VULNERABILITY, POVERTY AND HIV/AIDS IN BAWKU EAST MUNICIPALITY OF NORTHERN GHANA

By

Sundong Samuel Natonaah

Final thesis work submitted to the Department of Geography, Norwegian University of Science and Technology for the award of Master of Philosophy in Development Studies

May 2005
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May 2005
DECLARATION

I certify that except for the references cited and duly acknowledged, this work is my own original attempt and that it has not in whole or in part been presented for an award of any kind any where.

Samuel Natonaah Sundong
May 2005, NTNU
Trondheim, Norway
DEDICATION

To the loving memory of Mr. John Natonaah Sundong my dear father.

Barely ten years ago (22nd November 1995) you passed away quietly like a gentle breeze but like a squall you left in your trail many a broken heart that time alone can heal.

Fondly remembered by your family through this work.
ACKNOWLEDGEMENTS

This study is my own attempt to contribute knowledge towards HIV/AIDS and poverty in Bawku East municipality. I sincerely acknowledge the efforts of all those who contributed in diverse ways to the successful completion of this thesis. I wish to acknowledge the protection, guidance and the invaluable support of the All-powerful God for my education and everything in life. This thesis would not have been possible without your design. I will always sing your praises, LORD.

I am also full of gratitude to my supervisor, Associate Professor Stig H. Jørgensen for his source of inspiration, guidance, complete attention and constructive criticism that have guided my thinking to the successful development of the ideas featured in this thesis. I am grateful to the staff at the Department of Geography at NTNU particularly Professor Raghild Lund who provided very useful insights during progress meetings and was a mother to us all. In you I often remembered my own mother back in Ghana. To Markus Steen and Jorunn Reitan thanks for assisting me with all administrative issues leading to my successful completion of the course.

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No acknowledgements of debts incurred in the course of research would be complete without mention of the support and assistance provided by Mr. David P. Nar-ire of BEMA, Mr. Apusiga Osman, a focal person in-charge of HIV/AIDS at BEMA, Mr. Issaku Bukari, a Programme Officer in-charge of HIV/AIDS at BEWDA, Mr Zangina of BEWDA, Mr. Seidu Umar Sanda, Youth vrs HIV/AIDS Programme Coordinator, Jude Aasoglenang and all organisations and individuals for furnishing me with information that were highly needed for the completion of this work. Much fervent thanks also go to my course mates and fellow students from Ghana at Moholt.

To my family, friends and all those who have laboured with me in the production of this thesis, I wish to express my heartfelt thanks. “Ye Nwin sung tiziaa” (God bless us all).
ABSTRACT
This is a study about vulnerability and risk of HIV/AIDS in Bawku East municipality of northern Ghana. The main objective of the study is to examine poverty as a likely determinant of HIV/AIDS. It also includes other factors which are contributing to the risk of HIV infection in the municipality.

The study makes use of concepts and perspectives linked to the risk theory, the human disease ecology model and ideas generated from structuration, diffusion theory and place and time.

The triangulation approach which encompasses multiple methods of data collection included questionnaire administration covering a purposive sample of 120 respondents, 12 in-depth interviews, focus group discussions and observations. Primary data was complemented with secondary data from Ghana sentinel HIV/AIDS data, statistics on PLWHA in Bawku and other sources of data.

The relationship between poverty and HIV/AIDS is complex. The prevailing poor conditions have led to various ways of coping with life. The study reveals that such livelihood strategies might catapult the risk of infection of HIV/AIDS among the vulnerable. Women are more at risk and are likely to adopt risky sexual behaviours that could put them in high positions for infection. The study reveals that women’s socio-economic dependence on men constrains them in negotiating protective sex.

The study further reveals that there are a wide range of cultural beliefs and practices that fuel the spread of HIV/AIDS in Bawku. The high value placed on marriage and the recognition of many children, widow inheritance, arranged marriages, bridal dowry, polygamy, female circumcision and religious beliefs in particular weaken the autonomy of women and deprive them the rights to decision making in the household. Early initiation of sexual intercourse and the number of sexual partners involved is also reported to be very high. A regression analysis performed on possible variables indicated significant positive association between age and personal monthly income with multiple sexual partners. It is recommended that HIV/AIDS prevention programmes should not only promote condom use but also initiate projects that will address the socio-economic, religious and cultural issues that entrap people putting them at greater risk of HIV infection.
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<td>Asian Disaster Preparedness Centre</td>
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<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
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<td>ASIP</td>
<td>Agricultural Sector Infrastructural Programme</td>
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<td>BEDA</td>
<td>Bawku East District Assembly</td>
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<td>BEMA</td>
<td>Bawku East Municipal Assembly</td>
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<td>BEWDA</td>
<td>Bawku East Women Development Association</td>
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<td>CSM</td>
<td>Cerebro Spinal Meningitis</td>
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<td>FGD</td>
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<td>FGM</td>
<td>Female Genital Mutilation</td>
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<td>GDHS</td>
<td>Ghana Demographic Health Survey</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GLSS</td>
<td>Ghana Living Standard Survey</td>
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<td>GNACP</td>
<td>Ghana National AIDS Control Programme</td>
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<td>GPRS</td>
<td>Ghana Poverty Reduction Strategy</td>
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<td>GSMA</td>
<td>Ghana Social Marketing Foundation</td>
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<td>GSS</td>
<td>Ghana Statistical Service</td>
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<td>HIPC</td>
<td>Heavily Indebted Poor Countries</td>
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<tr>
<td>HIV</td>
<td>Human Immuno-deficiency Virus</td>
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<td>ISSER</td>
<td>Institute of Statistical Social and Economic Research</td>
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<tr>
<td>JHU/PCS</td>
<td>John Hopkins University/Population and Communication Services</td>
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<td>JSS/SSS</td>
<td>Junior Secondary School/Senior Secondary School</td>
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<td>MOH</td>
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<td>NGO</td>
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<td>PAMSCAD</td>
<td>Programme of Action to Mitigate the Social Cost of Adjustment</td>
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<td>PLWHA</td>
<td>People Living With HIV/AIDS</td>
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<td>PSI</td>
<td>Presidential Special Initiative</td>
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<td>SIF</td>
<td>Social Investment Fund</td>
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<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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<td>STD</td>
<td>Sexually Transmitted Disease</td>
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<td>UNAIDS</td>
<td>The Joint United Nations Programme on HIV/AIDS</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>VIP</td>
<td>Village Infrastructural Programme</td>
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CHAPTER ONE: GENERAL INTRODUCTION

1.1 BACKGROUND
There is no doubt that the HIV/AIDS epidemic which emerged in the early 1980s has now become a global phenomenon. Statistics globally show that about 60 million people have been infected with the virus that causes AIDS since the disease was detected. By the end of 2001, an estimated 40 million people were living with HIV and of this number, 950,000 are living in Western Europe, 1,000,000 in Central Europe and Central Asia, 1,000,000 in East Asia and the Pacific, 500,000 in North Africa and the Middle East, 5.6 million in South and South-East Asia, 28.5 million in Sub-Saharan Africa, 1.5 million in Latin America and lastly, 15,000 in Australia and New Zealand. By the end of 2002, about 42 million people were estimated to be living with HIV as over 20 million people had already died from AIDS (UNAIDS 2002).

Even though there is no region in the world today which has not been affected by this disease, AIDS is first and foremost an African tragedy. It is in Sub-Saharan-Africa that the disease is most pervasive. With less than 8 percent of the world’s population, the region encompasses an estimated two-thirds of the global reported cases (UN Population Institute 2001; UNAIDS 2001). This high prevalence rate of HIV/AIDS on the African continent is a source of worry to many development thinkers. Whilst the devastating impact of AIDS is generally felt throughout the African continent, considerable variations exist among and within countries. The region is now home to 29.4 million people living with HIV/AIDS (UNAIDS 2003). At the initial stages of the epidemic in the 1980s, the disease was highly pronounced in the so-called “AIDS Belt” of Central and Eastern Africa which encompass Tanzania, Kenya, Zambia and Uganda (Agyei-Mensah 2001). In the 1990s the disease began to spread seriously southwards to Botswana, Malawi and South Africa and westward to countries such as Cote d’Ivoire, Burkina Faso, Ghana and Togo. In Botswana for instance, the proportion of adults living with HIV has more than doubled over the past five years, to the point that it now has the highest infection rate in the world at 38 percent (UNAIDS 2003:17).

The first HIV/AIDS case in Ghana was recorded in 1986, mainly among female prostitutes returning home from the neighbouring Cote d’Ivoire. According to Agadzi (1989), AIDS was imported into the country primarily by female prostitutes in neighbouring Cote d’Ivoire (Agadzi 1989). Decosas et al. (1995) observe that more than half of all professional prostitutes in Abidjan are Ghanaian, many of whom originate from the Krobo tribe in the
Eastern Region of Ghana (Decosas et al. 1995). By the end of December, 1999, a cumulative total of 37,298 cases had been recorded. In Ghana nearly 90 percent of the cumulative AIDS cases from 1986-1999 were between 15-49 years of age, with 63 percent of all reported HIV/AIDS cases being females. The number of reported accumulated prevalence cases stood at 41,229 at the end of September 2000. Out of this number, 25,753 are females and 15,476 are males (Oppong and Agyei-Mensah 2004). The female-to-male HIV/AIDS infection ratio is, however, approaching parity, changing from 6:1 in 1987 to approximately 1.67:1 in 2000. The peak ages for infection are 25-29 years for females and 30-34 years for males (www.ywto.4t.com/catalog.html 15.10.2003).

Research indicates that half of all new cases of HIV infection globally are among young people aged 15-24. In the extreme cases, the HIV virus is spreading fastest among people below the age of 24, with young women especially more susceptible and most of them do not know they carry the virus. Ankomah (1998) attributes this vulnerability of young females to their inability to negotiate condom use in premarital sexual exchange relationships (Ankomah 1998). In Ghana, the sentinel site at Agomanya in the rural Krobo area in the Eastern Region recorded 11.9 percent of all infected cases within all age groups for 1999 coming from the 15-19 age group. In the Adabraka site in the Greater Accra Region, the 15-19 age group recorded in the same way 5.2 percent. Percentages of 2.2 and 5.2 for the 15-19 age group were scored at the sites at Bolgatanga in the Upper East Region and Wa in the Upper West Region respectively (GNACP 2000).

HIV prevalence in the 15-49 age group in Ghana which rose from 2.7 percent in 1994 to 4.0 percent in 1998, is now estimated to be 4.6 percent (Oppong and Agyei-Mensah 2004). The Ghana National AIDS Control Programme (GNACP 1999) projects the average national prevalence rate to increase to 6.4 percent by 2004, 8.2 percent by 2009 and 9.5 percent by the year 2014 if the current trend continues (GNACP 1999). Today, even though the prevalence rate in Ghana is relatively low compared to most African countries, it is feared that the disease may explode if concrete strategies are not adopted to control the rate of the spread, since the epidemic continues to get worse instead of better.

Several hotspots of HIV are emerging. Prevalence of the disease is very high in mining towns like Obuasi, Tarkwa and Prestea, the port city of Tema as well as in the border towns of Bole and Hamile in northern Ghana (Oppong and Agyei-Mensah 2004). Interestingly, higher cases
are also observed in the new small scale mining areas, where young girls flood these areas to engage in prostitution with the result being the spread of the disease. Surprisingly, however, lower rates were found in the three northern regions of the country at the initial stage of its detection. Many researchers attributed the situation to dominance of the Islamic religion with its strict sanctions to promiscuity and widespread practice of circumcision (Gould 1993; Caldwell 1995). It is in this regard that it becomes very interesting to study the HIV/AIDS trend and development in northern Ghana. Indeed, these regions are the most deprived and poorest in Ghana. The illiteracy rate is also overwhelmingly very high. One therefore sees the region as a special risk area for infection. The increases in the cases of HIV in northern Ghana probably reflects the exodus of the youth into HIV/AIDS prone areas within Ghana and the cross-border migration to neighbouring countries for scarce greener pastures.

It is in this respect that the study seeks to examine the main reasons behind this increasing trend and development with main emphasis on the Bawku East municipality. More specifically, the main objective of the study is to examine poverty as a likely determinant of HIV/AIDS in the Bawku East municipality. The study further examines the cultural practices and beliefs of the population and their implications on HIV/AIDS in the Bawku East area.

1.2 STATEMENT OF THE PROBLEM

In 1997, more than 6.5 million Ghanaians lived in absolute poverty, and the poverty of 1.8 million people (about 28% of the 6.5 million Ghanaians) was described as hard-core (World Bank 1997). The proportion of the population classified as poor increased from 43% in 1981 to 54% in 1986 and 55% in 1997. It is most interesting to realise that even among these, there are regional as well as rural-urban variations. In fact, poverty in the national capital, Accra, tripled from only 7% in 1988 to 21% in 1992 (World Bank 1995). Boateng et al. (1992), research on *a poverty profile for Ghana*, concluded that in 1992, northern Ghana consisted of 22% of the total population of Ghana but accounted for 28% of total poverty (using the higher poverty line) and 31% of the very poor (using the lower poverty line).

Another group of researchers in 1997 argued that the entire Savannah Agro-ecological region of Ghana which mainly comprises the North contributed 12% of the total population of Ghana and had 56% of its population below the poverty line. The researchers therefore concluded that the Savannah Agro-ecological region mainly located in northern Ghana is the poorest
Poverty and other economic pressures on individuals constitute major factors in the spread of HIV/AIDS.

In Ghana, there are several differences between the South and the North. The north is overwhelmingly deprived in terms of natural resource availability and the provision of basic facilities in life. The social indicators show a high disease burden, low literacy levels and access to social services such as clean water, health and sanitation are limited particularly in the rural areas. Poor people therefore are likely to engage in more risky behaviours and lack access to health care resources that would lower their risk of contracting HIV. HIV/AIDS will therefore create a gap in the achievement of welfare or life quality due to the economic strain it is likely to exert on individuals, households and communities.

The very recent increases in the number of cases of HIV/AIDS in the north have opened a new chapter of thinking among health workers and policy makers. Polygyny has been increasingly identified to be closely associated with the spread of the disease (Kalipeni 1997). A break down in strict sanctions to offenders in recent years has lead to infidelity or extra marital relationships especially where there are multiple spouses. Undoubtedly, many researchers could fail to give a true picture of the HIV/AIDS situation in the North due to serious under-reporting. It is true that not all the cases of HIV/AIDS are reported in the area because of poor health care conditions, high cost of health care, non-use of modern health care, illiteracy, risk of shame and stigmatisation and the high use of traditional medicine.

Bawku East municipality is deprived in all aspects of political, economic and social commitments. Poverty and other economic pressures on individuals constitute major factors in the spread of HIV. The recent upsurge in cross border movements could possibly be linked to economic difficulties compelling many women along the borders to migrate to Burkina Faso and Togo to practice prostitution. In the Upper East Region for instance, where the study is located, population density is very high about 200 persons per square kilometres (Benneh et al. 1990). This state of affair contributes to food insecurity and poverty as well. Land holdings in the region are too small so that the food produced on one land cannot sustain a family up to the next farming season. Between the months of February and May every year, the weather also becomes so hot of about 42°C that provokes epidemics such as cerebrospinal-meningitis (CSM) and Yellow Fever break out, however, leading to deaths and further impoverishing the people.
These conditions compel especially the youth in the region to migrate to the southern parts of the country and neighbouring countries in search of better living conditions. Some get employed as farmhands, others as drinking bar attenders while some serve as porters. It is estimated that about one million youth especially girls from the northern regions are in southern Ghana alone engaged in menial jobs (www.ghanaweb.com 27.02.2004). They have no homes as they sleep in street corners and on people’s room verandas where they are sexually abused and some of them return to their home towns infected with the deadly disease HIV/AIDS making their conditions worst off. Therefore the magnitude and trajectory of the AIDS epidemic in Bawku East underlie one of the essences for this study (Craddock 2004).

It is evident that little research has been accomplished in assessing, examining and exploring the risk factors of HIV/AIDS in northern Ghana especially in the Bawku East municipality. The epidemic is therefore believed to be severe and continuing, thus the need to examine and document the evidence, trends, status and direction of HIV/AIDS in the Bawku East municipality and the attitudes and perceptions of people toward the disease.

1.3 OBJECTIVES
The special aim of the study is to examine poverty as a likely determinant of HIV/AIDS infection in Bawku East municipality. More specific emphasis is focussed on the following objectives:

1. To present some patterns of poverty and HIV/AIDS in Bawku East municipality.
2. To examine the levels and sources of HIV/AIDS knowledge and awareness in the Bawku East municipality.
3. To describe the risk perceptions of individuals in relation to their poverty situations, health and risk-taking behaviours.
4. To study the specific cultural practices, beliefs, actions and perceptions of the population and the implications these could have on the outbreak of HIV/AIDS.

1.4 CRITICAL RESEARCH QUESTIONS
In pursuit of examining poverty, vulnerability and their implications on the outbreak of HIV/AIDS, the following research questions are critically assessed.

- To what extent does poverty indicate the prevalence of HIV/AIDS in Bawku East municipality?
• What are the identified risky health behaviours and practices in the Bawku East municipality?

• What efforts and measures are put in place to create people’s awareness of HIV/AIDS in Bawku East municipality? Have individuals sexual behaviours changed as a result of these efforts and measures?

• To what extent has migration and the closer relations with neighbouring Republic of Burkina Faso and Togo influenced the transmission of HIV/AIDS?

1.5 RATIONAL OF THE STUDY

A choice of a relevant topic and research objectives are very necessary before the start of every research exercise. For me, my interest was skewed towards the environment and agriculture. My attention was however, drawn to this current topic by my supervisor who saw the possibilities in researching on the HIV/AIDS situation in northern Ghana where little research has been performed. Indeed, the recent increases in the number of HIV cases in northern Ghana have opened a new chapter of thinking among health workers and policy makers (Oppong and Agyei-Mensah 2004).

Upon accepting this challenge, I decided to choose the Bawku East municipality with only two reasons in mind. First the municipality serves as a border town between Burkina Faso and Togo. Studies by experts indicate that settlements closer to the borders have highest risk scores and are most vulnerable to the HIV/AIDS epidemic (Oppong 1998; Prothero 1996; Cliff and Smallman-Raynor 1992). Secondly, poverty levels in the Bawku East municipality are very high with accompanying lack of job opportunities. The able-bodied youth therefore migrate to neighbouring Cote d’Ivoire, Togo, Burkina Faso and the more endowed southern Ghana in search for employment. Hence the topic: Vulnerability, Poverty and HIV/AIDS in the Bawku East municipality of northern Ghana.

It is my fervent intention that this study shall serve as a spring-board to researchers who will venture into the area to make in-depth studies of the HIV/AIDS situation. Interestingly, the outcome of this study will supplement some of the existing literature in the HIV/AIDS circles and thus contribute to knowledge on HIV/AIDS in the Bawku East municipality. The study can further serve as a guide to NGOs, the Municipal Assembly, health officers and policy makers to formulate appropriate programmes for the control of diseases especially HIV/AIDS. The study is further a starting point to the recommendation suggested by Nabila
that more case studies should be commissioned to focus on specific localities, subgroups and districts in order to provide the light for effective and specific programme implementations.

1.6 ORGANISATION OF THE THESIS

The study is organized into eight chapters closely intertwined with issues on poverty, vulnerability and HIV/AIDS. Chapter one encompasses the background to the study and states the main problem of the thesis together with the objectives of the study. It highlights the rational of the study as well.

Chapter two examines the most relevant theoretical perspectives used as interpretative guides to the study. The main concepts such as HIV/AIDS, Poverty and Vulnerability have been operationalized as starting point to the chapter.

Chapter three reviews the methods used in the collection and analysis of the data. It discusses the methodological debates and gives justification for the combination of both quantitative and qualitative approaches. Chapter four gives a description of the profile of Ghana, poverty and HIV/AIDS situations and attempts at addressing these twin challenges. The description of Bawku East with regards to its location, physical, socio-economic and cultural conditions are inclusive.

Chapters five, six and seven demonstrate the main findings regarding the objectives and research questions of the thesis. Chapter five reviews the background characteristics of respondents according to certain variables. Other parts of the chapter look at secondary data on reported cases of people living with HIV/AIDS in Bawku East. Chapter six analyses the household concept, poverty and livelihood strategies in Bawku. Chapter seven looks at socio-cultural practices and beliefs and how these could fuel the spread of HIV/AIDS. Chapter eight contains the conclusion made on the study, summary of findings and recommendations.
CHAPTER TWO: CONCEPTS AND THEORETICAL FRAMEWORKS

2.1 INTRODUCTION
When you start making plans for your thesis, the choice of topic and the related theories are first and foremost. It is virtually impossible to do research without a theory. Theories can be used as interpretative guide to reality. Indeed, all research begins with some type of theory, even if that theory is crude. It is worthy of note that no single theory is capable of fully capturing the complexity of reality. Theory plays a crucial role in generating ideas. HIV/AIDS epidemic is a complex syndrome in which different researchers have expressed different opinions about. It is therefore very important to take into consideration a broad-range of explanatory theories to help explain the phenomenon especially in relation to poverty and risk taking behaviours.

Many researchers employ multiple factors from several theories to guide their research plans on health-related issues such as HIV/AIDS. For instance, research on HIV/AIDS in the first phase of the outbreak in the early 1980s used an individualistic behavioural approach. Strenuous efforts were made to examine the behaviours of individuals to identifying common features which might explain the spread of the disease. The behavioural approach allied to the epidemiological technique is now used together with the political economy models where more attention is paid to structural and often inequalities in power, wealth and status (Parker and Mailman 2001).

Gatrell (2002) observes that there is a wide-range of approaches employed by social scientists to study how disease and illness vary from place to place (Gatrell 2002). Firstly, the Positivist explanation emphasises via mapping and spatial analysis, what is observable and measurable based on which generalisations on a given population are drawn. The positivist approach has many of the characteristics of a natural science approach to investigation. In health context, such an approach seeks to uncover quantifiable factors and thus model the way in which disease incidence varies spatially (Gatrell 2002).

The social interactionists on the other hand, are concerned with recording of individual characteristics and emphasise what is less readily measured and quantified; the subjective experience of health and illness (Gatrell 2002). Aggleton (1990), refers to these approaches to study of health and illness as social interactionist (some use the term social constructionist).
They are so called, because meanings are constructed out of the interactions through conversations and encounters that we have in day-to-day life (Aggleton 1990). Geographers for sometime referred to these perspectives as *humanistic* because they address implicitly human beliefs, values, meanings and intentions (Gatrell 2002).

There is a third perspective called structuralist approach which suggests that the underlying causes of diseases are embedded in political and economic systems (Gatrell 2002). Indeed, explanations are not to be sought at individual level, for example the kinds of “unhealthy” behaviours they adopt; instead, it is the broader social context that matters. However, because of the stress on these macro-scale social, political and economic structures, this approach is often referred to as structuralism (Gatrell 2002). That is to explain that the social, economic, political and locality of a place is crucial in understanding the spread of HIV/AIDS.

My intention to use theories and concepts in this study of *Vulnerability, Poverty and HIV/AIDS in the Bawku East municipality of northern Ghana* is based on the nature of the study emanating from my objectives and set of research questions. In my choice of the study and the set of theories and concepts, critical thought is given to those theories and concepts which are very relevant and equally afford me the possibility of taking account of social, economic, cultural and environmental factors. In other words, the focus is on theories and concepts which understand and explain the possibilities to become infected with HIV/AIDS. Interestingly, strenuous efforts are taken to select theories and concepts which integrate the combined outcome of the population, behaviour, environment and the role of the national economy. The concepts and theories chosen are discussed below.

### 2.2 SOME KEY CONCEPTS IN THE STUDY

The three main concepts used in the study are HIV/AIDS, poverty and vulnerability. Except for HIV/AIDS which has widely been recognised as a health problem, poverty and vulnerability have no widely accepted definitions because different people perceive them in diverse fields of understanding. It is therefore considered very significant to clearly explain these concepts as they are used in the study.

**HIV/AIDS:** Clearly, these two acronyms are synonymous, HIV is the *human immunodeficiency virus*; the aetiological agent that causes AIDS (*acquired immune deficiency syndrome*) when blood from an infected person passes directly into another’s bloodstream,
and also through sexual intercourse. AIDS is then a disease in which the body’s natural protection or immune system is damaged allowing opportunistic diseases to finally take control of the body leading to death. The major symptoms of AIDS are weight loss, chronic diarrhoea and fever for more than a month, coughing for more than a month, widespread itchy dermatitis (inflammation of the skin), recurring shingles like Herpes Zoster and Candida (funga) infection in the mouth.

**Poverty:** The term poverty is a conundrum that means different things to different people in time and place. It has increasingly been very problematic in terms of definition and the variables needed to categorise the poor. Poverty is a term used to associate a status whereby people lack productive resources, household assets, little or no income, few livelihood opportunities and insufficient access to basic services such as health, education, water and sanitation. According to the UNDP (1999), poverty is weak endowments of human and financial resources, such as low level of education and few marketable skills hence generally poor health status and low labour productivity. Hesselberg (1993) identifies three categories of poverty: food poverty, subsistence poverty and relative deprivation. Food poverty refers to absolute poverty or starvation poverty, subsistence poverty to a basic need concept and relative deprivation to social coping or participation.

Poverty could be a pre-condition for getting infected with HIV. Even if the poor understood how to adopt recommended behaviours, poverty in all its forms will not allow the poor to protect themselves from HIV/AIDS. Hard livelihoods are factors resulting in people becoming isolated from traditional cultures and social networks as they look for jobs. In their areas of destination, people often engage in risky sexual behaviours. Obviously, many of the poorest are women who often head the poorest households. Commercial sex transactions become the only alternative as survival strategy for themselves and their families. Furthermore, because of poverty, young girls have sexual relations with men who are older than them and deemed to have the resources to take good care of their needs. To increase their chances of having enough means to satisfy their needs, most of them have several sexual partners at the same time.

Poverty is the main cause of frequent migration of the youth into the more endowed south and neighbouring Burkina Faso, Cote d’Ivoire and Togo for non-existent jobs. Prothero (1996) has considered the possible effects of population migration on the transmission and diffusion
of AIDS in West Africa and concludes that there is a need for more research on the complex interactions of socio-economic, cultural and biomedical mechanisms (Prothero 1996). Factors accounting for the spread of HIV/AIDS in settlements closer to the borders include mobility and free cross border movements, based on distance from this area to Accra the capital city of Ghana, loosed immigration laws, and economic difficulties in Ghana as well as seeking for adventure and new experiences.

Poverty as used in this study is of both absolute and relative terms referring to material deprivation, place poverty and individual or community lives characterised entirely by hardships. Poverty is widespread in Bawku and in the Upper East Region where every 9 out of 10 living persons live below the poverty line. Generally the constraint on food, cloth, shelter and access to services such as health, education, sanitation, clean drinking water and self-defence characterise the main aspects of poverty covered in the study.

**Vulnerability:** The term vulnerability has been employed by a large number of authors to refer directly to risk, and they have even used it to refer to disadvantaged conditions, especially in the social sciences (Bankoff et al. 2004). Generally people refer to the vulnerable group when they talk about the elderly, children and women. The basic question then is vulnerable to what? Vulnerability has therefore been defined in varied but not in contradictory ways. The Asian Disaster Preparedness Centre (ADPC) defines it as a condition which limits or reduces people’s ability to mitigate, prepare for, withstand, respond to or cope with a hazard (ADPC 2001). Vulnerability as featured in this study is simply weakness in the face of strong forces; it is susceptibility to HIV/AIDS. Vulnerability used here refers to a certain level of exposure to HIV/AIDS derived from the environment, socio-economic and cultural conditions of the individual, family or community concerned. Vulnerability is the lack of capacity to protect oneself and survive a calamity (Chambers 1989).

Women are easily recognised as a vulnerable group because they have the responsibility of satisfying their children’s needs as well as those of other members of the household. Again they have insatiable material needs and due to the difficult conditions of their life, they tend to depend essentially on men for economic assistance. Most married women in Africa depend entirely on their husbands for economic support. In times of hardships where the man is unable to meet the needs of the family, some women result in extra-marital sexual relationship
as a survival strategy. In such context, the decision to use condoms is a problem as economic constraints reduce their power to insist on protective sexual intercourse.

Moreover, being vulnerable to a disease also depends on the external constraints. The ability of an individual to adopt a safe and protected sexual behaviour could be linked to the pressure of the society. In recent times, particularly with urbanisation and the consequent rural-urban migration, the traditional system based on strong communal support such as the extended family system is weakened and result in loss of control over the youth. The individual therefore buoys up by a very strong feeling of autonomy, independence and invulnerability thus failing to recognise the risks associated to sexual activities. It has also been widely recognised that a variety of cultural practices and traditions increase people’s risk of HIV/AIDS infections. Some of these cultural practices and traditions relate to marriage practices, sexual practices, women’s status, rites of passage and beliefs in disease causations.

Potential vulnerability is manifest with the reuse of razor blades, scalpels and non-sufficient sterilisation procedures especially as practised by most traditional healers. Traditional healers perform non-medical operations involving skin piercing with unsterilised sharp objects putting patients at high risk of complications. Ear piercing with contaminated needles is also performed on people at homes under unhygienic conditions. Traditional birth attendants involve in cutting the navel string of newly born infants could also affect both mother and baby. Other crude practices such as male circumcision, the numerous barbering shops specialised in using one clipper to barber many people and the habit of giving tribal marks could heighten the infection if not checked at all.

2.3 THE ECOLOGY OF HUMAN DISEASE MODEL
The distribution of a disease can be understood in relation to its association to the environment. The ecology of human disease model shows a relationship between the living organisms’ physical and biological environments within which they interact, and the role of human cultural behaviour in the progress of the disease syndrome (Roundy 1987). In other words, the human ecology of disease has to do with ways by which human behaviour in its cultural and socio-economic context interacts with environmental conditions to produce or prevent disease among susceptible people.
The importance of the model to the study cannot be over-emphasised. The model gives a better understanding of what is influencing the transmission of HIV. Again the model can be used to examine and assess a population’s risk of contracting HIV/AIDS. Indeed, the disease ecology model is inherently integrative and synthetic and provides an illustration of the potential for geography to unite the physical and social worlds (Mayer 1990). Indeed, because of its emphasis on culture and the environment, the disease ecology also demands contextual understanding. The ecological model of disease clearly outlines three essential factors (environment, biology and behaviour) that affect health conditions in time, space and place. Figure 2.1 below is the diagram of the ecology of human disease model.

![Triangle Diagram of Ecology of Human Disease Model](source)

**Fig. 2.1 The triangle of Ecology of Human Disease Model**
Source: Erickson and Meade 2000.

Most of the theories discussed below borrow some ideas from the disease ecology model. Structuration theory talks about how both structural factors and the human environment can interact to influence human actions. For instance, the proximity of Bawku to other neighbouring Francophone countries known to have higher HIV infection rates, higher levels of poverty and the long dry season could influence easier HIV transmissions and infections.
Habitat (environment), Population and Behaviour form the vertices of a triangle that encloses the state of human health. The main principles of the model of ecology of human disease is most closely identified with Jacque May in 1958 and subsequently updated by others. Basic to the disease ecologic approach is the understanding of how humanity, including culture, society and behaviour; the physical world, including topography, vegetation and climate; and biology, including vector and pathogen ecology, interact together in an evolving and interactive system to produce foci of disease (Mayer 1996).

2.3.1 Environment/habitat

The environment or habitat is the part of the environment within which human activities take place. The environment includes factors such as physical, chemical, infectious and psychosocial stresses as well as health services and public health measures (Mayer 1990). Natural conditions, building structures, economical, social and cultural factors all combine to directly affect human life in place and time.

That HIV/AIDS is first and foremost an African pandemic is much associated with the environment. Most African governments even though have initiated significant efforts to creating public awareness of the disease, yet studies indicate upward adjustments in trend of the disease. The resources met to help control the disease are truly lacking in Africa. Poverty easily comes into mind when the issue of diseases are discussed in Africa. Factors under environment or habitat have been identified as culture, population mobility, urbanisation and poverty. Furthermore the social environment also includes the groups to which we belong, the neighbourhoods in which we live, the organisation of our workplaces and the policies we create to guide our lives. Indeed, evidence with respect to HIV/AIDS transmission suggests that environment influences HIV/AIDS pathways. HIV risk behaviour is influenced by factors at three levels; within the person, within the interpersonal relationships, physical and organisational environment and within the culture and structural factors. These three domains overlap to a certain extent and reciprocally influence one another to create situations of vulnerability (Eaton et al. 2003).

Interpersonal issues, physical and organisational environments relate to balance of power between partners in a relationship and the problems both perceive and access to reproductive services which is the responsibility of the government. Hence the interpersonal factors include negotiating condom use, poverty, male-dominated sexual relationships, peer pressure,
interactions with adults and ability to discuss sex publicly. The physical and organisational environments consist of lack of access to condoms, low access to the media, lack of health services and lack of recreational facilities. These factors might vary within time and place but of course more pronounced in the rural areas and thus put more people particularly adolescents in danger of making wrong choices with all its consequences.

From the above, it seems clear that the Bawku East municipality in the Upper East Region has had its share of the situation. The physical environment does not permit all year round agricultural activities and at the same time promotes disease incidence within particular periods of the year. The lifestyles of people are particularly interesting to study. Increased unemployment levels and reduced government services have been critical for the poor. The government in an attempt to safeguard public expenditure have eliminated consumer subsidies on basic food staples and public transportation, schools without teachers and textbooks, hospitals/clinics without medicine have combined to increase the poverty levels. Bawku is quite close to both Burkina Faso and Togo where smuggling is at its ascendancy in which various goods are smuggled within and without. Women especially those engage in cross-border trading in desperation engage in transactional sex in lieu of favours from government officials.

2.3.2 Population
Population has to do with the biology of the human body and also takes into account factors such as genetics, nutritional status, gender and age. HIV affects women more than men probably because of the morphology of the woman’s reproductive system. It is argued that sexually transmitted diseases particularly those that cause genital ulcers and sores heighten the HIV/AIDS infection among women. The woman’s low status in a society to a larger extent also determines her lack of power to negotiate for safe sex with her male partner.

Evidence also indicates that more than half of all HIV cases globally are among young people within the ages of 15-24. Young girls and boys are exposed to STDs when they get involved in sexual activities but the former are more vulnerable. It has been proven that young girls have regular sexual relations with older people for economic reasons (Calves 1996, Rwenge 2000). This kind of sexual activity has also been observed among young boys (Calves 1996). However, young girls run more risk in contracting HIV/AIDS than young boys as generally
they do not negotiate and do not insist on the use of condoms because of economic constraints (Rwenge 2002).

Another factor is nutritional status. The issue is that HIV itself does not kill but rather lowers one’s immune system thus making the body more susceptible to opportunistic diseases such as tuberculosis. Health officers therefore recommend adequate diet to infected people to build up the immune system. However, poverty and lack of information could deny some people opportunities to improving their situations.

2.3.3 Behaviour

Behaviour is the observable aspect of culture (Meade et al. 1988). It includes both non-material and material elements and objects held by a people who share distinctive way of life. It encompasses beliefs, traditions, cultural practices, population mobility, social organisation and technological innovations. The importance of population mobility within the HIV/AIDS pandemic is widely recognised. The link between migration and HIV/AIDS is related to the conditions and structures of the migration process, poverty, exploitation, separation from families and partners and from socio-cultural norms that guide behaviours in communities. Migration has been a catalyst in the rapid spread of HIV/AIDS because rather in desperations people compensate failures to secure jobs to commercial sex trade. The people of northern Ghana have a history of migration to southern Ghana for greener pastures right from the colonial era where northerners supplied labour to cocoa farms, mines and the building of the railway lines. The 1980’s economic hardships couple with the fall of Ghana as a leading producer of cocoa and the annex of Cote d’Ivoire of this august position saw many people migrating to Cote d’Ivoire.

The low cases of HIV/AIDS reported in northern Ghana could partly be explained within a variety of models. It could be attributed to strict cultural practices, the Islamic religion and fidelity and the social setting. A high concentration of the population is Muslim and thus the strict sanctions against promiscuity in Islam and the practice of male circumcision may limit the vulnerability of HIV/AIDS spread among the population. Northern Ghana is also relatively more traditional in outlook than other parts of Ghana. In the past, the north was isolated from the south; a pattern that was started by the colonial masters and continued to the present. As a result of this isolation, traditional patterns of marriage and religion still
predominate. Of late modernisation reflected in urbanisation, adoption of Western cultures and migration has changed the patterns of beliefs and practices to a greater extent.

Disease ecology is thus based on the concept that, for a disease to occur, it is necessary for some agent and host to come into mutual contact at the same time and in the same place (Mayer 1996). It therefore becomes essential to understand the social, cultural and political factors which influence diseases, the environmental characteristics which influence and frequently determine the nature of host-agent interaction; and the behavioural dimensions of individual or group susceptibility to diseases (Meade and Erickson 2000). Disease affects individual and group behaviour since time immemorial and remains true in contemporary pandemics such as AIDS.

2.4 RISK THEORY
Risk is a slippery concept and describes different ways of taking endeavours. Risk is thus understood in different ways in different disciplines (Yates 1992). For instance in economics, risk taking is very crucial as economists explain that every human being is rational and must dare to take risk. This acceptance to risk-taking has led to a popular saying that “No risks no gain”. To the economists, risk is thus opportunity cost; a sacrifice for an alternative gain. Risk is an opportunity whose returns are not guaranteed. In technology, risk is more threatening as rightly put by Yates (1992), risk is the existence of threats to life or health. In Medicine, risk is the chance of some adverse outcome such as death or the contraction of a particular disease.

In all indications, risk is a conundrum that cannot be attributed to a single phenomenon. It is viewed as a multidimensional concept that as a whole simply refers to the prospect of loss (Yates 1992). The idea of risk points to the presence of any possibility of danger (Carter 1995). However, it is worthy of note that risk is also the possibility of gains or profits (the economists view point) rather than just relegated to loss. Risk is thus commonly viewed as the likelihood of an unwanted event times the consequences of this event.

Risk is a routine part of every one’s life. Human beings can never be totally sure of the outcome of their decisions. All decisions are risky, hence all human beings engage in risk-taking, although the possible consequences in most cases may be relatively trivial than others. But there are more serious risk: those of accidents, injuries, substantial property damage, death, disease and physical disability. It is this serious risk that forms the consequences of our
daily actions, habits and lifestyles. We add to the probability of this risk daily by getting involved in various activities.

2.4.1 Risk Perception
Risk perception is one’s opinion of the likelihood of risk associated with performing a certain activity or choosing a certain lifestyle (Moller 2000). Simply put, risk perception means how people react to various types of risk and these reactions have a number of dimensions. Our perception of risk is often influenced by what we feel in control of a perceived risk. In the case of HIV/AIDS, certain lifestyles such as having multiple sex partners and unprotected sex are viewed as risk behaviours. Health experts have continually designed strategies and warned people against these attitudes but the outcome of these warnings depend on the risk perception of individuals and the level of risk tolerance people can afford.

In relation to HIV/AIDS, the socio-psychological literature on health related behaviour emphasises the perception of being at risk of HIV/AIDS infection as one of the reasons for the prescription of acceptable health behaviour amongst vulnerable people. Sensitivity to risk depends also on other factors than knowledge of infection mechanisms and behaviour, as individual awareness of HIV/AIDS and the perception of the general health status (Rene 1997). There is also a view that individual risk assessment influences the perceived value attached to the consequences of actions and to the balance of gains and losses behavioural choices imply. If the magnitude of potential loss is perceived as small enough, then the acceptability of undertaking the action is higher (Bernardi 2002). The readiness to take risk is based upon people’s perceived susceptibility. Thus if people know the dangers of HIV and are educated that avoidance of sex, faithfulness to one’s sex partner and use of condoms are the safest ways of avoiding HIV, people are more likely to exercise restrain.

Risk perception related to HIV/AIDS is dependent on a range of factors. However, individual risk perception to start with has to do with the capability to assess the relationship between behaviour and the modes of transmission of HIV/AIDS. Strategies are thus designed and disseminated through appropriate media to inform people about the modes of HIV/AIDS transmission and safety control measures. Individual risk perception is further dependent on the perceived control of his or her capability to take preventive control against HIV/AIDS and actual behaviour. Risk perception is again affected by the degree of control people have on
their behaviour. Wilde thus contends that although people have uniform information about the risky nature of an activity, yet perceived risk is not uniform (Wilde 1994, 2002).

Finally risk perception has to also do with what people in an environment conceive about a particular activity and the influence of that activity over their lives. A society’s ability to accept information on HIV and its prevention measures is more likely to reduce the risk of contracting HIV/AIDS than one that is adamant to changes. In Ghana and some parts of Africa, diseases whose aetiology cannot easily be explained have been given supernatural explanations. Appiah-Kubi (1981) cited in Awusabo-Asare and Anarfi (1997) that diseases of such nature may be attributed to the commission of an offence against one’s spirits, the ancestors or gods or an omission of duty on the part of an infected person. It could also be attributed to a curse from a jealous neighbour, co-wife and even a family member or somebody who has been wronged. Such explanations of disease causation in Africa make it difficult for some people to accept HIV/AIDS as a disease caused by a virus via sexual intercourse.

2.4.1.1 Health Belief Model (HBM)

The Health Belief Model is one of the most used frameworks in health behaviours. It was initially developed by Rosenstock in 1966 to explain preventive health measures and updated by Becker (1974) to explain a variety of health behaviours. According to the HBM, individuals are automatically aware of the consequences of their actions and will take the necessary measures to prevent the consequences if they consider themselves susceptible to the condition, if they believe their actions have potential consequences, if they believe that there is a measure for them that would be beneficial in either reducing their susceptibility to or the severity of their actions, if they believe that they can successfully take that measure and if they believe that the anticipated barriers to or the cost of taking the action are outweighed by the benefits obtained (Strecher and Rosenstock 1997).

The Health Belief Model (HBM) has five main components. The first is *perceived susceptibility* which is a person’s opinion of the likelihood or chance that he/she will get a disease. Obviously one feels vulnerable to HIV infection if he or she identifies a particular sexual behaviour as high risk. The second component is *perceived severity* which is a person’s opinion of how serious the consequences of taking a particular action could be. The third component is *perceived benefits*. This is a person’s belief regarding whether taking a
particular action will reduce the disease threat. The fourth is perceived barriers referring to potentially negative aspects of taking a particular health action and may act as a barrier to undertaking the recommended behaviour. In the case of HIV/AIDS, some of the perceived barriers might be poverty, outrageous cultural beliefs and practices, embarrassment, denial and discrimination. The last component is that of cues to action which include cues that trigger certain behaviours such as posters, media publicity, illness of a family member, educational campaigns and warnings from health professionals (Strecher and Rosenstock 1997). The idea is that what the society considers as risky behaviour influences the individual’s behaviour accordingly. A recent addition to the HBM is that of self-efficacy. This is the conviction that one can successfully execute the right behaviour required to prevent a disease (Bandura 1977). A lack of self-efficacy can become a perceived barrier to taking a particular health action.

The importance of the HBM cannot be overruled in the HIV/AIDS circles. The model first identifies a vulnerable population, who feel susceptible to AIDS, believe that it constitutes a serious health threat and that the threat could be drastically reduce by changing their sexual practices and risky behaviours. In the area of HIV/AIDS prevention, the model offers a valuable measure that if one is working with an at-risk population who does not perceive their behaviour as a health risk, the first step would be that of helping them to identify the behaviour as risky before trying to intervene on a more behavioural change. It is important to deal with the perceived barriers by helping to identify and reduce them through offering reassurance and support, correcting misinformation and providing incentives and other assistance.

2.4.2 Risk Homoeostasis

The risk homeostasis theory maintains that, in any activity, people accept a certain level of subjectively estimated risk to their health, safety and other things they value, in exchange for benefits they hope to receive for that activity be it sexual intercourse, drinking, drug use, sports, work and recreation (Wilde 1994, 2002). People therefore seek to optimise rather than completely eliminate the risk faced in their routine lives.

In any ongoing activity, people continuously check the amount of risk they are exposed to. They then compare this with the amount of risk they are willing to accept, and try to reduce any difference between the two to zero. Thus, if the level of subjectively experienced risk is
lower than is acceptable, people tend to engage in actions that increase their exposure to risk. If however, the level of subjectively experienced risk is higher than acceptable, they make an attempt to exercise greater restrain.

Indeed, people will decide on their future actions accordingly, and these actions will produce the subsequent rate of human-made mishaps. Human beings are rational and would accept to take a higher risk activity for an expected benefit in the short-run rather than taking into cost the long-run consequences. Thus, a closed association is formed between past and present, and between the present and future. Eventually, the human-made mishap rate essentially depends on the amount of risk people are willing to accept. That is true with sex which is pleasurable and while in it one turns to forget that one can contract HIV/AIDS or any dreaded STDs.

2.4.3 Risk Assessment

Individual risk assessment influences the perceived value attached to consequences of actions and to the balance of gains and losses behavioural choices may imply. Obviously, if the magnitude of the potential loss is perceived as small enough then acceptability of undertaking the action is higher (Bernardi 2002). Risk Assessment relies on probabilistic reasoning (Carter 1995) meaning that individuals may take greater risk with more benefit today than minimised risk with less benefit that could occur in the future.

In assessing risk, we do realise that emphasis is placed much often on those at risk than the factors that place them at risk higher (Kronick 1997). For instance, it is generally agreed that poverty and other economic pressures on individuals constitute major factors in the spread of HIV. Poor people are more prone to risk taking behaviours due to their poverty. The poor may be aware of the risk involve in practicing unsafe sex but lack the resources to depend on and thus may not have control over negotiating protective sex trade. As the study tends to examine poverty as a likely determinant of HIV infection, emphasis is not placed only on the forces that contribute to and sustain poverty but rather the underlying factors that contribute to sustained victimisation.

Bio-medical approaches provide risk assessments relating to trajectory of AIDS in general epidemiological terms and relate the likelihood of infection of HIV to engagement in specific risk practices with an infected person. These approaches thus make individuals their own
experts in risk assessment for themselves. In the light of this Scott and Freeman argue that in the context of intimate relations, trust has become a symbolic solution to the risk of HIV infection (Scott and Freeman 1995).

2.4.4 Risk Tolerance
Risk is part of our every day life. Millions of people engage routinely, if not daily or even several times per day in risky activities. Obviously, the level of risk-taking differs from person to person and activity to activity. Every one has a different level of tolerance to risk. Risk tolerance implies a risk taking behaviour that when facing choices with comparable returns, agents tend to choose the less-risky alternative (Kronick 1997).

Risk tolerance is usually influenced by several factors; sex, age, experience, control and given situations. People who are relatively young are daring and could easily engage in adventurous sexual activities prone to risk than the elderly who are also at the same time much experienced. The youth during the process of transition from childhood to adulthood grows up in confidence, autonomy and feelings of invulnerability. At this stage, the youth could take personal decisions without permission of the adults. Also it is worthy of mention that the adolescent are more likely to exercise restrain when it comes to taking life-long risk. Control is all about believing in oneself and experience is what it takes. If a person identifies his or her sexual behaviour as being risky and thus vulnerable to HIV, experience shows that the person might exercise greater restrain or commit to engaging in low-risk behaviours. Drugs and alcohol can also lure people to engage in risky activities in given situations.

2.4.5 Risk Mitigation
More direct and frequent personal experiences of danger influence the amount of risk people expect to be associated with various activities, and with particular actions in these activities. The theory of risk homeostasis proposes that a nation’s temporal loss due to a lifestyle-dependent and behavioural disease is the output of a closed loop regulating process in which the accepted level of risk operates as the unique controlling variable. Consequently, if we wish to make an attempt at reducing this misery, that attempt should be aimed at reducing the level of risk accepted by the population. Therefore quoting Wilde “… People thus alter their behaviour in response to the implementation of health and safety measures, but the riskiness of the way they behave will not change, unless those measures are capable of motivating people to alter the amount of risk they are willing to incur” (Wilde 1994.5.).
All concepts of risk have a common element: a distinction between reality and possibility. If the future were predetermined or independent of present human activities, the term risk would have no significance. And if the distinction between reality and possibility is accepted, then the term risk signifies the possibility that an undesirable state of reality will occur as a result of natural events or human activities and behaviour. This implies that humans can make causal connections between actions and effects, and that undesirable effects can be avoided or mitigated if the causal events and actions are avoided or modified.

Health authorities have traditionally informed people about what they should or should not do to avoid HIV/AIDS without offering them motivation to reduce risk, without offering them a reason to live longer. It is obvious that a sure way to reduce HIV/AIDS infection to zero is to simply remain faithful to one’s sexual partner. It is almost as obvious that human beings by nature cannot be trusted. Sex is one of life’s most pleasurable activities that when in it one tends to forget the risk of contracting the disease until after the act. It is therefore not just enough to remain faithful but to abstain until it is of age to marry. Poor people, having no adequate resources and opportunities for earning a reasonable income, are more exposed to HIV. The impact of HIV on poor people is a factor in producing more poor people: poverty and HIV/AIDS can be considered as two sides of the same coin. Hence, attempts at addressing HIV/AIDS also necessitate addressing poverty. The vulnerable must be helped both socially and economically to enable them take the actions needed for full behavioural changes.

The risk theory therefore provides a medium through which people’s behaviour is understood in a given context. Beliefs and values influence the risk perception of people and thus inform the study about how beliefs and values of the population in Bawku East shape the risk perception about the spread of HIV. Moreover, it will be important to assess the efforts and measures put in place by various individuals and bodies in creating awareness of HIV and the need to adopt more acceptable behaviours.

2.4.6 The AIDS Risk Reduction Model (ARRM)
This theory proposes that individuals must go through three distinct stages before they are able to change their risky sexual practices. Labelling is the first stage where individuals must recognise and label their behaviour as high risk. Followed closely by commitment which indicates that individuals must make a commitment to reduce high risk sexual activity and
increase low risk activities. Finally *enactment* means people must seek and act on solutions directed on reducing these high risk behaviours.

Although this model is presented as a series of sequential stages, individuals may move through them in any order. The argument is that a number of personal, interpersonal and social factors may influence progression through these stages. People may identify the consequences associated with having multiple partners but poverty might prevent them from executing the appropriate behaviour. Poverty is thus a perceived barrier to sexual behavioural change in a very broader context.

The ARRM was developed by Catania et. al (1990) after carefully combining elements from various behavioural theories. The main aim of ARRM is to provide understanding on why individuals fail to progress over this change process. It provides the intervention strategies that facilitate movement across the stages, thereby helping to decrease risky sexual practices and the threat of HIV. The ARRM emphasises the importance of helping members of a vulnerable population to accurately perceive their risk of developing HIV, helping to build their commitment to safer sex practices and assisting in the removal of barriers that are preventing people from making positive behavioural changes.

2.5 DIFFUSION THEORY

The diffusion theory is one of the very many theories that explain how a disease is spread over time, space and place. Perhaps, it is the most appropriate theory used in interpreting and assigning reasons to the spread of HIV/AIDS in Ghana as a whole. The theory was developed at the University of Lund, Sweden by Torstein Hagerstrand in 1953 through the publication of *Spatial Diffusion as an Innovation Process*. Diffusion is generally defined as the spread of a phenomenon over space and through time (Gatrell 2002).

In relation to HIV/AIDS, four elements of diffusion are observed:

- The innovation, which is HIV/AIDS.
- The transmission channels, which are the means by which HIV is spread in a society.
- The time or process required for the innovation (HIV/AIDS) to spread amongst the vulnerable group of people.
A social system; the structure and functions of relations among a group of individuals (Dearing et al. 1994). Diffusion theory therefore examines how HIV/AIDS is transmitted over time among the members of a social system.

The diffusion theory recognises that there are several factors that influence the levels of transmission of HIV/AIDS. Regarding the communication of HIV risk behaviour change, Dearing et al. (1994) observes three factors: First due to the sexual nature of HIV transmission, the topic might be considered as a taboo. The argument is that discomforts and embarrassments may surround attempts at communication of prevention measures, the disease will thus spread. In many communities the sensitive discussions of sexual relations are considered as taboo and might impede HIV/AIDS prevention efforts.

Secondly the fact that many AIDS prevention strategies lack a guarantee of consequence, there is a decreased likelihood that the recommended behaviour will be adopted. An example of this is condom use. A person considering using a condom may reason that using condoms does not guarantee that HIV will not be contracted and not using condoms does not guarantee that the virus will be contracted. He or she may thus choose to forgo the use of a condom. Moreover, economic constraints may further prevent vulnerable groups from negotiating safer sexual practices.

The third factor is the unique nature of the population or groups which are at high risk for contracting HIV. The argument is that the process of diffusion occurs faster in unique populations or groups. Examples of such unique groups are married people and people in longer relationships. This may be attributed to the fact that people communicate most easily and readily with others whom they believe to be similar to themselves. Communication in these groups is often frequent and there is a great deal of trust between group members. Within these groups information will travel more readily with fewer obstacles.

The relevance of the diffusion theory for the study is that it can be used to explain the spread of HIV/AIDS in the Bawku East area. Cliff and Smallman-Raynor (1992) have used this theory in their interpretation of the truck town hypothesis. The idea is that some truck drivers make frequent sexual contacts with prostitutes and other girls when they stop in major cities and intervening route settlements. Moreover, places closer to areas believed to have higher incidences of the disease are likely to be influenced through a back and front interactions.
Again, the diffusion theory tends to provide a summary of all the theories so far discussed in the study. For example, the theory of the human ecology discusses how the environment, population and behaviour interact to generate a disease in time and place. Quickly linked to these theories is the risk theory. It is argued that perceived risk, certain cultural beliefs and economic constraints can influence the spread of HIV/AIDS. The structuration theory also discusses how the lack or insufficiency of certain structures and policies can trigger transmission of HIV/AIDS.

2.6 STRUCTURATION THEORY

Structuration theory is another alternative theory to positivism that emerged almost three decades ago. Structuration theory is most identified with the British social theorist Anthony Giddens (Gatrell 2002), whose proposal for a structuration theory emerged three decades ago based on critiques of Marxist and humanist traditions. Structuration theory acknowledges that structures shape social practices and actions, but that, in turn, such practices and actions can create and recreate social structures (Gatrell 2002). This means that social structuration require that particular activities can be carried out at particular times and in particular settings, but equally, such structures may themselves be transformed by social actions and that there are skilled individuals who can direct their own lives through actions.

Giddens’ structuration theory lies between two extreme points in the structuration debate. First, as structural determinism which views human actions to be dictated by conditions or structures and secondly, as structural voluntarism which views the actors as independent of any constraints.

Webb (1997) observes that human behaviour is a useful tool for analysing the behaviour of individuals within their social, economical and cultural environments. Giddens structuration theory provides an understanding of what can influence behaviours as well as the differences between places, gender and their socio-economic characteristics. Structuration theory is tried and tested within the field of health geography to explain the determinants of health behaviours.

The structuration theory has proven useful in attempting to understand the social epidemiology of HIV as the analysis concentrates on human behaviour, motivations and determinants. The contents in a specific environment do not cause a special behaviour, but
rather influence behaviours to some extent that are dependent on the individual. There are therefore many variables that can explain people’s actions. A person’s willingness to engage in health behaviour differs over a range of factors; hence Giddens’ way of illustrating the interaction between the broader social, economic and political structures that mould and as well determine health and health-care provisions and the lives of real people (Gatrell 2002). Information-based education programmes seek to change people’s behaviours through providing them with information or knowledge about the dangers of particular behaviours such as having unprotected sex (Campbell 1997). Social factors may constrain people from making choices of behaviour. Unprotected sex may arise out of patriarchy relationships where men dominate women in decision making.

Actions are routine activities of daily life (Giddens 1984). Actions are based upon knowledge that one is able to express as well as upon knowledge that one may have problems in expressing. For most parts, motives supply overall plans within which a range of conduct is enacted. Much of our day-to-day conduct is not directly motivated and unconscious motivation is significant feature of human conduct. Indeed, whilst reasons refer to the grounds for action, motives refer to the wants which prompt it (Giddens 1991). Individual actions are shaped by cultural contexts within which they find themselves. Material constraints are crucial in promoting prostitution as a desperate way of earning money.

Giddens distinguishes between action which is motivated by the individual, purposive action and action which has no motivational cause. This motivation can be conscious, subconscious or unconscious, whilst Giddens observes that the unconscious element is the most important. Agents (individuals) assess, rationalise and justify their actions either to themselves or to others through the process of reflexive monitoring. Accounts for actions will be affected by both the unintended consequences of action, and the unacknowledged conditions of actions. The unacknowledged conditions of actions are the elements of the environments which are not part of the conscious decision-making.

Human actions further imply power (Giddens 1991). Power is thus relational and means that the wider context has to be taken into account. The implication is that human actions can also eventually influence and reconstitute structure. In addition, the extent of one’s influence is limited by the resources at one’s disposal.
Structures on the other hand are sets of rules (constraints) and resources (capabilities or possibilities). Structures set the conditions for human actions, but are also the results for human actions (Giddens 1984) such as economic conditions that influence the risk of unsafe sexual behaviour. Individuals are born into societies that entrap them within social structures, which both constrain and also enable them (Giddens 1984). People are influenced by actions of others as well as structures. Extreme poverty makes it rational for some desperate women to allow their partners to practice unprotected sex.

Human agency and social structure both shape health behaviour. Agency refers not to the intentions people have in doing things but to their capability of doing those things (Layder 1994). Human beings have reasons for their behaviour but no matter how skilled and competent they may be, yet their knowledge is always limited to some extent (Giddens 1984). Thus, agents are also influenced by actions of others as they are by the rules and limitations of structures (Giddens 1984). Indeed, agents often have some choices to make (Young 1996). Young (1996) suggests that women must make choices within the context of economic and social network resources available to them individually and through the family (Young 1996). Therefore scheduling choices can be judged against the time space frame of reference set by a woman’s own health status and the division of labour market and caring responsibilities in her household (Young 1996). The implication is that women by virtue of their nature are saddled with lots of work which society gives them. But at the same time, there are always resources available to them to act in ways that suits them in every society (Gatrell 2002).

Giddens further observes that structures through a host of institutional arrangements, both constrain and enable human action, whilst human agents, by their behaviour reconstitutes both institutional arrangements and structures (Giddens 1984).

The relevance of Giddens’ structuration theory to this study cannot be over-ruled. It affords the study the opportunity to realise that individual health behaviours change according to their sense of place of whatever location they are in (Webb 1997). Human beings behave in certain ways based on certain purposes and intends as unveiled by Giddens’ explanation of interaction between structures and human agency. Indeed, observed behaviour is useful for analysing the behaviour of individuals within their social, economical and cultural environments (Webb 1997).
2.7 PLACE AND TIME

Geography of health can be studied in a context of time and place. The concept of time and place is useful in understanding the social epidemiology of HIV in a particular environment as the analysis concentrates on human behaviour by studying the integration of human activity, the economic system and the biology of a disease. Disease ecology is based on the idea that, for any disease to occur, it is necessary for some agent and host to come into mutual contact at the same time and the same place (Mayer 1990). Historical analysis is important to understanding structural changes over time and place, and is part of the process of putting phenomena in context.

Scale is very important in the ecological approach as well as the quantitative analyses and measurements of disease patterns (Mayer 1990). The way individuals respond to their environment socially, culturally, economically and the general nature of the reciprocal action between individuals and the environment varies greatly even within single, location-specific population groups (Webb 1997). Research shows that HIV/AIDS impact is felt everywhere but variations thus exist among and within countries. At a localised scale, patterns emerge which are related to transport infrastructure, economic activity and migration patterns, which in part determine the geographical extent of infection and the epidemiological regime. When AIDS started to break out in the early 1980s, it was just as much a problem for the higher social groups as it was for the lower-classes.

Giddens (1991) employed the concepts of time and space in his later work on structuration often called Stage II. Giddens believes that to be able to act, the individuals must move in time and place. This new concept makes it possible to look at individuals and the creative act, as a chance of challenging structures (Giddens 1991). Social systems are not only structures of rules and structures, but time and space are also part of the action.

Interaction that demands being at the same place at the same time in a time and place setting is Giddens termed for social interaction. When it is not necessary to be part of the same time and place, Giddens calls it system interaction, meaning it also involves an element from time and place. By explaining this, Giddens tries to demonstrate how social activity in time and place can be influenced by social relations not belonging to where you are. The possibilities for interaction of this kind have been observed in contemporary society with phone and Internet services increased (Giddens 1991). Giddens uses the idea of “Time-Space
Distanciation” to explain worldwide social relations which link distant localities that are intensified in such a way that local happenings are shaped by events occurring many miles away and vice versa (Giddens 1991).

However, the way individuals and groups respond to their socio-cultural and economic environment varies greatly from place to place and at different times within the same place or as well between different places. The concept of time and place will be used to examine the Geography of HIV/AIDS in the Bawku East municipality by assessing the relationship between poverty and HIV/AIDS. Indeed, it is generally known that HIV/AIDS was imported into Ghana within a certain time period and was most pronounced in certain localities. However, with time, HIV/AIDS has become a national concern and is spreading very fast in northern Ghana. Hence health-risk factors and practices that put individuals at risk of infection will equally be examined within a time and place context. The geography of HIV/AIDS in Bawku can only be completely understood by considering the uniqueness of the place in terms of physical, cultural, economic, social and political settings.

2.8 SUMMARY OF THE CHAPTER

The chapter is made up of carefully selected theories that are capable of understanding and explaining the spread of HIV/AIDS in Bawku East municipality. The very aim of the chapter is to formulate a theoretical framework within which to advance the essence of the study. The chapter throws light on the three main concepts use in the study (HIV/AIDS, poverty and vulnerability). The theories used in the chapter include the human disease ecology model, risk theory, diffusion, structuration and place and time. It is interesting to realise that each of these theories are related in one way or the other to themselves. Moreso, theories upon theories could have been used in this study but it is more convenient to choose theories that particularly influence the spread of HIV/AIDS.
CHAPTER THREE: METHOD OF RESEARCH

3.1 INTRODUCTION
This chapter reviews the methods and procedures adopted for data collection meant to solve the research problem. It includes an overview of the data sources, sampling techniques for data analysis and the current methodological debates based on the rationale and choice of methodology. Primary and secondary methods of data collection are used to ensure a higher quality of the study and further give a broader presentation. Limitations of the study are also sighted in this chapter.

3.2 QUALITATIVE AND QUANTITATIVE DEBATE
The study recorded details of human beliefs, values, experiences, perceptions and actions of a relatively sizeable population of individuals and groups who were selected purposefully. Indeed, both the qualitative and quantitative techniques of data collection were employed. Interestingly, much emphasis was placed on the qualitative approach because of the degree of detailed information about a much smaller number of people and cases it explores. In general qualitative methods were more suitable than quantitative methods when time and resources were major constraints.

The quantitative approach is a strong research tool that calls for maximum trust in numbers that equally depicts opinions or concepts. The quantitative approach works best when you want precise, statistical answers to carefully defined questions on topics which are thoroughly understood. They are powerful tools for collecting a broad range of standard information on a large population. The qualitative approach on the other hand uses words and critical observations to express a reality describing people in ordinary situations (Krueger 1994). The qualitative approach, which studies small communities or neighbourhoods rather than larger populations, argues that the experience of place is more important than the accurate recording of large numbers of locations, or categorising of people into a fixed set of areal units (Gatrell 2002). The quantitative method is further more formalised and well structured, thus keeping the researcher in absolute control of the exercise. Indeed, with the quantitative approach, the varying perspectives and experiences of people are well fit into a limited number of predetermined response categories to which absolute numbers are assigned.
Indeed, a quantitative approach that focuses almost exclusively on aggregate spatial patterns of disease incidence through mapping does not actually give attention to what the points or dots on the map or numbers in a table really represent. And the way in which the dots or points may be arranged spatially may shed light on disease causation but may fail to give consideration to the feelings, experiences, beliefs and attitudes of people (Gatrell 2002). There is therefore the need to have them express their opinions through free-will conversations rather than “dictating” for them. This is where the qualitative approach was given more recognition than the quantitative one. The qualitative approach gives a rapid feel for a problem and thus essential in exploring community attitudes and priorities especially when dealing with sensitive topics such as HIV/AIDS in depth. They can give a rich understanding of community life and help set up a dialogue between planners and communities.

The qualitative method of research is concerned with how the world is viewed, experienced and constructed by social actors (Johnston et al. 2000). Qualitative research is designed to help build up a picture of how a society works, what the relationships within the society are and how different aspects of life are linked together. This research may also reveal how people within that society understand their own situations, and problems, and what their priorities are. It further provides access to the motives, aspirations, class, caste and power relationships that account for how places, people and events are made and equally represented. Interestingly, the qualitative approach can afford a study of this kind, details about HIV/AIDS in a spatio-temporal perspective where questions are asked in an open-ended way and the findings are analysed as data is collected. This means that the design of the study can be continuously modified to follow up significant findings as they arise. The approach also affords a greater understanding of the social processes that are involved in shaping health-related behaviours and outcomes.

However, a sum of these two approaches (a triangulation of methods) is to contribute to a better understanding of the human society by finding out how individuals, groups and institutions act together (Holme and Solvang 1993). In fact one of the key reasons for blending the two methods in my study is the kind of information that was gathered from respondents. Indeed, using the quantitative method afforded me the opportunity to assess the background characteristics of the respondents. Blending the two approaches has been better put by Webb (1997), who argues that a theory or hypothesis testing may call for large quantitative surveys supplemented with qualitative data. Thus, both methods were employed in the study to
enhance the reliability and validity of the data. The quantitative approach is hereby integral to the study because it afforded me the opportunity of clearly explaining the relationship between risky sexual behaviours and socio-economic status which poverty is a major determinant and a consequence as well. In this case, objectivity matters more rather than subjectivity and the inclusion of wider structural influences on health are integral to the study.

Indeed, the two approaches as recognised by McCracken (1988) are never substitutes for each other but that each observes different realities or different aspects of the same reality. Moreover, the fact that more emphasis was given to the qualitative approach is based on the idea that the method enhances knowledge about the HIV/AIDS pandemic by describing the experiences, beliefs, perceptions and practices of individuals and groups in Bawku East.

The setbacks of the qualitative approach are that the interviewer himself is the instrument in the qualitative research. Hence the quality of the research and the subsequent output of the work grossly depend on the in-depth experience, knowledge and skills of the researcher. In this vein, the respondent might be subjected to a time consuming and privacy endangering exercise especially dealing with a very sensitive topic such as HIV/AIDS. This state of affairs might subsequently lead to bias and lack of responses. The end result could be that the quality of the final work will be affected seriously. The positivists also equally criticise this approach as lacking the verifiability of results and conclusions drawn based on this approach which dwells on small numbers are difficult to credit (Gatrell 2002). The idea is that a small number of respondents to a questionnaire are not representative of the general population of the people under study and that concerns cannot be pinned as due exclusively to small numbers but broad based perspectives.

Interestingly, despite the setbacks of the qualitative approach, it was still ranked higher in the study than the quantitative approach. It is worthy of mention that a blend of the two approaches was very fruitful to my study that aims to assess poverty as a likely determinant of HIV/AIDS infection in Bawku East municipality.

3.3 CHOICE OF METHODS AND SOURCES OF DATA
A research topic of this kind is admittedly very sensitive. Hence, I had to apply maximum experience and skills to achieve my research objectives and questions. The concept of triangulation which encompasses multiple methods of data collection to safeguard the
research from concentrating on only a few methods was used. The concept of triangulation ensures that the weaknesses of one particular method are compensated by an alternative method. Webb (1997) argues in favour of the *method of triangulation* that in order to collect a broad data material, one may need large quantitative surveys supplemented by qualitative data. The triangulation was used in the study not merely because the methods would compensate one another but that each method was carefully used to serve the needs of the research problem objectives. Therefore the study employed both primary and secondary sources of data collection. In terms of the primary data, questionnaires, interviews (structured interviews with key informants and with individuals) and Focus Group Discussions were used. However, in terms of the Focus Group Discussions the females were separated from the males to ensure that the females are fully integrated in the discussions.

### 3.3.1 Questionnaire

A study that aims at examining poverty as a likely determinant of HIV/AIDS in Bawku East municipality is obviously sensitive. In addition a search for attitudes and beliefs about a people’s own lifestyles as well as changes in sexual behaviour is likely to call forth strong feelings. A very comprehensive questionnaire that addressed the research problems and objectives was formulated and used.

The variables featured in the questionnaire included the background characteristics of respondents, travel experiences especially to areas within and outside Ghana that are noted to be prone to HIV/AIDS, lifestyles, living conditions and a general characteristics of the study area that might serve as fertile ground for the occurrence of HIV/AIDS. Poverty is one particular complex phenomenon that could be difficult to assess and yet very easy to observe or recognise. Questions relating to variables such as access to basic conditions of life were used to measure poverty.

The questionnaire was characterised by both open-ended and close-ended questions. Open-ended questions were aimed at testing the vulnerability of individuals to HIV infection and further enable respondents to freely express their opinions and views without prejudice and thus obtain adequate information for the study. The open-ended questions were however, very few and allied to parts of the questionnaire that needed alternative answers. Meanwhile, the close-ended questions apart from avoiding time consumption also made it easier for data
analysis and processing. Indeed, background characteristics such as sex, age, marital status, ethnicity, level of education, religion and income levels were close-ended.

Another important issue that was considered in designing the questionnaire was to make it essentially hierarchical in nature. This made it easier for the researchers to be in-charge of the research, controlling the process in a position of some power, and thus gave way to a more equal relationship in which the conversation was shaped as much by the respondent as by the interviewer. The use of the questionnaire was to enable me calculate percentages; make frequency tables and cross tabulations to clearly assess the association between dependent and independent variables. Simply, the questionnaire is used to generate statistical analysis and descriptions. Furthermore, the use of the questionnaire was to easily access whether a particular population share certain characteristics in common. It is also used to measure attitudes, beliefs and behaviours.

Initially I thought of using three field assistants (one male and two female student nurses) but upon deciding on administering only 120 questionnaires after the protesting exercise, I chose only one female student nurse together with whom I administered the questionnaires. I decided to use only one female student nurse because most of the women were much more comfortable talking to her about their sexuality than me. It was also more cost effective dealing with only one field assistant. The assistant was given an in-depth training on the exercise and her efficiency was tested during the reconnaissance survey at Zawse; a village in the outskirts of Bawku town.

The questionnaire was designed in such a way that one needed immerse care and precision to fill in the forms. That was the most reason why it was administered and filled in by the researchers. It was much easier administering the questionnaire because it was mostly close-ended. The questionnaire was straight-forward and easy to translate into four local dialects such as Kusaal, Hausa, Mossi and Bissa. These were the four dialects used in the exercise. Inconsistencies were also easily checked and simply rectified on the field.

3.3.1.1 Sample procedure for Questionnaire
The questionnaire was administered on a sample of 120 respondents comprising an equal number of men and women. HIV/AIDS is an infection spread mainly through sexual intercourse and seems to put “every one” at risk of infection. This is the main reason why
equal distribution of the questionnaire was given to both sexes. The main objective of the study is as mentioned earlier to assess poverty as a likely determinant of HIV/AIDS infection in Bawku East municipality. It is also the intention of the study to unveil the realities surrounding the HIV/AIDS situation in the Bawku East municipality by illustrating the cultural, social and economic factors that expose people to the infection.

Indeed, for Nichols, it is quite important to choose the group of people that the researcher is most interested in (Nichols 2000). This state of affair however, depends on the research objectives and the kinds of research questions that the researcher intends to solve. Based on these, the study targeted mainly the risk group of women and men aged within 18-49 years (both married and unmarried). The choice of this age category has been influenced by an understanding that HIV/AIDS is more serious within this age group and further still that is the sexually most active age group. Vulnerable groups such as people who have history of travels outside the town and heads of households were also contacted with the questionnaire. In addition, health workers, HIV/AIDS officers, religious leaders, teachers and other social figures formed part of the study group. These categories of people were selected purposefully using mainly the snow ball method of non-random sampling. This approach illuminates a free and fair selection procedure whereby key informants with appropriate information on HIV/AIDS are considered in the sample frame.

The snowball sampling method was used in recruiting the target population. A snowball sample is based on the subjects suggested by previous subjects. The sample selected in this regard will have to meet the study’s needs. The advantages of this sampling method are that the researcher is able to accumulate more respondents by making use of each respondent as a source of getting the others. Right choices of individuals with the needed information about the situation under study are gotten whilst the researcher is able to assess the respondents chosen for the study. Furthermore, the Multiple Initial Contact Persons method was adopted before the snowballing to avoid selecting respondents from a narrow circle of like-minded people. The Multiple Initial Contact Persons involves contacting a wide range of persons who possess the needed information to afford the study but however, choosing those who meet a certain criteria of mostly experience in the knowledge of HIV/AIDS and the most vulnerable. Admittedly, Bawku East municipality is a very big area with over 300,000 people, meaning that the choice of snowball sampling afforded me the opportunity of selecting respondents who possessed the requisite information to advance the study.
All respondents approached agreed to take part in the exercise except 23 people comprising of 17 women and 6 men who refused. Most of the women who refused argued that they needed permission from their absent husbands before they could answer the questions. It could also be attributed to the fact that some of the questions were very sensitive and privacy endangering. Indeed, most excuses given were that they were busy, others were not motivated at all to talk to us because of the volatile nature of the place emanating to the long ethnic conflict that claimed lots of lives. It was then realised that the number of people who refused might have affected the study negatively, because, they could possess other views and information which could be important to inform the study. Respondents who refused to take part in the study were substituted by others who were willing enough to part-take in the exercise.

3.3.2 Focus Group Discussions
A focus group is a collection of a small number of people, typically between four and twelve that meet to discuss a topic of mutual interest, with assistance from a facilitator (Gatrell 2002). Usually, the group members represent particular positions or interests. Focus group discussions were used however, separating the females from the males to ensure that the females are fully integrated in the discussions. Indeed, due to the extent of privacy and intimacy of the questions, women were more likely to be over-shadowed, since men generally appear to be more vocal and discuss issues more freely than women. I selected the two groups purposefully with all members coming from different communities and ethnic backgrounds such that nobody knows the other.

Another challenge was how to group or blend the different ages and the socio-economic backgrounds of the respondents. It is noted that focus group discussions are best conducted with participants who are similar to one another (Krueger 1994). Time was an asset and very limited for the research, otherwise, it was most appropriate grouping respondents according to ages and socio-economic class to enable me compare the information to assess variations in data. In all, four discussion groups were formed, two each from the males and females. Two discussion groups comprising both males and females were conducted in Bawku central. One of the Saturdays (26.06.2004) was chosen for the discussion, in which the woman’s group of only ten was organised in the morning for the discussion whilst that of the men also of ten took place in the evening.
In the village of Mognori for instance, only women were organised for the discussion. I had already made some arrangements to have only ten women but twelve of them came for the discussion. At that moment, I had no alternative than to accept the extra two ladies into the discussion. Another discussion further took place in Pusiga making up of only ten men. Some of the people who took part in the questionnaire exercise were also chosen for the FGDs. This was done in order to allow the respondents to give additional information and further explain issues that could not come up during the administration of the questionnaire because of the way it was structured for the scanning process. The selection procedure was based on snowballing.

Considering a sensitive issue such as HIV/AIDS that everybody is scared of, it was very difficult for respondents to volunteer the appropriate information especially about their sexuality in a one-on-one interview. Obviously, it was not uncommon for respondents feeling uneasy when asked questions directly about their own sexual behaviours and practices. Jato (1994) found that focus group discussions proved socially appropriate and that they were particularly effective in collecting information about sensitive issues such as family planning. The basic aim of the focus group discussion was to afford the participants the opportunity to express their own views and opinions freely on the issue at stake. Interestingly, the researchers never intervened but only serve as facilitators in the discussion exercise.

3.3.3 Interviews
Interviews are people-oriented and allow interviewees to construct their own accounts of their experiences about HIV/AIDS by describing and explaining their own sexual behaviours and practices in their own words. This conversation or in-depth interview gives the interviewees more scope to describe and explain their own experiences of health and illnesses, perhaps raising issues that had not occurred to the interviewer. As stated by Nichols (2000), interviews are especially suitable for work on attitudes or opinions and for dealing with sensitive issues related to risky health behaviours and practices resulting into HIV. In this study, individual one-to-one in-depth interviews were used for the targeted research population. The main concern was to treat those interviewees as people whose values, beliefs, and feelings are more respected and valued as legitimate sources of data to inform the study.

The interview guide consisted of issues such as vulnerability of individuals to HIV/AIDS considering the basic activities of the people, attempts at HIV/AIDS prevention, risky health
practices and beliefs, trans-border-migration and the ethnic conflicts that have engulfed the Bawku East area leading to the deployment of troops and this was done from a stand point of an equal partnership between me and the respondents.

Two separate interview guides were used for the exercise. One of the interview guides was targeted at individuals comprising mostly of health workers, teachers, assembly members, elders and religious leaders while the second one was mainly for the municipal assembly and NGOs. In drafting the interview guide, strenuous efforts were taken to observe the ideas expressed by Nichols (2000) that the purpose of open-ended interviews is not to put things in one’s own mind but to access the perspective of the person being interviewed. The interviews were very relaxed as many matters were brought up that were not actually covered in the interview guide and the questionnaire. Such was the case because I allowed for probing into issues that were most important for the objectives of the study.

Overall interviewees were made up of 12 people. Statistically, 2 were from the Bawku East Women’s Development Association (BEWDA): the financial officer and the programme officer in charge of HIV/AIDS. Three religious leaders comprising of one each from the traditional religion, Islamic religion and a pastor of the Assemblies of God church represented respondents from the religion side. The 7 other interviewees were the municipal’s focal person on HIV/AIDS, 1 health officer, an Assembly member, a teacher and three traditional elders. It was quite bureaucratic getting the chiefs to be interviewed. I made several fruitless efforts to interview some of the chiefs thus eventually settling down to only three elders. The traditional elders as used in my study are those senior citizens in the community who are generally respected and consulted in times of problems for counselling. Such people are highly learned in the culture of the area, some of whom even form part of the council of elders for the traditional chief. I must admit that the interviewees were more composed and easy-giving on issues. However, some of them tended to talk for so long and this was time consuming but the detailed explanations of conditions were what I admired most about them.

It was because my attention was focussed on general issues that made me to contact individuals who were particularly knowledgeable about some factual matters on HIV/AIDS. However, Bawku East Women Development Association (BEWDA), a local Non-Governmental Organisation with financial assistance from IBIS another Danish International NGO has carried out a community-based education on HIV/AIDS through peer educators and
conducted surveys on the likely outbreak of HIV/AIDS in the municipality. The programme officer in-charge of HIV/AIDS was contacted with some structured questions directed to specific issues relating to the trans-border-migration patterns and sexuality of the people living around the border. Basic understanding of these patterns examined how poverty is playing a role in the spread of the pandemic. Key social figures including the municipality’s focal person on HIV/AIDS, religious leaders, members of Assembly, elders and health personnel all formed part of the interview group expressing their wider opinions on the issue. In contrast, the interviews were most appropriate for interpreting the observed relationships between the background variables and the knowledge of HIV/AIDS in the municipality. It was most significant for getting information that the questionnaire could not give.

3.3.4 Observation
According to Marshall and Rossman (1995), observation is the systematic noting and recording of events, behaviours and artefacts in a social setting. Observation is quite useful in getting a better understanding of context; crosschecking information and possible differences between what people do and what they say. In using questionnaire, interviews and focus group discussions, it was clearly necessary to supplement these sources with direct observation in order to establish the realities on the ground and to cross examine the people’s responses. Observation was particularly very necessary in revealing information about observable features such as the type of household, structure of houses, the appearances of the people and types of observable behaviours and practices.

It was therefore in view of these ideas that I attended three marriage ceremonies, two final funeral rites, two naming ceremonies, a disco, public cinemas and the market squares a number of times on various market days. It is very interesting observing the general indiscriminate behaviours of people during public ceremonies characterised by alcoholism and high courtships. The marriage ceremonies consisted of two Islamic and one traditional weddings. Infact within the period of the field work, it was my intention to observe at least a Christian wedding but that was not possible because I never had the opportunity at the time.

Actually there was a tendency for respondents to exaggerate information about their real situation, thus the use of observation to verify some of the data regarding practices and beliefs. Photographs were also taken on the field to capture some details about objects and activities in kinds like signboards showing preventive measures for HIV and poverty
situations in the area. The combination of methods namely questionnaire, interviews, focus group discussions, observations as well as secondary data sources applied in this study only served as checks on one another since no single method is deemed to be complete on its own and thus ensured that the research has a higher degree of validity.

3.3.5 Secondary data sources

In the light of the secondary means of data collection, I consulted already existing literature on HIV/AIDS. In that vein, data was sought from text books, pamphlets, newsletters, leaflets, magazines, articles, journals, internet sources and other published and unpublished sources to complement those that were gathered by primary means. Gaining access to secondary data from official documents was very smooth. They were interested in knowing the purpose of the study to which I had to give an explanation and thus made appointments as well.

The municipal health administration gave me statistics on the incidence and prevalence of diseases including HIV/AIDS, whilst the municipal headquarters of the Ghana Education Service (GES) provided me with data on the number of schools, staff strength, enrolment rates and performance of students over a certain period of time. The municipal assembly also made available to me the 5 year development plan of the area. Some of the information was acquired from libraries and internet sources. The information gathered from the secondary sources was significant in describing the levels and patterns of poverty and HIV/AIDS in Ghana and the Bawku East municipality.

3.4 TECHNIQUES OF DATA ANALYSIS

The questionnaire was first and foremost scanned before my departure to Ghana. Strenuous efforts were made to get the field assistants to administer the questionnaire appropriately to avoid distortions. And normally because additional answers and ideas given in connection to the questionnaire and interviews are expressed in words, it was most advisable to edit the data during the period of data collection. This afforded me the opportunity of comparing results in order to identify gaps in the data provided.

Upon return from Ghana to Norway, the questionnaire data were scanned and fed into the computer were The Statistical Package for Social Sciences (SPSS) was used to analyse the quantitative data based on the objectives and research questions of the study. Analytical methods such as frequency tables, cross tabulations, graphs and percentages from the
questionnaire were used to show clear visual impressions and allowed for easier comparison of the results. Maps from the Town and Country Planning Unit of the municipal assembly and photographs from field observation were also used to represent the findings.

Coding of the field data, verbal presentation and interpretation of interviews and focus group discussion results were also systematically done and incorporated into the main work, however, paying respect and due attention to the concepts and frameworks chosen for the study. Information generated from the interviews and focus group discussions were sorted out paying attention to the relevant data specifically with regard to the objectives and research questions. The process involved reading all the individual scripts that were written during the interviews sieving out the relevant information and as well crosschecking with all the other scripts to identify differences and similarities. The qualitative data generated from the interviews, focus group discussions and observations were used to support and thus clarify the data collected through the questionnaire administration.

Several rates and percentages were generated from the quantitative data. It was much easier and simpler representing the quantitative data in the form of contingency tables for chi square tests because variables are measured at the nominal and ordinal levels. Where comparisons of results were needed and also in enhancing visual impression on the work, graphs and charts were used to represent some information. Indeed testing the association between the background variables on one hand and the likelihood of getting infected with HIV/AIDS on the other, the regression model for contingency table was favoured mainly because some variables like sex and place of residence are measured at nominal levels. But most of the variables are measured at interval and ordinal levels. The multivariate analysis involving the use of regression permits for the control of many variables simultaneously and gave a clear visual understanding between independent variables such as income, education, sex, age and number of over night trips and dependent variable such as number of sexual partners. Regression can also be performed for multivariate analyses on fairly small samples and provides easy to interpret indications of the relative strength of relationships.

3.5 LIMITATIONS OF THE STUDY
This section consists of the limitations encountered both on the field and in the process of writing. They include those arising from methodological weaknesses to those relating to
implementation of the study. It is worth stressing on these issues because they can influence the quantity and quality of the data as well as the conclusions drawn on various subjects.

High illiteracy level of respondents was a main factor for refusal to grant interviews. Great time was spent convincing respondents that the study was only an academic exercise and had nothing to do with politics or any developmental agendas as this may produce biased answers in direction of expected results. People were initially reluctant to take part in the study. They argued that many researchers have made fruitless promises to them in similar endeavours in times past. They had therefore lost confidence in all researchers and resolved never to grant interviews.

Questions relating directly to people’s personal lifestyles were obviously privacy endangering. Such issues are not publicly discussed in northern Ghana. As Newman (2000), noted when questions are sensitive, respondents may try to present a positive image of themselves to researchers instead of giving “correct answers”. Respondents were actually very nervous and surprised about such questions. Some of them were embarrassed and felt betrayed to give correct answers, which obviously will have some degree of influence on the quality of the data and the resultant credibility of the study.

Another issue is that it was observed that respondents who were willingly to answer exaggerated. It was observed that some respondents found it very difficult telling their ages. To overcome this obstacle we had to relate such people to important events in history. For instance there was a case in which one lady could not tell her age but upon thorough questioning, she mentioned being born at the time Kwame Nkrumah was overthrown (1966). Sexual behaviours and practices cannot be cross-checked to determine the reliability of the information given by informants. In most situations, we had to switch from question-answer type of administering questionnaire interviews to a more thorough discussion on a subject.

To forestall this problem, I employed the services of one female student nurse to handle the female respondents while I handled the males. Even with that the real solution lied with the personal experience and ability of the field assistant to relate questions based on sexuality to other people rather than directly to the respondent. The skill used in circumventing this problem ensured some level of reliability and credibility of the data.
On the whole most of the data collected was reasonably valid and reliable in that the process of triangulation was applied to remove biases from a single method of data collection. Secondary data further served as checks and balances for the primary data whilst most of the primary data also helped maintain confidence for most of the secondary data researched upon.

The study area is very large encompassing several other smaller towns. Much time and resources was therefore expended. We had to travel on long distances on motorbikes, which was quite tedious and time consuming. The issue of time constraint is very crucial. Yet the time allocated for this exercise was too short to afford me the right information. The period also coincided with the rainy season and some key informants were actually very busy on their farms. Some major respondents normally left their homes very early in the mornings to their farms and came back home very tire in the evenings, hence they were not accessible. There were possible biases as a result of this problem. The regression analysis failed to show positive association between some independent variables and risk-taking activities for contracting HIV/AIDS. Clearly, the sample size was relatively small to warrant a better understanding of the associations between the independent variables and risk factors for HIV.

One most important limitation of the study is the imperfect nature of data relating to poverty and HIV/AIDS. It is obviously a difficult task to measure the two variables adequately and as well try correlating them. Conclusions on their relationship therefore had to be based on observations. For instance most people have testified to having HIV but never lived any health risk lives. And it is also true to realise that the rich possess all the resources needed to engage in any sexual relationship they want because they can afford it. The idea is that the rich are more prone than the poor even though the former appears to be more informed than the later.

3.6 VALIDITY AND RELIABILITY OF THE STUDY
The basic ethics surrounding every research exercise is to record and document the given conditions. The fact remains that researchers depend and rely on information given by respondents. Biases cannot therefore be controlled and thus appear as a herculean task in every research exercise, since the researcher often influences the results of every study either negatively and/or positively or both.
Validity denotes the extent to which an instrument used to collect information, for instance questionnaire, interviews and group discussions in this study is used to approximate the “truth” about people’s behaviour or knowledge (Dare and Cleland 1994, Mikkelsen 1995). The use of the qualitative approach of data collection puts the interviewer in the centre of the research, meaning that the skills and experience of the interviewer is what determines the validity of the study. Respondents might be subjected to time consuming and privacy endangering exercise especially dealing with sensitive issues involving sexual behaviours and practices and the much feared HIV/AIDS. To maintain a good quality of the data, the questionnaire and interview guides were set in a way that questions dealing with sexuality, unhealthy behaviours and practices came at the tail-end of the interview.

Moreover, the questionnaire and interview guides were designed to meet the needs of the research questions and the objectives. In terms of the focus group discussions, respondents were chosen from different ethnic backgrounds and communities and females were separated from the males to ensure that the women were relaxed enough to express themselves freely. The concept of triangulation was thereby chosen to prevent over-reliance on few methods that might have limitations and went a long way to ensure that the data used in the research had a higher degree of validity.

Reliability on the other hand denotes the possibility to give consistent results over many tests (Mikkelsen 1995). Reliability can be related to the mode of data collection, the time interval of recall, characteristics of both the interviewer and the place of interview in addition to other social and demographic variables like job status and level of education (Dare and Cleland 1994).

Bawku East municipality has a very high illiteracy level. It is interesting to realise that some respondents could not tell their ages. In such cases, I used historical events to relate to the era in which respondents were born. Even though, this was merely approximations but it was the only reliable method of checking ages. Also all the questionnaires were administered by a female student nurse and me in the four local dialects (Kusaal, Moshi, Bisa, and Hausa). Moreover, the field assistant was given training on the job during which time she was taught to understand some of the confusing questions and possibly how to frame some of them in the various dialects.
Preliminary survey with some pretesting was done to get ourselves used to the exercise and rectified any cases that were seen as potential problems. Respondents were clearly convinced about the purpose and intense of the exercise and they were made aware that participation was purely voluntary.

3.7 SUMMARY OF THE CHAPTER

The chapter describes and justifies the methods adopted for the study. It also highlights the sampling procedure used in selecting the targeted population through which questionnaire, focus group discussions and interviews were granted. The problems encountered on the field, the analysis process and other types of information generated through secondary sources are also included in this chapter. The ensuing chapter will therefore concentrate on the background characteristics of Bawku East municipality beginning with some preliminary information about Ghana.
CHAPTER FOUR: PROFILE OF THE STUDY AREA

4.1 INTRODUCTION
The purpose of this chapter is to examine the current physical and socio-economic conditions of the Bawku East municipality. The chapter opens with a brief introduction to the Republic of Ghana including an overview of HIV/AIDS and poverty situations. The analysis of the current situation of the study area is very important to determine the relationships between poverty and HIV/AIDS.

4.2 BRIEF DESCRIPTION OF GHANA
Ghana is located on the West African gulf of Guinea only a few degrees north of the equator with a total area of 238,540 sq. km. It is bordered on the west by Cote d’Ivoire, on the north by Burkina Faso, on the east by Togo and on the south by the Atlantic Ocean. The climate is tropical, warm and comparatively dry along the southeast coast, hot and humid in the southwest but hot and dry in the north. Ghana’s population is spread across 10 administrative regions, which are further divided into 138 districts. The population of Ghana has tripled since independence from about 6 million to an estimated 18,412,247 with a growth rate of 2.05% per year in the year 2000 (GSS 2002).

At independence in 1957, Ghana was considered one of the high achievers in almost all spheres of life on the African continent. The first post independence government led by President Kwame Nkrumah lasted until 1966 when it was overthrown by the military. Since then there have been a succession of governments most of them military. Brief moments of civilian rule were the Busia administration (1969-1972) and the Limann government (1979-1981). Thereafter the military stepped in again and the J. J. Rawlings era commenced in earnest. In 1992, multi-party elections were held and the former military ruler, J. J. Rawlings was elected president, he won again in 1996 and finally lost out to the Kuffour government in the 2000 elections. The incumbent Kuffour’s government won by a little over 52% of the votes cast battling with 3 political parties for the presidency in the December 2004 elections.

4.2.1 Poverty situation in Ghana
Available income data in Ghana points to 80-90% of poor households being located in rural areas, while 44-60% of rural households are categorized as poor (Assenso-Okyere et al. 1997). The rural/urban gap is significant in regard to access to safe drinking water, education
and health services. Poverty has been with Ghanaians for a very long time though efforts have been made to curb it. Data made available about poverty incidence indicates that between 1991/1992, the revised estimates for the upper poverty line was 51.7% that is a number of people earning about 900,000 cedis (equivalent to US$200) and that of the lower poverty line; number of people earning 700,000 cedis (equivalent of US$155) stood at 36.5% (GSS 1995).

The poverty line is the minimum amount of money that one needs to obtain the basic needs of life (The Daily Graphic 2004). The poverty line is normally set to help distinct the poor from the non-poor. At the national level around 58% of those identified as poor from 1998/1999 and 39% in 2000 were from households for whom food crop cultivation was the main activity. The surveys that were carried out by the Statistical Service show that during the 1990s, poverty trend has been broadly favourable, which means a decline.

It is however worth mentioning that the trend has geographical dimensions. For instance the rural/urban dimension of poverty reflected relative differences in numbers, severity and depth. The distribution (GSS 2000) based on ecological zones revealed that:

- Accra 23.0 percent considered as poor
- Other urban areas 27.7 percent considered as poor
- Rural coastal 28.6 percent were poor
- Rural forest 33.0 percent were poor
- Rural savannah 38.3 percent considered as poor

From the above presentation, it is easily observed that poverty reduction is skewed in favour of Accra. In much of the rest of the country, poverty in both urban and rural areas fell only marginally. In the rural Savanna, the percentage of those defined as poor has actually increased. This shows that the locality has benefited very little from overall poverty reduction programmes. The disturbing scenario of the poverty situation indicated by Ghana Statistical Service (GSS 2000) revealed that 5 out of the 10 regions in Ghana had more than 40% of their population living in poverty in 1999, the worst being the three northern regions (Upper East, Upper West and Northern region). The report further showed increasing poverty variations amongst the 5 poorest regions in Ghana. The figures indicated 9 out of 10 in the Upper East, 8 out of 10 in the Upper West, 7 out of 10 in the Northern, 5 out of 10 in Central and Eastern regions classified as poor in 1999. Table 4.1 below demonstrates the regional poverty profile for 1992 and 1999 in percentages.
Table 4.1 Ghana regional poverty profile for 1992 and 1999 in Percentages.

<table>
<thead>
<tr>
<th>GEOGRAPHICAL AREA BY REGIONS</th>
<th>GEOGRAPHICAL DISTRIBUTION OF INCIDENCE OF POVERTY BY YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1992</td>
</tr>
<tr>
<td>All regions</td>
<td>51.7</td>
</tr>
<tr>
<td>Upper West</td>
<td>88.4</td>
</tr>
<tr>
<td>Upper East</td>
<td>66.9</td>
</tr>
<tr>
<td>Northern</td>
<td>63.4</td>
</tr>
<tr>
<td>Brong Ahafo</td>
<td>65.0</td>
</tr>
<tr>
<td>Ashanti</td>
<td>41.2</td>
</tr>
<tr>
<td>Volta</td>
<td>57.0</td>
</tr>
<tr>
<td>Eastern</td>
<td>48.0</td>
</tr>
<tr>
<td>Greater</td>
<td>25.85</td>
</tr>
<tr>
<td>Central</td>
<td>44.3</td>
</tr>
<tr>
<td>Western</td>
<td>59.6</td>
</tr>
</tbody>
</table>

(Source: GSS 2000)

From table 4.1 above, there has been percentage reduction of poverty levels among the regions from 1992 to 1999. This does not however imply that poverty situation in Ghana has improved. Apart from Accra that recorded a percentage reduction of 5.2% in 1999, all the regions recorded slightly 12.2% reduction in poverty but 3 out of the 5 poorest regions recorded increases in the incidence of poverty. Ghana remains desperately poor with people mostly in the rural north living below the poverty standard of a dollar a day set by the United Nation’s and ranks 131st on the UN Development Index out of 177 countries. These figures are not acceptable according to international standards and further imply that lots of Ghanaians do not have access to adequate food, basic social services and income required to make life worth living. It also suggests that inequalities exist.

The Ghana Statistical Service (GSS) undertook in 1998/9, the Ghana Living Standard Survey (GLSS4) and 1992/3 (GLSS3) revealing the poverty situation in Ghana used different approaches to measure poverty. The approach adopted was based on the level of income and consumption earned by individuals annually. The uni-dimensional measure of poverty used
by the GSS for assessing poverty thus considered the poorer population as those obtaining less than 900,000 cedis per annum is not good enough. It appears poverty is a much broader and deeper issue of deprivation than having an income below a poverty line. Poverty should focus on income and broader categories such as a combination of basic material and non-material goods including rights and liberties.

A publication in *The Chronicle, October 19, 2004* contains a report issued by the Institute of Statistical Social and Economic Research (ISSER) showing deterioration in the poverty situation in Ghana. The report gave a different assessment of the poverty situation from 51.7% to 39.6% as depicted in the GLSS4 report of the GSS. ISSER therefore observes that poverty is a bigger phenomenon that cannot be assessed only by the use of income levels, hence the use of different methods that consider poverty as multi-dimensional process taking into consideration other factors that affect the livelihood of people and places to rank it.

The report further shows that poverty levels have deteriorated in Ghana. This was shown by the *Fuzzy Set Theory* used by ISSER to analyze data from the GLSS3 and GLSS4 on actual living conditions, including housing conditions, the possession of durable goods, household expenditure and assets and many other poverty indicators to show a tremendous deterioration in living conditions of Ghanaians.

### 4.2.2 Causes of Poverty in Ghana

The causes of poverty are multivariate but in view of the study these shall be categorized under four main subheadings; economic, location, socio-demographic and political.

1. **Economic**

Productivity and growth have been very low as a result of small disposable incomes and low savings resulting in low investment. In the year 2002, the GDP growth rate of Ghana was 4.5% and increased only by 0.3% in 2003 (Daily Graphic 2004). This is an indication of a stagnant economy which cannot support its population. Job creation and capital intensity are equally very slow. The end results of these are the presence of high unemployment rates that pose big challenges for effective mobilization of tax revenue and other forms of investments. Other factors include macro and market instability, market failures, inequalities of income and wealth. Over reliance on a few cash crops and extractive minerals in their raw state for exports only open up the country for more exploitation by the developed countries.
Globalization has contributed to the large pool of the poor resulting from inflexibility of economies and failure to respond to the opportunities offered by the acceleration of the world trade growth and internationalization of the capital market. In the 1980’s, Ghana become a model country of the Bretton Woods Institutions. The introduction of the economic reforms associated with structural adjustments even failed to bring significant improvement to the lives of the poor people.

2. Location

Moreover, the mere location of Ghana makes it remote and environmentally degraded. The three northern regions of Ghana are poor due to their geographical location. They are drought prone and unable to sustain farming all year round which is the major source of sustenance. In addition the farm lands are heavily degraded. The HIV/AIDS pandemic has left untold misery to Ghana of late. Despite the commendable decline of infection rates, HIV/AIDS poses a serious threat to individuals, households and national well-being in Ghana. The pandemic primarily claims the economically productive section of the population which spells poverty and destitution for individuals and families as well as a loss of wealth to the national economy. The pandemic has increased the spending on health, whilst reducing expenditure on other social services.

3. Socio-demographic

Families are poor because of large depended numbers among households. Food produced on a very small land holding is not enough to sustain a large family all year round. Incomes and family sizes in the whole of Sub-Saharan Africa are negatively related. Majority of people also suffer as a result of the deficiencies in the volume, quality and incidence of social services mainly education, health, clean water and sanitation provided by the state. Corruption among the ruling class and those at the pinnacle of affairs goes on in grand scale and thus explains why even with huge potentials, Ghana is still poor. Despite efforts to raise the status of women in Ghana, gender disparity remains a challenge. Effective participation of women in development programmes is still lacking. Women are still constrained by cultural values and norms that lead to subordination and abuse. The major constraint for women in Ghana pertains to property ownership and domestic violence. Women are denied access to productive assets particularly land and this has aggravated the poverty for many rural women. Women in northern Ghana for instance are not entitled to land either from their parents’ homes or husbands. Currently most of the traditional safety nets are broken down hence
children, the aged and the physically challenged from the extended families are no longer
catered for.

4. Political
Economic growth is crucial to human development and poverty reduction. Ethnic conflicts
and political instability have held back this growth for sometime now in Ghana. Indeed, the
failings of political systems and the social forces underlying these are identified as the
primary causal factors of poverty in many countries. Political instability has brought into
existence social exclusion. This means that lots of people are denied the structures and
opportunities to move out of poverty. The continued ethnic conflicts in certain parts of the
country such as Bawku and Yendi have created severe hardships and human suffering such as
social dislocation which impedes improvement of people’s quality of life. Heavy military
presence has caused such areas financial deficits because resources that could be allocated to
improving social welfare are diverted to addressing conflicts.

4.2.3 Addressing Poverty in Ghana
It is an acknowledged fact that the overall poverty decreased from the level of 51.7 percent in
1991/92 to 39.5% in 1998/99. In 2000 it further reduced to 39%. Extreme poverty also
declined from 36.5% to 26.8% over the same period (GPRS 2000). The above scenario was
achieved through a lot of national programmes and projects since 1988 including the
Programme of Action to Mitigate the Social Cost of Adjustment (PAMSCAD), the European
Union micro projects, Agricultural Sector Infrastructure Programme (ASIP), Village
Infrastructural Project (VIP), Social Investment Fund (SIF) and Presidential Special Initiatives
(PSI).

To facilitate and create a collaborative and organized environment for the respective
programmes, the country with retrospective effect from 1988 to date, put in place an
institutional framework at the national level to co-ordinate the efforts. The two main policy
documents available for the period to guide the institutions one at a time included the
abandoned VISION 2020 and the current Ghana Poverty Reduction strategy (GPRS). The
VISION 2020 was a national policy document that took into consideration the need to address
poverty especially in the rural areas. Some of the priority areas in this document included; the
creation of an enabling environment for democracy, economic liberalization, decentralization,
equitable social and spatial development, gender balance, ensuring efficient macro economic policies, environmental protection amongst others.

The GPRS (2002-2004) is a World Bank initiated document as a condition for Ghana to benefit from the Heavily Indebted Poor Countries (HIPC) package. The document has 5 thematic areas which include; micro/district economy (for accelerated growth), increase production and gainful employment, support for human resource development and basic services, programme for the vulnerable and excluded and good governance. The institutional framework was thus implemented at four levels (National, Regional, District and Non Governmental Organizations’ level initiatives).

4.3 OVERVIEW OF HIV/AIDS IN GHANA

The findings of the 2004 UNAIDS report of global AIDS epidemic indicates that if the current infection rates continue without access to treatment, 60% of today’s 15 year olds will not reach their 60\textsuperscript{th} birthday. In 2003, the median prevalence of HIV was 3.6% and is projected that 365,000 people will be living with HIV/AIDS by the close of 2004 (UNAIDS 2004). Almost 18 years since the first ever official recording of HIV case in Ghana, the country faces the threat of crossing the crucial 5% HIV prevalence rate threshold. The assumption is that any country whose HIV prevalence rate reaches 5% or more faces the extreme danger of containing the already incurable pandemic (UNAIDS 2004). Ghana like any other country in Sub-Saharan-Africa where HIV/AIDS is prevalent is poorer and less able to deal with the consequences of this universal plague.

The National AIDS and STIs Control Programme (NACP) tasked with controlling the disease began collating surveillance data in 1992 shows that there is a steady increase in HIV prevalence from the year 2000. From a low prevalence rate of 2.4% in 1994, HIV prevalence has shot up to 3.6% by the end of 2003. A significant feature of the pandemic in Ghana is the spatio-temporal variations. HIV/AIDS records in Ghana indicate 42 cases in 1986, of these; no cases were reported in northern Ghana. Many of the cases were recorded in the Eastern region especially among the Krobo ethnic group. Recent HIV/AIDS regional spread pattern has shifted to the Ashanti region. The increased number of cases in this region can be understood in part to the activities of commercial sex workers both local and international. Besides the region is closer to the Eastern region, the initial source area of HIV/AIDS, thus following the diffusion theory, one would expect areas closest to the source region to have
highest cases during the diffusion process. The region is further connected to the rest of the country by road, air and rail. This facilitates the movement of people, goods and services and hence serves as a transit point for people traveling north, south, east and west of the country.

Perhaps another attribute of the pandemic is its disproportionate effects on certain vulnerable people and groups. Records point towards high prevalence among women and the youth. Nearly 90% of the cumulative cases from 1986-1999 are between 15-49 years of age, with 63% of all reported cases being females (GNACP 2001). The prevalence ratio between females and males is currently 2:1, an improvement from the 6:1 in 1987. The peak ages for infection are 25-29 years for females and 30-34 years for males (GNACP 2000). This often leads to stigmatization, divorce, rejection and other forms of discrimination eventually worsening the plight of people living with HIV. The Ghana Demographic and Health Survey (GNACP 2003) results show that about 98% of all Ghanaians have heard of HIV/AIDS and know how to avoid the infection.

4.3.1 Attempts at prevention of HIV/AIDS in Ghana

The government of Ghana realizing the magnitude of the task in controlling the disease, established a National Advisory Commission on AIDS in 1985, followed by the National AIDS Control Programme (NACP) in 1987. In September, 2000, Ghana took a significant step towards mobilizing all sectors in responding to HIV/AIDS by establishing the multi-sectoral Ghana AIDS Commission. The commission coordinates the involvement of all public and private sector stakeholders in combating the epidemic. Specific aims of the commission are to prevent new infections among the youth and other vulnerable groups and to mobilize groups to support PLWHA.

NGOs and other relevant bodies have equally joined the race in fighting the disease. The United State’s Agency for International Development (USAID) supports the development of local capacity for diagnosis and surveillance of HIV and other STDs and the social marketing of condoms. The Ghana Social Marketing Foundation (GSMF) in collaboration with the Johns Hopkins University/Population and Communication Services (JHU/PCS) initiated a “Stop AIDS, Love Life” public education campaign in February, 2000. The campaign aims to increase the perception of risk among the population; increase and expand condom usage among the youth and increase compassion for PLWHA.
The prevailing facts indicate that the responses made by the government and other bodies have yielded results in terms of knowledge and awareness of HIV/AIDS reflected in the results of GDHS 2003. However, the virus still continues to plague Ghanaians despite the awareness created. It is now time for individuals to change their sexual behaviours and certain cultural practices that promote incidence quickly avoided.

4.4 THE STUDY AREA: BAWKU EAST MUNICIPALITY

The features demonstrated in this section include the location of Bawku East municipality, the physical, cultural and socio-economic characteristics. It is the intention of the study that these features will expose the reader to the general characteristics of the Bawku East area and thus help people understand why the place is vulnerable to HIV spread.

4.4.1 Location

Bawku East municipality is located in the extreme north-eastern corner of the Upper East region of Ghana. The municipality covers an area of about 2,067 sq.km with an estimated population of 307,162 as at the year 2000 (GSS 2002) which is actually the highest in the whole of the Upper East region. The municipality stretches a distance of 67 km from north to south and 47 km east to west. The Republic of Burkina Faso occupies the northern boundary, the Republic of Togo to the east, the Bawku West district to the west and the East Mamprusi district takes the southern boundary (See fig. 4.1). It has Bawku as its capital town and occupied by two major tribes: the Kusaasi and the Mamprusi. The fact that the municipality shares common borders with two neighbouring countries has consequences for community level planning and development. The free influx of people between these countries and Ghana through the municipality poses threats for the control and management of HIV/AIDS cases. It also places a strain on the limited health facilities in the area. Meanwhile, food security is not well managed as people from the neighbouring countries buy foodstuff from the Bawku East municipality. There are increasing cases of smuggling and immigration personnel are duly deficient to controlling this menace.

4.4.2 Physical characteristics

The area falls within an extension of the Gambaga scarp and is underlain mainly by Birrimian and granite rock formations. The surface relief is characterized by flat to gently rolling relief. The major river is the White Volta which has Tamne, Kumbugu, Gasori and Kubago as tributaries (Benneh et al. 1990). Except in a few areas around the river basins where the
drainage becomes periodically poor because of seasonal flooding, the municipality is generally well drained.

The vegetation of the municipality is classified under the Sahel savannah type. The vegetation consists of fire-swept grassland of varying heights occurring between deciduous trees, which mostly have economic uses. The present nature of the vegetation resulted from long settlement, over-population of both livestock and human numbers resulting into prolonged grazing, burning and intensive cropping and seasonality of the rainfall pattern. In the densely inhabited areas, tree densities are low and those found are the most economically and socially important such as silk cotton (*Ceiba pentandra*), sheanuts trees (*Butyrospermium parkii*), baobab (*Adansonia digitata*) and *Acacia albeda*.

The municipality falls within the Tropical Continental climatic zone as classified by Benneh et al. (1990). The climate is characterized by pronounced dry and wet seasons, which are influenced by two alternate air masses- the North-East trades and the South-West monsoon winds. The municipality has a single rainy season with monthly totals increasing gradually from March to October (IFAD 1990). Temperatures are considerably higher than the rest of the country. Mean monthly temperatures vary between years with average maximum temperatures being highest in March or April and lowest in August. Average minimum temperatures are usually lowest in December when the harmattan is in control of atmospheric conditions.

The prolonged dry season further renders most of the people engaged in agriculture seasonally unemployed whilst high temperatures between March and May promote the incidence of *Cerebro spinal meningitis* (CSM), *yellow fever* and malaria thus placing a heavy burden on the health delivery system in the municipality. The physical characteristics of the Bawku East municipality thus exhibit a deprived area and render the area susceptible to environmental degradation and a healthy ground for the breeding of most diseases potential for exacerbating poverty. The combinations of environmental changes, unemployment and the resultant poverty have negative implications for HIV prevention as the deprived conditions prevent women from negotiating safer sex and widespread casual sex among the youth worsen the situation.
4.4.3 Population and Settlement structure

Population growth and density have been key factors in determining the direction of socio-economic development of many parts of Ghana. They have determined land holding and the rate of unemployment in some agricultural areas in northern Ghana. The population density of Bawku East municipality in 1984 was 122 persons per sq. km and the very recent population survey of 2000 puts the area at 149 persons per sq. km. According to the 2000 population and housing survey reports, in 1970, the area had a population of 175,154 but growing at a rate of 3.02% per annum, the population increased to 251,221 in 1984 and was a home of approximately 307,162 people in 2000 (GSS 2002). Furthermore a greater percentage of the population is under 15 years of age. Children between the ages of 0-4 experience a high incidence of malaria and malnutrition.
Bawku East municipality is basically a rural certain. The Ghana Statistical Service Population and housing census reports that as at 2000, out of 466 settlements only Bawku Central and Garu had population numbers of above 5000 and thus attain urban status. Most of the other settlements have populations below or just around 1000. A feature of the settlement pattern is its dispersed nature. It is interesting to realize that farmlands are incorporated into the settlement structures, houses are built far apart from one another creating dispersed settlement structures.

4.4.4 Household size

Bawku East municipality is approximately a home to fairly large household sizes. The Ghana Statistical Service population census reports of 2000 indicate that there is an average of 7 persons per household. This state of affairs brings untold hardships in terms of meeting the basic needs of survival in Bawku East municipality.

The traditional household structure of the society is still based on male-headed unit of extended families consisting of one or more wives and several children. Males provide protection and security to the home as well as the breadwinners of the family. However, women in this society are heavily burdened with many roles. Women are often mainly housewives who are responsible for domestic chores such as preparation of family meals, maintenance of the house and in charge of nurturing children and the aged. Despite the prominent roles played by women, they are often marginalized with regards to resource allocation and decision making. Women generally lack control over economic resources like land, labour and capital and these have greatly limited their ability to produce even for subsistence.

4.4.5 Socio-economic characteristics

The socio-economic characteristics of the area are based mainly on a very complex network of cultural systems and extractive activities based on land. Crop production and livestock rearing are the major gainful activities with only a relatively few percentage engaged in formal jobs and informal jobs such as trading, vulcanizing, artifacts making and wood cutting. Trading in particular is a very lucrative activity in Bawku because of the strategic location of the place to the two neighbouring countries of Burkina Faso and Togo. Other activities that sustain the lives of women are pito brewing, sheabutter processing, dawadawa processing and groundnut oil processing.
4.4.6 Employment and Occupational distribution
Agriculture is the dominant occupation of the people, accounting for about 62% of the employment. The major outputs of farmers are maize, millet, rice, groundnuts, onions, watermelon and livestock such as cattle, sheep, goats and poultry. The area experiences only one rainy season thus limiting all year round farming to areas such as dam sites and in valleys. The seasonality of the farming activity as resulted in a mass exodus of the youth to the southern sector of the country and into Cote d’Ivoire during the lean season in search of menial jobs. This has adverse effects since some of them return with the dreaded disease-HIV, whilst the elderly and the aged are left behind to provide labour for the execution of projects at community levels.

Due to the strategic location of the area with respect to cross-border trade between Ghana, Burkina Faso and the Republic of Togo, Bawku is quite a busy commercial centre and a transit point for haulage trucks moving between Niger, Mali, Burkina Faso and the ports and harbours of Ghana. The township of Bawku is very busy with the folks mostly engaged in petty trading and small scale businesses. As unemployment rate is very high, the proximity of Bawku to the borders of Burkina Faso and Togo heightens the rate of smuggling in the municipality. Other employment avenues include public service, food processing, textile, leather works and trading.

4.4.7 Ethnicity
The predominant tribes in the area are Kusaasis, Mamprusis and the Moors, with the Kusaasis forming the majority followed by the Mamprusis. Ethnic heterogeneity has had implications for harmony in the municipality. There has been a long existing conflict between the Kusaasis and the Mamprusis over lordship of the place. There are quite a number of migrants from other parts of the country, especially the south, most of whom are civil servants and others from neighbouring countries of Burkina Faso, Togo, Mali and Niger. The Mosis are deemed to have come from Burkina Faso whilst the Busangas can trace their roots to areas bordering the Niger delta region.

Majority of the people of Bawku are Muslims who profess the Islamic faith. In other literature, it is estimated that about 60-70% of the inhabitants are Muslims (BEDA 2000). The Christian faith is mostly dominated by the Orthodox Church. In recent times, there has been the proliferation of smaller spiritual churches. It is most interesting to observe that though the
western religions appear to have paved their way into the area yet still the inhabitants recognize their ancestors and smaller gods to whom sacrifices are made occasionally. Today even though people profess their trust to the Almighty God or Allah, people go to the traditionalists to have their immediate problems solved. Traditional Practices, beliefs and rituals are still strong and widespread.

Needless to say intermarriages have fully integrated these ethnic groups to the area and provided the impetus for peaceful co-existence. Traditional marriage entails the distinctive practice of payment of a bride-price including the payment of 2 to 4 cows to the family of the bride. The marriage rite is quite distinct from what pertains in other parts of northern Ghana. The various tribes in the area practice both Islamic and Christian marriages depending on the type of religious affiliation a family belongs to but the almighty concern is that the tradition must be observed. The idea is that a family cannot proceed with the Christian or Islamic wedding without performing the traditional rites. The bride price is relatively higher and includes drinks, money and materials items for the bride’s family. These items are accompanied with 2 to 4 cows if the woman gives birth. In recent times this form of dowry payments has been seriously challenged as most families are unable to pay the full bride price due to poverty. It can further be observed that the high cost of dowry appears to have silenced the women folks and simply reduced them to mere “servitudes” under their husbands. The dowry rites further weaken women ability to negotiate safer sex with their husbands as they are seen as “properties” of their husbands.

It is quite interesting that the woman almost becomes a property of the bridegroom’s family after the completion of the rites. In case of the death of the husband, a brother of the husband takes possession of the woman as a wife. This arrangement may have a strong implication for the spread of HIV/AIDS because either can infect the other whilst in the polygamous family, it is likely that extra marital affairs would exist and thus a higher chance of spreading HIV/AIDS. One important cultural practice in the area that has a far reaching implication for the spread of the disease is female genital mutilation which is a traditionally deep-rooted practice that has targeted women and girls over the years. It is an initiation rite that prepares the girl for marriage. The idea is that men refuse to marry women who have not undergone the initiation. Beside this, tribal marks, skin piercing and male circumcisions are done by poor, uneducated men and women using very crude traditional instruments in deprived rural areas with minimal social facilities and supervision. The more complicated the surgery and
more crude the instruments used, the greater the incidence and seriousness of the associated health risks.

4.4.8 Governance
The society is generally patrilineal and patrilocal based upon hierarchies of clans and lineages that control access to land and exercise authority in marriages, funerals, religious and social ceremonies. Local level political governance is based on traditional sets of micro-states or chiefdoms. The Bawku chiefdom is the most powerful local chiefdoms in the whole of the municipality. The chief serves as the link between the living and the ancestors and thus as a spiritual head he performs the traditional rites to the ancestors, settles disputes, arguments and sanctions wrong doers. Politically, the municipality is divided into 40 electoral areas, with each represented by an assembly member in the Municipal Assembly. The Municipal Chief Executive is the political head flanked by the Coordinating Council and other staff.

4.4.9 Education and Health
Bawku East municipality has 146 primary schools, 50 junior secondary schools, 3 senior secondary schools, 1 technical institute, 1 vocational school, 1 teacher training college and 1 nurses training college (GES-Bawku 2004) but despite the availability of these schools, literacy rate in the municipality is very low. The enrolment rate for children of school going age is relatively low. The situation is generally believed to be worse in the rural areas and especially for the girl-child (BEDA 2000). The causes of the low enrolment rate is multifactoral and generally include the unwillingness of parents to send their children to school, inability of parents to pay fees, unavailability of teachers and the general poor state of educational infrastructure. In the rural areas, the situation is much pathetic as school buildings are either built with mud or roofed with thatch. Schools do not have furniture and pupils have to lie or sit on the floor to study.
The municipality has a well-equipped hospital with efficient staff. As a Presbyterian hospital, it has been providing voluntary testing and counseling to patients and the general public through The Presbyterian Home-based Care Unit of the hospital. Figure 4.2 above shows the entrance of the only hospital in Bawku East municipality. In addition to the Presbyterian hospital are 4 health centres, 2 health posts, 3 community initiated clinics, 2 private maternity homes in Bawku central and 3 private clinics (BEDA 2000). Most people also make use of traditional medicine and some pregnant women are taken care of at home by traditional birth attendants. It is important to note that the sphere of influence of the various health facilities are patronized beyond the limits of the municipality into other parts of the Upper East and Northern regions and mostly into Togo, Burkina Faso and Niger.
CHAPTER FIVE: BACKGROUND CHARACTERISTICS OF RESPONDENTS AND KNOWLEDGE OF HIV/AIDS IN BAWKU

5.1 INTRODUCTION
This chapter is dedicated to the presentation of the results from the research. It has been categorized into three main parts. The first part deals with a distribution of respondents according to certain selected background variables through the questionnaire survey. The main background variables are the independent factors that could influence HIV/AIDS infection. They include age, sex, marital status, level of education, household size, occupational status, religious background and ethnicity. The second part looks at secondary data on reported cases of People Living with HIV/AIDS (PLWHAs) and the last part is devoted to the knowledge and awareness of HIV/AIDS in Bawku East.

5.2 BACKGROUND CHARACTERISTICS OF RESPONDENTS
This part demonstrates the fact that certain variables have effects upon others. It is thus very important to summarize these variables more concisely for understanding. The main independent variables as employed here include age, sex, marital status, educational levels, occupation, income, religious background. The idea of establishing a cause and effect relationships is strongly influenced by the research design.

5.2.1 Background characteristics of respondents by age and sex
The literature on HIV/AIDS maintains that age and sex have become foci of AIDS researchers for the ominous implications indicated by recent trends influencing HIV/AIDS infection (Kalipeni et al. 2004). HIV/AIDS does not discriminate and hence is not a respecter of age and sex but females are more at risk because of the morphology of their vaginal structure. Males and females have different life expectancies, different reproductive concerns and different incidences of diseases. Sex further forms the bedrock of gender roles in societies and affects the degree of exposure to the risk of HIV infection. Table 5.1 below is the representation of the age and sex distribution of respondents through the questionnaire survey.
Guided by the idea that HIV/AIDS is no respecter of sex, the sex distribution of respondents was quite fair as it gave a 50% chance to both male and female. This is to ensure that accurate explanations of events encompassing views of all people are captured without prejudice to any sex. Table 5.1 depicts the age and sex distribution of the sample of respondents in Bawku. There are generally more respondents in the age group of 18-26 years than the other groups though there is difference between the male and female distribution. The males recorded 33% as against 30% of the females. This could be attributed to the low level of education in the Bawku. Respondents within this age group were expected to be in school at the time of the research. The fact that they were easily gotten to inform the study confirms the low level of education in the area.

It is also explicit from the total percentage distribution that the percentages of respondents tend to decline with increasing age. This trend is typical of developing countries like Ghana which have more of their population in the youthful group. The population diagram of Ghana especially resembles a pyramid, with a wide base indicating a youthful population and a steeply tapering top. There are fewer people in the older age groups due to lower average life expectancy at birth. It is however, interesting because it is observed that for the females a greater proportion of them are recorded in the 27-35 year group, an age group which by African standard any respectable woman is expected to be married. Unmarried women within this age group are often despised by the society and associated with bad character.
5.2.2 Background characteristics of respondents by marital status and sex

Marital status is a very significant independent factor that determines the kind of sexual behaviour that an individual can adopt. It is a common knowledge that in most parts of the world single people are more likely to engage in sexual activities with many partners than their married counterparts. This assertion is supported by the fact that single people are not committed to any relationship and could easily be seen around with many sexual partners without opened criticisms. A study in Ghana shows that a greater proportion of the unmarried youth making up of 27% of females and 18% of males have had sex before marriage (GNACP 1999). Even in legalized marriages, there are well researched studies that point to high level of premarital sexual activity, extramarital relations and sexual violence thus making spouses more at risk for both HIV/AIDS and STDs.

Widows especially the younger ones are even at more risk because they are likely to seek and be sought by other prospective partners. In many communities, women are believed to be subordinates to men and can thus expect battering not only if they suggest condom use but if they refuse sex. Unfortunately, due to lack of empowerment and unfair distribution of resources in favour of men, many women cannot bring up the subject of condom use for protection against HIV for fear of attracting the wrath of their partners. Table 5.2 depicts the distribution of respondents according to their marital status.

Table 5.2 Distribution of respondents by marital status and sex in Bawku, 2004 in Percentages

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Female Percentage</th>
<th>Male Percentage</th>
<th>Total percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>22</td>
<td>28</td>
<td>25</td>
</tr>
<tr>
<td>Co-habiting</td>
<td>12</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Married</td>
<td>44</td>
<td>56</td>
<td>50</td>
</tr>
<tr>
<td>Divorced</td>
<td>12</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Widowed</td>
<td>10</td>
<td>5</td>
<td>7.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100 (60)</strong></td>
<td><strong>100(60)</strong></td>
<td><strong>100 (120)</strong></td>
</tr>
</tbody>
</table>

Source: Field work 2004

N=120  Missing cases=0

The table 5.2 clearly depicts that marriage is a very significant part of the culture of the people of Bawku. A whopping percentage of 44% of the females and 56% of the males are married respectively culminating into 50% of all the respondents interviewed. In the culture
of these people marriage and procreation is very important as they believe it perpetuates the family’s lineage. Thus at a certain stage one is expected to marry and reproduce. Such perceptions of masculinity tend to pressure men to prove their manhood. That might explain why the males registered a higher percentage in terms of the married category as against the females. In fact, most local cultures expect men to be sexually active and women at the receiving end. The unmarried people form 25% of the respondents interviewed. Most of these people mentioned lack of economic resources as constraints in their inability to marry. It is however, observed that these together with those co-habiting are the at-risk population because poverty might lead them into premarital sex while lack of serious commitments to any relationship will more likely cause them to adopt health risk behaviours. Those divorced and widowed constituted 7.5% respectively.

5.2.3 Distribution of respondents by educational attainment, sex and income

The importance of education in the social and economic development of people in a society cannot be over emphasized. Education is an expensive item for the people of Bawku and its quality and availability show variations between the urban and rural areas.

Table 5.3 Distribution of respondents by educational level and sex in Bawku, 2004 in Percentages

<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>Female percentage</th>
<th>Male percentage</th>
<th>Total percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No education</td>
<td>35</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>Primary/Middle/JSS</td>
<td>18</td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td>SSS/A’ Levels</td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Vocational</td>
<td>18</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Higher</td>
<td>12</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100 (60)</strong></td>
<td><strong>100 (60)</strong></td>
<td><strong>100 (120)</strong></td>
</tr>
</tbody>
</table>

Source: Field work 2004

N=120    Missing cases=0

Table 5.3 above shows the educational attainment of respondents by sex. Inequalities in education underlie many of the disparities among respondents. Education and personal income are closely related and the groups with the lowest education and highest poverty rates
have worst health status. A combined figure of “No education” and “Basic education” (that is from Primary to Junior Secondary School) from the table above represents 52% of the sample population. In terms of sex distribution females are slightly less privileged with 35% as against 32% for the males. This could mean that those with low educational levels are exposed to more serious stress and have less access to health care services. Low educated people are generally more susceptible to deception and at the same time are equally more difficult to convince to accept new ideas like condom use to protect themselves. It is worthy of note that females are grossly disadvantaged in the ladder of education as represented in table 5.3. Vocational education shows a higher percentage of 18% and 13% for females and males respectively. It is argued that females generally are good at using their hands and that accounts for the reason why they registered a higher percentage in vocational education.

Statistically, the level of educational attainment among respondents overall is low but available facts on education in the municipality indicate that educational attainment among males is higher than that of females. The figures on table 5.3 seem to support the general situation in the Bawku East area. It will be right to therefore conclude that literacy rate is lower among females than males. Drop out rate is very high generally but higher amongst girls than boys. The lure to withdraw female children from school to give up for marriage has had a serious toll in contributing to high school drop out rate.

Education and personal income are closely interrelated and is represented in Table 5.4 below. Income has become a very important indicator of standard of living in most countries. In Ghana the daily minimum wage as at February, 2005 was 11,200 Cedis and increased slightly to 13,500 Cedis by the beginning of March representing $1.48. Incomes in Ghana actually increase accordingly to educational attainments. It is therefore very disheartening to observe that areas with very low educational attainments often lack behind in terms of income. Education is so significant an indicator that even well to do self-employers need it to some extent to manage their investments. Table 5.4 below depicts the educational attainment and personal monthly income of respondents.
Table 5.4 Distribution of respondents according to level of education and personal monthly income in Bawku, 2004 in Percentages

<table>
<thead>
<tr>
<th>Personal monthly income (in cedis)</th>
<th>Educational attainments</th>
<th>None</th>
<th>Primary/Middle/JSS</th>
<th>SSS A &amp; O Levels</th>
<th>Vocational</th>
<th>Higher education</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td>42.5</td>
<td>26</td>
<td>60</td>
<td>10.5</td>
<td>17</td>
<td>33</td>
</tr>
<tr>
<td>Less than 499,000</td>
<td></td>
<td>20</td>
<td>26</td>
<td>10</td>
<td>32</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>500,000-999,000</td>
<td></td>
<td>17.5</td>
<td>26</td>
<td>20</td>
<td>42</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>1,000,000-1,499,000</td>
<td></td>
<td>12.5</td>
<td>22</td>
<td>10</td>
<td>16</td>
<td>61</td>
<td>22</td>
</tr>
<tr>
<td>1,500,000-1,999,000</td>
<td></td>
<td>7.5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100(40)</td>
<td>100(23)</td>
<td>100(20)</td>
<td>100(19)</td>
<td>100(18)</td>
<td>100(120)</td>
</tr>
</tbody>
</table>

Source: Field work 2004

N=120  Missing cases=0

Chi-square value 47.7 at 0.05 significant level (0.00) and 16 degrees of freedom

It is clear from table 5.4 that the proportion of respondents decline as the level of educational attainment increases. Those with no education records a whopping 42.5% and do not earn any income at all. Overall proportion of respondents with No income is 33% with 60% of them have attended Senior Secondary School. The trend further indicates that higher incomes are associated with higher educational attainments. This assertion proved significant by chi-square tests (0.00). As respondents with higher education and who earn between 1,000,000 to 1,999,000 cedis represent 78% of the population, whilst a rather exceptional case is observed amongst the “No education” group (20%). Here it is higher than the percentage (17%) of those respondents with higher education and earning between 1,500,000 to 1,999,000 cedis. This trend is typical of the area because most of the inhabitants are self-employed business tycoons who own lots of properties. Inequalities in income however, exist and grossly skewed against women. Sadly as it appears 17% of respondents with higher education do not earn any income at all. Low income groups are associated with high poverty rates and have worst
health status. People with low or no incomes may be prone to HIV infection because they may lack the knowledge and resources to promptly treat other STIs, which increase the risk of HIV. In desperation such people especially females are more likely to engage in risk taking behaviours leading to HIV infections.

5.2.4 Distribution of respondents according to occupational status and sex

An analysis of occupational characteristics is significant to the study because low levels of employment especially amongst the females have serious toll for HIV/AIDS prevalence. Women who are generally unemployed are more likely to trade their bodies for material gains and this directly renders them defenseless when it comes to negotiations for condom use. Figure 5.1 shows the distribution of respondents according to occupational status in Bawku East, 2004 in percentages.

<table>
<thead>
<tr>
<th>Occupational status</th>
<th>Percentage</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal sector</td>
<td>10</td>
<td>10</td>
<td>32</td>
</tr>
<tr>
<td>Informal sector</td>
<td>25</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>Self-employed</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Student/Apprentice</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Unemployed</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

Fig. 5.1 Distribution of respondents according to occupational status and sex in Bawku, 2004 in Percentages

Source: Fieldwork 2004

N = 120   Missing cases = 0

Figure 5.1 above shows that majority of the females making up of 30% are self-employed. This proportion of women is into petty trading whilst 25% of them are unemployed. Only 18% of women are in formal sector employment and 15% in informal sector jobs. A lower proportion of them (12%) were found as students in formal education and apprentices undertaking training to be hair dressers, seamstresses, bread makers, food sellers and house sitters. Against their males’ counters, majority (32%) of whom are into self-employment and identified mostly as cross border traders dealing in (clothing, cassettes, motors and spare parts), petty traders, artisans, masons, carpenters and mechanics. Only 10% are in informal...
sector as farmers and other working for non governmental bodies and community based organizations. A further 18% are students in formal institutions around the municipality and others under going various forms of training as apprentices. It is also observed that 20% of the male respondents are in formal sector employment where teaching is the commonest type of employment. Another 20% of the male respondents are not working at all. Thus it is clear that overall majority of respondents (31%) take to self-employment as the only means of survival. NGOs and other community based organizations are making strenuous efforts to empower especially the youth and women to becoming self sufficient in the area of employment. Unemployment is very common (24.5%) in Bawku and particularly synonymous to females (25%). This unemployment level has tremendous consequences for HIV/AIDS spread in Bawku East municipality.

5.2.5 Distribution of respondents according to ethnicity and religious affiliation

Ethnic heterogeneity has had great influence in the municipality since time immemorial. This is as a result of historical influences dating far back into pre-colonial era. A closer knit with neighbouring countries such as Togo, Burkina Faso, Niger and Mali has witnessed the influx of migrants into the municipality over the years probably because the capital is fast becoming a vibrant commercial centre. The predominant tribes in the area are the Kusaasis and Mamprusis representing 27% and 20% respectively of the respondents. The issue of ancestral claim to the land has created a bone of contention between the two dominant tribes generating serious tribal conflicts in recent times. The Moors (Binmobas) also owe allegiance to the land but are mostly confined in the rural areas of the municipality. It is observed that they form only 17% of respondents in the study. Other-Ghanaians represent 24% of respondents and are mostly civil servants from other parts of the country. Migrants from other neighbouring countries further complete the proportion with only 13% and are the Mosis, Busangas and other smaller tribes. It is observed that long settlements and intermarriages between the Mosis, Busangas and the indigenes have provided an impetus for peaceful co-existence in Bawku East.

Bawku is generally a Moslem town irrespective of the distribution reflected in the study. It is observed that Christians represent 41% of respondents interviewed as against 33% of the Moslems. The distribution here is not fair especially regarding the real situation in the Bawku. However, this trend could be attributed to the snowball method adopted which identified more Christians than the Moslems. About 21% of respondents practice the traditional religion
involving ancestral worship and pouring libation to smaller deities for protection. Those who
do not belong to any religious affiliation represent 6% of respondents. Religious affiliation
has a serious implication for the spread of HIV. Whilst some religions do not permit the open
discussions of sex, religious practices and beliefs could equally promote HIV infection
without warnings.

5.3 HIV/AIDS IN BAWKU EAST MUNICIPALITY

The incidence of HIV infection in Ghana in general is on the increase. The number of cases in
absolute figures in 1998 was 380,000. It was estimated that 3.6% of the adult population aged
15 to 49 years were living with HIV/AIDS as at the end of 2001 (MOH 2003). Each day it is
estimated that 200 persons are being infected with the virus. From a low national rate of 2.4%
in 1994, HIV prevalence has gone up to 3.6% by the end of 2003. A significant feature of the
disease is the spatio-temporal variations. While the Eastern and Ashanti regions have often
recorded high prevalence and incidence of the disease respectively, the regions in the northern
part of the country record low rates. The results of the MOH HIV sentinel survey, 2003
indicate an HIV prevalence rate ranging from 1.6% to 8.5% with a median prevalence of
3.4%. It was a revelation that severe epidemics by Ghana’s standard are raging in various
non-contiguous parts of the country. The Upper East region is no exception to this as
Navrongo and Bawku were associated with 5.1% and 3.8% respectively. In Bawku for
instance the median prevalence was 3.4% and the mean prevalence was 3.8% (MOH 2003).
This state of affair is very crucial for the people of Bawku East municipality.

5.3.1 Magnitude and distribution of HIV/AIDS in Bawku East Municipality

Bawku East municipality is certainly located in a threshold of a risk environment for
HIV/AIDS infection. With its total population of about 307,162 living in 466 communities
and closely tied to neighbouring countries known to have high HIV prevalence rates could be
said to have high implications for the spread of HIV/AIDS. The study therefore attempts a
discussion on the number of HIV cases recorded in the municipality. Lack of sufficient
statistics on HIV/AIDS in Bawku could be attributed to concealment of information on sero-
positive status of individuals and inadequate health facilities. Table 5.1 depicts recorded cases
of HIV/AIDS from 1999 to 2002 according to age and sex distribution.
Table 5.5 Age and sex distribution of PLWHAs from 1999 to 2002 in Bawku East

<table>
<thead>
<tr>
<th>Age</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>Total</th>
<th>Grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>15-19</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>9</td>
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<tr>
<td>20-24</td>
<td>9</td>
<td>6</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>25-29</td>
<td>8</td>
<td>13</td>
<td>9</td>
<td>12</td>
<td>7</td>
<td>44</td>
</tr>
<tr>
<td>30-34</td>
<td>10</td>
<td>8</td>
<td>7</td>
<td>4</td>
<td>6</td>
<td>29</td>
</tr>
<tr>
<td>35-39</td>
<td>6</td>
<td>5</td>
<td>9</td>
<td>2</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>40-44</td>
<td>12</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>45-49</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>50-54</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>55-59</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>60+</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>40</td>
<td>50</td>
<td>31</td>
<td>34</td>
<td>161</td>
</tr>
</tbody>
</table>

Source: Bawku Presbyterian Home Based Care 2003

Data available concerning reported cases of HIV/AIDS is quite limited as it starts from only 1999 to 2002. It is however, an indicative of the fact that the pandemic is visible in the area and could even spur more than the cases reported so far. After what appears almost more than two decades since the first cases of HIV were reported in Ghana, Bawku East municipality only started to take serious records of the disease in 1999. The fact is that people could have gotten infected with the disease from 1986 onwards and most of such patients might have been dead. The exact magnitude of HIV/AIDS cases in Bawku East is therefore extremely difficult to predict. This means that HIV/AIDS is a serious health problem in Bawku East.

According to the Presbyterian Home Based Care records, there were an estimated number of 87 persons living with HIV in the year 1999 and the number of AIDS patients was estimated to have reduced to 81 at the end of 2000. It is clear from the foregoing that the number reduced absolutely by 6 persons representing 7% of the absolute proportion in 1999. The records further reveals that there were 6 and 8 deaths related to HIV/AIDS in 1999 and 2000 respectively. This is therefore an indication that HIV/AIDS has been in the area for a very long time taking into consideration the incubation period of the disease. In the 2 years (1999
and 2000) 14 persons died through HIV but are not included in the absolute numbers of cases. Experts and other institutions believe that these cases are just a tip of the iceberg as many of the cases are not reported. Reported and documented cases as shown above are littered with high levels of under-diagnosis, under-reporting and delays in reporting. The truth is that lack of accurate sources and low patronage of the hospital in Bawku where biomedical health care facilities are available could partly count for the under-reporting.

In Bawku and Ghana generally, heterosexual transmission is the primary mode of spread and accounts for more than 85%. There are slightly higher cases of incidence amongst females than males in the whole of the country. The case of Bawku East is quite strange and appears to deviate from this trend. The ratio of infection has since 1999 favoured the males. In 1999 the ratio was 47:40, increased in 2000 to 50:31. However, from 2001 to 2002, the ratio is attaining parity as it can be observed to have changed in favour of the females in 2001 (34:41) and almost an equal ratio in 2002 (31:30). Moreover, the peak ages for HIV/AIDS cases are between the ages 20-34 for females and 35-44 for males in Bawku. It is observed that the age groups 25-39 years bore the greatest burden of the epidemic in the municipality for the four year span (1999-2002). Further examination reveals that more females were infected within the age group peaking at 25-29 year group closely followed by the 30-34 year group and the 20-24 year group. This trend has serious implications as the age groups affected are the most energetic and reproductive hence affecting both production and reproduction capacities of the Bawku East area.

The epidemic poses a major reproductive health challenge which goes beyond morbidity and mortality as the age groups mostly affected constitute the peak of childbearing (Awusabo-Asare 2004). Since most of them may be bread winners of their respective families, this can cause serious economic, cultural and social disruption particularly reproduction process. The young children and elderly who form the dependency population may face untold hardships (GNACP 2003). This could further be the beginning of poverty as both determinant and consequence of the epidemic. Burdens will thus shift to those least prepared to do so. The causal chain runs from macro-factors, which result in poverty through the community, household and individual, into the capacity of the individual’s immune system (Whiteside 2002). The number of females infected in the 15-19 age groups is much higher than for males in the same age group. This is due to earlier sexual activity by young females usually with older males (GNACP 1999, Jackson 2002).
In the year 2000, Bawku East recorded 81 new HIV/AIDS cases, indeed the highest in the Upper East region that year. Absolute numbers of cases declined in 2001 to 75 and further declined to 61 in 2002. There was a steady increase in the number of newly reported cases to 64 in 2003 (BEMA 2004). For the four year period (2000-2003), a total of 281 new cases were reported in the municipality. This works out an institutional prevalence rate of 0.92%. Given that the institutional data represents only 30% of actual HIV/AIDS cases reported, as is often the case for most diseases (BEMA 2004), the real infection rate of the disease in the four year period could be roughly estimated to 3.3%. This is close to the rate (3.8%) assigned to the municipality by the Ghana sentinel survey 2003. This rate when closely related to the national infection rate of 3.6% (2003) and 200 persons per day will translate to an infection rate within the range of 230 to 330 persons per year in the municipality. This generates into a monthly infection of about 19 to 28 persons and about 1 infection per day.

This trend is certainly critical as far as the socio-economic development of the municipality is concerned. In view of the fact that the pandemic finds solace in eroding the very human resource base of the municipality, there is the need to arrest the situation before it gets out of hand. The municipality has a commercial character that suggests direct and clear implications for the easy explosion of the pandemic. I will return to the factors that are accounting for the rapid spread of the disease in chapter 6 and 7.

5.3.2 Sex and country of origin of PLWHAs in Bawku East Municipality
Bawku East is strategically located between two neighbouring countries (Togo and Burkina Faso). Further revelation by the Presbyterian Home Based Care 2003 indicates that the number of PLWHAs in Bawku vary spatially. The clients of the only hospital in the municipality come from three different countries for counseling and treatment. Reported cases of people living with HIV/AIDS compiled by the Presbyterian Home Based Care from 1999 to 2002 show variations in the origin of people seeking treatment. There were mainly from Ghana, Togo and Burkina Faso.
Figure 5.2 Distribution of people living with HIV/AIDS by country of origin and sex in 
Bawku East municipality, 2004 in percentages

Source: Based on reports of the Presbyterian Home Based Care 2003

Figure 5.2 above shows the country of origin and sex distribution of people living with 
HIV/AIDS in Bawku from a 4 year period (1999 to 2002). It is clearly indicated that people 
living with HIV/AIDS come from far places outside Ghana into Bawku to seek medical 
attention. Statistically, 42% and 37% of both males and females respectively of PLWHAs 
came from Ghana in the 4 year period. Those from Burkina Faso consist mostly of males as 
10% of them and 8% of females sought medical attention in Ghana. Togo trailed behind 
Burkina Faso with 2% of their females and 1% of males seeking medical attention in Ghana. 
Nonetheless, it remains clear that Ghana alone recorded 79%, Burkina Faso 18% and Togo 
3% of PLWHA and who were seeking medical attention in Ghana from 1999-2002. Of all the 
total deaths resulting from HIV in the 4 year period, both Burkina Faso and Togo registered 
17% (5) whilst Ghana took the bulk of the percentage 83% (25). It is believed that a number 
of people from neighbouring Burkina Faso, Togo and other parts of Ghana prefer to seek 
counseling and treatment outside their own residences to avoid exposure and potential 
stigmatization. It is worthy of note that stigmatization is still one major barrier to effective 
prevention strategies. Whilst it is also true to emphasis that health service is generally cheaper 
in Ghana than the neighbouring countries. Free border movements have enabled many 
foreigners from neighbouring Togo and Burkina Faso seeking medical attention in Ghana.

This state of affairs is very critical to the prevailing health situation in the municipality as it 
might exert unnecessary pressure on the health services. One other major contributing factor 
to the spread of the disease in the municipality is the concealment of information on the status 
of people living with HIV/AIDS. This concealment is largely due to fear of stigmatization and 
personal embarrassment on the part of the people living with HIV/AIDS, because regardless
of how the disease is contracted, they are viewed by society as being immoral and both shunned and feared. This attitude almost compels persons to remain underground; act sexually as if all is “normal” thus spreading the disease. One will therefore not be far from the truth to conclude that some local residents (Bawku East) for fear of stigmatization and discrimination will seek medical attention outside the municipality as well. The exact numbers of local residents living with HIV/AIDS is thus extremely difficult to predict.

It must be mentioned, indeed that even though the HIV/AIDS cases above are very useful in analyzing the disease trend in the municipality as they could be underestimated. The cases are only those recorded in the Presbyterian hospital in Bawku central and mean that only patients with STDs who visit the hospital and oblige to testing are captured. HIV/AIDS patients who do not visit the only hospital in the municipality are definitely not captured. An almost instinctive reaction to HIV has been that of discrimination and stigmatization of HIV-infected people. This discriminatory behaviour tends to create fear and secretive activity even among those who already have basic knowledge about the disease (Vitillo 2004). Studies in Cote d’Ivoire show that, in places with extremely high HIV prevalence, women refused HIV testing or did not return for their results. In southern Africa, a study on needle stick injuries in primary health care clinics found that nurses did not report the injuries because they did not want to be tested for HIV (Vitillo 2004). In one of the focus group discussions, respondents were quick to point out that people who were caring for HIV-infected patients at home will rarely acknowledge that their relative is suffering from the effects of the virus. Another issue is that majority of people make use of traditional medicine and thus will avoid the hospital were HIV testing is done. Documented cases in the hospital do not therefore represent the actual prevalence and incidence rates of the disease.

5.4 KNOWLEDGE AND AWARENESS OF HIV/AIDS IN BAWKU
Currently, it’s known that awareness on HIV/AIDS is over 98% (GNACP 2003). The 1998 Ghana Demographic Health Survey (GDHS) indicated that 97% of females and 99% of males in Ghana have heard about HIV/AIDS (GNACP 1999). The high awareness created about the disease by Ghanaians supports the fact that campaigns have been very effective. HIV/AIDS campaigns in Ghana often emphasize behavioural change based on the universal \textit{ABC message}: Abstinence til marriage, Faithfulness to only one’s sexual partner and Condom use frequently if it is quite necessary to have sex for fun and not for procreation. The concept of behavioural change appears to be a common motto used by all stakeholders who intervene on
HIV/AIDS. Yet there has been little or no appreciable behavioural change sexually, discrimination and stigmatization towards people living with HIV/AIDS is very high, care and support to people living with HIV/AIDS as well as widows, orphans and the vulnerable is very negligible (BEMA 2004). Data on HIV/AIDS knowledge and awareness and the level of risk people are prepared to take can be used to cross examine the degree at which the “supposed campaigns” have served the people of Bawku with the correct information to enhance their sexual behaviours.

Generally knowledge about the transmissive methods of a disease is necessary to providing the appropriate measures to controlling it. Moller (2000) contended that people often misperceive the risk associated with a particular activity because of insufficient information. This assertion is also closely supported by the health belief model (Strecher and Rosenstock 1997) that people might not believe that taking a particular action will reduce the disease threat. Obviously some people will tend to take negative aspects of a particular health action and that could act as a barrier to undertaking the recommended behaviour. The influence of poverty and low access to education could be devastating here. Some of the perceived barriers might be viewing the prevention measures as expensive to acquire in the case of condoms, time-consuming in visiting a health expert for counseling and difficult to obtain for example condoms in a rural area.

Though awareness of HIV/AIDS appears to be very high, yet knowledge of the disease needs more efforts and concerns. Surprisingly, some respondents still believe that HIV can be spread by ordinary social contact or through the air and that all HIV-infected people must be identified publicly in order to avoid infection because of ignorance and extreme fear of the disease.

There are various community based organizations, non-governmental organizations and clubs working on HIV/AIDS prevention in the municipality. There is a wider specialized activities between and within the organizations but equipped with the same warning messages to the population. For instance, there are some such as the Presbyterian Home Based Care and the Ghana Social Marketing Foundation (GSMF) working on condom distribution and sales as well as support and care for people living with HIV/AIDS. Some like the Youth Vrs HIV/AIDS have set up posters and billboards everywhere in the municipality warning people about the dangers of the disease and at the same time advocates the need for a positive
behavioural change to fight the disease. They increasingly travel to rural areas to stage informative plays. Whilst the Presbyterian Home Based Care apart from the support and care for PLWHA also specializes in counseling of patients, it also compiles statistics on the prevalence and incidence of the disease in the municipality. The Presbyterian hospital have sero-status testing centre as Bawku is one of the participating districts of the Ministry of Health (MOH) annual sentinel surveys.

![HIV/AIDS warnings displayed on a signboard and wall in Bawku East Municipality](image)

**Fig. 5.3 HIV/AIDS warnings displayed on a signboard and wall in Bawku East Municipality**

*Source: Field work 2004*

The municipal assembly has equally been assisting other smaller clubs, CBOs and local NGOs with the necessary logistics and guidance to creating awareness on HIV/AIDS. Some religious bodies have also been adequately mobilized to respond appropriately to the HIV/AIDS epidemic and to help reduce the stigma and discrimination associated with HIV infection. Some religious bodies sponsor some excellent educational programmes designed to prevent the sexual transmission of HIV. Schools especially under religious bodies such as the Catholic Church have developed curricula to help young people learn about their bodies, about the drive to develop strong and even intimate relationships with others and about the need to develop discipline and maturity in those relationships so that they will not become manipulative or exploitative (Vitillo 2004). The most consistent message of such religious educational programmes is that sexual activity is to be restricted to faithful marriages and abstinence should be practiced outside marriage. In addition, some tailoring shops, hairdressers’ shops and schools have formed clubs working on awareness creation targeting mainly the youth population, women and the vulnerable. See Appendix IV for a list of some of the organizations involved in awareness creation on HIV/AIDS in Bawku East municipality.
Indeed, 56% of respondents stated that HIV/AIDS campaigns have reached most parts of the municipality and that the level of campaigns on HIV/AIDS is high in the town. 41% of respondents think that the level of campaigns on HIV/AIDS is moderate whilst very low proportions of 2% and 1% stated that campaigns were low and don’t know respectively. Overall, the high knowledge of HIV/AIDS amongst the population is an indicative of the fact that the HIV/AIDS campaigns have gone down well with the people. Despite the high level of awareness created and the indicated high knowledge of the disease, individuals still think that they are not at risk at all of HIV/AIDS.

5.4.1 Knowledge of HIV/AIDS and self-perceived risk in Bawku

On self-perceived vulnerability to HIV/AIDS infection, 75.5% of the respondents admitted that there were vulnerable to HIV infection. 2.5% did not agree whilst 22% of the respondents answered don’t know. “Don’t know” is used to refer to respondents who actually could not tell whether they are vulnerable to HIV/AIDS or not. Whilst in a very similar way respondents who lack sufficient information about HIV/AIDS and its transmissive mechanism could not access their degree of vulnerability to HIV/AIDS and therefore answered “Don’t know”. The focus group discussions supported this assertion that most respondents did not see themselves at any risk of HIV/AIDS. Respondents were rather of the view that they have had enough preventive messages to be able to control the situation. A personal interview with one of my key informants demonstrated this perception. On self- perceived vulnerability, the respondent replied that:

“…Since I heard of the disease and its ways of transmission, I have been using condoms if I have to enter into a new relationship. But at the moment I have only one sexual partner and so I am not at risk” (Personal interview 2004)

Like this respondent, most people think that the advocacy for condom use if necessary has opened a new chapter for premarital sex. Some young men in the municipality are not committed to permanent relationships because of the cost that accompanies keeping a regular partner. Some of the young men admitted through the discussions that ladies in the area demand lots of “gifts” from them. Some respondents thus explained that to avoid the increasing demands made by girlfriends, some young men jump from girl to girl claiming that they use condoms in the process. They need more convincing messages that they are at risk. The young men in the focus group discussion therefore concluded that:
“...Once there were condoms, nothing could prevent us from enjoying the world’s most pleasurable thing (sex)” (Focus Group Discussion 2004).

Asked why they believe so much in the efficacy of the condom, some of them replied that they have been informed that it is the safest method against HIV/AIDS. Some of the men disagreed with this and contended that the condom is not all that safe because it can burst thus putting one at higher risk of acquiring the disease. One of the participants indicated how a friend experienced this situation a couple of months ago. These contested views threw further light on the level of knowledge people have about HIV/AIDS and its preventive methods. Unfortunately, many preventive educational efforts focus almost exclusively on condom use and arguably portray it as “100% guaranteed safe sex”. The danger is familiar for most of them and they have indeed benefited from the various campaigns going on unabated in the municipality.

The women’s focus group discussion however, indicated that condom use with their regular partners have not been frequent. The unmarried young girls said that condom use with their partners is often very high at the beginning of courtship but reduces as the relationship deepens. This clearly supports the fact that condoms are frequently used in casual relationships but reduces in permanent relationships. It was also mentioned by the young unmarried girls that one notable reason why they engage in premarital sexual intercourse is due to the deteriorated socio-economic structures in the area. Hence, they tend to lean on prospective men for financial and material support. Some married women on their part are aware that their husbands cheat on them. Unfortunately, these women are powerless and do not dare suggest condom use in their marriages for fear of physical abuse.

Domestic gender-based violence against women was reported in the women’s group discussions, is widespread and closely linked to HIV/AIDS infection. Obviously, some married women know they are vulnerable to the disease but cannot help the situation because the society expects them to be at the receiving end. Indeed, women’s status in a society to a very large extent determines their ability to negotiate for sex with male partners. This is the general situation in most societies in Africa (Kalipeni et al. 2004). For instance it has been reported that in Rwanda, HIV-positive women with an HIV-positive partner were more likely to report sexual coercion in their relationship than it were amongst women without HIV (Van
Der Straten et al. 1995). The following reported statement by an elderly lady further emphasizes the ordeal of women under men:

“My daughter got married two years ago to a married man in the neighbourhood. The man is believed to be promiscuous and was seeing a lady many believed died of HIV/AIDS recently. My daughter tried refusing sex with him because the man will not use condom, he gets angry and beats her up when the subject of condoms are raised. This matter has been ruled off as a domestic case by elders of both families giving the man power to exercise his manhood in the house” (Interview with a 66 year old lady, 2004).

This revelation supports the argument that knowledge and awareness of HIV/AIDS alone does not help if one does not have the power and self-efficacy to reduce the risk by behavioural change (Bernardi 2002). Individual risk perception depends on the degree of control they have on their own behaviour and that of their partner’s. Behaviour to some extent is also influenced by the culture and society that one is born into. The culture that gives men the power to dominate their partners definitely subordinates women’s quest for protective sexual relations. Thus according to the Structuration theory cultural beliefs could constraint women’s behaviour.

5.4.2 Sources of knowledge of HIV/AIDS in Bawku East Municipality
It has been repeatedly mentioned that awareness on HIV/AIDS is certainly very high in most parts of the country amongst and within gender. In Bawku, respondents and key informants were very quick to accept this claim. However, it is appropriate to accept the fact that the kind of knowledge people get on HIV/AIDS depends on the source of information. Table 5.6 shows a frequency distribution of the various sources of information on HIV/AIDS in Bawku.
Table 5.6 Distribution of respondents according to most important source of information on HIV/AIDS by sex in Bawku, 2004 in Percentages

<table>
<thead>
<tr>
<th>Source</th>
<th>Female percentage</th>
<th>Male percentage</th>
<th>Total percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>TV/radio/news papers</td>
<td>25</td>
<td>28</td>
<td>27</td>
</tr>
<tr>
<td>Health workers</td>
<td>20</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Educational campaigns</td>
<td>25</td>
<td>27</td>
<td>26</td>
</tr>
<tr>
<td>Workshops</td>
<td>7</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>100 (60)</td>
<td>100 (60)</td>
<td>100 (120)</td>
</tr>
</tbody>
</table>

Source: Field work 2004

N=120 Missing cases=0

Table 5.6 above clearly shows that television/radio/news paper tops the list as the most important source of information on HIV/AIDS as 27% of overall respondents of the sample population stated that they heard of HIV/AIDS through that source. Closely trailing television/radio/news paper is educational campaigns in the area with 26%. The next important source mentioned is through friends with 23%. It was therefore quite surprising that more informative sources such as health workers (16%) and workshops (8%) were ranked lowest by respondents. It is clearly observed that non-interactive sources such as television, radio and newspapers cannot afford the people the needed information on HIV/AIDS because they are less privilege to asked questions for clarification. They will therefore have to depend on peers or others which have the greater risk of spreading more false information. The most important sources of information where people have the opportunity to ask questions are through health workers, campaigns and workshops.

Here again, it is clearly observed that there are indeed variations between gender in terms of sources of knowledge. 20% of females heard of the disease through health workers as against 12% of males. This is strongly supported by the fact that most HIV messages are received by women attending prenatal and postnatal clinics. Moreover, the reproductive role of women suggests that they take the sick (both children and the aged) to seek medical attention at hospitals and traditional homes whilst pregnant women often under go HIV-test before
delivery. This therefore suggests that females often get concise information on HIV/AIDS more regularly than men.

5.5 SUMMARY OF THE CHAPTER
The preceding chapter has demonstrated that the sex distribution of the sample population is fair with majority of the population within 18-35 years. 44% of females and 56% of males are currently married culminating to a 50% proportion of married people interviewed overall. Level of educational attainment is low and facts on education in the municipality indicate that it is higher among males than females. Inequalities in education underlie many of the disparities among respondents. The proportion of respondents decline as the level of educational attainment increases. Unemployment is quite emanate and finds expression amongst females. This unemployment situation has a serious implication for the spread of HIV/AIDS in Bawku East municipality. The predominant tribes are the Kusaasis and Mamprusis. Whilst a closer tie with neighbouring Burkina Faso and Togo has seen the proliferation of many migrants into the municipality. Distribution according to religious affiliation favours Christianity, though obviously Bawku is recognized as a Muslim town and this was generated through the snow ball sampling method adopted in the study which of course recognized more Christians than Muslims.

The actual cases of people living with HIV/AIDS in Bawku East municipality were generated from 1999 to 2002. According to the statistics, there were 87 patients in 1999, 81 in 2000, 75 in 2001 and 65 cases in 2002. While there are slightly higher cases of incidence amongst females nationwide in Ghana, the situation is different in Bawku East as the ratio of infection favours males than females. The 25-39 age groups bore the heaviest burden of the disease and affects females more. The number of people living with HIV/AIDS has a spatial dimension in Bawku. The clients of the only hospital in Bawku come from Togo, Burkina Faso and other parts of Ghana for medical attention. Whilst stigmatization and fear of exposure is a major barrier to concealment of information on HIV/AIDS, effective structures were not put in place earlier to compile data on the disease in Bawku East.

It is further demonstrated that HIV/AIDS awareness is very high in Bawku East but knowledge of it is still a problem amongst the populace. There are many organizations involved in educational campaigns. Television/radio/news papers were cited as the most
important source of information on HIV/AIDS. It is therefore not surprising that some people still believe HIV/AIDS is spread through social contact and through the air.
CHAPTER SIX: LIVELIHOOD STRATEGIES AND HIV/AIDS RISK IN BAWKU EAST MUNICIPALITY

6.1 INTRODUCTION
In this chapter the levels and patterns of poverty in the municipality is described and analysed. Some differences in levels of poverty exist within households and individuals and are considered in this chapter as well. Poverty in the municipality has led to many ways of initiating survival strategies. The ways in which individuals and households adopt in sustaining their existence is examined.

6.2 POVERTY IN UPPER EAST REGION OF GHANA
The Upper East region is one of the poorest regions in Ghana. In 1989 the population consisted of 31.8% absolute poor people, 37.1% moderate poor, 29.7% non-poor and only a very small proportion (2.9%) rich people (Assenso-Okyere et al. 1997). The conditions of the region continued to worsen during the 1990s. Between 1992 and 1999, while the number of poor people in Ghana reduced from about 5 out of every 10 persons to about 4 in every 10 persons, the Upper East region had 9 out of every 10 people being poor (Daily graphic 2004). The Upper East region lags behind in every available indicator of human welfare and development (Songsore 1989). The region owned 0.6% of total national industrial establishment, contributing 0.4% to overall industrial employment in the 1960s. This fraction dropped to zero after the collapse of the meat factory in Zuarungu and the tomato processing plant in Pwalugu following the serial changes in governments in the 1970s.

In terms of agricultural output, the region’s major products (millet, sorghum, groundnuts, beans, maize, rice and livestock) are largely undervalued and under priced in the national market. It therefore means that the dependence on rain-fed agriculture implies lower per capita output of crops (Department of Geography and Resource Development 1992). Government intervention in agriculture has been limited to cotton and rice which have also suffered low patronage following the commencement of the Economic Recovery Programme (ERP). Currently, only souvenirs and sheanuts production appear to be enjoying some little bit of patronage as non-traditional export products.

In the social sector, infrastructure, education and health lags behind all other regions and are very critical to the teeming population. As at 1985 the region had only 1 specialist doctor, 5
doctors and 97 nurses (Songsore 1989). Today even though it appears there has been a minimal improvement yet when compared to the national figures, the region is still the least privileged. There have been high rates of failures and school drop outs at all levels of education (BEDA 2000). Drop out rate for girls is higher than that of boys. The situation is generally worse off in the rural areas. High user charges have discouraged the use of health and educational facilities by a greater proportion of the populace who simply cannot afford the use of the services.

6.2.1 Brief history of poverty in the Upper East Region
The present poor conditions in the region cannot be adequately explored without resorting to history. The history of poverty can be traced back to the colonial era when young energetic people were induced or coerced to migrate to the plantations and mines in southern Ghana. Mass out migration from northern Ghana commenced as a result of colonial administration policies associated with the recruitment of labour from northern Ghana to work in the mines, cocoa farms and construction of the railway lines in southern Ghana. The north was left as a labour reserve for the mines and plantations of the already endowed south. Nabila (1972) mentions that in 1950, the Finsbury Pavement House Transit Welfare Centre established a labour recruitment camp at Bolgatanga with the approval of the colonial secretary for engaging and transporting labour to the mines (Nabila 1972). Other illegal recruitment centres sprang up all over the territory. Thus colonialism succeeded in providing a new definition of northern Ghana in relation to the south. The marginalization and deprivation of the north is part of the legacy of the past and has not changed since as the people of the south tend to see northern Ghana from a different perspective.

It was only in the 1950s that the first mission schools were opened, the 1940s did the colonial administration allow northerners to be trained as teachers at Achimota and in 1992 was a University established and electricity extended to the area. The neglect of the area in terms of development gives no option to the energetic youth rather than to migrate. Migration has been part of the lifestyle of the population (Nabila 1972). Neo-liberal policies introduced in Ghana in the early 1980s meant the advent of free markets involving the elimination of government control over the economy, elimination of subsidies, and the introduction of user fees in the social sector. Many people lost their jobs as a result of the privatization of government owned enterprises that hitherto provided job security to those with low levels of education.
6.3 THE HOUSEHOLD CONCEPT IN BAWKU EAST

The household is a small part of larger extended families that live together in the same house or compound, share the same house-keeping arrangements and are catered for as one unit. A household is usually formed when sons of the older household get married and begin to take care of their own families. In some cases some of the sons might feel the need to start different lives outside the sedentary family. Usually this happens when the head of the family (the father) dies and disputes emerge regarding sharing of properties. Whilst in a very different respect people might be dictated by social responsibilities to maintain some degree of independence from the main family. Where more than one household live in the same compound and share some common facilities is called sedentary family whilst the break-out household is one that remains relatively independent from the sedentary family.

The household is the key living unit in Bawku and controls decision making, production and expenditures. Households are typically larger and include parents, grandparents, aunts, uncles, children and distant relatives. All households pass through a developmental cycle, during which their size and composition may change and the all-important ratio between workers and dependents changes over time (Potter et al. 1999). At certain stages, households may be under considerable pressure and this could affect the quality of life of the whole family. Indeed, the 2000 population census report demonstrates the fact that the household size in Bawku East municipality was on the average of 7 persons per household. Table 6.1 represents the head of households by sex in percentages in 2004.

Table 6.1 Household headship by sex distribution in Bawku East, 2004 in Percentages

<table>
<thead>
<tr>
<th>Head of household</th>
<th>Sex</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female percentage</td>
<td>Male percentage</td>
</tr>
<tr>
<td>Yes</td>
<td>48</td>
<td>70</td>
</tr>
<tr>
<td>No</td>
<td>52</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>100 (60)</td>
<td>100 (60)</td>
</tr>
</tbody>
</table>

Source: Field work 2004

N=120  Missing cases=0

As observed from the table above, household responsibilities are borne both by men and women. Though men are often credited as breadwinners in most families in Africa but in certain cases responsibilities are borne by women whose husbands might have been dead,
divorced and worst still single mothers. In the table, 48% of female respondents are heads of their households as against 70% of males. 52% and 30% of females and males respectively are reported as being parts of households but not household heads. The interaction of female household headship and the high cost of living force them to engage in risky sexual behaviours. The economic conditions of most female headed households are more precarious than their men counterparts. Consequently, the responsibility of providing food and other basic necessities for children mostly falls on the shoulders of these women who have no regular sources of income. In most cases women especially those who head households result in exchanging sex for money. For such women, sex in this regard is seen as a means for basic survival. Sex with wealthy men for financial favours becomes the means for ensuring that rent is paid and food is provided for the children and the aged.

In depth interviews and focus group discussions clearly manifested that unemployment and unavailability of sources of generating income are critical factors that drive women to risky sexual behaviours. Obviously, the desperate economic conditions under which many women live, make some well to do single men vulnerable to HIV/AIDS as well because they are confronted with the risk of having many sexual partners as they become targets for women facing increasing hardships in terms of survival. There are also quite distinct inequalities between households. Poor households are frequently the less privileged in terms of education, nutrition and ignorance about their own rights. Poor households are often vulnerable to diseases including HIV/AIDS and lack access to health care. Such households often are susceptible to exploitation as they are confined into cycles of debt, usually with landlords, shops, friends, neighbours and other relatives.

It was also observed that there were different pressures and responsibilities within households. That is why perhaps, it is very important to assess the total size of the household amongst the sampled population and compare this to the household income. This is important in finding out the pressure exerted on households as a result of having lots of dependents and how this can generate into a risk taking behaviour to providing for the family. The household income and total size of the household is summarized in table 6.2 below.
### Table 6.2 Household income and total size of household in Bawku, 2004 in Percentages.

<table>
<thead>
<tr>
<th>Household income (Cedis)</th>
<th>Total size of household</th>
<th>5 and less</th>
<th>6-11</th>
<th>12 and more</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>999,000 and less</td>
<td></td>
<td>33</td>
<td>40</td>
<td>18</td>
<td>32</td>
</tr>
<tr>
<td>1000,000-1,999,000</td>
<td></td>
<td>28</td>
<td>27</td>
<td>36</td>
<td>32</td>
</tr>
<tr>
<td>2,000,000-2,999,000</td>
<td></td>
<td>17</td>
<td>25</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>3,000,000 and more</td>
<td></td>
<td>22</td>
<td>8</td>
<td>37</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100 (21)</td>
<td>100 (58)</td>
<td>100 (41)</td>
<td>100 (120)</td>
</tr>
</tbody>
</table>

Source: Field work 2004

N=120    Missing cases=0

The table above clearly represents the total size of households and household incomes among the sample population in Bawku. The poor are the single most numerous group in the category of lowest income rankings (64%); a combined percentage of those earning 1,999,000 Cedis and less. Even where the poor have higher incomes as represented by 37% of those earning 3,000,000 Cedis and more, they are constraint by larger family sizes. The household size could be so large as to increase the dependency burden, while lack of income earning opportunities and greater number of dependents all combine to reduce the advantages of moving out of the poverty threshold.

Household incomes are generated from different sources depending on the income earning opportunities available to individuals who contribute to household incomes in Bawku East (figure 5.1 on occupational status of respondents). The main source of income is agriculture (BEDA 2000) involving crops such as millet, sorghum, rice and groundnuts and livestock sales in the local market. Sales of properties form a great source of household income but at the same time reduces the asset base of households and may constrain future prosperity. The prices of products fluctuate between the seasons and could actually lead to poverty for the poorer groups as they sell their products when they are hard pressed, which unfortunately coincide with low prices in the market.

Other important sources of income to modern households are salaries from formal employment. The majority of income sources come from self-employment (see figure 5.1).
including petty trading, artifact making and local brewing. Employment opportunities in self-employed and informal sector are invariably poorly paid. In most cases individual earnings cannot meet the basic needs of larger families and so household income earnings normally have to do with access to productive assets which are defined by power relations within the household. Women appear to display greater altruism particularly in relation to children (Barrett and Browne 1995). Women’s ability to maximize their own welfare and that of their dependents is always impeded by the power relations of the household. The contributions of women to household income and welfare are eminent. It is estimated that 70% of the food of tropical Africa is produced by women (Potter et al. 1999) as the most demanding farm jobs such as hoeing, weeding and harvesting are done by them, in addition to taking care of younger children and the aged, collecting firewood and water, processing and cooking food (Binns 1994). In poorer households the only productive asset is labour and thus all able-bodied adults including children do some kind of paid work (by day) on the farms of wealthier people which is seasonal as well.

Amongst the 29 female household heads interviewed, a 44 year old widow lamented:

“Since my husband died 6 years ago through CSM, living behind 5 children, the responsibilities of the family has since rested on my shoulders. I’m only a second-hand clothes seller and business is not good these days. I go out at 8:00 am and return late in the evening with little sales. The children school fees have to be paid and there is no hope of assistance anywhere”.

In another household, the woman has two children and has no source of income as a result she is a servant to a “pito” brewer in the neighbourhood. She narrated her ordeal and how together with her 8 year old daughter they engage themselves in assisting the pito brewer in return for very little wages. She has further been forced into heavy dependence on a patron who is her employer. Thus for these women life is extremely difficult. Given the circumstances, they are clearly the economic and social household heads of their respective families. In both households lack of reliable source of income has led to sale of assets, indebtedness and deepening poverty, leading to inadequate, unreliable and seasonal flows of food. Other literature has demonstrated how women’s vulnerability to HIV infection is promoted by economic hardship and inequality within groups and in households (Schoepf 1988). Female household headship and the pressure of maintaining the basic needs of their household compel women to keep multiple sexual partners for financial favours in return. This to some extent
implies to the concept of risk as the possibility of losses and benefits. The danger lies on the economic pressure for female households to engage in sexual practices that obviously minimizes their power to negotiate safer sex and thus make them run the risk of HIV infection.

6.4 POVERTY IN BAWKU EAST MUNICIPALITY
Poverty in Bawku is a reality felt and not perceived by those who fall in its path. Poverty was observed in the low levels of living of majority of the people as it found expression in their physical appearances, dwelling places, the physical environment and social facilities. The weather constantly fails farmers and results in low agricultural production for household consumption. Bawku municipality is not accorded equal socio-economic services by the government as in other districts in Ghana. Observing poverty is not as sad as listening to people tell stories of their lifestyles full of suffering and misery. Considering the fact that poverty could compel people to adopt health risk behaviours in life that can generate into risk for HIV infection, respondents were asked several questions regarding poor situations and coping strategies aimed at investigating the association between poverty and HIV/AIDS. In this section, a list of criteria given by respondents and those implicitly generated from household surveys and observation are employed to describe poverty in Bawku East municipality. The section reflects the perception of well being among respondents and their desire for better life. The description has been arrived at by considering economic and socio-cultural factors.

6.4.1 Characteristics of the Rich in Bawku East Municipality
Respondents observed that the rich in Bawku are the most prosperous economically and are ethnically distinctive and better educated; they constitute major elements in the local and possibly national power structures, having good links with government officials, police, large landowners, traders and are frequently well endowed with assets and incomes. The most educated rich people are state employees who equally possess private businesses. They often get positions such as assemblymen, unit committee members, managers and directors in their areas of work. The illiterates among the rich are the Alhajis (Muslims) and those who inherit large amounts of properties including big houses, cars, cattle and land from parents and grandparents. There are also illiterate rich people involved in businesses including onion production and the smuggling of various goods within and without the Bawku area.
It is often very easy recognizing such people in the area because in the first place they are well known to every one and command lots of respect in the society. They can easily be identified by looking out for block houses with modern roofs or mud houses with strong structures, packed vehicles outside the house. In most cases such people possess many wives because they can afford to take care of them. They also can afford to keep multiply sex partners outside the wedlock. It is sad to mention that these criteria favour the men more than the women and thus make such men targets of women who are hard pressed by economic circumstances. This situation is further orchestrated by the rich men who take advantage of the disadvantaged socio-economic conditions of women in Bawku to lure them into sexual intercourse. Admittedly, respondents confirmed that local adult men seize the deplorable situation to lure young girls with “gifts” in exchange for sexual favours.

6.4.2 Characteristics of the Poor in Bawku East Municipality
The poor are the most numerous in terms of number and activity type. Every 9 out of 10 you meet are likely to fall within this bracket. Unfortunately, they work very hard but most frequently are unable to ripe the harvest of their efforts. The poor are frequently less well educated, have poorer nutrition, are often ignorant of the law and possess fewer assets apart from their labour. The voices of such people are hardly heard by authorities. The poor often have miserable appearance; dirty and frail looking, often drunk and not entitled to any social network.

The poor are mostly found in the rural areas and associated with single mothers, widows, the aged, school drop outs and the unemployed who through frustrations take to alcoholism and drugs. Farming is the only activity they can easily engage in with rarely a very few of them producing surplus for sales in the local market to cater for basic kitchen needs. For most of these people the resources used to cultivate their farms far exceed the yields obtained after harvest. They are often the last to start cultivation and the last to harvest their products which are also dictated by market forces. For the poor, property sales are necessitated in times of distress. The poor often crowd in households where single rooms are shared with many people.

Poor people and poor households are thus vulnerable and susceptible to exploitation as they become locked into cycles of debts. This is the most migratory group. They often contribute money gotten through borrowing to fund a member to travel to destinations within or without
the country rumoured to have good jobs. However, subsequent wide range of hard conditions in the areas of destination painfully prevents them from remitting those left behind. At some points in the lives of these poor people, they tend not to care about the consequences of their actions. This unfortunately is the category in which most vulnerable women fall, and are compelled by the precarious circumstances to entertain multiple partners in order to satisfy the most basic of needs. Sadly in such precarious circumstances, women are heavily exploited by men generally emanating from their economic vulnerability by paying them little for their sexual services. Rich single men can thus possess multiple sex partners, a phenomenon that aggravates poor women’s vulnerability to HIV/AIDS infection. There is therefore a clear cut relationship between rich men and poor women. The rich can afford to keep multiple sex partners while the poor is pressurized by the given poor socio-economic structures to keep multiple sex partners. This assertion has been supported by Jackson (2002) who observes that HIV is at least partly an infection of men with money and women without (Jackson 2002).

6.4.3 Regression model and HIV/AIDS risk factors

In this section, regression model is used to conduct multivariate analysis on personal monthly income, age, sex, education, number of overnight trips and place of residence as independent variables and number of sexual partners as dependent variable to test the association of risk factors for HIV. The main aim of the section is to establish the strength of association between possible independent variables mentioned above and number of sexual partners as a dependent variable. It is interesting to mention here that other risk factors for HIV/AIDS transmission such as condom usage, knowledge of partner’s promiscuous behaviour and age at first sexual intercourse did not show any strong association with the independent variables when they were used in several other models to check the goodness of fit.

The regression model was computed using SPSS through a procedure known as stepwise. Age, personal monthly income, education, number of overnight trips and place of residence were entered as independent variables against number of sexual partners as dependent variable. To establish an association between the independent variables and the dependent variable, the system standardized the units of measurement by multiplying each regression coefficient by the product of dividing the standard deviation of the relevant independent variable by the standard deviation of the dependent variable which is known as the standardized regression coefficient. It is used to establish the most important independent
variable in relation to the dependent variable. Table 6.3 provides a demonstration of the exercise as generated from SPSS.

Table 6.3 Comparison of unstandardized and standardized regression coefficients with levels of significance and number of sexual partners as dependent variable

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Significant levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal monthly income (Cedis)</td>
<td>0.169</td>
<td>0.252</td>
<td>0.011</td>
</tr>
<tr>
<td>Age</td>
<td>0.031</td>
<td>0.359</td>
<td>0.000</td>
</tr>
<tr>
<td>Education levels</td>
<td>-0.015</td>
<td>-0.033</td>
<td>0.700</td>
</tr>
<tr>
<td>Sex (Female*)</td>
<td>-0.074</td>
<td>-0.043</td>
<td>0.588</td>
</tr>
<tr>
<td>No of overnight trips</td>
<td>0.041</td>
<td>0.045</td>
<td>0.587</td>
</tr>
<tr>
<td>Town*</td>
<td>-0.336</td>
<td>0.187</td>
<td>0.067</td>
</tr>
<tr>
<td>Village*</td>
<td>-0.507</td>
<td>-0.223</td>
<td>0.038</td>
</tr>
</tbody>
</table>

(Source: SPSS for Windows from Questionnaire 2004)

* Refers to dummy variables (Male is ref. category for sex and City for place of resident)

The Adjusted R square (% of explained variance in the dependent variable) is 29%

The adjusted $R^2$ provides the percentage that explains how efficient the independent variables are in explaining the dependent variable. It thus implies that only 29% of the variance in number of sexual partners is not explained.

The independent variables age and personal monthly income provide the strongest positive coefficients. The independent variable personal monthly income however, provides the greatest positive unstandardized coefficient (0.169) whilst between the two, age provides the smallest unstandardized coefficient (0.031) but the greatest standardized coefficient (0.359) and significance level of 0.000 as against 0.011 for personal monthly income. We can thus accept that age not surprisingly has the strongest association on the number of sexual partners followed closely by personal monthly income. Some explanations could be given to explain that increase in age is associated with number of sexual partners. The theory of risk tolerance is influenced by several factors including age. Older people are financially and materially matured enough to take care of multiple partners without opened criticisms. It was found
during the research that the Ghanaian society frowns upon young people who are not generally ripe enough to run into sexual relationships. Thus it is only older people who are permitted by society to engage in sexual relationships. People who reported ever having multiple sexual partners were older, have money to spend and could pick and choose the sort of lifestyles they desire.

In the case of personal monthly income, it has already been established that increases in personal monthly income is associated with good standard of living and prestige. The number of sexual partners ever contracted is to some extent a measure of prestige in the Bawku East area. Rich men generally are likely to possess multiple partners because most women would prefer to be married into affluent homes. People with higher incomes are therefore likely to be sought and hence increase poor people’s vulnerability to HIV/AIDS. Obviously, increasing men’s incomes through better-paid jobs and widening disparity between men and women’s incomes is crucial for HIV spread as it reduces women’s status and power to negotiate safe sex within or without marriage.

There is no significant relationship between number of overnight trips and number of sexual partners ever contracted. Though the unstandardized coefficient is positive at 0.041 and that of standardized coefficient is 0.075, yet the level of significance (0.587) far exceeds the 0.05 significant levels used as the yardstick of measurement. However, the result is thus inconclusive because the sample size is not large enough to warrant a strong relation.

The other independent variables such as education, sex and place of resident have the smallest standardized coefficients as they are expressed negatively and thus exceed the 0.05 level of significance. It is hence indicative from the model that education, sex and place of resident have no impact on the number of sexual partners ever contracted. This has been true for most of the variables used in the study to test the association between poverty, vulnerability and HIV/AIDS risk factors such as condom use, age at first sexual intercourse and knowledge of promiscuous partners. For the levels of education, it is noted throughout the study that Bawku has low rate of education and finds extensive support amongst females. The society is also generally male dominated and wealth amongst men could be higher risk factor for HIV. Another genuine explanation of this major occurrence is the small size of the sample. Nevertheless, the small sample size has resulted in some of the analysis being inconclusive due to small frequencies in some categories. The analysis would have been statistically
enhanced with a larger sample size. To ensure a fair generalization of the research findings that qualitative data was generated through interviews, group discussions and observations to enhance the research findings.

6.4.4 Resource distribution and access in Bawku East Municipality

Access to certain resources in the community was used to determine the rich and the poor in Bawku. Possession of certain resources is viewed by respondents as very significant in determining the position of a person in a society. The possession of some resources including cars, televisions, radios, land and livestock are skewed in favour of the rich.

Among the sample population of 120 people interviewed, only 7% had private cars, 68% possess television sets, 28% telephone/mobile phones, 26% have refrigerators, and a greater majority of 98% has radios whilst 59% have sewing machines. It is interesting to realize that the type of possession is dependent upon the wealth group and in turn helps to explain why people adopt certain behavioural attitudes for the seek of surviving the odds of poverty. The rich are the only people who can afford to keep private cars and since such people are very few explains why they registered a marginal proportion of 7%. Other items considered as luxury in the Bawku East area are mobile phones and refrigerators. However, respondents who answered that they possess refrigerators were those who use it for business involving the selling of bagged ice water, whilst those with sewing machines were self-employed people and apprentices.

Land and its quality is a very important resource in Bawku. The poor own small parcels of land as compared to the rich. The rich who has no land has adequate income from other ventures to meet basic needs. While for the poor, having no land means being a labourer for the wealthier people. Respondents in the focus group discussions admitted that in such situations the poor rents land from other family members when the rains set in. The rich are able to hire the services of modern equipments and inputs such as tractors, fertilizers, improved seeds and use their own oxen while the poor continue to use crude equipments such as the hoe and cutlass as their main tools. The poor cannot afford to pay rent in the township and therefore are content with their mud and grass roofed round houses in the outskirt of town.
Livestock ownership is of paramount significance in Bawku. The poor normally own limited number of fowls, goats and sheep while the rich possesses cattle. Cattle ownership is very important in the study area because they are used for ploughing the land and also supply manure, pay dowry, enjoy social prestige and as collateral security amidst times of increasing economic hardships.

Economic support through credit facilities, community mobilization and NGOs has become very important in modern lifestyles. Vulnerable groups and individuals have to seek economic support from the assembly, state apparatus, NGOs, CBOs and neighbours whose aim is to increase rural incomes through the giving of loans to groups and specific categories of people. The rich more often possess the collateral security required by banks to obtain loans. NGOs also pass through protocol which involves contacts with a chain of authorities before eventually meeting the ordinary people. Through this process, a certain category of people could be designated as beneficiaries when they are actually the same rich people. Credit facilities are very scarce in Bawku and where they exist the poor cannot afford because they lack collateral security. The social support system which could provide a kind of buffer for the poor is lacking. The rich often maintain friendship and kinship ties with colleagues at work place whilst the poor lack such social ties and influence. However, the poor being passive in the community could deepen their poor status further. Figure 6.1 below demonstrates the economic support in Bawku East in 2004.

![Economic support in Bawku East by sex, 2004 in Percentages](image)

**Fig. 6.1 Economic support in Bawku East by sex, 2004 in Percentages**

Source: Field work 2004

*N=120  Missing cases=0*
The trend as shown here indicates that economic support for the vulnerable has not been regular in Bawku and come from diverse sources. For instance 48% of females and 72% of males respectively reported never had any economic support in the last month. On the other hand, 23% of females reported having received economic support once in the last month and 28% have received economic support more than once but not regular. As compared to their male counterparts, 8% reported receiving economic support once while 20% sometimes. Those who have ever benefited from economic support mentioned that the economic support included money, food items, medicine, relief items and job engagements and came from the municipal assembly, NGOs, neighbours and community organizations. Further inquiry revealed that the support was only for victims of the December 2000 ethnic violence. Let me mention for clarification purposes that economic support for the last month was actually interpreted as ever received economic support.

In-depth interviews with some of the key informants revealed that the only source of social cohesion observed in Bawku is land. They mentioned that land is vested in the community and held in custodianship for the inhabitants by the Tindana who is a patrilineal descendant of the original family which settled at the place. Rights of usufruct are granted to an individual by the Tindana and the occupier can also pass it on to his male heir in accordance to custom. Migrants may be granted use rights by the Tindana on temporary basis but expected to give “kola” or occasionally provide pito for the landlord. Traditional land tenure as a form of social capital has frequently been cited as an important barrier to development (World Bank 1997) and leads to break down in social cohesion and stability in some communities. Land disputes in many cases have led to mistrust amongst individuals in households and communities in the Bawku area. Customary tenurial system is used to explain the attitude of people to resource use in Bawku. Because land is communally owned, nobody takes responsibility for it as the land is mismanaged without due respect of the harm on the environment. In such situations abuse is paramount and the incentive to over exploit resources to meet individual’s needs is a topmost priority leading to deepening place poverty.

6.4.5 Expenditure patterns in Bawku East Municipality
Government’s role in providing social welfare has been decreasing and increasing pressure is exerted on people resulting from the increasing cost of living. Price changes transformed into high expenditures therefore emanate from inflation and other government impulses and shortfalls in food production. Right after Ghana gained independence in 1957, public services
such as health care and education were provided free of charge. Two elders contacted for a face-to-face interview lamented how the situation has suddenly changed putting increasing pressures on breadwinners. They mentioned that at one time hospital, education and other social services were free of charge. Children were even forced to go to school where they were consistently fed and given stationary free of charge. Many people lived good lives and had their food and health needs provided for. One of the elders however, was quick to emphasise that:

“The future looks gloomy as one cannot predict what will happen tomorrow and thereafter. Today, you are even asked to pay for garbage collection. You have to queue for several hours before you consult a doctor or “sup” (senior nurse) for a very serious illness. The only common diagnosis is malaria if even you have a case of emergency and the prescription is paracetamol. Drugs are no more available in the hospitals and you are told to buy at the chemical shops at exorbitant prices. We eventually cannot afford to pay the school fees of our wards and at the same time provide for their basic needs. Imagine some people ride bicycles to Bawku only 18 miles from here but taxis’ charge 6,000 Cedis. Prices of fuel keep increasing and it is rumoured that prices of fuel will even escalate after the 2004 December, 7th presidential elections. Such is our plight my son” (An elder in Garu: Field interview 2004).

Expenditure patterns however, vary amongst households and individuals and between the poor and the rich depending most importantly on the economic conditions prevailing at a time in the country promulgated by the physical environment and macro policies. All the focus groups and in-depth interviews ranked consumption as the most ranking item on the expenditure list. Food forms the major share of expenditure all year round. The weather does not permit all year cultivation meaning shortages of food stuff during the lean season which is longer. The interaction with the elder in Garu forms a summary of the expenditure patterns of majority of the residents of Bawku East municipality and represented in a more pessimistic and helpless manner. Figure 6.2 demonstrates the number of meals lack in a household in Bawku, 2004.
Figure 6.2 shows the number of meals lack in a typical household within a week in Bawku. Food inadequacy is a major indicator of poverty that goes to affect many aspects of life in Bawku. Reducing the quality of meals taken is the first step in prolonging existence. After sometime this gives way to cuts in quantity of meals taken and the frequency per day and week. Parents have to skip meals to ensure that children get enough to eat. Meals are reserved over night for children’s consumption the following day. Basic survival is the main priority of households.

Many are those who reported having to withdraw their wards from schools dictated by their inability to pay fees. Some have resorted to traditional medical attention because they cannot afford to pay medical bills for major illness and expensive drugs. This situation is quite critical because in such circumstances, people have reported deaths in their households because they could not afford medical expenses. Respondents reported that expensive funeral rites form part of the expenditure patterns of households. The dead is much respected in Bawku because it is deemed that a befitting funeral is required to usher the decease into the realm of the ancestors. It was also mentioned that performance of funeral rites prevent attacks by the decease in the forms of diseases, infertility, deaths, bad weathers, misfortunes and further prepares the ground for the inheritance and sharing of the properties of the dead. Funerals have therefore become very expensive due to the show of rare wealth and competition. The performance of funeral rites is a source of worry and creates economic hardships to several households. Focus group discussions revealed how households have to borrow or sell out family properties to meet the heavy cost of funerals of in-laws or lost family members. Marriage rites involving the payment of 2 to 4 cows to the family of the
bride has led to untold economic hardships to many households (see chapter 7 on rites of passage).

6.5 LIVELIHOOD STRATEGIES IN BAWKU EAST MUNICIPALITY
Households and individuals resort to a variety of adaptive strategies within their constraints to ameliorate their situation. These strategies as was demonstrated by respondents have been grouped into three major categories:

- Income generating ventures
- Reductions in household spending
- Out-migration

These strategies however, have critical implications for the promotion of HIV/AIDS in the Bawku East area. The type of strategy adopted varies from individuals and households depending on the particular situation of need and stress. I will proceed to present each of the strategies as discussed by respondents and will intend relate this to the risk involve in adopting each strategic method.

6.5.1 Income generating ventures
High illiteracy level in Bawku means that majority of people are unable to secure employment in the formal sector. As a result most of these people find themselves in agriculture which heavily depends on the unreliability of the weather. A very few are self employed and thus have no regular sources of income. Therefore distress amongst people emanate from the shortfalls in production of the respective enterprises resulting in low incomes and increasing expenditures. To ameliorate this situation that respondents mentioned that they resort to other complementary sources of generating more income to ensure decent livelihoods. I have decided to explore notable income generating ventures that respondents suggested could easily spell the spread of HIV/AIDS in the Bawku area.

Male focus group participants mentioned women’s involvement in petty trading as a possible means of survival. Especially, there are many women who stay on their own without husbands and are engaged in buying and selling businesses. Cross border trade was reported to be very high among women traders and could possibly lead to an increased risk of having multiple and extramarital sexual partners. Some such as dealers in household cooking utensils, second hand-clothing and food items, primarily involve females who are mobile, away from home and at high risk of supplementing income through selling sex to get through
borders or past police blocks, as their tax-evading trade is not formally sanctioned (Webb 1997). Oppong (1995) has linked this partly to the interaction with more men at the course of transacting their businesses. Obviously, most of the goods are often supplied by men and male custom officers could demand sexual favours in lieu of creating conducive atmosphere for women to trade. The higher degree of trade, smuggling activities, and other social interactions going on at the borders of Bawku, Burkina Faso and Togo are unfortunately contributing partially to the levels of HIV infection in Bawku.

Another issue of utmost concern is investment in drinking activities, experiencing high demand in Bawku at all times and during ceremonies. People are very selective on the types of drinks that command high demand and can boost their incomes to maintain adequate livelihoods. Local beer production known as pito, sale of hard liquor including akpeteshie (locally brewed gin) and bottled drinks have contributed greatly in depleting the household income of most households. Pito brewing for instance competes with households for supply of cereal crops such as millet and sorghum. The other negative impact of investing in drinking activities is the increasing consumption level, which results in investing in alcohol and subsequent alcoholism. Some incidence of risky sexual behaviours have been increasingly blamed on drunken people who in that state forget of the repercussions of their actions and run into having sexual intercourse without using the appropriate safety measures.

It was pointed out in the discussions that investment in alcohol is most lucrative thus the proliferations of village drinking spots in every corner of the municipality. Lack of regular income earning opportunities and lack of motivation were cited as major reasons for such drinking habits among the populace in Bawku. Vulnerable people take to heavy drinking of locally brewed hard liquor to avoid depression propelled by hopelessness and joblessness. The widespread drinking activities in Bawku can partially explain the risk factors associated with HIV infection since alcoholism reduces self consciousness and could lead to risky sexual behaviours. In-depth interviews further echoed the fact that excessive drinking habits are encouraged by tantalizing advertisements in the media associating increasing sexual drive to the consumption of particular brands of alcohol. Respondents mentioned locally brewed hard liquor such as alomo bitters, agye appiah aduro yee, abiriviwa bebo ball and atatewe gin bitters as enhancing sexual performance after consuming them. As a result this leads people into increasing desire for sexual intercourse in drinking spots, discos, during festive occasions and at funeral grounds. Interestingly, Moslems were not spared in this regard as respondents were
emphatic that “some Moslems” have contributed heavily to higher cost of alcohol in the town. The fact is that weakening Islamic laws have created fertile grounds for some “supposed Moslems” to indulge in drinking activities. The above scenario was supported by one key informant who incidentally is a programme officer in charge of HIV/AIDS for an NGO in Bawku as:

“...the practice of heavy drinking of alcohol and indiscriminate sexual activities are widespread during final funeral rites performances, ceremonies, in pito houses, in discos and the Samanpiid festival. Single and unattached people can easily meet their prospective partners during such occasions while at the same time widespread casual sexual activities go on indiscriminately. Such activities command heavy tolls on the spread of HIV/AIDS”.

Such practices and attitudes can be associated with the theory of the ecology of disease which gives a better clue to what is influencing the spread of HIV. The model shows the relationship between the environment within which people interact and what propels them into adopting particular types of behaviours. The model emphasizes how people manage to survive in an environment that continuously constrains them. The three factors of human, environment and behaviour can therefore interact in time and place to cause HIV/AIDS. Jobless and hopeless individuals constraint by their situation coupled with the unyielding environment within which they live would therefore make the best out of their condition through heavy drinking. Also closely related to the ecological model is Gidden’s structuration theory which argues that the structures developed in a place at a time coupled with the characteristics of people and their social environment could have telling impacts on people’s actions. Thus for Wilde factors such as hard socio-economic conditions with hard pressing life events, alcoholic influence could bring variations on the wanted or tolerable level of risk individuals want to achieve under varying conditions Wilde (2002).

6.5.2 Reductions in household spending

Reducing spending strategies have been the most effective and most painful way of meeting the basic needs of households. It is so crucial that developing countries are encouraged by the world’s financial institutions to reduce government’s expenditure on agriculture, health, education, nutrition and sanitation. Basic survival in time and place where resources are rare, the only option at the disposal of people is making use of limited income in the most economical way. In most cases such options left for households have higher implications for
the spread of diseases. There are many changing strategies of living which people adopt in time and place; however, for the purposes of the study, only methods likely to instigate risky sexual behaviours are examined.

Focus group discussions unveiled some of the methods people adopt in Bawku in times of need. The rich as much as possible try to save from every venture they are involved in, to enable them invest into more lucrative enterprises. They often predict the demise of their expenditure and therefore take concrete measures to maintain their living standards. On a more serious note, the rich are always able to minimize general livelihood expenditure to enable them invest in more “mouth-watering” ventures such as in transport, buying and selling of livestock, onion business and construction activities.

For poor households, women upon realizing how little food is available for consumption within a particular time, may decide to regulate the quantity, frequency and types of meals served (see figure 6.2). Women then struggle to improve upon the meals served by taking up various odd jobs. Such a phenomenon can be associated with the argument raised in Kalipeni et al. (2004) that the frustrations of unemployment and income insecurity promote high levels of alcohol and drug abuse among men, and consequently the responsibility of providing food and other basic necessities for children mostly fall on women (Kalipeni et al. 2004). I realized that group discussions were very reluctant when the issue of what women do in such situations where they are likely to protract extra marital sexual intercourse for money. Other studies have demonstrated how economic deprivation fosters risky sexual behaviour as a way for women to afford basic needs for their families (Schoepf 1988, Zulu et al. 2004, Kalipeni et al. 2004).

When households have exhausted all avenues without any improvement, the next issue is to cut down expenditure of the household by withdrawing children from school and pushing them into the household’s labour system. Stubborn and acute ailments that may cost too much to treat are referred to traditional homes for treatment with the notion that the ailment is caused by spiritual forces. Minor sickness or the starting stages of sickness is suppressed until it assumes uncontrollable limits before medical attention is sought. Nevertheless, it was reported by focus group discussion participants as well as key informants that there are cases where hospital authorities detain sick people for their inability to settle hospital bills, thereby further increasing their debts as they continue to use the hospital beds. Increasing poverty
among women make them use sex as survival strategy and this serves as an obstacle preventing them from insisting on safety sex.

It is argued that poor women may be aware of the danger associated with unprotected sex but may lack the resources to avoiding such sexual practice. Poor women may take maximum risk of engaging in unprotected sexual intercourse for financial favours to ensure their survival. Risk optimization therefore explains that faced with these options, the poor woman would optimize the level of risk based on her perceived risk tolerance level (Wilde 1994, 2002). Thus in such circumstances the knowledge and perception of the dangers of unprotected sex does not count much towards risk reduction since the concern of the poor woman is solely survival (Bernadi 2002), she therefore accepts a higher risk tolerance. Poor women therefore would accept or tolerate the probability of unsafe sex to gain more money. The argument is that according to the assessed probabilities and consequences, desperate poor women would adjust the perceived balance of gains (money) and losses (HIV-risk).

In such desperate conditions, the poor tends to be more concerned with the satisfaction of the immediate needs. The poor is rational when it comes to seeking the best means of survival. The poor weighs the consequences of poverty and HIV/AIDS over time. The fact is that since the incubation period of HIV is long enough, the poor reasons that extreme poverty can kill even within the shortest possible time. Faced with these options, the poor might take the greatest risk of unsafe sexual intercourse to meet the immediate needs. According to the diffusion model, it is extremely difficult to convince such desperate people to adopt preventive measures. HIV/AIDS can thus diffuse easily among them and subsequently worsen their poor conditions further.

The prevailing incidence of HIV/AIDS spread is further attributed to withdrawal of children especially the girl-child from schools because of lack of money for school fees. Typically, boys start abusing alcohol and drugs and some at very tender ages are driven on to the streets to beg for alms. The reasons cited for withdrawing especially females from schools are because they are considered to be confined to the house where they assist their mothers in the kitchen and other household chores. Again they are expected to get marry and thus bring wealth to their parents. These tendencies are initiated by resource constraints where households are compelled through need to make tough decisions about the treatment of sons against daughters. The importance of education in enhancing good attitudes has been
recognized in many studies. The uneducated may lack knowledge which may play a role in understanding and subsequently resulting into an accepted behaviour change. Better education makes people knowledgeable about health issues and increases self-confidence, while the uneducated may lack these opportunities.

That explains why key informants revealed that premarital sex is currently widespread especially among the supposed “couples to be”. It was increasingly mentioned that girls these days indulge in sexual intercourse with prospective husbands without attracting any caution from parents. Most girls tend to look for some financial support from their partners. Economic pressures provide the basis for premarital sexual relationships. Regarding the risk of HIV/AIDS infection, a girl who agrees to have sexual intercourse with a man in the hope of marriage definitely cannot negotiate for condom use. This revelation is allied to the diffusion model which states that the process of diffusion occurs faster in unique population groups. The argument is that people who think of marriage do not see the need to use condoms in their sexual relationship. There is often a great deal of trust between such partners as a result of permanency of the relationships. Within these groups, HIV/AIDS is likely to diffuse more widely in case one partner gets infected. Parents more often approve of such relationships because poverty forces them into accepting financial favours from their daughters. In time past where premarital sexual affairs were severely punished, it is today observed as normal (Awusabo-Asare et al. 1993). Many of the traditional norms against sexuality are no longer recognized in this era of modernization and globalization. Today, sexual behaviour is purely determined by socio-economic, environmental and cultural factors.

6.5.3 Out-migration
Migration has been part of the people of northern Ghana since the colonial era. The poor as mentioned earlier are the most migratory especially when the weather increasingly fails to enhance their course since most of them are engaged in agriculture. In desperate need of basic necessities in life, households could contribute money to finance a person to travel to destinations known to have jobs. The 3 northern regions in Ghana are therefore traditionally the labour-exporting zone for southern Ghana. A greater majority of these primarily younger people exist in conditions of higher risk for HIV. Most of these people migrate without their spouse or families and are employed in cocoa and palm plantations in southern Ghana. Out-migration cuts across both sexes but finds more expression amongst female street hawkers in the cities. Those who happen to arrive in the cities remain heavily unemployed with others
accepting to do menial jobs such as head-porters, street hawking and drinking bar attendants. The risk is that long periods of separation from spouse and families could cause lots of hardships to the migrant and the family left back home. Women especially left back in the rural areas are burdened with increased responsibilities of catering for the needs of the household. The migrant labour pattern observed in Bawku East could therefore lead to a weakening in the social control and stability of the household and thus form a medium through which HIV/AIDS can diffuse.

Respondents reported through the questionnaire that the most frequent destination is southern Ghana which recorded 38%. Another 25% had traveled to other destinations within northern Ghana and not outside it, while, 15% traveled to Cote d’Ivoire, 13% to Burkina Faso and 9% to Togo. The booming economy in Cote d’Ivoire in the early 1980’s and the subsequent drought in Ghana witnessed a mass movement of young people in search of economic opportunities in Cote d’Ivoire. It is widely accepted that the many women who traveled to Cote d’Ivoire in those days topped up their income by prostitution (Decosas et al. 1995). This has been rather perilous since Cote d’Ivoire has the highest incidence of HIV/AIDS in West Africa. In addition to those who traveled to Cote d’Ivoire are the thousands of younger people who leave the Bawku area citing lack of economic opportunities in the rural areas to seek non-existent jobs in southern Ghana. Most of them do not get sleeping places and are forced to crowd in the corners of shops and along the corridors of streets. Indeed, risk behavioural activities are increasingly common amongst them as they search casual lodgings for the night constituting ideal threshold for the dissemination of HIV/AIDS. When they finally return home, the disease could spread amongst a substantial number of people.

It was observed that Bawku town and smaller towns such as Garu, Wariyanga, Mognori and Kulugungu are along major transport routes linking Ghana to Burkina Faso and Togo. Though the roads need some kind of rehabilitation but they are well connected allowing for urban-rural movement. It is interesting however, to observe that a greater majority of the population in Bawku East lives along the main transport route characterized by the frequent movements of people involved in buying and selling. Many people are reportedly making a living crossing over to Sankasse and Dapango in Togo, Tenkudugu and Bito in Burkina Faso purchasing goods to sell at marginal profits in Bawku. In most cases smuggling and illegal crossing of the borders is very high. The phenomenon calls for a more concise research in the area because on other studies in Zambia and Zimbabwe (Jackson 2002, Webb 1997) uniform
personnel often exploit the women at border posts, demanding sex from the women they catch illegally crossing the border (Jackson 2002, Webb 1997). The situation might not be different in Bawku East. As a result of detection and subsequent stigmatization, young girls prefer to migrate to Togo and Burkina Faso to exchange sex for financial favours. Both interviews with individuals and the focus group discussions revealed that prostitution is operated under cover in Bawku because of the stigma and shame associated with it. To avoid the shame and stigma some women then migrate outside the municipality into Burkina Faso and Togo where they engage in prostitution incognito. The role of economic factors as reasons behind the cross border movements to engage in prostitution of course implies to the concept of risk. Risk is not only the presence and possibility of losses but also the possibility of gains or profits. In light of this the danger may lay on the role of economic motives for prostitution that it obviously minimizes their power to negotiate safer sex and thus make them run frequent risk of HIV infection.

Discussions with HIV/AIDS officers in the municipality have indicated that the frequent use of the main transport route by heavy haulage truckers from Niger to the ports and harbours of Ghana have partly contributed to the spread of HIV/AIDS in Bawku. Following the civil war in Cote d’Ivoire disrupting normal businesses along the borders of Cote d’Ivoire, heavy trucks from the landlocked countries of the Sahelian regions use the ports and harbours of Ghana. Bawku thus serves as a shorter route into Niger and other parts of Burkina Faso. Bawku is a very busy commercial centre providing many lodges, restaurants and bars to truck drivers and other traders. Many drinking spots were observed to be very busy in the night selling drinks to passers-by. Majority of passers-by such as travelers, truck drivers and traders often visit these spots to enjoy drinks, food and casual sexual relationships. Adolescent girls are often observed flocking to the truck stop over at the community centre which incidentally serves as the resting point for these truck drivers. Long truck drivers are a risk group for HIV/AIDS spread because they appear to possess multiple sex partners in all places that they make stop over.

6.6 SUMMARY OF THE CHAPTER
The chapter tended to describe the livelihood strategies that the people of Bawku adopt to cope with the prevailing economic depression. The study showed that poverty exists within households on different levels. The economic conditions of female headed households are obviously more serious than those households headed by males in better income earning
opportunities. It was therefore realized that the pressure of maintaining the basic needs of such households have compelled many women to keep multiple sexual partners for material favours.

Regression model performed on independent variables such as age, personal monthly income, education, number of overnight trips and place of residence and number of sexual partners as dependent variable reveals that age has the stronger positive association followed closely with personal monthly income. Increases in wealth and income are prestige and the ability to cater for multiple partners. Personal monthly income is also closely linked to age and has a greater positive association with number of sexual partners.

The study also revealed that poverty found expression in all aspects of life of the people of Bawku. The rich are the most prosperous economically and better educated as well commanding lots of respect in the society. The poor on the other hand are the greater majority, frequently less educated, malnourished, and ignorant of their own rights and own no property at all. Lack of income earning opportunities coupled with increasing expenditures compels households and individuals to resort to a variety of strategies to ameliorating their situation. The strategies often adopted are categorized under three headings namely: income generating ventures, reducing expenditures and migration. Petty trading involving cross border movement was reported to expose women to risk sexual behaviour. While investment in drinking activities was observed to be very high thus creating increasing desire for sexual intercourse in drinking spots and during public ceremonies. Withdrawal of girls from school as a means of reducing household expenditure has also created a phenomenon where it is very difficult for parents to control their wards. Adolescent girls withdrawn from school are often forced by lack of motivation and joblessness to accept gifts from boys normally supposed to be their expected husbands. Monetization of sexual relations among adolescents is common because of resource constraint and lack of collective support. When all possible means have been exhausted and there is still no way, the younger people especially the males resort to migration.
CHAPTER SEVEN: SOCIO-CULTURAL RISK FACTORS FOR HIV/AIDS IN BAWKU EAST MUNICIPALITY

7.1 INTRODUCTION
The chapter demonstrates the role of certain socio-cultural and traditional beliefs and practices in Bawku East and how these factors could interact to create high risk for HIV/AIDS. Admittedly, the chapter explores risky behaviours, beliefs, practices and perceptions of the society and why people take part in such activities. For most part, these activities and traditions affect women more than men. In attempting to explain these factors, efforts are taken to relating them to the selected theories which serve as interpretative guide for the study in Bawku East municipality.

7.2 RITES OF PASSAGE
It has been widely recognized around the world that a variety of cultural practices and traditions increase certain group of people’s risk for HIV/AIDS (Eaton et al. 2003). One of these cultural practices is rite of passage. Rite of passage is a transition from one stage of life to another. It involves an embodiment of a variety of elements including marriage, puberty, birth and death. Culture is an embodiment of both non-material and material elements and objects held in common by people who share a distinctive way of life. In Africa, every stage of life is adored as very significant and that calls for the performance of various types of rites ushering one into a stage of life. This cycle of marriage and procreation, ushering into adulthood (puberty), birth and death (funeral) is what is simply referred to as rite of passage.

7.2.1 Marriage practices
Marriage is accorded much respect in Bawku that failure to marry at a certain age in life is associated with irresponsibility by the society. Households often use marriage of their daughters into affluent families to escape poverty because of the rewards of high bride prices. Moreover, marriage and procreation is recognized as perpetrating the family’s lineage and meets a criterion of smooth sail into the ancestral realm after death. Marriage practices across various ethnic groups in Bawku vary widely according to religion, level of education and attitudes, and could expose spouses to the risk of HIV/AIDS infection. Aside the religious marriage rites, the tradition of bride price payment is wide spread and accepted by all as legitimate and mandatory. In asking for the hand of the woman in marriage, the prospective husband is expected to send a delegation of elders to present certain items including drinks,
kola nuts and money to the uncles of the bride. These items are then accompanied with 2 to 4 cows if the woman is proven to be fertile by giving birth. It is therefore argued here that where the payment of bridal dowry is necessitated by tradition, it leads to untold hardships to most families because the little resources available to the husband for the upkeep of the household are used in paying the bridal dowry. Tensions therefore exist within households among spouses about who is responsible for the precarious situation. Thus in most of these households in Bawku, big gaps are created between spouses. The woman is considered as “paid for” and often cannot leave her husband, should the husband’s promiscuous behaviour predisposes her to the risk of HIV infection. The crucial arrangement here is that if a woman refuses sex with her promiscuous husband and she is driven to her father’s house, elders will intervene and send her back to the husband. This system of arrangement puts women in higher position for HIV infection. Interestingly, Bawku is a society where the man is recognized as the bread winner who is tasked to provide the needs of the household.

Traditionally, the man is entitled to marry as many wives as his resources can enable him. A man can therefore indulge in extramarital affairs whilst the society looks on but the same cannot apply to the woman. Males’ extramarital relationships are known to be at its peak during long periods when the wives abstain from sexual relations during pregnancy and post-partum lactation. A key informant (elder) pointed out that married women’s extramarital sexual relations are rare because of a belief that the husband of a woman who secretly has extramarital affairs will die or more still that woman is expected to openly confess or face the wrath of the gods. It is believed that such a woman will encounter difficulty in giving birth or may even die in the process.

Procreation is the basis of marriage in Bawku and having many children with males preferred is widespread among the rural folk. In the rural areas, parents especially weigh the economic returns involved in having male children to female children. These biases are reinforced by institutional arrangement in which parents live with their sons in old age while daughters move to their husbands’ homes (Massimo and Gustavo 1999). By this arrangement, men find it very difficult to use condoms in their marriage. Even in certain circumstances when either of the spouses is sterile, he or she is advised by the society to have extramarital affair. For some women the mere belief in cultural sanctions for extramarital affairs do not perturb them from exhibiting high levels of infidelity especially in cases of impotency of their spouses. The risk is that spouses will continue to have unsafe sexual relationship even if they are aware of
the danger of acquiring an STD in the process. Such decisions are usually fuelled by traditional beliefs, thus for Sibanda (2000), someone who dies without leaving behind children is prevented from becoming an ancestral spirit. Some of these beliefs also continue to influence the practice of childhood marriages, arranged marriages and early betrothals. Some marriages are often contracted between families for obvious reasons between young girls and men that normally the girls do not know; such men usually might have had a number of sexual partners prior to this arrangement and thus could make these women vulnerable to STDs. Obvious reasons for arranged marriages are economic in nature; parents marry their daughters into affluent homes to escape poverty. Some also marry their daughters to strengthen their relational ties to certain families.

Another issue of greater concern that could help propel the spread of HIV in Bawku is polygyny, the practice of a man having multiple wives. Bawku is predominantly a Moslem dominated community and as such Islam thus encourages men to marry as many wives as their resources can cater for. Polygyny is thus widespread. Traditional rural areas of Bawku are strict to strong customary norms, values and practices which recognize many children as a source of labour and security in times of old age and need and thus the patriarchal system permits a man to marry many wives. In-depth interviews with a Moslem leader revealed that the practice of having multiple wives is clearly outlined in the Qu’ran (the holy book of the Moslems) which further admonishes women to be faithful and submissive to their husbands. The Moslem leader aged 48 clearly stated that:

“For a man to have multiple wives is duly recognized in Islam. It’s a unique sign of wealth and prestige and commands lots of respect in the society.”

The above statement shows the kind of value people in Bawku attach to polygamy. Rushing (1995) and other researchers (Jackson 2002; Shannon and Pyle 1989; Kalipeni et al. 2004) have argued that polygamy is a major factor for the transmission of HIV/AIDS in Africa. Based on the fact that an estimated 30-50% of African marriages are polygamous, they conclude that polygamy increases the spread of STDs and AIDS. In contrast to their views, Oppong (1998), Tastemain and Cole (1993) using the prevalence and incidence of HIV/AIDS in areas and communities dominated by polygamy concluded that if indeed, polygamy were a potent means of spreading HIV, such areas (Islamic societies) should have exhibited a higher prevalence of HIV since polygamy is the normative form of marriage in these societies.
Against this backdrop, I will argue in this study that the most crucial aspect of polygamous relationships is the greater autonomy given to the man. Usually before the man marries more wives, he might have had many sexual partners in which case unprotected sex is the most likely because of the intention of the marriage. That is why it is repeatedly argued that a woman who agrees to indulge in sexual relationship in the hope of marriage obviously cannot raise the question of protected sexual intercourse. In the process a polygamous man risk bringing HIV home, all the people in the marriage are thus at high risk of getting infected (Jackson 2002). The number of people interconnected and exposed to the disease here may be alarming.

The practice of *widow inheritance* is customarily accepted amongst all the ethnic groups in Bawku. In this practice there is an opportunity where the widow is re-married to the brother of her deceased husband even though the husband could have died of HIV/AIDS. Even so either partner can risk infecting the other with HIV/AIDS. The practice is much embedded because of the very high bride prices paid during the course of marriage. Younger widows are particularly targets in such marriage transaction. Bridal payment as a result reinforces the power relations that exist between men and women. Adolescent children of the deceased are a vulnerable group to HIV because of potential neglect.

The above discussion on the influence of customary marriage on HIV/AIDS can clearly be interpreted using Gidden’s structuration theory which argues that structures are elements for action which may enhance or constrain human actions. Thus for the people of Bawku, traditional beliefs and religious practices are the social structures that impede them from avoiding certain risky behaviours for HIV/AIDS. For women in Bawku, the quest for marriage and the subsequent happiness that accompanies any successful marriage gives them no option but to indulge in unprotected sexual intercourse with their prospective husbands. The idea is normally to get pregnant and obviously convince the men into marrying them. Thus the cultural norms serve as constraints on these women and put them at higher risk of HIV/AIDS than men. Closely related to Gidden’s Structuration is the *Ecology of Disease model* which outlines the fact that the environment within which people live and work coupled with human behaviour (multiple wives and extramarital affairs) and the society (widow inheritance and patriarchy) could create strong bearings on people prior to marriage and within marriage relationships.
7.2.2 Puberty rites

Puberty refers to the stage of transition from childhood to adulthood characterized by the attainment of sexual maturity and full reproductive capacity. Puberty is most often marked by the performance of certain rituals. For girls puberty occurs at the time of menarche, but for boys, the timing varies from society to society (Jackson 2002). Puberty rites more often are meant to fully prepare the candidates for adulthood and install in them the importance of the culture of the people. Interestingly, it has been re-echoed that the rites associated with puberty are meant to traditionally unite communities but at the same time could be recognized to increase the risk of HIV/AIDS (UN Population Institute 2001). In-depth interviews with elders in Bawku revealed that puberty rites were very significant to their forefathers that failure to perform it could lead to banishment. All of them were however; unanimous in their views that modernization has completely led to the abolishment of these practices. An elder aged 72, however, narrated his experience:

“As boys growing up with our elder brothers and parents, we were taught to observe the culture of our forefathers. In those days you could be taught a couple of activities such as hunting, farming, dancing and masonry. Most of us learnt the act of warfare from experienced warriors in the neighbourhood. Parents could even arrange wives for those who were grown and marriageable. Girls on their part were confined in rooms some and surrounded with experienced old ladies who taught them about sexuality and household maintenance. Female genital mutilation was then performed on the final day of the exercise. But today these practices aside FGM are almost non-existent.”

The above explanation given by the elder summaries the activities that used to be associated with puberty rites in Bawku East. It was further observed that female genital mutilation although outlawed in Ghana is still practiced in smaller scale in certain communities. In-depth interview with an HIV/AIDS officer attached to an NGO revealed that some communities especially slip across the border into Burkina Faso, where they believe to be outside the reach of the Ghanaian law, to perform the operation. More generally, the practice is associated with identity, tradition, culture and religion. In rural Bawku, female genital mutilation plays a significant role in the social and religious life of communities where it is performed. Female focus group participants were of the view that the practice socially prepares them for marriage. Further probe re-echoed the belief that the act makes women more respected by the communities that they hail from. Participants mentioned that it was very common for women
to deride their colleagues who have not gone through the act. In most cases uncircumcised women are referred to as “men” because of the clitoris. It is reported somewhere that in some occasions the children of uncircumcised women are not spared for they are derisively referred to as “clitoris children” (PIP 2000).

Unfortunately, female circumcision makes their victims more vulnerable to HIV/AIDS. The sorts of operation tools ranging from razor blades, knives, scalpels and pieces of glass used in the act expose victims to serious infections. “In all cases of female circumcision that I have observed, no antiseptics are used in the process, ground charcoal and special herbs are placed on the wound to stop the bleeding after the operation” (a 62 year old lady in a personal chat). It must be mentioned that the more crude the tools used, the seriousness of the risk since the surgery is normally performed by poor, illiterate old ladies using the same tools on several girls at the same time. The act of female circumcision has a graving influence of spreading HIV/AIDS. Because of the risk of infectious blood transfer, infected individuals risk transmitting HIV to lots of women involved in the process. In such circumstances, HIV infection may tend to spread more rapidly since the operation is normally done in a common group among many prospective women.

7.2.3 Birth practices

Procreation is very important in the culture of the people of Bawku East municipality because it perpetuates the family’s lineage. Different practices are associated with the birth of children in the area. For male children, the practices often include circumcision. The giving of tribal marks and the cutting of the umbilical cord is similar to both sexes whilst ear piercing finds more expression amongst female children. These practices could increase the risk of HIV transmission many times for a number of reasons. The focus of the study is the way the surgical removal of the prepuce of the penis is carried out which make baby boys prone to HIV. In the rural areas where it is very difficult to obtain medical attention women give birth at home and attended to by traditional birth attendants most of whom are old ladies. They use various contaminated sharp objects to cut the umbilical cord. Local practitioners known as wamzams circumcise baby boys with same equipments over the years. Even though, it has been shown by studies that male circumcision is associated with lower rates of HIV as well as protection against STIs (Jackson 2002, Kalipeni et al. 2004), yet the manner in which it is done might be risky. Shillinger (1999) observes that male circumcision is not without risk.
The value placed on having children often leads to the pressure of having unprotected sex. Such decisions are often fuelled by cultural and spiritual beliefs that childlessness is punishable by the gods. For a married person who knows he is HIV-positive may insist on having unprotected sex with his/her spouse. Many unmarried women have exploited this cultural value placed on having children to tricking some men into rushed marriages. It was mentioned and also observed that there were proliferations of teenage pregnancies in the town. It is therefore a clear indication that condoms are rarely used in such premarital and extramarital sexual relationships. The municipal focal person on HIV/AIDS summarized it in this way:

“It is very difficult these days to get good men to marry. The young girls around town therefore use pregnancies to coerced men into marrying them. It is not uncommon to see such men been surmount to human rights to accept responsibilities of pregnancies. In many of these cases, such men are tasked to take care of the women until the child is of age. You therefore observe that where the intention of the girl involved fulfilling her selfish interest no condom will be use.”

The above revelation from the focal person in-charge of HIV/AIDS in the municipality supports Bledsoe (1990) in that the premarital pregnancy may be used as a measure of fecundity to lure men into marriage. From the above, some of these cultural beliefs and economic reasons continue to fuel the practice of teenage pregnancies and its accompanied early childbearing. Such practices often exist among partners who obviously might have had a number of sexual partners prior to or even during the time of sexual relationship. Gidden’s structuration theory can be applied here to explain that strict adherence to cultural beliefs and practices is what makes people adore many children whilst at the same time lack of job earning opportunities and over reliance on men for economic support leads women to adopting many survival tricks. Birth practices such as giving of tribal marks, ear piercing and circumcision could spread HIV transmission observing the manner in which they are performed. The fact is that if it is necessary to perform such practices, then the appropriate procedures should be medically sought to avoid the risk of HIV/AIDS infection.

7.3 RELIGIOUS BELIEFS AND PRACTICES
The belief in the supernatural is widespread among all ethnic and social groups in Bawku. Bawku in general has been under the influence of Islam long before Christianity surfaced in
the area. The belief in smaller gods and the efficacy of palpable objects is also deep-rooted and finds expression in the belief in the spirit of the dead. Such is the importance of the Traditional religion that even people who claim to be professing Christian or Islamic faiths revert to seek the help of the animists in times of need. The fact is that religion has in different ways influenced the lifestyles of people in different ways. Each society has moral standards which reflect the approved ideas that religion has set for it (Foreman 1999).

Since the most common means of HIV spread is through sexual intercourse and scientists proposed that the correct use of a good-quality, latex condom could reduce the risk of transmission during sexual intercourse, the public interest has been generated in promoting this means of protection. The Catholic Church and other churches protest against the massive promotion of condoms. Their objections include concerns about promoting sexual activity outside marriage. The strong position taken by the Churches over the promotion of condoms has led to a perception among AIDS educators and the media that Christianity is obstructing HIV/AIDS prevention efforts and is therefore a “promoter of death”. Fortunately, against this idea is the fact that Christianity sponsors some educational programmes designed to prevent the sexual transmission of HIV. The most consistent message of such educational programmes is that sexual activity is to be restricted to faithful marriages and abstinence should be practiced outside marriage.

According to the interviewed faith leaders one egregious manifestation of power inequity can be found in the oppression that men are allowed to exert over women and girls. One Islamic leader summarized things as follows:

“According to the Qu’ran chapter 4 verse 34, men are the maintainers of women, with what Allah has made some of them to excel others and with what they spent out of their wealth. So the good woman is obedient, guarding the unseen as Allah has guarded. And (as to) those on whose part you fear desertion, admonish them and leave them alone in bed and chastise them. So if they obey you seek not a way against them. Surely Allah ever be exalted, Great.”

The above quotation from the Qu’ran supports the fact that women are supposed to be submissive and obedient to men. Among Christians the marriage vow “For better for worse” is an aspect of wedlock that promotes and legitimizes a husband’s superiority over the wife. Implicit in this marriage vow is a denotation that whatever happens within a Christian
wedlock the woman is expected to spend the rest of her life in it. Women are therefore almost confronted daily with their relative lack of control over their personal health and sexual activity as well as over the sexual activity of their partners. They cannot negotiate or better still refuse sexual relations within wedlock. Yet these women are unfortunately blamed as “vectors of HIV”, even when the same religion forbid them to be unfaithful and they have been utterly faithful in their marriages, and the entry of the virus into the family circle has come from their husbands’ infidelity.

Despite the fact that the rejection and scapegoating of people living with HIV/AIDS finds no basis in religion, such incidents still continue in some Church circles. Some religious groups believe that HIV/AIDS is as a result of punishment from God for living sinful lives. The critical issue emerging here is the fact that the right to confidentiality which should be enjoyed by all persons with regard to information about the intimate details of their lives and welfare is grossly impeded. Instead of rigorously applying rights of confidentiality, some Churches thus insist on mandatory HIV testing and labeling of patients before uniting them in holy matrimony. By disregarding the patient’s right to confidentiality, such irrational attitudes undermine the dignity and human rights of those concerned.

The Traditional religion also attributes the occurrence of misfortunes to supernatural causes. To some extent some people believe that everything that happens in life was already pre-determined (Caldwell 2000). Awusabo-Asare et al. (1999) therefore summarized it simply in a popular proverb, *all die be die*. West African Traditional religion believes that destiny cannot be changed and so if one was destined to die through HIV/AIDS, there is therefore nothing one can do. Unfortunately, equipped with this idea some people fail to adhere to preventive methods associated with HIV/AIDS. The traditional religion allows a man to possess multiple wives meaning that men have the customary rights to extramarital affairs. These unique groups of people who consider themselves markedly different are at high risk for contracting HIV. Thus in regarding the communication of HIV/AIDS risk behavioural change, the *theory of diffusion* observes that it is often difficult to convince such adamant people to accept preventive measures.

Religious beliefs and practices are also part of the socio-cultural environment which could influence a given population negatively and positively. The ecology of human disease model describes how human environment, beliefs, behaviours and socio-cultural factors can
influence actions and attitudes and hence initiate diseases. In an environment like Bawku East were socio-economic conditions are deplorable, people tend to focus their attention on God and the supernatural for miracles to salvage their situations. Strict adherence to religion is therefore widespread and appears to create the context within which people act. Some religious beliefs and practices serve as impediments in the fight against HIV/AIDS.

7.4 SEXUAL PRACTICES AND ORIENTATION

Sexual behaviour is associated with risk of HIV/AIDS and can be analyzed at personal, economic and socio-cultural levels. In many households, parents traditionally do not discuss sex with their children. Sensitive discussions regarding sex are generally postponed in the whole of Ghana. Communication between parents and their children about sex is often very difficult because either parents are too busy chasing after money and do not have the time to discuss issues of sex with their children or better still the society forbids it. However, it was repeatedly mentioned in the study that traditional sexual values that use to discourage sexual activity outside and within marriage are weakened and sexual practices have become rampant.

The study found out that sexual activities are common in Bawku East municipality. People tend to initiate sexual activity at very tender ages than it used to be the case some years back when it was considered as a taboo. In time past virginity was treasured and highly prized in every society. For a girl to remain chaste till marriage was a source of pride and honour to her family. Unfortunately, such traditional values and practices have been diluted by modernization and formal education. For instance, most people especially the youth who have been exposed to western cultures will today challenge such practices as impeding their human rights and may not be so much concerned about traditional values. Changes in the form of early sexual practices are widespread. Interviews with a sampled population revealed that the traditional sexual values are broken down with people presently practicing sex indiscriminately.

The fact that sexual experience very early in life and the number of sexual partners involved could expose people to higher risk of STDs, respondents were asked questions concerning their sexuality. My questions related to issues of early initiation of sexual intercourse and the number of partners involved was asked to all respondents irrespective of their marital status. Out of 120 sampled people interviewed, 7 representing 6% reported that they have never had sexual intercourse before whilst a whopping 113 representing 94% have ever and are
currently practicing sexual intercourse. For fear of associating early initiation of sex and multiple partners to HIV, respondents might have underestimated their sexual experience. Table 7.1 demonstrates the age at first sexual experience in Bawku East among the sampled population by sex.

Table 7.1 Age at first sexual intercourse in Bawku by sex, 2004 in Percentages

<table>
<thead>
<tr>
<th>Age at first sex</th>
<th>Female percentage</th>
<th>Male percentage</th>
<th>Total percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-14</td>
<td>9</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>15-19</td>
<td>68</td>
<td>63</td>
<td>66</td>
</tr>
<tr>
<td>20-23</td>
<td>23</td>
<td>30</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>100 (57)</td>
<td>100 (56)</td>
<td>100 (113)</td>
</tr>
</tbody>
</table>

Source: Field work 2004

N=120 Missing cases=0

Not applicable for females=5% (3) and males=7% (4)

Not applicable refers to respondents who answered that they have never had sexual intercourse before and thus the age at first sexual intercourse does not apply to them.

Chi-square value 0.852 at 0.05 significant level (0.653) and 2 degrees of freedom

It is clear from Table 7.1 above that both sexes tend to initiate sexual intercourse at a young age. Majority of respondents had their first sexual intercourse at the age brackets of 15-19 years represented 68% and 63% for females and males respectively, culminating into 66%. Only 9% and 7% of females and males have had their first sexual experience within the 10-14 age group, meaning about 79% of respondents have had their first sexual intercourse before the age of 20. 30% and 23% of males and females respectively have had their first sexual experience at age brackets of 20-23. It appears then that females have experienced their first sexual intercourse earlier than their males’ counterparts. Chi-square tests at 0.05 significant level (0.653) proved non-significant probably because the number of cases were merely smaller and show no significant difference in frequencies between males and females on table 7.1 above. It was revealed that 46% and 45% of females and males have had sexual intercourse with two partners meaning that at least they have had sex with one person other than their current sexual partner, whilst 17% of the sampled population (113) has had sexual intercourse with three persons and 13% with four to six sexual partners. Only 28% and 23% of females and males respectively have been faithful to their current partners. From the
analysis, it can be observed that a whopping 76% were found to experience sexual intercourse with other partners apart from their regular sexual partners.

The fact that early initiation of sexual intercourse and the number of partners involved could be associated with greater risk of contracting HIV/AIDS, calls for the application of the concept of risk to interpret the situation. Initiating sex very early in life means that those involved may lack the knowledge about the consequences and might not know the protective methods for minimizing the cost of the risk involved. Thus according to Moller (2000) the manner in which people react to various risk and their reactions have a number of dimensions. Earlier initiation of sex and the number of partners ever contracted could therefore put people into greater risk of contracting HIV/AIDS.

7.5 SUMMARY OF THE CHAPTER
The chapter shows that cultural practices related to rites of passage and religious beliefs are still very potent in Bawku East municipality, serve as constrain on people’s sexual behaviours. Polygamy, widow inheritance, bridal dowry and the autonomy given to men over women are demonstrated as serious constrains in preventing HIV/AIDS infection. Female circumcision which was outlawed in Ghana is observed to be going on among some communities in Bawku and is also associated with serious health problems. Whilst certain cultural specifics such as male circumcision by traditional experts known as wanzams, giving of tribal marks and birth delivery at home associated with attendance to by non-licensed traditional birth attendants could also trigger off HIV/AIDS infection.

It has been observed that socio-economic and cultural factors further prevent women from taking absolute control of issues regarding protective sexual intercourse. Respondents initiate sex very early in their life and with many sexual partners in the process. Beginning sex very early in life is associated with greater risk of HIV infection since people might be too young to think of safer sex methods and cannot negotiate for condom use. Religious beliefs and practices also well enshrined in the area as a result of poverty make people rely seriously on the supernatural for divine intervention.
CHAPTER EIGHT: CONCLUSION

8.1 INTRODUCTION
Chapter eight presents a summary of the research findings. It includes some conclusions drawn from the study in general and suggested recommendations derived from observation of the magnitude of HIV/AIDS, poverty and vulnerable situations in Bawku East municipality.

8.2 SUMMARY
The study has been dealing with issues of poverty, vulnerability and HIV/AIDS. The aim is to examine poverty mostly as a determinant of HIV/AIDS infection in the Bawku East municipality of northern Ghana. The nature of the study judging from the sensitivity and complex nature of it enabled me to employ a set of theories which are very relevant and equally take into consideration socio-economic, cultural and environmental factors. Insights were generated from the discussions of the risk theory, structuration, disease ecology model, diffusion and place and time. The theories have been used extensively to guide and explain the effects of poverty on HIV/AIDS transmission in Bawku East municipality. The main sources of data were generated using a method of triangulation where several techniques including questionnaire and interviews were carried out on a sample of 120 and 12 respondents respectively. The questionnaire was designed in such a way as to obtain information on people’s perceptions, attitudes and practices that expose them to HIV. The data featured in the study was further supplemented with information gotten from observation, focus group discussions and extensive literature search.

The first specific objective is to present some patterns of HIV/AIDS and poverty in Bawku East municipality. The study thus indicates that the results of the MOH HIV sentinel survey 2003 associated the Bawku East municipality with a 3.8% mean prevalence rate. According to the secondary information generated from the Presbyterian Home Based Care HIV/AIDS has been in the area for a very long time. The study shows that from 1999 to 2000 14 people died through HIV in the Bawku East municipality. A very interesting revelation as observed from the study was the fact that in contrary to what pertains in the whole of the country, the case of Bawku East municipality is quite strange and deviates from the normal trend of HIV/AIDS finding more expression among males than females. In 1999, the ratio of infection was 47:40 in favour of males and 50:31 in 2000. From 2001 to 2002, the ratio attained slight parity. The peak of infection is greater amongst the ages 20-34 for females and 35-44 for males in the
Bawku East municipality. Bawku East is strategically located near two neighbouring countries of Burkina Faso and Togo that is said to have high implications for the spread of HIV/AIDS in the area. From the foregoing it was observed that HIV/AIDS cases in the municipality might be under estimated because of insufficient medical care facilities, concealment and stigmatization, high patronage of traditional medicine and poverty.

The second specific objective is to examine the levels and sources of HIV/AIDS knowledge and awareness in Bawku East. The study demonstrated that HIV/AIDS awareness is very high generally in the municipality but actual knowledge of the transmission of HIV remains a major problem. TV/radio/new paper was cited as the most important source of information on HIV/AIDS. Such non-interactive sources obviously cannot positively enhance people’s knowledge and awareness because of lack of possibility of asking questions for clarification purposes. There are many bodies engaged in educational campaigns on HIV/AIDS in Bawku East. Individuals still believe that they are not at risk of HIV infection yet the study revealed that condom use with partners is often very high at the beginning of courtship and reduces as trust in the relationship is established over time. Premarital sexual intercourse is driven by deplorable socio-economic structures which compel vulnerable women to fall on men generally for material and financial favours. Hence the various measures and efforts have not strongly changed people’s sexual behaviours.

In relation to issues about poverty and risk-taking behaviours, the research shows that there are substantial variations of levels of poverty amongst households, individuals and geographical areas. In terms of geographical area, the Upper East region where Bawku East is located is the poorest. It has an unfair distribution of both social and economic facilities with 9 out of every 10 persons being poor. The weather is consistently very hot throughout the year and coupled with environmental degradation, agricultural output is the lowest. In Bawku, the household is typically large and the main unit controlling decision making. Though men are often recognized as breadwinners, females who head households sometimes absorb the burden of providing the care and needs of their households. The economic conditions of most female headed households are more serious than their male counterparts. Women therefore result in exchanging sex for money as the only means for basic survival. This perhaps implies to the theory of risk as the possibility of benefits on one hand and losses on the other. The risk is that when sexual intercourse is contracted for material and financial favours, the possibility
of negotiating safer sex is minimize and thus might put both parties at higher risk of infection with HIV/AIDS.

A regression analysis performed on possible background variables namely age, personal monthly income, education, number of overnight trips and place of residence against risk factors for HIV such as number of sexual partners led to a significant positive association between age, personal monthly income and number of sexual partners. Surprisingly, there were no positive relationships between education, sex and mobility and number of sexual partners. Similar analysis with other risk factors such as condom usage, age at first sexual intercourse and knowledge of promiscuous spouses further showed no association. It is observed that such relationships might have been implicated by the small cases featured in the contingency table as a result of the small sample size.

The study further indicated that poverty finds expression in all aspects of life of the people of Bawku East municipality. The rich are the most prosperous economically and better educated. The poor are the majority frequently less educated, malnourished and appear to sell more of their productive resources which invariably reduce the asset base of households and thus constrain future prosperity. It has similarly been shown that high cost of living and economic hardships have compelled households and individuals to resort to various ways of coping with life. The strategies often adopted include petty trading across the border and reported to expose people to risk sexual behaviour. Investments in alcoholic activities as means of survival are at ascendency since most people including some Muslims are involved in it. Vulnerable people take to drinking to avoid depression caused by hopelessness and lack of motivation. Alcoholism reduces self consciousness and leads to increasing desire for sexual activities in drinking spots and during public ceremonies. Withdrawals of girls from school as a means of reducing household expenditures have created very difficult situations for parents in exercising maximum control over their daughters. Adolescent girls withdrawn from school are forced by lack of motivation and missing opportunities to lean on men for financial and material favours. It is thus possible to conclude that monetization of sexual relationships clearly imply the possibilities for risky sexual practices. Girls may lack the self efficacy to negotiate about safer sex as long as they depend on men for favours, the men might also be at risk because they feel that they have the right to decide about how to do sex with girls since they provide the means.
Out-migration is one of the coping strategies adopted by households and individuals in Bawku East municipality. The deplorable conditions in Bawku have witnessed a mass movement of young people in search of greener pastures both within and outside the country. Out-migration is not restricted to a single sex but finds expression amongst both males and females. Most migrants without their families or spouses are exposed to risky activities. Women especially are exposed to risk of accepting multiple sexual partners as means of basic survival. The migrant labour pattern in Bawku East thus might lead to a weakening in the stability and social control of the household and form a medium through which HIV/AIDS can spread. The study observes that majority of the population in Bawku East lives along major transport route characterized by the frequent movements of people involved in buying and selling. Prostitution per say is operated incognito in the municipality because of the stigma and shame associated with it. Thus to avoid the shame and stigma some women migrate to neighbouring Burkina Faso and Togo where they exchange sexual intercourse for financial favours.

In relation to the role of socio-cultural, religious and traditional factors interacting to create high risk for HIV/AIDS, the study demonstrates that cultural practices related to rites of passage and religious beliefs are still potent in Bawku East municipality. Polygamy, widow inheritance, bridal dowry and patriarchy are very critical and could constrain HIV/AIDS preventive efforts. Marriage is recognized as very significant in the social lives of the people of Bawku East. The value placed on male children serves as a main constrain to safer sexual intercourse. Polygamy has exposed men to increasing proportions of infidelity putting the whole family at risk of HIV/AIDS infection. The culture gives men the autonomy to engage in extramarital affairs especially when in pursuit of additional wives. A man might have had sexual intercourse with many women in the process. Women in particular are aware about their husbands’ infidelity but the society and poor economic structures give men the exclusive right to decide when, how and why to have sexual intercourse with women within or without marriage. Indeed, these attitudes are reinforced by the dependence of women on men for their needs, both financial and material. Female circumcision still lingers on with impunity despite the several attempts to abolish it. The nature of the operation associated with risk of infectious blood transfer following the uses of crude equipments (same for all the victims) have serious health implications and could transcend into HIV/AIDS infection in the Bawku East municipality. Cultural specifics such as male circumcision practiced by wanzams, giving of tribal marks for identification purposes amongst some tribes and giving birth at home and attended to by non-licensed individuals could expose people to the risk of contracting
HIV/AIDS in Bawku. Religiously, wives are supposed to be submissive to their husbands. Once it is religiously believed that sex was created as a fulfillment of marriage vows, couples consider it their duties to have sex with each other despite the situation. Churches are also against the use of condoms and tend to advocate for abstinence outside marriage and faithfulness in marriage.

8.3 CONCLUSION
The study shows that HIV/AIDS lingers on with impunity in the Bawku East municipality as demonstrated by the results of the statistics obtained from the Presbyterian Home Based Care of the Bawku hospital. It can therefore be concluded based on the findings that the risk of HIV/AIDS in the study area is based on a more complex network involving socio-economic, cultural, religious and environmental factors which tend to constrain the individual. It is difficult to blame the prevalence of HIV/AIDS in Bawku East municipality to poverty alone. Many factors come into play as unraveled that monetization of sexual intercourse involving some one who has the resources and some one who does not have could result into the danger of contracting the disease. As shown in the regression model, the higher the personal monthly income the likelihood of possessing multiple sexual partners. The rich therefore becomes the mirror through which the poor sees their reflections and opportunities for fulfilling basic needs such as food shelter and children’s education. Thus, the knowledge of HIV/AIDS and conventional efforts taken will not help change the sexual behaviours of people if the socio-economic, cultural and institutional structures constraining them are not first identified and appropriately addressed.

The consequences of these poverty patterns are that, the threat of HIV/AIDS will be most serious for poorer households particularly women and children. Agricultural production of particular significance to household income and food supply will drop from its already low levels. Families and communities will eventually break apart and young people’s future may become insecure. Once the disease finds more expression amongst those in their economically productive years, the resource base of Bawku will be depleted culminating into a negative affect on Ghana’s ability to achieve a middle income status by the year 2020.

8.4 IMPLICATIONS FOR FUTURE RESEARCH
This study provides insights about poverty, vulnerability and HIV/AIDS in Bawku East municipality. It focuses on socio-economic, cultural, religious and institutional barriers that
expose people to the risk of contracting HIV/AIDS in Bawku East. Despite the extensive knowledge generated from the research, it is interesting to acknowledge that time and resource constrain within which the research was carried out could not allow for thorough investigation of the relationships between poverty and HIV/AIDS.

It is observed that some of the analyses did not show significant associations between the independent variables and risk factors for contracting HIV/AIDS. There were very small numbers in some of the cases presented. In the case of using the regression model to analyze the relationship between sex, age, personal monthly income, educational level, place of resident and number of overnight trips against dependent variable (number of sexual partners), there were no significant results for sex, educational level and number of overnight trips. Obviously, a sample size of 120 could not be used to generalize for the over 300,000 people inhabiting the Bawku East municipality. On the basis of the above, it is recommended that a larger sample size could have enhanced the statistical power and quality of the thesis if adequate time and resources were allowed.

Further research could focus some specific risk groups and activities such as cattle and onion dealers involved in transporting goods to southern Ghana for trade purposes. Their activities could expose them to the risk of contracting HIV since they are frequently away from their spouses and families. The study should be conducted over a longer period (longitudinal study) for the researcher to fully appreciate how local factors interact with external factors to cause HIV in Bawku East.

Overall, the current trends of poverty and HIV/AIDS call for thorough investigation. For most people especially women who use sex as a survival strategy, behavioural change for HIV/AIDS prevention might be very difficult for them. Hence, research should also focus on investigations of poverty interventions promoted by the Government, International Development Agencies and NGOs, why such poverty strategies have failed over the years and indeed, further promote understanding of ways the interventions can be improved to enhance the welfare of people.

8.5 RECOMMENDATIONS

HIV/AIDS is not a curable disease but it can be avoided if the appropriate prevention methods are adhered to. There are many alternative prevention efforts meant to slow the spread of
HIV/AIDS and change high risk behaviours among vulnerable people. Such prevention efforts must be adopted by individuals, communities, the municipal assembly and NGOs to slow down the prevalence of the HIV/AIDS problem in Bawku East municipality. To achieve this, the following recommendations are made:

First, since it is shown clearly through the risk optimization model that feminization of poverty makes women use sex as survival strategy and poor men may also delay having stable sexual partners, there is an urgent need to launch an assault on poverty. To address this problem, poverty reduction strategies must focus on sustaining basic services to the poor like provision of good drinking water, electricity and primary health care in the short term. In the medium term, targeted interventions must include offering micro-credit financing to help the poor set up their own businesses and increase rural credit facilities for farmers to expand their farms with improved farming techniques. Extending irrigation facilities to all agricultural lands especially areas closer to the Tamne River and the White Volta will boost rural employment and thus arrest mass out-migration. In the long term, focus must be placed on programmes to build human capital. The government must stimulate growth and encourage the private sector to create more jobs to supplement its efforts.

Secondly, since most households are unable to send their wards to school, and where it is necessary the girl-child is denied education or worse still withdrawn from school, the study recommends that efforts must be made to assist poor households to send their female children to school. The Bawku East municipal assembly should create special incentives to needy but brilliant girls who are constrained by poverty and drop out of school to go to school. Attempts at encouraging girls to stay in schools will mean that the government must reform the educational system to place emphasis on the acquisition of relevant technical skills and basic education to generate productive work out of all school goers. With increased spending on bolstering the education system, it is possible to launch a direct assault on poverty and unemployment. For people who are already beyond the age of going to school, efforts must be made to empower them with the needed marketable skills and credit to make them financially and materially self-sufficient.

Moreover, it is demonstrated that women’s exposure to the risk of contracting HIV/AIDS is reinforced by their lack of the right to negotiate safe sex. It is thus recommended that in the face of the HIV/AIDS menace, women must be given the power to negotiate safe sex if the
HIV/AIDS prevalence level among them were to be reduced. The government should initiate laws that would empower women against men with multiple sexual partners and obnoxious cultural practices such as female genital mutilation that could risk women’s lives to take the necessary steps to protect themselves.

There is the need for sustained public education on the negative effects of some cultural practices such as female circumcision, widow inheritance and bridal dowry on HIV/AIDS transmission in Bawku East. High prevalence levels of the practices in the area suggest that more advocacy work has to be done. The municipal assembly should liaise with the chiefs and other traditional bodies especially those handling traditional issues to find practical ways of modifying and or eliminating those traditional practices in Bawku East that infringe on the rights of people and could generate into HIV/AIDS infections.

It is further recommended that a more effective way of combating HIV/AIDS will be to adopt an appropriate behavioural change. HIV/AIDS prevention efforts must be equipped with comprehensive, sustained health information and interventions to help people develop lifelong skills for avoiding behaviours that could generate into HIV/AIDS. Obviously, comprehensive efforts should include the involvement of parents initiating sex communication with their wards at tender ages. Parents must set aside time to teach their children about the dangers of illicit sexual relations and how to protect their health. This attempt must start at home before children are misinformed by their peers.

Since the common means of HIV spread is through sexual intercourse, perhaps the most crucial ethical issue related to the prevention of HIV spread is the propriety of means to reduce the risk of transmission during sex. People must be educated on the correct use of good quality latex condoms. Gossips about the moral characters of people who buy condoms must stop and people must feel free to buy and sell condoms openly. Public interest must be generated in promoting condom use as means of protection. Religious bodies must also play enormous roles to educate their people that the most effective means to prevent sexual transmission of HIV/AIDS is abstinence before marriage and sexual fidelity between uninfected partners within marriage. It is thus concluded that if HIV/AIDS is to be completely eradicated, then certainly a decisive factor will be the promotion of social justice in order to bring about a situation where economic consideration would no longer be an obstacle in an uncontrolled globalization.
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VULNERABILITY, POVERTY AND HIV/AIDS IN BAWKU EAST DISTRICT OF NORTHERN GHANA

Questionnaire survey

The main aim of this questionnaire is to examine poverty as a likely determinant as well as a consequence of HIV/AIDS infection in the Bawku East District of Northern Ghana. The study is purely an academic exercise, hence all information you provide will be treated private and efforts will be made to prevent any one beyond the main investigators having access to your individual information.

**Section A: Background Characteristics**

1. **Sex:** 
   - Female: 
   - Male: 

2. **Age:** 

3. **Marital status:** 
   - Single: 
   - Co-habiting: 
   - Married: 
   - Divorced: 
   - Widowed: 

4. **How many wives or rivals do you have?**

5. **Religion:** 
   - Christian: 
   - Moslem: 
   - Traditional: 
   - Other (specify): 

6. **Level of education:** 
   - None: 
   - Primary: 
   - Middle/JSS: 
   - SSS: 
   - Vocational: 
   - Higher: 

7. **Tribe:** 
   - Kusaasi: 
   - Mamprusi: 
   - Moor: 
   - Other Ghanaian (specify): 

8. **Work status:** 
   - Formal sector: 
   - Informal sector, paid: 
   - Self-employed: 
   - Student/apprentice: 
   - Unemployed (specify): 
   - Other (specify): 

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**READ THIS BEFORE YOU START!**

This form will be read by a machine. Please follow these rules:
- Use a black or blue ball-point pen or a good pencil. Do **not** use felt-tipped pens or green ink.
- Do not write outside designated fields/boxes. Fields/boxes only will be read.
- Mark boxes like this: ☑️ If you mark the wrong box, fill it **completely**, like this: ☐️ Then mark the right box.
- Mark one box only per question unless otherwise instructed.
9. Personal monthly income:

- None
- 1 m – 1.5 m
- < 500 000
- 1.5 m – 2 m
- 500 000 – 1 m
- > 2 m

10. Monthly household income: ___ cedis

SECTION B: HOUSEHOLD CHARACTERISTICS, POSSESSIONS AND RESOURCES

11. What is the type of tenure/holding?  
   - Owning
   - Renting
   - Rent-free
   - Perching

12. Are you the household head?  
   - Yes
   - No

13. If No, what is your relationship to the household head? CAPITALS ONLY, please.

14. What is the total size of your household?  
   Note: Children = under 18 years old.

15. Number of rooms primarily used for sleeping:

16. What is the main source of drinking water?
   - Pipe inside
   - Pipe outside
   - Well
   - Bore hole
   - Tanker
   - Other (specify)

17. Type of toilet facility used:
   - WC
   - KVIP
   - Public toilet
   - Free range
   - Pit latrine
   - Bucket/pan
   - Another house
   - None

18. Does any member of your household own any of the following? Mark one or more boxes.
   - Private car
   - Refrigerator
   - Television
   - Radio
   - Telephone/mobile
   - Sewing machine

19. Which of these statements best describes the food eaten in your household in the last 12 months? Mark one box only.
   - We always have enough to eat and the kinds of food we want...
   - We have enough to eat but not always the kinds we want...
   - We don’t have enough to eat during the lean season...
   - We only get enough to eat during harvest...
   - Don’t Know

20. In the last week, how many days did your household cut the size of meals because there wasn’t enough to eat?
   - None of the days...
   - 1 – 2 days...
   - 3 – 4 days...
   - 5 – 7 days...
   - Don’t know...

21. Where do you usually go for help when you are seriously sick?

- Hospital
- Clinic/Health centre
- Chemical shop
- Herbalist
- Self-medicate
- Other (specify)
- None
22. In the last 30 days, what degree of stressful life events did your household endure because of health problems?
- None ........................................ 1
- Mild ........................................... 2
- Moderate ..................................... 3
- Severe ........................................ 4
- Overwhelming ............................... 5
- Don’t know .................................... 6

23. Have you received economic support outside the household within the last month?
- No .............................................. 1
- Yes, once ...................................... 2
- Yes, some times ............................. 3
- Yes, several times ......................... 4

24. If yes, what kind(s) of economic support? Mark one or more boxes.
- Money........................................ 1
- Food items ................................... 2
- Medicine ....................................... 3
- Job engagement ............................ 4
- Other (specify) .............................. 5

25. If yes, where did the support(s) come from? Mark one or more boxes.
- Neighbours .................................. 1
- Local community ............................ 2
- NGOs .......................................... 3
- District Assembly .......................... 4
- Gov’t agency ................................ 5
- Co-operatives ................................ 6
- Other (specify) .............................. 7

26. Do you agree that people in this community should take initiative to come together to improve their living conditions?
- Strongly agree .............................. 1
- Agree .......................................... 2
- Uncertain ..................................... 3
- Disagree ....................................... 4
- Strongly disagree ........................... 5

27. Do you belong to any association or group organisation in this community?
- Yes .............................................. 1
- No .............................................. 2
- Don’t know .................................... 3

28. Do people in this community trust or rely on one another?
- Yes, to a strong degree ................. 1
- Yes, to a certain degree .................. 2
- Yes, to a low degree ....................... 3
- No .............................................. 4
- Don’t know .................................... 5

SECTION C: KNOWLEDGE AND AWARENESS OF HIV/AIDS

29. What do you think are the possible ways of transmission of AIDS? Mark one or more boxes.
- Body contact ............................... 1
- Mother to child ............................. 2
- Sharp objects ................................ 3
- Heterosexual contact ..................... 4
- Other (specify) .............................. 5

30. What are your primary sources of information on AIDS? Mark one or more boxes.
- Friends ....................................... 1
- Educational campaigns ................. 4
- TV/ radio/newspaper adverts ........... 2
- Workshops ................................... 3
- Health workers ............................. 5
- Other (specify) .............................. 6

31. Have you seen a HIV/AIDS patient in this community?
- Yes, several times ......................... 1
- No .............................................. 4
- Yes, some times ............................ 2
- Don’t know .................................... 5

SECTION D: TRAVEL HISTORY

32. For most of the time until you were 18 years old, where did you live?
- City ............................................ 1
- Town ......................................... 2
- Village ....................................... 3
33. For how many years have you been living continuously in this community?
   Please round to nearest number of whole years.
   \[
   \text{years}
   \]

34. How many overnight trips did you make outside your community during the last year?
   None \(\square\) 1 – 3 trips \(\square\) 4 – 9 trips \(\square\) 10 – 19 trips \(\square\) 20 or more trips \(\square\)

35. To where did most of the trips go? Mark one or more boxes.
   - Northern Ghana \(\square\)
   - Southern Ghana \(\square\)
   - Togo \(\square\)
   - Burkina Faso \(\square\)
   - Côte d’Ivoire \(\square\)
   - Other West-African destinations (specify) \(\square\)
   - Europe \(\square\)
   - USA \(\square\)
   - Elsewhere (specify) \(\square\)

36. What were the reasons/purposes for your overnight trips? Mark one or more boxes.
   - Trade \(\square\)
   - Leisure/adventure \(\square\)
   - Visit family/friends \(\square\)
   - Employment \(\square\)
   - Other (specify) \(\square\)

SECTION E: SEXUAL BEHAVIOUR

37. Have you ever had sexual intercourse? Yes \(\square\) No \(\square\) Don't know \(\square\)

38. How old were you when you had sexual intercourse for the first time?
   Please round to nearest number of whole years.
   \[
   \text{years}
   \]

39. In your life, with how many different people have you had sexual intercourse?
   \[
   \text{persons}
   \]

40. Do you see your spouse’s or partner’s sexual behaviour as a health risk to you?
   - Yes, to a strong degree \(\square\)
   - Yes, to a low degree \(\square\)
   - Yes, to a certain degree \(\square\)
   - No \(\square\)
   - Don’t know \(\square\)

41. If Yes, in what way(s)? Mark one or more boxes.
   - Risk of HIV \(\square\)
   - Risk of STDs \(\square\)
   - Injuries caused by rivalry \(\square\)
   - Other (specify) \(\square\)

42. Do you think it is important to stick to one sexual partner?
   - Yes, to a strong degree \(\square\)
   - Yes, to a low degree \(\square\)
   - Yes, to a certain degree \(\square\)
   - No \(\square\)
   - Don’t know \(\square\)

43. If Yes, what are you reason(s)? Mark one or more boxes.
   - Faithfulness \(\square\)
   - Avoidance of HIV \(\square\)
   - Avoidance of STDs \(\square\)
   - Other (specify) \(\square\)

44. In your lifetime, have you or your partner used a condom?
   - Very often \(\square\)
   - Often \(\square\)
   - Rarely \(\square\)
   - Very rarely \(\square\)
   - Don’t know \(\square\)
45. Do you know if some of your friends have sexual relationships without protecting themselves against STDs?

- Very often .................................. 1
- Often ........................................ 2
- Sometimes................................. 3
- Seldom...................................... 4
- Don’t know................................. 5

46. Do you agree that some of your friends cheat on their spouses and/or partners?

- Strongly agree ......................... 1
- Agree to a certain degree ............. 2
- Agree ........................................ 3
- Disagree .................................... 4
- Don’t know................................. 5

47. Do you agree that people should be tested for HIV before marriage?

- Strongly agree ......................... 1
- Agree to a certain degree ............. 2
- Agree ........................................ 3
- Disagree .................................... 4
- Don’t know................................. 5

48. Do you agree that every human being is vulnerable to HIV at one time?

- Strongly agree ......................... 1
- Agree to a certain degree ............. 2
- Agree ........................................ 3
- Disagree .................................... 4
- Don’t know................................. 5

49. How would you describe the level of educational campaigns on HIV/AIDS in the district?

- Very high .................................. 1
- High........................................... 2
- Low........................................... 3
- Moderate................................. 4
- Don’t know................................. 5

Space for comments:

Thank you sincerely for participating in this study.
APPENDIX II

Norwegian University of
Science and Technology

VULNERABILITY, POVERTY AND HIV/AIDS IN BAWKU EAST MUNICIPALITY
OF NORTHERN GHANA

Interview Guide for Individuals, Municipal Assembly and NGOs

A: INDIVIDUALS
1. What do you think are the main reasons for the prevailing increases in HIV infection in Ghana and Bawku East municipality?
2. What kinds of information and services do people get about HIV/AIDS in the municipality? Can you identify the agencies or bodies responsible for disseminating information on HIV?
3. Please what kinds of people are most vulnerable to HIV infection in Ghana and the Bawku East municipality? What are you reasons?
4. Would you describe your current situation as extremely poor, poor, normal or rich? What are your reasons?
5. Do you think poverty could possibly lead people to adopting unhealthy sexual behaviours that could expose them to HIV infections? In what ways possible?
6. Is it customarily acceptable to discuss sexual matters and HIV/AIDS openly and especially with sexual partners, peers and children? Why?
7. What measures do you think people adopt to avoid HIV infection? Do you think there is high patronage of condom use especially amongst the adolescent? Do women have the rights to negotiate safe sex?
8. What are the major traditional values that impede the rights of women and are likely to expose people to HIV infections?

B: MUNICIPAL ASSEMBLY AND NGOs
1. How aware are people of HIV/AIDS, and has the existence of AIDS made people change their sexual behaviours and attitudes? What kind of changes do you observe and mostly among who?
2. Could we directly link poverty to HIV/AIDS? How possible? What are the evidences of poverty in the municipality?
3. Is HIV/AIDS one of the problems the municipal assembly has to solve? What is/are the reason/s for your answer? What plans are advanced to ameliorate the current situation?

4. Do you have any responsibility/ (ies) for taking care of people living with HIV/AIDS? How do you think people living with HIV should be treated?

5. What accounts for the heavy exodus of people to other destinations? What are some of the likely destinations? Do you think the closeness of the municipality to neighbouring Burkina Faso and Togo has a score factor for HIV/AIDS spread in the municipality? Please explain that?

6. What can you say about job situations and the level of education in the municipality? What plans has the municipal assembly/NGOs in creating jobs and improving the literacy level in the municipality?
Questions for Focus Group Discussions

1. How aware are people of HIV/AIDS? What do you think are the reasons for the spread of HIV/AIDS in Ghana and Bawku East?

2. Do you think that there are people in this municipality infected with HIV? What are the reasons for your answer?

3. Where do people mostly migrate to? For what reasons do people migrate outside the municipality? What types of activities do migrants engage themselves in their areas of destination?

4. What are the attitudes and perceptions of people toward the use of condoms? What common practices and beliefs could expose people to the risk of HIV infection?

5. What aspects of poverty are people mostly exposed to in the municipality? What are the major characteristics of the poor and the rich? Identify some major survival strategies adopted by individuals and households in terms of poverty?

6. How can the municipal assembly, Government, NGOs and individuals do to eradicate HIV/AIDS in the municipality and Ghana as a whole?
## APPENDIX IV

**Number of organizations involved in HIV/AIDS intervention in Bawku East municipality.**

<table>
<thead>
<tr>
<th>NAME OF ORGANISATION</th>
<th>TYPE</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bawku East Women Development Association</td>
<td>NGO</td>
<td>Bawku township</td>
</tr>
<tr>
<td>Bawku Secondary School Virgin &amp; AIDS Clubs</td>
<td>Club</td>
<td>Bawku township</td>
</tr>
<tr>
<td>Bawku Secondary Technical School</td>
<td>Club</td>
<td>Bawku township</td>
</tr>
<tr>
<td>Bawku Technical Institute</td>
<td>Club</td>
<td>Bawku township</td>
</tr>
<tr>
<td>Becky Beauty Hair Care against HIV/AIDS</td>
<td>CBO</td>
<td>Gingade/Bawku</td>
</tr>
<tr>
<td>Bugri HIV/AIDS Voluntary Association</td>
<td>CBO</td>
<td>Bugri</td>
</tr>
<tr>
<td>(CAESIA) Compassion &amp; Education for the Sick, Infected &amp; affected</td>
<td>CBO</td>
<td>Tempane</td>
</tr>
<tr>
<td>Catholic Health Unit on HIV/AIDS</td>
<td>CBO</td>
<td>Bawku township</td>
</tr>
<tr>
<td>CERUDECS</td>
<td>NGO</td>
<td>Bawku/Tamale</td>
</tr>
<tr>
<td>Community Based Organisation on Reproductive Health</td>
<td>CBO</td>
<td>Bawku PHC</td>
</tr>
<tr>
<td>Garu Community Welfare against HIV/AIDS</td>
<td>CBO</td>
<td>Garu</td>
</tr>
<tr>
<td>Garu Presby Agric. Station on HIV/AIDS</td>
<td>NGO</td>
<td>Garu</td>
</tr>
<tr>
<td>Gbewaah Teachers Training College</td>
<td>Club</td>
<td>Pusiga</td>
</tr>
<tr>
<td>Ghana Education Service (GES)</td>
<td>CBO</td>
<td>Bawku township</td>
</tr>
<tr>
<td>Grace Fashions against HIV/AIDS</td>
<td>CBO</td>
<td>Gingade/Bawku</td>
</tr>
<tr>
<td>Kaabingo Youth Advisory Club</td>
<td>Club</td>
<td>Kukazuli</td>
</tr>
<tr>
<td>Kpikpira CBO on HIV/AIDS</td>
<td>CBO</td>
<td>Tubong JSS/Primary</td>
</tr>
<tr>
<td>Naken Community against HIV/AIDS</td>
<td>CBO</td>
<td>Pusiga</td>
</tr>
<tr>
<td>Presbyterian Home Based Care</td>
<td>CBO</td>
<td>Bawku township</td>
</tr>
<tr>
<td>Red Cross Society</td>
<td>NGO</td>
<td>Bawku township</td>
</tr>
<tr>
<td>Solace Civil Society on HIV/AIDS</td>
<td>CBO</td>
<td>Bawku township</td>
</tr>
<tr>
<td>Tansia Response Initiative on HIV/AIDS</td>
<td>CBO</td>
<td>Atuba</td>
</tr>
<tr>
<td>Tempane Community against HIV/AIDS</td>
<td>CBO</td>
<td>Tempane</td>
</tr>
<tr>
<td>Winatenga HIV/AIDS Committee</td>
<td>CBO</td>
<td>Zabgu</td>
</tr>
<tr>
<td>Youth Alive Club</td>
<td>Club</td>
<td>Daduri/Bawku</td>
</tr>
<tr>
<td>Youth Versus HIV-AIDS</td>
<td>NGO</td>
<td>Bawku township</td>
</tr>
</tbody>
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