study and others were either divorced (6%) or were under separation (2%). Similar results were evident in Mzimba and Lilongwe. In Mzimba, 64% of household heads were married followed by 30% who were widowed. In Lilongwe, 69% of the households interviewed were married and comprised 84% of non-affected households sampled in Lilongwe and 54% of affected household's heads. Twenty one percent of the household heads in Lilongwe were widowed, which accounted for 32% of affected households heads and 9% non-affected household heads. The rest of the households heads were either separated (2%), divorced (8%)

accounted for 11% of affected household heads and 5% non-affected while only 1% of household heads indicated that they never married.

Table 5: Marital status of household heads

<i>Marital</i>	<i>Mzimba</i>		<i>Lilongwe</i>		<i>Total</i>	
<i>status</i>	Frequency	%	Frequency	%	Frequency	%
Single	3	1.9	1	0.5	4	1.1
Married	102	63.8	145	69.0	227	66.8
Divorced	6	3.8	16	7.6	22	5.9
Widowed	48	30.0	43	20.5	91	24.6
Separated	1	0.6	5	2.4	6	1.6
Total	160	100	210	100	370	100

This implied that most of the household heads interviewed were married followed by the widowed in the study areas. The result is in total agreement with NSO (2004) findings that the number of widows and orphans in Malawi were increasing due to HIV and AIDS in Malawi.

Table 6 shows the cross tabulation of marital status and household category (affected and non-affected). The results from the cross tabulation indicate that married household heads were highly affected by HIV in the two study areas. This was also spelt out during the focus group discussions that the mostly affected group was the middle aged. The other category that was heavily affected from the study areas was

the widowed, this imply that HIV and AIDS caused most of the deaths in the two study areas this is in agreement with UNDP findings that HIV and AIDS is the leading cause of deaths in Malawi displacing malaria (Mwafulirwa, 2007).

Table 6: Marital status of household head and household category

<i>Marital status of household head</i>	<i>Mzimba</i>				<i>Lilongwe</i>			
	Non-affected		Affected		Non-affected		Affected	
	Freq	%	Freq	%	Freq	%	Freq	%
Never married	2	2.5	1	1.3	1	1	0	-
Married	67	83.8	35	43.8	88	83.8	57	54.3
Divorced	2	2.5	4	5	5	4.8	11	10.5
Widowed	9	11.3	39	48.8	9	8.6	34	32.4
Separated	0	0	4	5	2	1.9	3	2.9
Total	80	100	80	100	105	100	105	100

The results in table 6 shows that 44% of HIV and AIDS affected households in Mzimba were married and were followed by widowed (49%). Similar results were evident in Lilongwe where 54% of HIV and AIDS affected Household heads were married followed by the widowed (32%). It was indicated through focus group discussions that the main reason for this trend was that HIV and AIDS mainly affects those who are sexually active and the groups above were falling in this category. A chi-square test indicates that marital status of household head was found to be

associated with the household category at 5% level of significance. The F-statistic for the whole sample (370) was found to be significant at 1 percent level indicating that there were statistically different numbers of HIV and AIDS affected household heads across the marital status of household heads.

4.4. Education of the Household Head

Ngulube (2001) found out that education levels of farmers is considered as essential element in any development and this includes understanding issues of land access and also behaviour change in issues of HIV and AIDS, which requires rationality and the more educated the individual, the more rational his/her thinking is supposed to be. In addition, education makes farmers understand the changes that are coming in because of external pressure such as changes in social setting; because of effects of HIV and AIDS increasing in orphans and widows.

The mean number of years spent in school for affected households was 7 years and that of non-affected was 6 years. This implied that on average HIV and AIDS affected household had more years of education as compared to non-affected household heads.

Table 7 shows that majority of the affected household heads and non-affected had some formal education in the study area. Fifty six percent of HIV and AIDS affected household heads attended primary education. Twenty four percent did secondary education but 10% had no formal education. Similar trend was evident amongst non-

affected household heads where 76% had primary education, 16% had secondary education and 11% had no formal education.

Table 7: Education level of affected and non-affected household heads

<i>Educational level category</i>	<i>Total</i>			
	Non-affected		Affected	
	Frequency	%	Frequency	%
No formal Education	15	8.1	19	10.3
Junior Primary	36	19.5	31	16.8
Senior primary	103	55.7	90	48.6
Secondary school	30	16.2	44	23.8
Tertiary	1	0.5	1	0.5
Total	185	100	185	100

$$\chi^2_{\text{cal}} = 4.368 < \chi^2_{\text{tab}} = 9.488 \text{ p} = 0.05$$

The trend in the table 7 was such that HIV and AIDS affected household were across all educational categories but the trend shows that the higher the number of years spent in school the more the cases of HIV and AIDS affected households. The chi-square test was not significant at 5% indicating that HIV and AIDS status of household heads was not associated with years spent in school of household head.

4.5. Household Size

The mean household size for the whole sample (n =370) was 5. HIV and AIDS affected household size was above sample average 5.3 while that of non-affected was 4.6. F-statistic was significant at 1% level implying that there was no significant difference between mean household sizes of affected and non-affected households.

Mean household sizes for Mzimba and Lilongwe were 4.81 and 5.12, respectively. Implying that on average household heads in Lilongwe had larger household sizes than their counterparts in Mzimba. The affected households in Mzimba and Lilongwe had mean household sizes of 5.44 (with minimum of 1 and maximum of 14) and 5.28 (with minimum of 1 and maximum of 14) respectively. The mean household sizes for non-affected for Mzimba and Lilongwe were 4.19 and 4.97 respectively.

Table 8: Mean household sizes for Mzimba and Lilongwe.

<i>Household category</i>	<i>Mzimba</i>	<i>Lilongwe</i>	<i>Total</i>
	Mean	Mean	Mean
Non-affected	4.19	4.97	4.64
Affected	5.44	5.28	5.34
District mean	4.81	5.12	4.99

The results in table 8 show that the affected household heads had large household sizes as compared to the non-affected households both in Mzimba and Lilongwe.

From Table 8, it was clear that the average household size for HIV and AIDS affected households was higher than that of non-affected households. This was a surprising result but could imply that affected households were more sexually active than non-affected household heads. The F-statistic indicated that the mean household size for HIV and AIDS affected household was statistically different to that of non-affected households at 1% level significance.

Chi-square test for Mzimba indicated association between household category and mean household size while that of Lilongwe indicated that there was no association between household category and mean household size.

4.6. Occupation of Household Heads

Table 9 shows that majority of non-affected (87%) and non-affected (71%) household heads in study area were farmers. This was in agreement with the national statistics by NSO that majority of household heads in Malawi rely on agriculture for their livelihoods. It can also be noted from table that 14% of affected household heads were under wage employment and businessmen. The result implies that the households with higher economic status in the study area were likely to have the virus as compared to household with lower economic status. Similar observations were made in Lilongwe where majority of affected and non-affected household heads reported that farming was their core livelihood activity 78% and 88% respectively. It was reported that 8% of household heads were under wage employment and those running their own business (12%) were affected. This implies that households that have other sources of income apart from farming are more likely

to be affected with the Virus. This meant that the higher the income levels of the household head the more likely was the household head was affected by HIV and AIDS in the two study areas.

Table 9: Occupation of household heads

<i>Occupation of household heads</i>	<i>Non-affected</i>		<i>Affected</i>	
	Frequency	%	Frequency	%
Farming	160	86.5	132	71.4
Wage Employment	13	7	25	13.5
Farm-ganyu	2	1.1	1	0.5
Non-farm ganyu	1	0.5	2	1.1
Business	9	4.9	25	13.5
Total	185	100	185	100

$$\chi^2_{\text{cal}} = 14.670 > \chi^2_{\text{tab}} = 9.488$$

The result from the chi-square test shows that occupation for HIV and AIDS affected household heads was significant at 5% level. It is therefore, concluded that there is significant difference between the occupation of affected and non-affected household heads.

Figure 3 represents graphically occupation of household heads in the two study areas and it is clear from the graph that majority of affected and non-affected household heads were farmers. The figure further indicates that we had more affected household heads than non-affected household heads for those under wage

employment, non-farm ganyu and also those who were doing business. The analysis of variance F-statistic for the whole sample (370) showed that occupation of household head was statistically significant at 1 percent level indicating that HIV and AIDS affected households were statistically spread across the occupations.

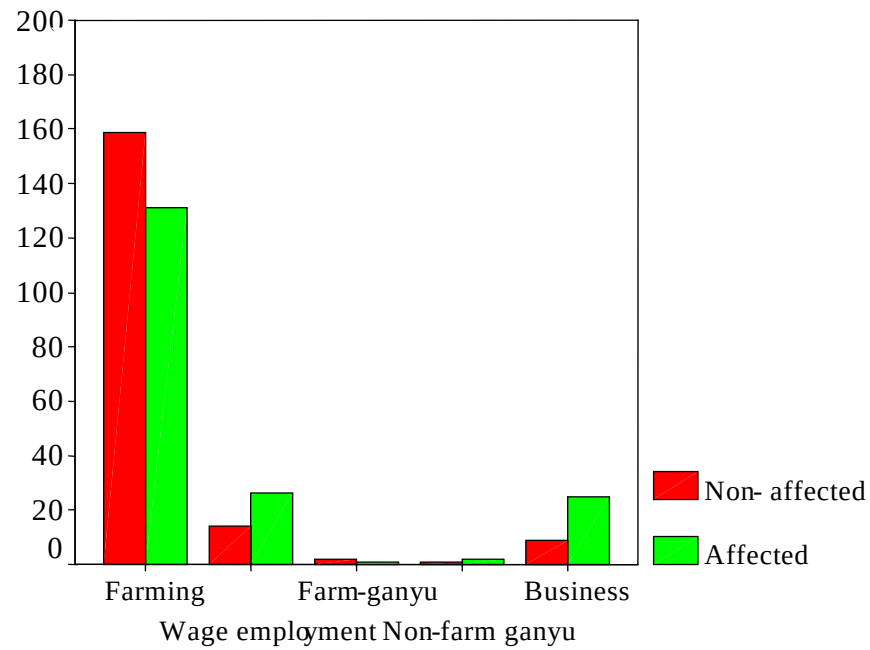


Figure 3: Occupation of household heads

CHAPTER FIVE

5.0. HIV AND AIDS AND LAND ISSUES

Introduction

This chapter mainly discusses land holding sizes of the household heads, land cultivated by household head, land lost by household head, land rights of widows and orphans, incidences of land sales and land inheritance in the study areas.

5.1. Customary Land Tenure

Customary land tenure system is governed by unwritten traditional rules and administered by traditional leaders. Active occupation or usage of a piece of land is the main evidence of ownership or an existing interest on the land. In customary tenure, access to land is contingent upon tribal or community membership controlled by the chief. Households have strong, residential rights, seasonally exclusive rights to arable land (during growing season), and shared rights to grazing land and natural resources. Usually, however, an individual's land use rights are secure, subject to certain conditions, which include that the land be more or less continuously cultivated.

5.2. Land Holding Size

The mean land holding size ($n = 370$) was 1.3 hectares and that of HIV and AIDS affected households was 1.2 hectares and for the non-affected households was 1.3 hectares. The F-statistic indicates that mean land holding size for HIV and AIDS

affected and non-affected households were not statistically different at 5% level of significance. The average land holding size in the study area was greater than the national land holding size of 0.79 hectares per household and this was in total agreement with literature that land holding sizes for central and northern regions are greater than that of national average (IFDC, 2002).

The mean land holding size for Mzimba was 1.5 hectares while that of Lilongwe was 1.1 hectares. The average land holding for the HIV and AIDS affected household heads were 1.4 (with maximum of 7.6 hectares) and 1.1 (with maximum of 4.8 hectares) for Mzimba and Lilongwe, respectively, and that of the non-affected was 1.7 and 1.1 hectares for Mzimba and Lilongwe, respectively. This implied that affected households owned less land as compared to non-affected households on average. The major reason was that HIV and AIDS affected household heads were apportioning more land to their children and relatives. For details of mean holding sizes for affected and non-affected see table 10.

Table 10: Mean land holding sizes of household heads

<i>Statistics</i>	<i>Average land holding size of households heads</i>					
	Mzimba		Lilongwe		Total	
	Non-affected	Affected	Non-affected	Affected	Non-affected	Affected
Mean	1.698	1.37	1.030	1.111	1.327	1.215
n	80	80	105	105	185	185
Std. Deviation	1.170	0.935	0.749	0.8437	1.001	0.8875
District Mean	1.535		1.076		1.271	

Table 10 indicates that on average affected households in Mzimba owned less land (1.4 hectares) as compared to non-affected households (1.7 hectares). On average, households in Mzimba owned 1.54 hectares. The case in Lilongwe was different from that of Mzimba as the table indicates HIV and AIDS affected households in Lilongwe owned more land than non-affected households. On average affected households owned 1.1 hectares while non-affected households owned 1.0 hectare. The mean overall mean for Mzimba was 1.54 and that of Lilongwe was 1.1 hectares; this implied that household heads in Mzimba owned more land on average than household heads in Lilongwe. This was attributed to the fact that Lilongwe district was densely populated than Mzimba district.

Table 11 shows the result of cross tabulation between household category and land holding sizes (n= 370). The table shows that majority of affected household heads

(55%) and non-affected household heads (52%) owned less than a hectare of land while only 5.9% of affected household heads owned more than 5 hectares of land compared to 7.6% of non-affected household heads. Thirty four percent of affected and 35% non-affected household heads owned land between 1.1 and 2 hectares. This implied that most of the household heads owned less than two hectares of land in the study area. The findings were in total agreement with literature that most smallholder farmers own less than one hectare of land. The chi-square test was not significant at 5% level implying that there was no significant difference in categories of land owned by affected and non-affected household heads.

Table11: Land holding sizes of household heads

<i>Land holding sizes</i>	<i>Non-affected</i>		<i>Affected</i>	
	Frequency	%	Frequency	%
< 0.5	32	17.3	34	17.8
0.6- 1	60	32.4	67	34.3
1.1-1.5	34	18.4	32	17.8
1.6-2	31	16.8	29	16.2
2.1-5	14	7.6	15	7.8
> 6	14	7.6	8	5.9
Total	185	100	185	100

$$\chi^2_{\text{cal}} = 2.72 < \chi^2_{\text{tab}} = 11.07$$

Table 12 shows the case of cross tabulation of land holding size and household category in patrilineal society (n = 160). Majority of the affected households in Mzimba owned less than 1.5 hectares of land represented by 65% while only 50% of the non-affected households were in this category. Only 16% of affected household heads owned land in the range 2.1-5 hectares. The finding implied that most of affected households in Mzimba owned less than 1.5 hectares of land.

Figure 12: Land holding sizes of household heads in Mzimba

Land holding sizes	<i>Non-affected</i>		<i>Affected</i>	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
< 0.5	4	5	9	11.3
0.6- 1	21	26.3	28	35
1.1-1.5	15	18.8	15	18.8
1.6-2	22	27.5	15	18.8
2.1-5	17	21.3	13	16.3
> 6	1	1.3	0	-
Total	80	100	80	100

$$\chi^2_{\text{cal}} = 5.781 < \chi^2_{\text{tab}} = 11.071$$

Table 13 shows the case of Lilongwe. The results show that 76% of HIV and AIDS affected households had less 1.5 hectares of land while 83% of non-affected were in this category. The chi-square test suggests that total land holding size o was not

associated with household category (affected and non-affected) at 5% level of significance, implying that the number of hectares the household possesses was not influenced by the household head status (whether affected or non-affected).

Figure 13: Land holding sizes of household heads in Lilongwe

<i>Land holding size</i>	<i>Non-affected</i>		<i>Affected</i>	
	Frequency	%	Frequency	%
< 0.5	28	26.7	25	23.8
0.6- 1	40	38.1	38	36.2
1.1-1.5	19	18.1	17	16.2
1.6-2	9	8.6	14	13.3
2.1-5	9	8.6	11	10.5
> 6	-	-	-	-
Total	105	100	105	100

$$\chi^2_{\text{cal}} = 1.619 < \chi^2_{\text{tab}} = 19.488$$

5.3. Land Cultivated by Households Heads

Table 14 shows the mean land cultivated by affected households and non-affected households in the study area. The result in table shows that mean land cultivated for the total sample (n = 370) was 1.11 hectares and that of HIV and AIDS affected households was 0.96 hectares and that of non-affected households was 1.22 hectares. F-test was used to determine if there was a difference in the mean land cultivated

between affected and non-affected households. The null hypothesis that was tested of no difference in mean land cultivated between affected and non-affected households was rejected. It was then concluded that there was significant difference between the mean land cultivated of affected and non-affected households at 1% level. From the focus group discussions the respondents indicated that the main reasons for cultivating less land were; shortage of labour as family labour was diverted to caring for the sick, lack of agricultural inputs for financial resources were mostly diverted to pay for hospital bills and cater for transportation costs instead of investing in agriculture. It was further indicated that crops do well with the application of fertilizer hence other plots were left uncultivated and this led to less land that was cultivated compared to land owned.

The mean land cultivated for households in Mzimba was 1.26 hectares and that of HIV and AIDS affected households was 0.99 hectares and non-affected was 1.52 hectares. F-statistic was significant at 1% level implying that there was significant difference in mean land cultivated between affected and non-affected households. In Lilongwe the results were similar to those of Mzimba where on average HIV and AIDS affected households cultivated less land (0.96 ha) as compared to non-affected households (0.98ha). F-statistic was not significant. Implied that the null hypothesis of no difference in mean land cultivated by affected and non-affected households in Lilongwe was not rejected. It was, therefore, concluded that there was no significant difference between land cultivated by affected and non-affected households in Lilongwe.

Table 14: Average land cultivated by affected and non-affected household heads

<i>Statistics</i>	<i>Average land cultivated by households heads</i>					
	Mzimba		Lilongwe		Total	
	Non-affected	Affected	Non-affected	Affected	Non-affected	Affected
Mean	1.520	0.995	0.981	0.964	1.223	0.959
N	80	80	105	105	185	185
Std. Deviation	1.129	0.643	0.7642	0.7993	0.9774	0.7269
District Mean	1.258		0.973		1.091	

Table 14 shows that household heads in patrilineal society cultivated more land (1.26ha) on average than their counterparts in Lilongwe (0.97ha), which is under matrilineal society. It was further revealed that under the patrilineal society there was significant difference between mean land cultivated by HIV and AIDS affected and non-affected households while there was no significant difference in Lilongwe (under matrilineal society). The result was surprising and it was difficult to indicate that this was so because of HIV and AIDS pandemic. The findings on mean land cultivated were in total agreement with literature that HIV and AIDS affected household heads cultivate less land when compared non-affected households. The findings were in agreement with the national statistics that the average land cultivated for smallholder farmers in central region is above the national average 0.5 hectares.

Table 15 shows the cross tabulation of categories of land cultivated and household head category (affected and non-affected). This analysis was conducted mainly to see the major categories of land cultivated by HIV and AIDS affected households in comparison non-affected households. The results in table 15 shows that 58.8% of affected household heads cultivated less than a hectare while in non-affected household heads category only 35% of household heads cultivated this amount of land. This implied that most households in Mzimba cultivated less than 0.5 hectares of land. This was in agreement with the national statistics that majority of smallholder farmers cultivated less than 0.5 hectares of land. F-statistic indicated that there was significant difference between land cultivated by affected households in Mzimba at 5% level while land cultivated by affected and non-affected households in Lilongwe was not statistically different.

Table 15: Land cultivated and household heads in Mzimba

<i>Land Cultivated</i>	<i>Mzimba</i>			
	Non-affected households		Affected households	
	Frequency	%	Frequency	%
< 0.5	8	10	19	23.8
0.6- 1	20	25	28	35
1.1-1.5	20	25	16	20
1.6-2	18	22.5	12	15
2.1-5	13	16.3	5	6.3
> 6	1	1.3	0	-
Total	80	100	80	100

$$\chi^2_{\text{cal}} = 12.015 > \chi^2_{\text{tab}} = 11.071$$

Table 16 shows cross tabulation between land cultivated and household category. The case in Lilongwe was different from that of Mzimba where most of the affected households (71%) and non-affected households (71%) cultivated less than 1 hectare of land. The chi-square test for Mzimba indicates that land cultivated by household head was associated with the household category of the head at 5% level of significance and that of Lilongwe indicated that there was no association between household category and land cultivated by household head.

Table 16: Land cultivated by household heads in Lilongwe.

<i>Land Cultivated</i>	<i>Lilongwe</i>			
	Non-affected		Affected	
	Frequency	%	Frequency	%
0-0.5	30	28.6	33	31.7
0.6- 1	44	41.9	41	39.4
1.1-1.5	12	11.4	13	12.5
1.6-2	11	10.5	8	7.7
2.1-5	8	7.6	9	8.7
6-10	0	-	0	-
Total	105	100	105	100

$$\chi^2_{\text{cal}}=0.816 < \chi^2_{\text{tab}}=9.488$$

5.4.1. Land Lost by Household Heads

The test hypothesis was there was no significant difference in land lost by affected and non-affected households for the whole sample (n = 370). The result in table 16 shows that the mean land lost for HIV and AIDS affected households was 0.39 hectares and that of non-affected household was 0.13 hectares. The results indicate that HIV and AIDS affected households lost more land on average as compared to non-affected households in the study area. The F-statistic test was significant at 5% hence the hypothesis was rejected implying that there was significant difference in

land lost by HIV and AIDS affected households and non-affected households. For details see table 17.

Table 17: Mean land lost by household heads in past three years

Statistics	Household Category		
	Non- Affected	Affected	Overall
Mean	0.127	0.385	0.256
Standard Deviation	0.371	0.880	0.686
n	185	185	370

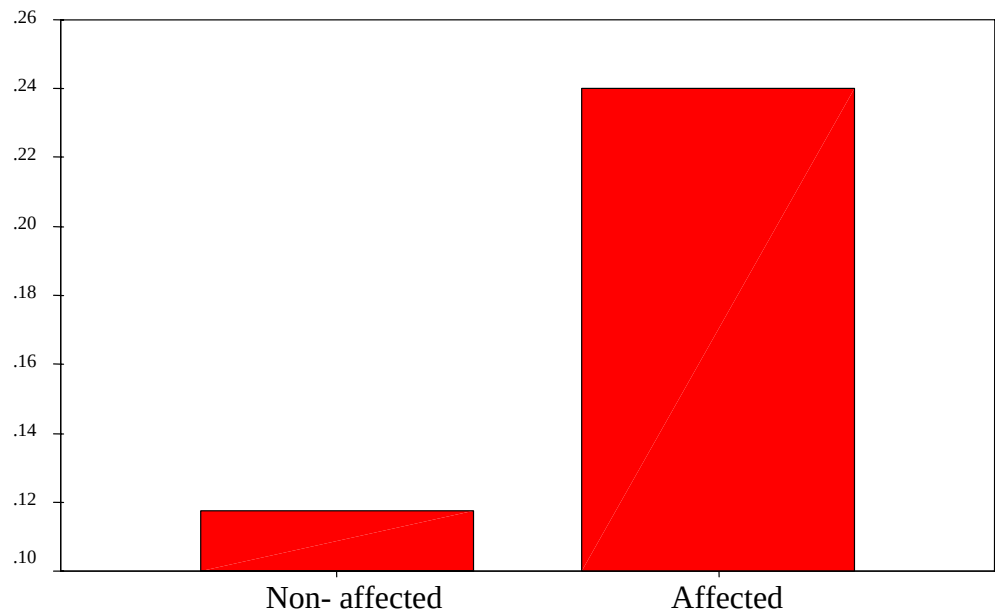
Table 18 shows the district specific mean land lost analysis. The results indicate that on average household in Mzimba indicated that they had lost 0.18 hectares of land. The average land lost by HIV and AIDS affected households was 0.24 hectares while that of non-affected was 0.12 hectares with standard deviation of 0.58 and 0.44, respectively. The result clearly indicates that affected household heads were losing out more land in Mzimba on average as compared to non-affected household heads. F-statistic indicated that the mean of land lost by HIV and AIDS affected and non-affected households were significant at 5% level implying that there was a significant difference in land lost by affected and non-affected households in Mzimba.

Table 18: Mean land lost by households in Lilongwe and Mzimba

	Mzimba		Lilongwe	
	Non-affected	Affected	Non-affected	Affected
Mean	0.12	0.24	0.133	0.496
n	80	80	105	105
Std. Deviation	0.438	0.577	0.312	1.042
Overall district mean	0.18		0.315	

The household heads in Lilongwe indicated that they had lost 0.32 hectares of land on average in the past three years with a maximum of 6 hectares. The average land lost by HIV and AIDS affected household heads was 0.50 hectares while that of non-affected households was 0.13 hectares with standard deviation of 1.04 hectares and 0.31 hectares respectively. The result implied that on average affected households lost more land than non-affected households. F-statistic indicated that mean of land lost by HIV and AIDS affected household was significant at 1% level, implying that there was significant difference in mean land lost by HIV and AIDS affected and non-affected households in Lilongwe.

Figure 4 represents the relationship between mean land lost by the households in the past three years and household category in Mzimba. From the figure it was clear that on average HIV and AIDS affected households lost more land as compared to non-affected households.



Similar findings were evident in Lilongwe as represented in the Figure 5. It was also clear from the graph that HIV and AIDS affected household heads lost more land as compared to non-affected household heads. This implied that the household status in the two study areas played a vital role for the household to lose land despite the fact that the averages for the land lost in these areas was less 0.5 hectares.

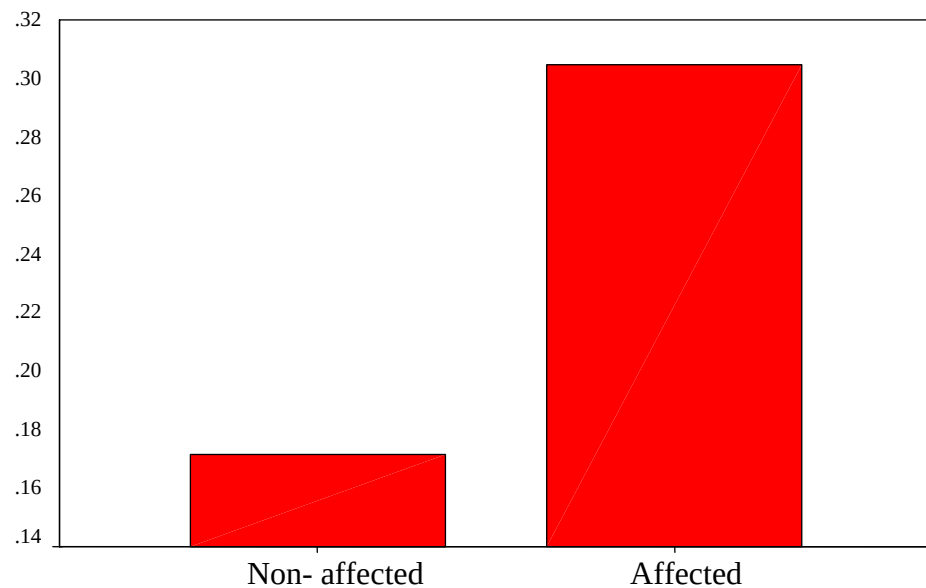


Figure 5: Land lost by affected and non-affected households in Lilongwe

From the above explanations and the figures it can be concluded HIV and AIDS affected households on average lost more land in the study area as compared to non-affected households and the results were statistically significant at 5 % level.

5.4.2. Chronic Illness and Land Loss

Long time illness associated with HIV and AIDS has effect on ability of affected households to make productive use of their land holdings. In early stages of the illness there is little impact as those infected are still able to work but when the illness progresses the period of incapacitation increases, as does the need for medical

attention. Household members increase time for caring for the sick and hence reduce livelihood activities (Mbaya et al., 2002). When the household heads were asked whether long time illness leads to land loss, 50% of the household heads indicated that long time illness can lead to land loss and 51% of the household heads indicated that chronic illness does not lead to land loss in the two study areas. Refer to Table 19 for details.

Table 19: Chronic illness and land loss

<i>Sex of household head</i>		<i>Do chronic illness contribute to land loss</i>			
		Mzimba and Lilongwe			
		Non-affected		Affected	
		Frequency	%	Frequency	%
Male	Yes	71	56.3%	55	43.7%
	No	86	67.7%	41	32.5%
Female	Yes	10	17.5%	47	82.5%
	No	18	30%	42	70%

Table 19 shows that 82% of affected females in the study area reported that chronic illness leads to land loss while only 18% of non-affected females indicated that chronic illness do not lead to land loss. Only 44% of affected male household heads in the two study areas indicated that chronic illness could lead to land loss while 56% of them indicated that chronic illness could not lead to land loss.

When the household heads were asked for reasons to why chronic illness leads to land loss, forty seven percent of the household heads indicated that it was because of shortage of labour. It was indicated that labour diversion to caring for the sick and lad is left idle. While 18% of household heads indicated lack of capital as the main reason for land reallocation as funds are diverted to caring for the sick such as paying for hospital bills and for buying nutritious food. Thirty three percent of the household heads indicated that land is mainly lost when the landowner dies. The land is then reallocated. Only 4% of the household heads indicated land is lost through floating of rules of agreement especially after the death of the landowner. When the land was rented and the landowner dies within the period of the rent the land is assumed sold.

Table 20: Reasons to why long time illness leads to land loss

Why chronic illness leads to land loss	Frequency	Percentage (%)
Labour is diverted to caring for the sick	114	47.3
Death of land owner leads to reallocation	79	32.8
Lack of capital as diverted to caring	44	18.3
Floating of the rules of agreement	4	1.7
Total		100

5.4.3. Land Loss by Affected Household Heads.

To understand how the affected household heads were losing out their access to customary land there was need to identify the phases of HIV and AIDS namely;

symptomatic, early illness, chronic illness, critical illness, death and lastly survivors. The affected household heads interviewed were on phase three chronic illnesses as 85% were on ARVs.

The study found out that land was lost when the land owner/ holder was chronically ill (94%) and only 5% of respondents indicated that land could be lost when the spouse of landholder was chronically ill and only 0.3% indicated that land was even lost when the child in the family was chronically ill. The findings meant that land in patrilineal society was lost when the husband (land holder) in the family was chronically ill while in the central region when the wife (Under Chikamwini or the husband under Chitengwa) was chronically ill. Land for farming in Mzimba and Lilongwe was fragmented with average of three plots of land per household. HIV and AIDS affected households were farming the plots of land that were closer to their homes while the plots of land that were to far off places were left idle or fields were left unattended to. In Mzimba it was indicated that these plots of land that were left idle were then utilized by male relatives and after the death of the land owner the land was returned to remaining spouses and children. The remaining spouse under Chitengwa was forced to go to her original home thereby losing her access to customary land similar under Chikamwini after the death of the landowner (wife) the spouses were also forced to go to their original homes.

To avoid the land loss that the affected households were facing government should speed up the customary land registration process as stipulated in Land policy of

2002, this would enable landowners to declare who to inherit their land and customary land could also be included in the Inheritance and Wills Act.

5.4.4. Coping Strategies of Households Affected by HIV and AIDS

Table 21 shows the coping strategies reported by HIV and AIDS affected households to avoid losing their access to customary land. The main strategy indicated both from focus group discussions and personal interviews was that affected households made sure that they cultivated all their land. Majority of HIV and AIDS affected households indicated that family labour was employed to cultivate the field (42%); others indicated casual labour (21%) and permanent labour (9%). On family labour it was indicated that school going children were mostly used to cultivate the land. This was in agreement with literature that majority of smallholder farmers in Malawi use family labour to cultivate their land. Other coping strategies that were reported were; land rents (10%), lending to neighbours 8.9% and selling land before losing it was 3%. The figure of land rents could be higher than what was reported mainly because of the confusion that was there between lending land to neighbours and land renting amongst both data collectors and respondents. Only 3% of HIV and AIDS affected households reported land selling as major strategy to avoid losing their customary land. The findings were in agreement with the coping strategies employed by HIV and AIDS affected households in other countries such as Kenya and Lesotho and South Africa (Kiai et al., 2002, Mphale et al., 2002).

Table 21: Copping strategies of affected households heads

<i>Coping Strategies of household head</i>	<i>Frequency</i>	<i>Percentage</i>
Selling land before losing it	21	3.4
Renting out their land	62	10.0
Farm land by sharecropping arrangements	8	1.3
Widows remarry/ orphans marry	2	0.3
Leasing out their land	21	3.4
Lending land to neighbours	55	8.9
Farm land using permanent employees	57	9.2
Farm the land by using casual laborers	132	21.3
Farm the land by using school going children	262	42.6
Total	-	100

5.5. Inheritance of Customary Land

The inheritance of customary land in Malawi is not catered for under statutory law. This means that customary law applies with respect to the inheritance of customary land. Malawi has two customary systems of inheritance, the matrilineal and the patrilineal systems. The patrilineal system is a marriage system practiced in the northern region of the country. A number of distinctive features set this system apart from the matrilineal system. The marriage residence is virilocal, that is, the man's village is the matrimonial home and the man pays a bride price (in local language called *lobola*) to the wife's parents to establish his right to take his wife to his own

village. This set up signifies that the man owns everything and makes the children of the marriage legitimately his own. Women in the patrilineal society do not own property in their own right (Ngwira, 2003).

Matrilineal society is in central and southern region where marriage residence is uxirilocal, the wife's village is the matrimonial home, and no bride price is paid for the wife. Inheritance of property passes through the female line. Women were the custodians of land. Children belong to the woman and her brothers. Children inherit their property of their Uncle. Under matrilineal society we have Chikamwini and Chitengwa systems of marriages. In *Chitengwa* no bride price is paid but a gift called *chiongo* in local language is paid for the wife (Ngwira, 2003) and under the system the man's village become the matrimonial home; this practice is very common in Lilongwe. Under *Chikamwini* the wife's village is the matrimonial home and no bride price or *chiongo* is paid.

Table 22 shows the rightful heir of their land in Mzimba. Sixty one percent of affected households in Mzimba indicated that their first-born son was the rightful heir of their land followed by 26% of respondents who indicated parents were the rightful heir of their land. Similar trend was evident among the non-affected group where 55% of respondents indicated that their first-born son was the rightful heir while 25% indicated that parents were the rightful heirs of land. The findings were in agreement with what Ngwira found that descent and inheritance in patrilineal societies passes through sons or male relatives. It was further indicated during focus

groups that daughters were regarded as in transient, that is, they were expected to get married and leave for their husband's village, and they do not inherit land. Thus the customary heir was firstborn son and male relatives in Mzimba. It was further indicated that male relatives (man's father and brother(s)) were in most cases asked to contribute towards the payment of bride price, hence their vested interest and entitlement to inherit property of their relative. The results were not statistically significant at 5% level, implying that there was no significant difference in customary heir of land between affected and non-affected in Mzimba.

Table 22: Heir of customary land in Mzimba

<i>Heir of customary Land</i>	<i>Mzimba</i>			
	Non-affected		Affected	
	Frequency	%	Frequency	%
First born son	44	55.0	49	61.3
First born daughter	1	1.3	2	2.5
All children	20	17.5	7	8.8
Parents	14	25.0	21	26.3
Brother to land holder	1	1.3	-	0
Uncles	-	0	1	1.3
Total	80	100	80	100

The sampled households in Lilongwe comprised of 47% households under Chikamwini and 52.9% of households were under Chitengwa marriage systems. The

case in Lilongwe was different from that of Mzimba. In Lilongwe, 49% and 37% of non-affected and affected respondents indicated that any child in the family was the rightful heir of land, 29 % and 20% of non-affected and affected household heads reported parents as the rightful heir of land. Sixteen percent of affected household heads in Lilongwe reported that female children were the rightful heir of land. This was because of the Chikamwini marriage system that exists in Lilongwe. Under this system of marriage women are the custodians of land and land inheritance is through the female line. The results indicated that household heads in Lilongwe regard children as the rightful heirs of customary land. The results obtained were significant at 5% level, implying that there was significant difference in customary heir of land between affected and non-affected household heads. The results are reported in Table 22.

Table 23: Heir of customary land in Lilongwe

<i>Heir of customary Land</i>	<i>Land inheritance by spouses</i>			
	<i>Non-affected</i>		<i>Affected</i>	
	Frequency	%	Frequency	%
First born son	1	1	7	6.7
First born daughter	6	5.7	17	16.2
All children	51	48.6	39	37.1
Parents	30	28.6	21	20.0
Brother to land holder	13	12.4	14	13.3
Uncles	4	3.8	7	6.7
Total	105	100	105	100

5.5.1. Inheritance of Land by Orphans

Sixty six percent of respondents (n = 370) reported that orphans were allowed to inherit land in the study area while 34% indicated that orphans were not allowed to inherit land. For those who indicated that orphans were allowed to inherit land 44% were from HIV and AIDS affected households and 54% were from non-affected households. For those who indicated that orphans were not allowed to inherit land 62% were from HIV and AIDS affected households and only 38% were from non-affected households. This implied that household with AIDS orphans were more vulnerable to land loss if compared to orphans from non-affected households and the result was statistically significant at 5% level. The results are reported on Table 24.

Table 24: Inheritance of land by orphans in the study area

<i>Land inheritance</i>	<i>Non-affected</i>		<i>Affected</i>		<i>Total</i>	
	Frequency	%	Frequency	%	Frequency	%
Yes	118	63.8	98	53.0	245	66.2
No	67	36.2	87	47.0	125	33.8
Total	185	100	185	100	370	100

The results from the cross tabulation indicated that majority HIV and AIDS affected household heads (53%) and non-affected household heads (64%) indicated that orphans were allowed to inherit land in the study area. Forty seven percent of HIV and AIDS affected household heads indicated that orphans were not allowed to inherit land as compared to 36%, implying that a good percentage of HIV and AIDS orphans were not allowed to inherit land. This was attributed to the fact that relatives of the affected landowner start utilizing the land before the death of landowner and after the death they just continue utilizing the land, on the pretext that they agreed the terms with the landowner.

The analysis of the district specific data revealed that in Mzimba 91% of male non-affected household heads and 80% female non-affected household heads reported that orphans were allowed to inherit land. The results from HIV and AIDS affected households indicated that 78% of male affected household heads reported that orphans were allowed to inherit land in the district while only 52% of HIV and AIDS

affected female household heads indicated that orphans were allowed to inherit land. This implied that 48% of HIV and AIDS affected female household heads indicated that orphans were not allowed to inherit land in the district. Households that indicated that orphans were allowed to inherit land; the reason given was the system of paying bride price that is being practiced in Mzimba. Under this system children born in the family were not allowed to leave their father's home if bride price was paid this meant that children were allowed to use the land that their father was using. Similar observations were made by Economic Commission for Africa (2003). The results for Mzimba are reported in Table 25.

Table 25: Land Inheritance by orphans in Mzimba

<i>Sex of household</i>	<i>Responses</i>	<i>Mzimba</i>			
		Non-affected		Affected	
		Frequency	%	Frequency	%
Male	Yes	59	90.8	28	77.8
	No	6	9.2	8	22.2
Female	Yes	12	80.0	23	52.3
	No	3	20.0	21	47.7
Total		80	-	80	-

The trend in Lilongwe was the same as that of Mzimba where majority of non-affected male and female household heads indicated that orphans were allowed to inherit land but the percentages were a bit lower than those of Mzimba (18%). It was

indicated during focus group discussions that despite the Chitengwa marriages because of the Mwinimbumba system (system that all the children of the family belong to uncle) orphans were still not allowed to inherit their father's plots of land. It was indicated that by custom after the death of the land owner children were supposed go to their uncle (Mwinimbumba) and the uncle was expected to give these children plots of land for farming. But because of land shortages the orphans were given small plots by the uncle and the land that they were using for farming when all their parent were alive goes to the nephews of the deceased parent. In cases of Chitengwa it was reported that after the death of the landowner (the husband), the wife and children were forced to go to the wife's original home, where the parent was supposed to give the daughter land for cultivation. The results were significant at 1 % level. The results are reported in Table 26.

Table 26: Land inheritance by orphans in Lilongwe

<i>Sex of household</i>	<i>Responses</i>	<i>Lilongwe</i>			
		Non-affected		Affected	
		Frequency	%	Frequency	%
Male	Yes	58	63.0	32	53.3
	No	34	37.0	28	46.7
Female	Yes	9	69.2	24	53.3
	No	4	30.8	21	46.7
Total		105	-	105	-

5.5.2. Inheritance of land by spouses of landholder

Fifty eight percent of respondents in the study area indicated that spouses were allowed to inherit land while 42% indicated that they were not allowed to inherit land. Table 27 shows the inheritance of land by spouses of landholders both in patrilineal and matrilineal society. In Mzimba, 79% of household heads indicated that the spouses (women) were allowed to inherit land while only 12% of the household heads indicated that women were not allowed to inherit land.

Table 27: Land inheritance by spouses of landholder

<i>Were spouses allowed to inherit land</i>	<i>Mzimba</i>	
	Frequency	%
Yes	216	58.4
No	154	41.6
Total	370	100

Table 28 shows the cross tabulation of land inheritance by spouses and household category. Almost half of the HIV and AIDS affected household heads indicated that spouses of land owner were not allowed to inherit land in the study area while 64% of non-affected household heads indicated that spouses were allowed to inherit land. The results from focus group discussion and key informant interviews revealed that the relatives of HIV and AIDS affected land owner start land cultivating when the owner was sick and failing to cultivate.

Table 28: Land inheritance by spouses in the study area

<i>Were spouses allowed to inherit land</i>	<i>Land inheritance by spouses</i>			
	Non-affected		Affected	
	Frequency	%	Frequency	%
Yes	118	63.8	98	53.0
No	67	36.2	87	47.0
Total	185	100	185	100

Table 29 shows a cross tabulation of sex of household head, household category (affected and non-affected) and inheritance of land by spouses. Overall result showed that 79% of household heads indicated that spouses in Mzimba were allowed to inherit land while 21% of the household heads reported that spouses were not allowed to inherit land. Eighty seven percent and 64% of non-affected and affected females reported that spouses were allowed to inherit land after the death of landowners in Mzimba. Similarly amongst male respondents 85% and 84% of non-affected and affected household heads indicated that spouses were allowed to inherit land. But it was reported through key informant interviews and focus group discussions that women inherited land through children especially when the husband paid lobola. Ngwira (2003) made similar observations. The results from Mzimba were significant at 5 percent level.

Table 29: Inheritance of land by spouse(s)

<i>Sex of household head</i>		<i>Land inheritance by spouses in Mzimba</i>			
		Non-Affected		Affected	
		Frequency	%	Frequency	%
Male	Yes	55	84.6	30	83.6
	No	10	15.4	6	16.7
Female	Yes	13	86.7	28	63.6
	No	2	13.3	16	16.4

The result from Lilongwe were different from that of Mzimba, where only 43% of household head indicated that spouses were allowed to inherit land while 57% of them indicated that spouses were not allowed to inherit land. Table 30 reports that 62% and 62% of affected females and males, respectively, indicated that spouses were not allowed to inherit land. Chi-square test was significant at 5% and 1% for Mzimba and Lilongwe, respectively, indicating that land inheritance for spouses was associated with sex of the household head. When the households were asked on what really happens when the land holder dies, 73% of the household heads indicated that spouses take control of the land that the landholder was using while 21.3% reported that relatives of the deceased grab the land, about 4% indicated that the traditional leaders take control of the land while 1% indicated that land is sold. This implied that spouses and children inherited land in Mzimba after the death of the landowner.

This finding was in agreement with the findings of Ngwira (2003) and ECA (2003).

The results are reported in Table 30.

Table 30: Marriage type and land inheritance by spouse(s) in Lilongwe

<i>Sex of household head</i>		<i>Land inheritance by spouses in Lilongwe</i>			
		Non-Affected		Affected	
		Frequency	%	Frequency	%
Male	Yes	42	45.7	23	38.3
	No	50	54.3	37	61.7
Female	Yes	8	61.5	17	37.8
	No	5	38.5	28	62.2
District	Yes	42.2%			
	No	57.1%			

5.6. In Whose Name is the Land Held

This question referred to whose name the land is held or registered. In Lilongwe which is under matrilineal society, 69% of respondents indicated that the land was held under wife's name while 30% indicated that land was held under the husband name. This information was important because the person in whose name the land is held is highly favoured to be the one in whose name the land will be registered when the exercise starts. In Chitengwa marriages, 75% of male respondents indicated that land was held in their name and only 25% of male respondents under Chikamwini

indicated that land was held in their name. Eighty eight percent of male respondents under Chikamwini indicated that land was held in the name of their spouses and 12% of male respondents under Chitengwa indicated that land is in the name of their spouses. This implied that men in matrilineal uxirilocal marriages were regarding themselves as owning land. Fifty two percent of female respondents under Chitengwa indicated that land was held in their husbands name and 49% those under Chikamwini indicated that land was in their name. This implied that 51% of women respondents indicated that land was in the name of their husband, this did not tally with what custom prescribes. The main reason given through FGDs was the changes in customs due to the increase in numbers of new comers with different cultural backgrounds, which have diluted some of the customs.

Under patrilineal system, 91% of male respondents indicated that land was held in their name and 86% of females indicated that land is held under husbands or male relative names. Only 9% of male respondents indicated that land was held in female names and 14% of female respondents stated that land was in their name. The findings in Mzimba were in total agreement with what custom prescribes in patrilineal societies. These findings were similar to the findings of Ngwira (2003).

5.7. Land Rights of Women and Children

Women make up 51% of Malawi's total population of 10 million, 85% of them live in rural areas and derive their livelihood from agricultural production (ECA, 2003). In terms of women and land ownership, women's rights to land under customary

tenure in Malawi still depend on the type of marriage, namely, patrilineal or matrilineal. Holden et al., (2006) reported that in Malawi, small-scale farmers still allocate land rights and interpret land claim using kinship-based norms and rules of descent, succession and inheritance. The main idea was to find out whether women and children in the two study areas can own customary land regardless of their marital status.

Majority of the household heads in Mzimba (67%) indicated that women do not own land while only 33% indicated that women own land in Mzimba. The reasons given were; customary laws were not permitting unmarried women to own land (33%) and others indicated that the inheritance laws do not permit women to inherit land especially unmarried women as they were in transit to their husbands home (27%). The findings were in agreement with what was reported by ECA (2003) that in patrilineal society's women can only access land through their husbands and sons. Others indicated that if they are not married then they were dependents and were taken care by the parents or guardians. Majority of affected household heads (66%) and non-affected household heads (69%) indicated that women were not allowed to own land while only 34% and 31% of affected and non-affected household heads indicated that women were allowed to own land in Mzimba. It was that upon divorce the woman loses the right to cultivate the field and returns to her original home. This is in agreement with Ngwira (2003) who indicated that in patrilineal societies unmarried women are seen to be in transit to the husbands' home and the can not own property. The case in Lilongwe was different as majority of household heads

(76%) indicated that unmarried women could own land and only 24% indicated that it was impossible for unmarried women to own land. This was attributed to the fact that by custom women were regarded as landowners in Lilongwe.

5.7.1. Protection of land Rights of Widows and Orphans

Sixty six percent of household heads in the study area (n = 370) indicated that chiefs were responsible for protecting the rights of orphans and widows while 15% and 19% indicated family heads and any adult member respectively. The results were surprising because in land acquisition most household heads indicated that they acquired land from family heads but in terms of seeking protection they go to tradition leaders especially chiefs. They indicated through focus group discussion that they usually seek protection from chiefs because relatives were the ones who were violating the rights of orphans and widows.

Cross tabulation between those who protect land rights of widows and orphans with household category (affected and non-affected) showed that 71% and 61% of HIV and AIDS affected and non-affected households heads, respectively, indicated that chiefs were responsible for protecting land rights of orphans and widows. Twenty two percent of non-affected and 16 % of HIV and AIDS affected indicated that they seek protection from any adult member in their village. It was further indicated through focus group discussion and key informant interviews that even after seeking help from any adult member in the family the matter was still referred to the chiefs to make decision. This was interesting result because despite the decline of land

allocatory role of the chiefs but the chiefs were still responsible for settling land disputes amongst family members and relations. The chi-square test was significant at 5%. The results are reported in Table 31.

Table 31: Protection land rights of orphans and widows

Land	Non-affected		Affected		Total	
Rights	Frequency	%	Frequency	%	Frequency	%
Protection						
Chiefs	114	61.2	131	70.8	245	66.2
Family head	30	16.2	25	13.5	55	14.9
Any adult member	41	22.2	29	15.7	70	18.9
Total	185	100	185	100	370	100

5.8.0. Land Acquisition by Household Head

One of the objectives of this study was to compare how households (affected and non-affected) in Mzimba and Lilongwe acquire land for agricultural production.

5.8.1. Land Acquisition through family heads and traditional leaders.

In Mzimba, 67% and 70% of affected and non-affected household heads indicated that land they were using was allocated to them by their family head (parents). Similar finding was evident in Lilongwe where 78% and 69% of affected and non-affected household heads reported that family head allocated the land they were

using to them. In total, 74% and 69% of household heads in Lilongwe and Mzimba, respectively, indicated that land was allocated to them by family heads and only 26% and 31% of household heads indicated that land was allocated to them by traditional leaders. This meant that there is decline in allocatory role of traditional leaders and implied that family heads had the right to exclude others from using the land and this poses a great danger to the HIV and AIDS affected households. Bosworth (1997) also found out that the allocatory role of the village headmen is declining as in this study this was attributed to the absence of unallocated land both in Mzimba and Lilongwe. Kishindo (2006) also made similar observations on his study on dynamics of land tenure.

Table 32: Land allocation

<i>Land Allocation</i>	<i>Mzimba</i>				<i>Lilongwe</i>			
	Non-affected		Affected		Non-affected		Affected	
	Freq	%	Freq	%	Freq	%	Freq	%
Family head	56	70.0	54	67.5	73	69.5	82	78.1
Chiefs	24	30.0	26	30.5	32	30.5	23	21.9
Total	80	100	80	100	105	100	105	100

5.8.2. Land Acquisition through Buying

A part from mere land allocation by the chiefs and family heads another way households acquired land was through informal buying of the agricultural land. Households also lost their control over land due to distress land sales. Renting out of

land was a strategy employed when landholders perceived their distress to be for a short term. When distress or where the economic distress was perceived to be deep, the sale of land was a strategy that was used. Mbaya et al., (2002) reported that serious illness and death of authority figures in families makes families vulnerable to “unauthorized” land sales by irresponsible family members. The study was meant to find out if households in the study area were engaged in informal land sales.

The results indicated that 89% and 65% of non-affected and HIV and AIDS affected household heads, respectively, in Mzimba reported that there are no incidences of land sales in the district implying that only 11% and 35% of non-affected and affected household heads, respectively, indicated that incidences of land sales do occur in the district. This implied that 35% of household heads that were HIV and AIDS affected agreed to the fact that people were selling land in the district. The results showed that most of the HIV and AIDS affected household heads in Mzimba were in agreement that land sales in the area do occur. It was reported through focus group discussions that in district the population was low and that the district has stress of some virgin land remaining idle hence land sales were not as common. The result was significant at 5% level. The findings agreed with Holden findings who reported that northern region has the lowest population density of 53 persons per km² (Holden et al., 2006)

In Lilongwe the story was different with 75% household heads reported incidences of land sales in the district while 25% denied incidences of land sales in the district.

A part from land sales it was spelt out clearly during the focus group discussions that majority of households in Lilongwe were renting out their land which was not reported in Mzimba.

To find out categories of household heads that were selling land a cross tabulation was conducted between household category and incidences of land sales. Majority affected household heads (78%) indicated that land was being sold in Lilongwe and 71% of non-affected household heads also indicated that land was being sold in Lilongwe. This implied that land sales were common in Lilongwe an indication that some affected and non-affected household heads in Lilongwe access land from land sales. As reported earlier on coping strategies this implied that most HIV and AIDS affected household heads were using land sales and land rents as the major strategy to avoid losing their access to customary land. The results were in agreement with what Mbaya et al (2002) found. The results obtained were significant at 10% level, implying that there was significant difference in land sales between affected and non-affected household heads.

Hence it can be concluded that in Mzimba land sales were not common while in Lilongwe land sales and rents were common and households either use land sales or land rents to avoid losing their access to customary land. This was attributed to the fact land Lilongwe was densely populated as compared to Mzimba with population density of 104 persons per km² and 53 persons per km² respectively (Holden et al., 2006).

During focus group discussions it was indicated that land was bought and rented by people within the villages and only the villages that were along the roadside sold land to new comers. It was further indicated that when the land was bought the men who are under Chikamwini felt more tenure secure as they owned the piece of land and had no outside pressure from the lineage claims. It was also indicated that households rented out land for specific periods mainly one season. The main reasons given for renting out land was shortage of labour to put all cultivable land under cultivation, lack of agricultural inputs, others indicated that when the owner was too ill to work.

Table 33: Incidences of land sales in Mzimba and Lilongwe

<i>Incidences of land sales</i>	<i>Affected and Non-affected household heads</i>							
	Mzimba				Lilongwe			
	Non-affected		Affected		Non-affected		Affected	
	Freq	%	Freq	%	Freq	%	Freq	%
Yes	9	11.3	28	35	75	71.4	82	78.1
No	71	88.8	52	65	30	28.6	23	21.9
Total	80	100	80	100	105	100	105	100

Incidences of land sales implied that able households were able to acquire land by means of purchase while most of the households that were in need of money such as those affected by HIV and AIDS were selling out their important resource, land. As

reported earlier in Mzimba 35% of HIV and AIDS affected households indicated that land was being sold in Mzimba compared to only 11% from non-affected households, and the results were statistically different at 5% level. Seventy eight percent of HIV and AIDS affected household heads indicated that incidences of land sale do occur similarly 71% of non-affected households also reported that land sales occur in Lilongwe. The high percentage in Lilongwe was attributed to increase in new comers, poverty and increase in population. This implies that informal land markets poses great danger to HIV and AIDS affected households as they require money to pay for hospital bills and to buy special foods hence may resort to selling their land.

CHAPTER SIX

6.0. SOCIO-ECONOMIC FACTORS AFFECTING TENURE SECURITY

One of the objectives in this study was to identify the socio-economic factors that affect customary land tenure security of households in the study areas. The analysis was conducted using logit model procedures. In this particular study the dependent variable was tenure security and was given the value of 1 when the household had lost land in the past three years (tenure insecure household) and 0 household that did not lost land in past three years (tenure secure household).

The method used was to analyse the data in SPSS was backward elimination. In backward elimination selection starts with all variables and deletes one at a time, in the order they are worst by some criterion. The SPSS output contains different combinations of independent variables. The output with greater R^2 and significant chi-square was chosen. The model had 14 independent variables and 7 of which were removed and the model combination with greater R^2 and with significant log likelihood as well as the chi-square was selected. Log likelihood (376) defined as the probability that observed values of the dependent variable may be predicted from the observed values of independents. Log likelihood was significant at 1 % implying that the independent variables taken together determined tenure security in the study area. Similarly chi-square (133) was significant at 1% implying that the over all model was significant at 1% level. The coefficient of determination was 0.585, indicating

that 59% of variations in tenure security were explained by the independent variables. For details of refer to Table 34.

Table 34: Socio-economic factors associated with customary land tenure security

Variable	Coefficients	Standard Error	P-value
Constant	-1.943	1.203	0.116
OCCUPTHD	-1.269***	0.339	0.001
SEXHHD	-1.259**	0.548	0.022
LANDSIZE	-0.514***	0.179	0.004
MARSTUSD	0.789***	0.286	0.005
EDUCTHH	0.147**	0.051	0.034
HHSIZE	0.333***	0.061	0.001
LANDCUT	1.071**	0.329	0.041
HCATEG	0.128	0.073	0.479
Log likelihood		375.906	
R ²		0.585	
Chi-square		132.839***	

* Significant at $p < 0.10$, ** significant at $p < 0.05$, ***significant at $p < 0.01$

The results from table 34 indicated that land-holding size of household was significant at 1 percent level and had negative sign, implying that household heads with larger holdings were tenure insecure. Large customary land holding meant that

some of the land was left idle hence household easily lost part of their holdings. Mbaya et al. (2002) reported the principle of use it or lose it. Holden et al. (2006) made similar observations.

Sex of household head was significant at 5 % level and had negative sign implying that male- headed households felt significantly more tenure secure than female-headed households. This was attributed to the fact that in Mzimba landowners are men while in Lilongwe majority of household heads interviewed were under Chitengwa, which implies that landowners were also men. This then was not a surprising result at all. Nankumba and Machika (1988) made similar observations that families utilizing land belonging to the matrilineages enjoy high security of tenure.

Occupation of household head was significant at 1 percent level with a negative sign implying that household heads who only depended on farming were tenure insecure than households that were engage in some off-farm activities. This was attributed to the fact that household heads engaged in other non-farm activities were able to farm all their plots of land by using casual labours and was able to buy agricultural inputs. Participation in off-farm activities was an indicator of power and influence and powerful and influential people enjoy are tenure secure. Similar observations were made by Reader (1971).

Marital status of the household head was significant at 1 percent level and had negative sign implying that married household were tenure secure than unmarried

household heads. This was attributed to the fact that when a person was married he was given land by either his parents or the chief such people enjoying lifetime rights of use and occupation. This was in agreement with what Reader (1971) found that individuals cultivating land belonging to them enjoy high security of tenure.

Household size was significant at 1 percent level and had a positive parameter estimate indicating that household heads with larger family sizes were tenure secure than households with small family sizes. This was attributed to the fact that households were using family labour to cultivate the land and households with larger family sizes were able to cultivate all their plots of land as compared to households with small family sizes.

Education level of household head was significant at 1 percent level with a positive sign implying that household heads with more years spent in school were tenure secure. This was attributed to the fact that those with little education were regarded as knowledgeable that made them understand the fact that customary land cannot be claimed as yours unless registered as proposed in the land policy document (Government of Malawi, 2002) hence able to sell their land.

Land cultivated was significant at 5 percent level with positive sign. This meant that the households that cultivated all their plots of land were more tenure secure than households that were unable to farm all their plots of land. The findings were in support of the principle of use it or lose it reported by Mbaya et al. (2002). This

principle works to the disadvantage of the HIV and AIDS affected household as they are mostly weak and often fail to cultivate all plots of land.

Occupation of household head was significant at 1 percent level with a positive sign implying that household heads who only depended on farming were tenure insecure than households that were engaged in some off-farm activities. This was attributed to the fact that household heads engaged in other non-farm activities were able to farm all their plots of land by using casual labours and was able to buy agricultural inputs. Participation in off-farm activities may be an indicator of power and influence. This was a surprising result.

Household category (HIV and AIDS affected and non-affected) dummy was not significant at any level but had positive sign. This implied that there was no significant difference in tenure security between HIV and AIDS affected households and HIV and AIDS non-affected households in the study area. This was contrary to the findings of other studies conducted in other countries such as South African, Lesotho and Kenya.

CHAPTER SEVEN

7.0. CONCLUSIONS AND RECOMMENDATIONS

7.1. Conclusion

The study revealed that there was significant difference in mean land lost by HIV and AIDS affected households and non-affected households; affected households lost more land than non-affected households.

Socio-economic characteristics that explained tenure security were occupation of household head, sex of household head, land holding sizes, marital status of household head, education level of the household head and the land cultivated of the household head while dummy variable for HIV and AIDS affected and non-affected household was not significant

The major coping strategies employed by HIV and AIDS affected households to avoid land losing out their access to customary land were renting out land, lending land to neighbours and relatives and by always farm their plots of land using school going children, casual labourers, and permanent labours.

The study also found out that orphans in the two study areas were allowed to inherit land left by their parents both in Mzimba and Lilongwe. Spouses in Mzimba were allowed to inherit land while their counter parts in Lilongwe were not allowed to inherit land left by landholder

The study also found out that traditional leaders (chiefs) and family heads were on forefront in protecting the land rights of widows and orphans in the study area.

7.2. Recommendations

NAPHAM, THAO and NAC should lobby for improved ability for HIV and AIDS affected households to have secure access to land to avoid land loss through registration of customary land.

NAPHAM, THAO and other Non-Governmental Organizations working on land related issues should call for changes in land inheritance laws to allow the remaining spouse(s) and orphans to inherit land left by landholders.

Traditional leaders should be trained on how to handle land inheritance disputes and other land related disputes because they play major role in protecting land rights of orphans and widows.

Similar study should be conducted but targeting the HIV and AIDS affected household heads that are not members of the support groups. The results may be different because this particular research only targeted special group of HIV and AIDS affected household heads those that were members of HIV and AIDS Support Groups.

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APPENDICES

Appendix A: Household Questionnaire

The Impact of HIV and AIDS on Accessibility to Land under Customary Tenure
in Malawi. A case of Mzimba and Lilongwe Districts

Household Identification

Name of Respondent_____

Household Category_____

Extension Planning Area / Group Name_____

District _____

ADD_____

Date of interview_____

Enumerator_____

A. SOCIO-ECONOMIC CHARACTERISTICS OF THE HOUSEHOLDS

1. Sex of household head [1] Male
[2] Female
2. What is the age of household head? _____(Years)
3. What is the Marital Status of household head?
[1] Never married
[2] Married
[3] Divorced
[4] Widow/widower
[5] Separated
4. Marriage system
[1] Patrilineal
[2] Matrilineal (if [1] go to 6)
5. Household head is under
[1] Chikamwini [2] Chitengwa
6. What is the level of education for the household head? _____(Years)
7. What is the total size of the household? _____ (Number of people living under same roof, under same household head)
8. What is the main occupation of the household head? (single response)
[1] Farming
[2] Wage employment,
[3] Farm-ganyu (casual labour)
[4] Non-farm ganyu,

[5] Business

[6] Others (Specify) _____

9. What position do the household head hold in the society?

[1] None

[5] committee member

[2] Chief

[6] political member

[3] VDC chairperson

[7] volunteer

[4] Chief Councillors

[8] others (specify) _____

B. LAND ISSUES

11. Total land owned and cultivated by the household

Plot No.	Plot Size (acres)	Area cultivated last season/ plot (acres)
1		
2		
3		
Total		

12. Has your household lost land in the past 3 years?

[1] Yes

[2] No

13. If yes, how much land has your household lost in the past three years? ____Acres

14. Is there any noticeable increase in land loss in last three years in your community? [1] Yes [2] No

15. If yes, what are the factors that led to increases to land loss in the past three years?

[1] Reallocation of land due to death of household head

[2] Incidences of land sales

[3] Land grabbing by relatives

[99] N/A

[6] Others (Specify) -----

16. Do you think that chronic illness is contributing to land loss? [1] Yes [2] No

17. When is a household more likely to lose land?

[1] Landholder is chronically ill

[2] Spouse of landholder is chronically ill

[3] Child of landholder is chronically ill (*child living in that household*)

[4] Others (specify) _____

18. What are the main reasons to why chronic illnesses lead to land loss?

[1] Labour is diverted to caring for the sick and if land remains fallow.

[2] Death of household head leads to reallocation of land

[3] Lack of capital as funds are diverted to caring for the sick.

[4] Others Specify_____

19. What are the copings strategies employed by households to avoid losing their land? (*Multiple responses*)

[1] Selling land before losing it

[2] Renting out their land

[3] Always farm the land by sharecropping arrangements

- [4] Widows Remarry /orphans Marry
- [5] Leasing out their land
- [6] Lending land to neighbours
- [7] Always farm the land by using permanent employees
- [8] Always farm the land by using casual labourers
- [9] Always farm the land by using school going children
- [10] Other Specify_____

20. What are the major problems associated with strategies mentioned above?

(Multiple answers)

- [0] No problem with the strategy above
- [1] Orphans and widows are deprived of land for farming
- [2] Land will be in hands of few worthy individuals
- [3] Increase in HIV and AIDS cases
- [4] Loss of land due to floating of the rules of agreements between to parties
- [5] Others specify_____

C. LAND INHERITANCE, SECURITY AND LAND RIGHTS

21. Is your land registered? [1] Yes

[2] No

22. If yes, when was your land registered? _____ (Year)

23. Under whose name is the land held/ registered

- | | |
|-------------------------|---------------------------|
| [1] Head of household | [4] First-born son |
| [2] Spouse | [5]Others (Specify) _____ |
| [3] First-born daughter | |

24. Why did you register your land?

[1] To secure the land

[2] Because every body in this area was registering his/ her land

[99] Not applicable

[3] Others (specify) _____

25. Do you feel like your land is secure? [1] Yes

[2] No

26. If yes, what makes your land secure?

[0] Land is registered

[3] Owner has position in society

[1] Land is under forest cover

[4] Owner related to the Village

[2] Land has permanent

Headman

structures

[5] Always farm the land

[6] Others (specify) _____

27. Does everybody in this community have equal access to land? [1] Yes [2] No

28. If no, which group of people is marginalised?

[1] The chronically ill

[4] Youth

[2] The disabled

[5] Widowed

[3] Women

[99] N/A

[6] Others (Specify) _____

29. Are orphans allowed to inherit land even when the deceased parent or parents die without a will? [1] Yes

[2] No

30. If no, what happens to land when the head die without leaving a will?

[1] Orphans take control of the Land

[2] Relatives Grab land

[3] Land is taken by traditional leaders and redistributed

[4] Land is left idle

[5] Land is sold

[6] Land is rented out

[7] Others (Specify) _____

31. Are spouses allowed to inherit land even if the head dies without leaving a will?

[1] Yes

[2] No

32. If no, what happens to land when the head dies without leaving a will?

[1] Spouse takes over control of the Land

[2] Relatives Grab land

[3] Land is taken by traditional leaders and redistributed

[4] Land is left idle

[5] Land is sold

[6] Land is rented out

[7] Others (Specify) _____

33. Who is the customary heir of your land?

[1] First-born son

[2] First-born daughter

[3] Uncle

[4] Parents

[5] Brother to the landholder

[6] Others (Specify) _____

34. Who helps in protecting the land rights of surviving spouses and children?

[1] Chiefs

[2] Family Head

[3] Any adult member

[4] Others (Specify) _____

35. Can a woman hold title to land regardless of marital status?

[1] Yes

[2] No

36. If no, provide a reason for your response

[1] Inheritance laws deny unmarried women to any right to own land

[2] They are still dependents under control of their parents

[3] Inheritance laws do not permit women to own land

[4] Others (specify) _____

37. Can an orphan hold title to land? [1] Yes

[2] No

38. If no, provide a reason for your response

[1] Inheritance laws deny orphans/ children to any right to own land

[2] They are still dependents under control of their surviving parent or relatives

[3] Others (specify) _____

39. What are the land inheritance laws that govern land reallocation in your area after death of landholder?

[1] Uncles are customary heir of land

[2] Parents of landholder

[3] Male children and male relatives of the landholder

[4] Female children and female relatives of the landholder

[5] Spouse is the customary heir of the land through children

[6] Brother to land holder

[7] Others (specify) _____

40. What do you think are the major problems associated with the land inheritance customary laws mentioned?

[1] Rights of orphans and widows to land are greatly violated

[2] No problem

[3] Others (specify) _____

41. What are other customary rules that govern land allocation in your area?

[1] Land is distributed by family head to family members

[2] Land is distributed by traditional leaders to members of the community

[3] Others (Specify) _____

42. What are some of the major problems associated with the customary laws above?

[0] Encounter no problem

[1] Land is being given to new comers

[2] Land selling by traditional leaders and family heads

[3] Biasness in land distribution

[4] Others (specify) _____

43. What are the some common experiences faced by orphans in relation to land rights?

- [1] They are not allowed to inherit land
- [2] They are forced to marry to inherit land.
- [3] Relatives grab the land and they are given small portions.
- [4] Allowed to inherit land
- [5] Others (Specify) _____

44. What are the some common experiences faced by the Widowed in relation to land rights?

- [1] They are not allowed to inherit land
- [2] They are forced to remarry to inherit land.
- [3] They are forced to go to their respective original homes soon after burial of household head (land holder)
- [4] Relatives grab the land and they are given small portions.
- [5] Allowed to inherit land
- [5] Others (Specify) _____

45. What do you think should be done to solve the land related problems in your area?

- [1] Call for changes in inheritance laws to allow the remaining spouse and orphans to inherit land
- [2] Registering of customary land
- [3] Customary land sales should be prohibited by law attached with strong penalties
- [4] Civic educating traditional leaders on how to handle land related disputes
- [5] Others (Specify) _____

D. LAND DISPUTES AND LAND SALES

46. Do problems of land disputes occur in your area? [1] Yes

[2] No

47. If yes, who is responsible for settling land disputes in your area?

[1] Chiefs

[2] Family head

[3] Any adult member of the family

[4] Others (specify) _____

48. Is there any noticeable increase in land disputes over the last 3 years?

[1] Yes

[2] No

49. Which categories of people are more involved in the land disputes?

[1] The chronically ill

[4] Men

[2] The disabled

[5] Youths

[3] Women

[6] Elderly

[7] The Widowed

[8] Others (*specify*) _____

50. What factors have led to these increases in land disputes?

[1] Overpopulation

[2] Incidences of land sales

[3] Corruption by chiefs

[4] Chronic illness

[5] Biasness in land distribution

[6] Others (specify) _____

51. Do incidences of land sales occur in this area?

[1] Yes

[2] No

52. Who are responsible for these land sales?

[1] Village Headman

[2] Household head

[3] Spouse

[4] Relatives

[5] Others (Specify) _____

53. Is there any noticeable increase in cases of land sales in your area?

[1] Yes

[4] Chronic illness

[2] No

[5] Increase in new comers

[3] Poverty

54. What are some of the factors that have contributed to increase in land sales?

[1] Overpopulation

[4] Chronic illness

[2] Love of money

[5] Increase in new comers

[3] Poverty

[6] Others (specify) _____

E. AGRICULTURE

55. What type of crops do you grow?

[1] Maize

[5] Cassava

[2] Groundnuts

[6] Beans

[3] Tobacco

[7] Soybeans

[4] Sweet potatoes

[8] others (Specify) _____

56. What type of Livestock do you keep?

[1] Cattle

[4] Poultry

[2] Goats

[5] Rabbits

[3] Sheep

[6] Pigs

Appendix B: Interview Guide for Traditional Leaders

Land issues

1. Are there any incidences that land remains idle in your area?
2. Is there noticeable increase of land remaining idle due to chronic illness?
3. What action is taken by traditional leaders to land that remain idle? Does the rule apply even for the households that are affected by chronic illness?
4. Do HIV and AIDS affected household have land related problems in this area?
(Probe if they are losing out their land)
5. What strategies do affected households' employ to avoid losing their land?
6. What strategies do you use to protect HIV and AIDS affected from losing their land?
7. What really happens to land:
 - When the titleholder /land owner dies leaving the spouse?
 - When both parents dies and leave young children (Under 18 years)
8. What are the rights of orphans to the land if both parents die?
9. Can a woman/man hold title regardless of marital status?
10. Are here incidences of land sales in this area?
11. If yes, who is buys Land?
12. In the past three, would you say land sales are increasing, decreasing or the same?
13. If there are increases, how would you account for these? Would you say these have any thing to do with chronic illness (Probe)

Appendix C: Checklist for Community Members (Men, Women and Youths)

Knowledge of HIV and AIDS

1. What are the most serious problems facing the community at present?
2. Is chronic illness a serious problem among the community members? Which diseases are common?
3. If HIV and AIDS is not mentioned, do you think HIV and AIDS is contributing to chronic illness?
4. If yes, which categories are mostly affected by HIV and AIDS?
5. Are there any efforts by community/extended family members to assist families affected by chronic illness?
6. How do they help?

Land issues and HIV and AIDS

1. What happens to land,
 - When both parents die and leave children under the age of 18?
 - When household head dies and leaves behind spouse?
2. What are the rights of orphans to land?
3. Can a woman/man hold title to land regardless of marital status?
4. Do you think a household maintains the previous land holding sizes?
 - When household head is chronically ill?
 - When one of the adult members dies?
 - When any member dies?
5. Are there incidences of land sales in this area?
6. Who is buying Land?

7. In the past three years, would you say land sales are increasing, decreasing or the same?
8. If there were increases, how would you account for these? Would you say these have any thing to do with chronic illness (provide specific examples)
9. What can be done to solve the land related problems in your area?

Appendix D: Areas visited in Mzimba and number of households interviewed

<i>Support Group</i>	<i>Non-affected</i>	<i>Affected</i>	<i>Total</i>
Zuwanyumo	18	18	36
Raiply	6	6	12
Chaleza	10	10	20
Katete	12	12	24
Ehleheni	14	14	28
Bulala	11	11	22
Boma	19	19	38
Total	80	80	160

Appendix E. Areas visited in Lilongwe and Number of Households Interviewed

<i>Support Group</i>	<i>Affected</i>	<i>Non-affected</i>	<i>Total</i>
Kamphata	11	11	22
Nathenje	10	10	20
Chawantha	18	18	36
Chileka	34	34	68
Nsundwe	24	24	48
Nkhukwa	<u>8</u>	<u>8</u>	<u>16</u>
Total	105	105	210

Appendix F: Means of socio-economic characteristics of household heads in the study area

Variable	Non-affected Households (n=185)	Affected Households (n=185)	Total (n=370)
Age of household head	42.44	40.59	41.5
Education level	6.21	6.57	6.39
Household size	4.64	5.34	4.99
Land owned in hectares	1.33	1.279	1.305
Land cultivated in hectares	1.22	0.959	1.089

“ It could be said that AIDS pandemic is an own goal scored by human race against it self. Princess Anne Ireland