

# **2010** Population & Housing Census

# **DISTRICT ANALYTICAL REPORT**

**BAWKU WEST DISTRICT** 



MINISTRY OF FOREIGN AFFAIRS OF DENMARK

**GHANA STATISTICAL SERVICE, OCTOBER, 2014** 

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### **PREFACE AND ACKNOWLEDGEMENT**

No meaningful developmental activity can be undertaken without taking into account the characteristics of the population for whom the activity is targeted. The size of the population and its spatial distribution, growth and change over time, in addition to its socio-economic characteristics are all important in development planning.

A population census is the most important source of data on the size, composition, growth and distribution of a country's population at the national and sub-national levels. Data from the 2010 Population and Housing Census (PHC) will serve as reference for equitable distribution of national resources and government services, including the allocation of government funds among various regions, districts and other sub-national populations to education, health and other social services.

The Ghana Statistical Service (GSS) is delighted to provide data users, especially the Metropolitan, Municipal and District Assemblies, with district-level analytical reports based on the 2010 PHC data to facilitate their planning and decision-making.

The District Analytical Report for the Bawku West district is one of the 216 district census reports aimed at making data available to planners and decision makers at the district level. In addition to presenting the district profile, the report discusses the social and economic dimensions of demographic variables and their implications for policy formulation, planning and interventions. The conclusions and recommendations drawn from the district report are expected to serve as a basis for improving the quality of life of Ghanaians through evidence-based decision-making, monitoring and evaluation of developmental goals and intervention programmes.

For ease of accessibility to the census data, the district report and other census reports produced by the GSS will be disseminated widely in both print and electronic formats. The report will also be posted on the GSS website: <u>www.statsghana.gov.gh</u>.

The GSS wishes to express its profound gratitude to the Government of Ghana for providing the required resources for the conduct of the 2010 PHC. While appreciating the contribution of our Development Partners (DPs) towards the successful implementation of the Census, we wish to specifically acknowledge the Department for Foreign Affairs, Trade and Development (DFATD) formerly the Canadian International Development Agency (CIDA) and the Danish International Development Agency (DANIDA) for providing resources for the preparation of all the 216 district reports. Our gratitude also goes to the Metropolitan, Municipal and District Assemblies, the Ministry of Local Government, Consultant Guides, Consultant Editors, Project Steering Committee members and their respective institutions for their invaluable support during the report writing exercise. Finally, we wish to thank all the report writers, including the GSS staff who contributed to the preparation of the reports, for their dedication and diligence in ensuring the timely and successful completion of the district census reports.

Dr. Philomena Nyarko Government Statistician

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# **ACRONYMS AND ABBREVIATIONS**

AIDS:	Acquired Immune Deficiency Syndrome
CIDA:	Canadian International Development Agency
CHPS:	Community Health Planning Services
DANIDA:	Danish International Development Agency
DPs:	Development Partners
EPA:	Environmental Protection Agency
ECOWAS:	Economic Community of West African States
EU:	European Union
GDP:	Gross Domestic Product
GSS:	Ghana Statistical Service
HIV:	Human Immune Virus
HND:	Higher National Diploma
ICT:	Information Communication Technology
JSS:	Junior Secondary School
JHS:	Junior High School
KNM:	Kassena Nankana Municipality
KNMA:	Kassena Nankana Municipal Assembly
LI:	Legislative Instrument
MCE:	Municipal Chief Executive
MP:	Member of Parliament
NGOs:	Non-governmental Organisations
PHC:	Population and Housing Census
PWDs:	Persons with Disabilities
SSS:	Senior Secondary School
SHS:	Senior High School
TLMs:	Teaching and Learning Materials
UN:	United Nations
UNCCD:	United Nations Convention to Combat Desertification
UNDP:	United Nations Development Programme
WC:	Water Closet

## **EXECUTIVE SUMMARY**

#### Introduction

The district census report is the first of its kind since the first post-independence census was conducted in 1960. The report provides basic information about the district. It gives a brief background of the district, describing its physical features, political and administrative structure, socio-cultural structure and economy. Using data from the 2010 Population and Housing Census (2010 PHC), the report discusses the population characteristics of the district, fertility, mortality, migration, marital status, literacy and education, economic activity status, occupation, employment; Information Communication Technology (ICT), disability, agricultural activities and housing conditions of the district. The key findings of the analysis are as follows (references are to the relevant sections of the report):

#### Population size, structure and composition

The population of Bawku West District, according to the 2010 Population and Housing Census, is 94,034 representing 9.0 percent of the region's total population. Males constitute 48 percent and females represent 52 percent of the district's population. About ninety (90.8%) percent of the population is rural. The district has a sex ratio (number of males to 100 females) of 92.2. The population of the district (less than 15 years) is youthful (45.1%) depicting a broad base population pyramid which tapers off with a small number of elderly (65 years and older) persons (6.9%). The total age dependency ratio for the district is 108.6, the child dependency ratio is higher (94) than old age dependency ratio (14.4).

#### Fertility, mortality and migration

The Total Fertility Rate (TFR) for the district 3.7. The General Fertility Rate (GFR) is 106.2 births per 1000 women aged 15-49 years which is the second highest for the region. The Crude Birth Rate (CBR) is 23.7 per 1000 population. The crude death rate for the district is 8.9 per 1000. The death rate for males is highest for age 70 and older representing about 58 deaths per 1000 population while for the females; the highest death rate of 34 deaths per 1000 population is for the same age category. Accident/violence/homicide/suicide accounted for 5.1 percent of all deaths while other causes constitute 94.9 percent of deaths in the district. Majority of migrants (55.3percent) living in the district were born in another region while 44.7 percent were born elsewhere in the Upper West Region. For migrants born in another region, those born in Ashanti constitute 60.8 percent followed by Western Region with 11.2 percent and Brong Ahafo, 9.4 percent.

#### Household Size, composition and structure

The district has a household population of 93,028 with a total number of 15,169 households. The average household size in the district is 6.1 persons per household. Children constitute the largest proportion of the household structure accounting for 49.3 percent. Spouses form about 11 percent. Nuclear households (head, spouse(s) and children) constitute 22.3 percent of the total number of households in the district.

#### Marital status

About half (52.2%) of the population aged 12 years and older are married, 36.0 percent have never married, 0.2 percent are in consensual unions, 9.2 percent are widowed, 1.5 percent are divorced and 1.0 percent are separated. By age 25-29 years, more than three quarters of females (85.3%) are married compared to a little above two in ten of males (24.4%). At age

65 and above, widowed females account for as high as 61.8 percent while widowed males account for only 10.0 percent. Among the married, 81.7 percent have no education while about 25.8 percent of the unmarried have never been to school. More than three quarters of the married population (88.5%) are employed, 0.9 percent are unemployed and 10.6 percent are economically not active. A greater proportion of those who have never married (45.5%) are economically not active with 1.0 percent unemployed.

#### Nationality

The proportion of Ghanaians by birth in the district is 94.0 percent. Those who have naturalised constitute 1.0 percent and the non-Ghanaian population in the district is 2.4 percent.

#### Literacy and education

Of the population 11 years and above, 39.0 percent are literate and 61.0 percent are nonliterate. The proportion of literate males is higher (48.0 %) than that of females (31.0%). A little less than two out of ten people (16.9%) indicated they could speak and write both English and Ghanaian languages. Of the population aged 3 years and older who are currently attending school (32,652) in the district, 59.9 percent are in primary school, 13.3 percent are JSS/JHS, of those who have attended school in the past, 50.4 percent have attended primary school and 17.5 percent have attended JSS/JHS.

#### **Economic activity status**

About 79.0 percent of the population aged 15 years and older are economically active while 21.0 per cent are economically not active. Of the economically active population, 98.6 percent are employed while 1.4 percent are unemployed. For those who are economically not active, a larger percentage of them are students (36.6%), 26.0% perform household duties and 6.8 percent are disabled or too sick to work. About half (49.0%) unemployed are seeking work for the first time.

#### Occupation

Of the employed population, 81.0 percent are engaged as skilled agricultural, forestry and fishery workers, 6.1 percent in service and sales, 6.9 percent in craft and related trade, and 2.9 percent are engaged as managers, professionals, and technicians.

#### **Employment status and sector**

Of the population 15 years and older 70.4 percent are self-employed without employees, 20.9 percent are contributing family workers, 0.5 percent are casual workers and 0.6 percent are domestic employees (house helps). Overall, men constitute the highest proportion in each employment category except the contributing family workers and apprentices. The private informal sector is the largest employer in the district, employing 96.2 percent of the population followed by the public sector with 2.7 percent.

#### Information and communication technology

Of the population 12 years and above, 17.6 percent have mobile phones. Men who own mobile phones constitute 24.6 percent as compared to 11.6 percent of females. A little less than one percent of the population 12 years and older use internet facilities in the district. Only 203 households representing 1.3 percent of the total households in the district have desktop/laptop computers.

#### Disability

About 4.2 percent of the district's total population has one form of disability or the other. The proportion of the male population with disability is same as (4.2%) that of females (4.2%). The types of disability in the district include sight, hearing, speech, physical, intellect, and emotion. Persons with sight disability recorded the highest of 37.6 percent followed by hearing disability (21.6%). About 93.2 percent of the population with disability are in the rural localities. There are slightly more females with sight, and hearing disabilities than males in both the urban and rural localities. Of the population disabled, 75.4 percent have never been to school and 41.2 percent are economically not active.

#### Agriculture

As high as 93.3 percent of households in the district are engage in agriculture. In the rural localities, 96.5 percent of the total number of households are agricultural households while in the urban localities, 68.4 percent of households are into agriculture. Most agricultural households in the district (98.1%) are involved in crop farming. Chicken and guinea fowl are the dominant animals reared in the district

#### Housing

The housing stock of Bawku West District is 11,284 representing 9.9 percent of the total number of houses in the Upper East Region. The average number of persons per house is 8.2.

#### Type, tenancy arrangement and ownership of dwelling units

Less than half (47.7%) of all dwelling units in the district are compound houses; 24.7 percent are huts buildings in same compound, 21.2 percent are separate houses and 4.2 percent are huts buildings in different compounds. More than nine out of ten (91.5%) of the dwelling units in the district are owned by members of the household; 3.5 percent are owned by private individuals; 3.5 percent are owned by a relative who is not a member of the household and only 1.2 percent are owned by public or government. Less than one percent (0.1%) of the dwelling units is owned through mortgage schemes.

#### Material for construction of outer wall, floor and roof

The main construction material for outer walls of dwelling units in the district is mud/mud bricks or earth accounting for 92.9 percent with cement/concrete constituting 4.3 percent of outer walls of dwelling units in the district. Cement (58.3%) and mud/earth (39.8%) are the two main materials used in the construction of floors of dwelling units in the district. Metal sheets are the main roofing material (61.6%) for dwelling units in the district.

#### Room occupancy

One room constitutes the highest percentage (45.6%) of sleeping rooms occupied by households in housing units in the district. About 0.1 percent of households with 10 or more members occupy single rooms.

#### Utilities and household facilities

The three main sources of lighting in dwelling units in the district are flashlight/torch (43.1%), kerosene lamp (39.8%) and electricity (14.3%). The main source of fuel for cooking for most households in the district is wood (80.2%). The proportion for rural (83.8%) is higher than that of urban (52.0%). The four main sources of water in the district are borehole,

protected well, unprotected well, and pipe-borne outside dwelling. More than half of households (65.2%) drink water from boreholes.

The most important toilet facility used in the district is KVIP, constituting 6.6 percent followed by pit latrine (3.1%). About 86.3 percent of the population in the district has no toilet facility. About four out of ten of households (33.4%) in the district share separate bathrooms in the same house while 33.6 percent own bathrooms for their exclusive use.

#### Waste disposal

The most widely method of solid waste disposal is by burning solid waste, accounting for 29.6 percent, followed by public dump in the open space representing 18.3 percent. About one in ten households (11.3%) dump their solid waste indiscriminately. House to house waste collection accounts for 12.0 percent. For liquid waste disposal, throwing waste onto the compound (47.5%) and onto the street (39.1%) are the two most common methods used by households in the district.

# CHAPTER ONE INTRODUCTION

#### 1.1 Background

Bawku West District is one of the thirteen (13) districts and municipalities in the Upper East Region of Ghana. The district is located in the north-eastern section of the region, with Zebilla as its administrative capital. It is bordered to the north by the Republic of Burkina Faso, to the east by Binduri district, to the west by Talensi district and Nabdam district and to the south by East Mamprusi district. Significantly, two tributaries of the Volta River namely the White Volta and the Red Volta run contiguous to the district's eastern and western boundaries respectively.

The district was created in 1988 under the local government system by Legislative Instrument (LI) 1442. The district covers an area of approximately 1,070 square kilometres, which constitutes about 12% of the total land area of the Upper East Region. It is the fourth biggest district in the region in terms of land area.

#### **1.2** Physical Features

#### 1.2.1 Climate

The district experiences a unimodal rainfall regime lasting 4 to 6 months and a long dry period of 6 to 8 months in a year. The average annual rainfall, temperature and relative humidity are 956mm, 34°C and 56% respectively, with potential evapotranspiration of more than 2882mm. There is therefore excessive evapotranspiration over rainfall.

#### 1.2.2 Vegetation

The district's vegetation is Sudan Savannah consisting of short drought and fire resistant deciduous trees interspersed with open savannah grassland. Grass is very sparse and in most areas the land is bare and severely eroded. Common grasses include *Andropogan gayanus* (Northern Gamber Grass) in the less eroded areas and *Hyparhenia spp, Aristida spp*, and *Heteropogon spp*. (Spear grass) in the severely eroded areas. Common trees include *Anogeissus spp, Acacia spp* (Thorn tree) and *Triplochiton spp*. Economic trees include *Parkia filicoidea* (Dawadawa), *Butyrospermum parkii* (Sheanut), *Andansonia* digitata (Baobab) and *Ceiba pentandra* (Kapok).

In most cases the vegetation is highly degraded by land clearing for farming, fuel wood harvesting, overgrazing, annual bushfires, and harvesting of poles for construction. The activities of illegal miners also contribute to the degradation of the vegetation in some parts of the district as most of these illegal activities take place on agricultural lands, and this therefore has serious implications on soil fertility for sustainable crop production

#### **1.2.3** Relief and drainage

The relief of the district is generally flat to gently undulating. These plains are broken in some places by hills or ranges formed from either outcrops of Birimian rocks (greenstones) or granite intrusions. These ranges lie along the border with Burkina-Faso, north of Zebilla, and turn south-west from the Red Volta north of Nangodi in the Talensi-Nabdam District. The granite areas are generally low to gently rolling (120 - 255m a.s.l).

Figure 1.1: District Map of Bawku West





Source: Ghana Statistical Service, GIS

The features of the hills vary from place to place but generally they have steep rocky slopes and narrow valleys subject to high rates of runoff leading to flash floods, gully erosion and stream bank erosion.

The district is drained by both the White and Red Volta and their tributaries. The rivers over flow their banks during the rainy season (June to September) but dry up soon after the season with disconnected pools of water in their beds separated by dry stretches of sand and rocks. During the dry season, the sand bars make it possible for people to cross the White Volta on foot or by motor cycles at Sapelliga, the Ghana-Burkina-Faso border.

#### **1.2.4** Soils & general characteristics

The total hectarage in the district suitable and unsuitable for crop production is 58,406 and 336,687 respectively.

The major soils mapped in the district belong to *Luvisols*, *Lixisols*, *Leptosols*, *Gleysols* and Fluvisols. Other less extensive soils include *Plinthosols*, *Regosols*, *Vertisols* and *Cambisols*. They are developed over granites, Birimian rocks and recent and old alluvia of mixed origin. Because these parent materials are coarse textured, many of the soils have predominantly light textured surface horizons (sandy) with heavier textured soils (clayey) confined to valley bottoms. There are also extensive areas of shallow concretionary and rocky soils, which have low water holding capacities and limited suitability for agriculture.

Most of the soils, having developed over thoroughly weathered parent materials, are old and have been leached over a long period of time. Their buffering capacity as well as caution exchange capacity is also low since their predominant clay mineral is *kaolinitic*, consequently, most of the soils are of low inherent fertility. The two most frequently deficient nutrients are nitrogen and phosphorus. The build-up of any amount of organic matter is constrained by regular burning of crop residues and/or competitive use of these residues for fuel, animal feed or building purposes. The low vegetative cover during the dry season also renders most of the soils susceptible to erosion during the rainy season. This, in turn, exacerbates the low fertility problem. The sustainability of good crop yields is therefore closely linked with careful management of the soils with the objective of preventing and controlling erosion, increasing their organic matter content (compost, crop residues, farmyard manure, etc.) and replacing and increasing plant nutrients lost through erosion, leaching and crop uptake.

#### 1.2.5 Geology

The soils and water supply conditions of the district are directly related to the underlying rocks. The major rocks fall within the Birimian and Granitic geological formations.

The Birimian rocks, often associated with granites, consist of steeply dipping metamorphosed sediments and volcanics. The argillaceous rocks of the Birimian formation consist, among others, of *phyllites, biotite schists* and *quartzites*, some of which are found north of Zebilla, south of Sapelliga and around Zongoyiri area. The volcanic group consists of greenstones, hornblende *schists* and *phyllites*. The rocks occur as hill ranges found north of Zebilla (e.g. Kubongo, Widnaba and Komaka) and in Apodabogo. Deposits of gold reportedly underlie the Birimian formation north of Zebilla and south of Sapelliga. In the Widnaba-Teshie zone, illegal mining of gold ('galamsey') accompanied by serious land degradation is prevalent. Therefore, if the activities of these illegal miners in the district which is on the increase are not checked, further degradation of the land would have serious consequences on agricultural production and household food security in the district as most of these mining activities take

place on agricultural lands. This would further worsen the poverty situation in the District since more than 80% of the population depends on agriculture for their livelihoods of which women are the majority.

The granitic rocks consist mainly of *biotite* and *hornblende* complex with potassium feldspars and sodium feldspars dominant in the *biotite* granite and *biotite* granodiorites respectively. These granites are coloured pink, coarse grained and potassium rich. The soils formed from these rocks are light textured and rich in potassium.

#### 1.2.6 Wildlife

The sparsely inhabited Oncho-freed woodland and forest belt and the uninhabited forest reserve along the eastern and southern portions of the Red and White Volta, stretching from Widnaba-Tilli area in the district through Binaba-Kusanaba and Zongoiri to East Mamprusi, is a favourable abode of a variety of animals including elephants. This forest belt (Eastern Wildlife Corridor) is the natural route for elephants moving to and from Burkina Faso through the district to East Mamprusi District. The forest belt with its rich flora and fauna presents an ecotourism potential in the district.

However, the wild animal resources have severely depleted and their habitats continue to be under siege from various economic activities including land clearing for agriculture, indiscriminate bush burning, hunting for bush meat, logging and mining. Community participation in the protection against encroachment and poaching and monitoring of animals in conserved areas will contribute to sustained build-up of wildlife stocks. The long-term goal is to ensure participation of the rural communities in wildlife management activities both in protected areas and outside reserve areas.

#### 1.2.7 Biodiversity

The natural woodlands and forest are a rich source of plant and animal biodiversity. They also protect soil and water resources. Future efforts on improving crops will need to draw heavily on the gene pool of native/wild crop varieties.

Biodiversity conservation should aim at conserving unique species and habitats, maintaining traditional crop varieties, land races and their wild varieties and improving the livelihoods of communities. Priority areas that are of national and global importance for biodiversity conservation should be delineated, mapped and excluded from exploitation and community-based management plans developed for the protection of these areas. There would be the need to finance alternative livelihood schemes for affected communities and provide for continuous monitoring and evaluation of biological and social indicators of programme performance. The alternative livelihood schemes would improve the economic status of the communities living around the protected areas and encourage them to participate in the conservation programme and forgo income previously generated from the newly delineated site. This would in addition, relieve pressure on biological resources by supporting alternative development options.

#### **1.2.8** Hydrology and water supply

The water supply condition in the district is directly related to the underlying rocks. Areas occupied by Birimian rocks have a high surface runoff so that surface flow of streams generally persist throughout the dry season as observed at some places such as Komaka, Kasongo and Kubongo. The rocks weather into clay and this combines with the relatively impermeable bedrock to give conditions favourable for surface water storage.

At Komaka, farmers reported year round flow of water from springs at the foot slopes of the greenstone hills separating Ghana from Burkina Faso. The rich aquifer could be assessed for the development of water supplies and bottling of spring water for income generation.

At present the main sources of domestic water supply in the district are from rivers, springs, wells, boreholes, ponds and dams. Most rivers and springs dry up towards the end of the dry season making water a scarce commodity. At such periods water may be obtained from shallow wells.

The yield of bore holes in areas within the White Volta Basin underlain by Birimian geological formations ranges from 0.0069 to 0.184 m3 h-1 with a mean of 0.014 m3 h-1. The static water level ranges from 0.61 to 12.8m with a mean of 5.57m. The mean depth to aquifer is 15.3m with values ranging from 0.003 to 29.26m (EPA, 2000b).

In the granitic areas the yield of boreholes ranges between 0.46 and 16.2 m3 h-1 with a mean of 2.26 m3 h-1. The range and the mean static water levels are 1.52 to 26.21 m and 5.56 m respectively. The depth to aquifer ranges from 0-31.7m with mean of 15.49m (EPA, 2000b).

#### **1.3** Political Administration

#### **1.3.1** Administrative and institutional arrangements

The institutional structures in the country for promoting local governance, planning and development was first contained in the Local Government Law 1988, PNDC Law 207. The Local Government Act of 1993, Act 462 later replaced this law. These laws made bold attempts at ensuring decentralisation in the country.

The Bawku West District Assembly is the highest administrative, political and planning authority in the district, charged with the responsibility of formulating and implementing development plans, programmes and projects.

The district assembly is a policy making body, the general assembly is made up of 45 members of which 32 are elected and 13 are appointed by the President of the Republic of Ghana. The number of nominees includes the only Member of Parliament in the district. Out of the 45 assembly members only 5 are women (about 12%). The political and executive head of the district is the District Chief Executive (DCE). The DCE chairs the Executive Committee, which performs the administrative and executive functions of the assembly.

The assembly is presided over by a Presiding Member who is elected from two-thirds majority of the assembly members.

The assembly has six (6) sub-committees through which the Executive Committee operates. There are five (5) Area Councils and two (2) Town Councils in the District. These subdistrict structures became operational in 2003. There are also 92 unit committees, which are yet to be functional.

#### **1.3.2** Traditional authority

In the traditional set up, the Bawku West District is under the Bawku paramountcy of the Bawku Traditional Area. There are ten (10) divisional chiefs in the District and these are:

- 1. The Zebilla Naaba
- 2. The Teshie Naaba

- 3. The Binaba Naaba
- 4. The Zongoire Naaba
- 5. The Kusanaba Naaba
- 6. The Tilli Naaba
- 7. The Widnaba Naaba
- 8. The Sapelliga Naaba
- 9. The Tanga Naaba
- 10. The Timonde Naaba

#### **1.4** Social and Cultural Structure

#### 1.4.1 Ethnicity

The most predominant ethnic group in the district is the Kusasi. They co-exist peacefully with other ethnic groups in the district such as Frafras, Kasenas, Mamprusis, Moshies, Busangas and Fulanis. There are also Ewes who are settler fishermen along the White Volta at Zongoyiri. The prevailing peaceful co-existence has made it possible for people to go about their socio-economic activities and this has led to the rapid socio-economic development in the district. However, it is significant to note that the continued ethnic conflict in the Bawku Municipality has a spill over effect on the Bawku West District and the sooner it is resolved the better.

#### 1.4.2 Marriages

The traditional marriage system entails payment of bride wealth ranging from 2 to 4 cows by the bridegroom to the family of the bride.

#### 1.4.3 Festivals

Festivals are a prominent feature in the district and have both cultural and religious significance to the people. The most distinct festival in the district is the Samanpid, which is celebrated by the whole district. It is a post-harvest festival meant to give thanks to God after a successful harvest season. Other post-harvest and thanksgiving festivals are the Yong and Zintas festivals. These festivals serve as period for reconciliation and stocktaking for the people.

#### 1.4.4 Inheritance

As pertained in the northern sector of Ghana, the patrilineal system of inheritance is practiced amongst the Kusasis. Male children inherit the family property after the demise of their father. Women are denied the right to inheritance and/or ownership of property. The system is seen to contribute to the high incidence of poverty among the female population in the district.

#### 1.4.5 Funerals

There is the practice of organising long and expensive funeral rites and other associated customary practices in the district. This is another emerging distressing issue affecting the welfare and the standard of living of several families and individuals in the district.

#### 1.4.6 Gender Issues

The female population in the district constitutes 53% of the total population. Women play an important role in the socio-economic life of the people. Women are responsible for planting, harvesting, storage and marketing of farm produce. They also assist the men in dry season farming activities, transportation and marketing of onions, tomatoes, okra, pepper and other vegetables. In the District, women are engaged in weaving, pottery, shea nut picking and processing, rice parboiling and processing, dawadawa processing, groundnut oil extraction, charcoal burning, gathering, pito brewing and sale of firewood among others. Although women perform these crucial roles in the society, they have little access to productive resources. Inadequate access to credit is also another barrier that inhibits the expansion of their economic activities such as rice milling, groundnut oil extraction, dawadawa and shea butter processing among others.

Apart from performing most of the labour on the farm, women do all the domestic chores in addition to taking care of their children. Low enrolment and high drop-out rate of the girlchild is a common phenomenon. Moreover, women are underrepresented in leadership positions in the District. This means that high illiteracy rate among women is not likely to change. Considering the fact that illiteracy is one of the major problems of underdevelopment, it can therefore be inferred that high illiteracy of women in the Bawku West District is a severe limitation to development.

#### 1.5 Economy

The district has agrarian subsistence economy. However, there exist potential for international and inter-district trade because of the location of the district. There is therefore the need to take advantage of this strategic location of the district to promote socio-economic development.

#### **1.5.1** Revenue and taxes

Revenue mobilisation is the means of raising funds for the implementation of development programmes and projects to promote socio-economic development towards improving the standard of living of the people.

The main sources of revenue to the district are basic rates, property rates (bicycle rates), and cattle rates. Other sources include market tolls and store/stall rent from the Zebilla, Binaba and other markets. Revenue generated from the Town and Area Councils is paid to the district assembly, which in turn makes quarterly allocation of funds to the Councils for their routine operations.

However, it is significant to note that local revenue generation in the District is woefully inadequate to meet even recurrent expenditure much more for the implementation of physical projects. There are certain periods in the year that the Assembly hardly generates anything, particularly during the hunger gap (i.e. April to July).

#### 1.5.2 Agriculture

Agriculture constitutes the dominant economic activity in the district. More than 80% of the active population derives their income and livelihood from agriculture (farming – crops, livestock and fishing) and agriculture related activities (agro-processing – pito brewing, shea butter extraction, groundnut oil extraction, malt production, rice processing, dawadawa processing).

#### **1.6** Census Methodology, Concepts and Definitions

#### 1.6.1 Introduction

Ghana Statistical Service (GSS) was guided by the principle of international comparability and the need to obtain accurate information in the 2010 Population and Housing Census (2010 PHC). The Census was, therefore, conducted using all the essential features of a modern census as contained in the United Nations Principles and Recommendations for countries taking part in the 2010 Round of Population and Housing Censuses.

Experience from previous post independence censuses of Ghana (1960, 1970, 1984 and 2000) was taken into consideration in developing the methodologies for conducting the 2010 PHC. The primary objective of the 2010 PHC was to provide information on the number, distribution and social, economic and demographic characteristics of the population of Ghana necessary to facilitate the socio-economic development of the country.

#### **1.6.2** Pre-enumeration activities

#### Development of census project document and work plans

A large scale statistical operation, such as the 2010 Population and Housing Census required meticulous planning for its successful implementation. A working group of the Ghana Statistical Service prepared the census project document with the assistance of two consultants. The document contains the rationale and objectives of the census, census organization, a work plan as well as a budget. The project document was launched in November 2008 as part of the Ghana Statistics Development Plan (GSDP) and reviewed in November 2009.

#### Census secretariat and committees

A well-structured management and supervisory framework that outlines the responsibilities of the various stakeholders is essential for the effective implementation of a population and housing census. To implement the 2010 PHC, a National Census Secretariat was set up in January 2008 and comprised professional and technical staff of GSS as well as staff of other Ministries, Departments and Agencies (MDAs) seconded to GSS. The Census Secretariat was primarily responsible for the day-to-day planning and implementation of the census activities. The Secretariat had seven units, namely; census administration, cartography, recruitment and training, publicity and education, field operations and logistics management, data processing, and data analysis and dissemination.

The Census Secretariat was initially headed by an acting Census Coordinator engaged by the United Nations Population Fund (UNFPA) in 2008 to support GSS in the planning of the Census. In 2009, the Census Secretariat was re-organised with the Government Statistician as the National Chief Census Officer and overall Coordinator, assisted by a Census Management Team and a Census Coordinating Team. The Census Management Team had oversight responsibility for the implementation of the Census. It also had the responsibility of taking critical decisions on the census in consultation with other national committees. The Census Coordinating Team, on the other hand, was responsible for the day-to-day implementation of the Census programme.

A number of census committees were also set up at both national and sub-national levels to provide guidance and assistance with respect to resource mobilization and technical advice. At the national level, the committees were the National Census Steering Committee (NCSC), the National Census Technical Advisory Committee (NCTAC) and the National Census

Publicity and Education Committee (NCPEC). At the regional and district levels, the committees were the Regional Census Implementation Committee and the District Census Implementation Committee, respectively.

The Regional and District Census Implementation Committees were inter-sectoral in their composition. Members of the Committees were mainly from decentralized departments with the Regional and District Coordinating Directors chairing the Regional Census Implementation Committee and District Census Implementation Committee, respectively. The Committees contributed to the planning of district, community and locality level activities in areas of publicity and field operations. They supported the Regional and District Census Officers in the recruitment and training of field personnel (enumerators and supervisors), as well as mobilizing logistical support for the census.

#### Selection of census topics

The topics selected for the 2010 Population and Housing Census were based on recommendations contained in the UN Principles and Recommendations for 2010 Round of Population and Housing Censuses and the African Addendum to that document as well as the needs of data users. All the core topics recommended at the global level, i.e., geographical and internal migration characteristics, international migration, household characteristics, demographic and social characteristics such as age, date of birth, sex, and marital status, fertility and mortality, educational and economic characteristics, issues relating to disability and housing conditions and amenities were included in the census.

Some topics that were not considered core by the UN recommendations but which were found to be of great interest and importance to Ghana and were, therefore, included in the 2010 PHC are religion, ethnicity, employment sector and place of work, agricultural activity, as well as housing topics, such as, type of dwelling, materials for outer wall, floor and roof, tenure/holding arrangement, number of sleeping rooms, cooking fuel, cooking space and Information Communication Technology (ICT).

#### **Census mapping**

A timely and well implemented census mapping is pivotal to the success of any population and housing census. Mapping delineates the country into enumeration areas to facilitate smooth enumeration of the population. The updating of the 2000 Census Enumeration Area (EA) maps started in the last quarter of 2007 with the acquisition of topographic sheets of all indices from the Survey and Mapping Division of the Lands Commission. In addition, digital sheets were also procured for the Geographical Information System Unit.

The Cartography Unit of the Census Secretariat collaborated with the Survey and Mapping Division of the Lands Commission and the Centre for Remote Sensing and Geographic Information Services (CERSGIS) of the Department of Geography and Resource Development, University of Ghana, to determine the viability of migrating from analog to digital mapping for the 2010 PHC, as recommended in the 2000 PHC Administrative Report. Field cartographic work started in March 2008 and was completed in February 2010.

#### **Development of questionnaire and manuals**

For effective data collection, there is the need to design appropriate documents to solicit the required information from respondents. GSS consulted widely with main data users in the process of the questionnaire development. Data users including MDAs, research institutions,

civil society organizations and development partners were given the opportunity to indicate the type of questions they wanted to be included in the census questionnaire.

Documents developed for the census included the questionnaire and manuals, and field operation documents. The field operation documents included Enumerator's Visitation Record Book, Supervisor's Record Book, and other operational control forms. These record books served as operational and quality control tools to assist enumerators and supervisors to control and monitor their field duties respectively.

#### Pre-tests and trial census

It is internationally recognized that an essential element in census planning is the pre-testing of the questionnaire and related instructions. The objective of the pre-test is to test the questionnaire, the definition of its concepts and the instructions for filling out the questionnaire.

The census questionnaire was pre-tested twice in the course of its development. The first pretest was carried out in March 2009 to find out the suitability of the questions and the instructions provided. It also tested the adequacy and completeness of the responses and how respondents understood the questions. The second pre-test was done in 10 selected enumeration areas in August, 2009. The objective of the second pre-test was to examine the sequence of the questions, test the new questions, such as, date of birth and migration, and assess how the introduction of 'date of birth' could help to reduce 'age heaping'. With regard to questions on fertility, the pre-tests sought to find out the difference, if any, between proxy responses and responses by the respondents themselves. Both pre-tests were carried in the Greater Accra Region. Experience from the pre-tests was used to improve the final census questionnaire.

A trial census which is a dress rehearsal of all the activities and procedures that are planned for the main census was carried out in October/November 2009. These included recruitment and training, distribution of census materials, administration of the questionnaire and other census forms, enumeration of the various categories of the population (household, institutional and floating population), and data processing. The trial census was held in six selected districts across the country namely; Saboba (Northern Region), Chereponi (Northern Region), Sene (Brong Ahafo Region), Bia (Western Region), Awutu Senya (Central Region), and Osu Klottey Sub-Metro (Greater Accra Region). A number of factors were considered in selecting the trial census districts. These included: administrative boundary issues, ecological zone, and accessibility, enumeration of floating population/outdoorsleepers, fast growing areas, institutional population, and enumeration areas with scattered settlements.

The trial census provided GSS with an opportunity to assess its plans and procedures as well as the state of preparedness for the conduct of the 2010 PHC. The common errors found during editing of the completed questionnaires resulted in modifications to the census questionnaire, enumerator manuals and other documents. The results of the trial census assisted GSS to arrive at technically sound decisions on the ideal number of persons per questionnaire, number of persons in the household roster, migration questions, placement of the mortality question, serial numbering of houses/housing structures and method of collection of information on community facilities. Lessons learnt from the trial census also guided the planning of the recruitment process, the procedures for training of census field staff and the publicity and education interventions.

#### **1.6.3** Census Enumeration

#### Method of enumeration and field work

All post- independence censuses (1960, 1970, 1984, and 2000) conducted in Ghana used the de facto method of enumeration where people are enumerated at where they were on census night and not where they usually reside. The same method was adopted for the 2010 PHC. The de facto count is preferred because it provides a simple and straight forward way of counting the population since it is based on a physical fact of presence and can hardly be misinterpreted. It is thought that the method also minimizes the risks of under-enumeration and over enumeration. The canvasser method, which involves trained field personnel visiting houses and households identified in their respective enumeration areas, was adopted for the 2010 PHC.

The main census enumeration involved the canvassing of all categories of the population by trained enumerators, using questionnaires prepared and tested during the pre-enumeration phase. Specific arrangements were made for the coverage of special population groups, such as the homeless and the floating population. The fieldwork began on 21st September 2010 with the identification of EA boundaries, listing of structures, enumeration of institutional population and floating population.

The week preceding the Census Night was used by field personnel to list houses and other structures in their enumeration areas. Enumerators were also mobilized to enumerate residents/inmates of institutions, such as, schools and prisons. They returned to the institutions during the enumeration period to reconcile the information they obtained from individuals and also to cross out names of those who were absent from the institutions on Census Night. Out-door sleepers (floating population) were also enumerated on the Census Night.

Enumeration of the household population started on Monday, 27<sup>th</sup> September, 2010. Enumerators visited houses, compounds and structures in their enumeration areas and started enumerating all households including visitors who spent the Census Night in the households. Enumeration was carried out in the order in which houses/structures were listed and where the members of the household were absent, the enumerator left a call-back-card indicating when he/she would come back to enumerate the household. The enumeration process took off smoothly with enumerators poised on completing their assignments on schedule since many of them were teachers and had to return to school. However, many enumerators ran short of questionnaires after a few days' work.

Enumeration resumed in all districts when the questionnaire shortage was resolved and by 17<sup>th</sup> October, 2010, enumeration was completed in most districts. Enumerators who had finished their work were mobilized to assist in the enumeration of localities that were yet to be enumerated in some regional capitals and other fast growing areas. Flooded areas and other inaccessible localities were also enumerated after the end of the official enumeration period. Because some enumeration areas in fast growing cities and towns, such as, Accra Metropolitan Area, Kumasi, Kasoa and Techiman were not properly demarcated and some were characterized by large EAs, some enumerators were unable to complete their assigned tasks within the stipulated time.

#### **1.6.4** Post Enumeration Survey

In line with United Nations recommendations, GSS conducted a Post Enumeration Survey (PES) in April, 2011 to check content and coverage error. The PES was also to serve as an

important tool in providing feedback regarding operational matters such as concepts and procedures in order to help improve future census operations. The PES field work was carried out for 21 days in April 2011 and was closely monitored and supervised to ensure quality output. The main findings of the PES were that:

- 97.0 percent of all household residents who were in the country on Census Night (26<sup>th</sup> September, 2010) were enumerated.
- 1.3 percent of the population was erroneously included in the census.
- Regional differentials are observed. Upper East region recorded the highest coverage rate of 98.2 percent while the Volta region had the lowest coverage rate of 95.7 percent.
- Males (3.3%) were more likely than females (2.8%) to be omitted in the census. The coverage rate for males was 96.7 percent and the coverage rate for females was 97.2 percent. Also, the coverage rates (94.1%) for those within the 20-29 and 30-39 age groups are relatively lower compared to the coverage rates of the other age groups.
- There was a high rate of agreement between the 2010 PHC data and the PES data for sex (98.8%), marital status (94.6%), relationship to head of household (90.5%) and age (83.0%).

#### **1.6.5** Release and dissemination of results

The provisional results of the census were released in February 2011 and the final results in May 2012. A National Analytical report, six thematic reports, a Census Atlas, 10 Regional Reports and a report on Demographic, Social, Economic and Housing were prepared and disseminated in 2013.

#### **1.6.6** Concepts and Definitions

The 2010 Population and Housing Census of Ghana followed the essential concepts and definitions of a modern Population and Housing Census as recommended by the United Nations (UN). It is important that the concepts, definitions and recommendations are adhered to since they form the basis upon which Ghana could compare her data with that of other countries.

The concepts and definitions in this report cover all sections of the 2010 Population and Housing Census questionnaires (PHC1A and PHC1B). The sections were: geographical location of the population, Household and Non-household population, Literacy and Education, Emigration, Demographic and Economic Characteristics, Disability, Information and Communication Technology (ICT), Fertility, Mortality, Agricultural Activity and Housing Conditions.

The concepts and definitions are provided to facilitate understanding and use of the data presented in this report. Users are therefore advised to use the results of the census within the context of these concepts and definitions.

#### Region

There were ten (10) administrative regions in Ghana during the 2010 Population and Housing Census as they were in 1984 and 2000.

#### District

In 1988, Ghana changed from the local authority system of administration to the district assembly system. In that year, the then existing 140 local authorities were demarcated into 110 districts. In 2004, 28 new districts were created; this increased the number of districts in the country to 138. In 2008, 32 additional districts were created bringing the total number of districts to 170. The 2010 Population and Housing Census was conducted in these 170 administrative districts (these are made-up of 164 districts/municipals and 6 metropolitan areas). In 2012, 46 new districts were created to bring the total number of districts to 216. There was urgent need for data for the 46 newly created districts for planning and decision-making. To meet this demand, the 2010 Census data was re-programmed into 216 districts after carrying out additional fieldwork and consultations with stakeholders in the districts affected by the creation of the new districts.

#### Locality

A locality was defined as a distinct population cluster (also designated as inhabited place, populated centre, settlement) which has a NAME or LOCALLY RECOGNISED STATUS. It included fishing hamlets, mining camps, ranches, farms, market towns, villages, towns, cities and many other types of population clusters, which meet the above criteria. There were two main types of localities, rural and urban. As in previous censuses, the classification of localities into 'urban' and 'rural' was based on population size. Localities with 5,000 or more persons were classified as urban while localities with less than 5,000 persons were classified as rural.

#### Population

The 2010 Census was a "de facto" count and each person present in Ghana, irrespective of nationality, was enumerated at the place where he/she spent the midnight of 26th September 2010.

#### Household

A household was defined as a person or a group of persons, who lived together in the same house or compound and shared the same house-keeping arrangements. In general, a household consisted of a man, his wife, children and some other relatives or a house help who may be living with them. However, it is important to remember that members of a household are not necessarily related (by blood or marriage) because non-relatives (e.g. house helps) may form part of a household.

#### Head of Household

The household head was defined as a male or female member of the household recognised as such by the other household members. The head of household is generally the person who has economic and social responsibility for the household. All relationships are defined with reference to the head.

#### Household and Non-household population

Household population comprised of all persons who spent the census night in a household setting. All persons who did not spend the census night in a household setting (except otherwise stated) were classified as non-household population. Persons who spent census night in any of the under listed institutions and locations were classified as non-household population:

- (a) Educational Institutions
- (b) Children's and Old People's Homes
- (c) Hospitals and Healing Centres
- (d) Hotels
- (e) Prisons
- (f) Service Barracks
- (g) Soldiers on field exercise
- (h) Floating Population: The following are examples of persons in this category:
  - i. All persons who slept in lorry parks, markets, in front of stores and offices, public bathrooms, petrol filling stations, railway stations, verandas, pavements, and all such places which are not houses or compounds.
  - ii. Hunting and fishing camps.
  - iii. Beggars and vagrants (mentally sick or otherwise).

#### Age

The age of every person was recorded in completed years disregarding fractions of days and months. For those persons who did not know their birthdays, the enumerator estimated their ages using a list of district, regional and national historical events.

#### Nationality

Nationality is defined as the country to which a person belongs. A distinction is made between Ghanaians and other nationals. Ghanaian nationals are grouped into Ghanaian by birth, Ghanaian with dual nationality and Ghanaian by naturalization. Other nationals are grouped into ECOWAS nationals, Africans other than ECOWAS nationals, and non-Africans.

#### Ethnicity

Ethnicity refers to the ethnic group that a person belonged to. This information is collected only from Ghanaians by birth and Ghanaians with dual nationality. The classification of ethnic groups in Ghana is that officially provided by the Bureau of Ghana Languages and which has been in use since the 1960 census.

#### Birthplace

The birthplace of a person refers to the locality of usual residence of the mother at the time of birth. If after delivery a mother stayed outside her locality of usual residence for six months or more or had the intention of staying in the new place for six or more months, then the actual town/village of physical birth becomes the birthplace of the child.

#### **Duration of residence**

Duration of residence refers to the number of years a person has lived in a particular place. This question is only asked of persons not born in the place where enumeration took place. Breaks in duration of residence lasting less than 12 months are disregarded. The duration of residence of persons who made multiple movements of one (1) year or more is assumed to be the number of years lived in the locality (town or village) since the last movement.

#### Religion

Religion refers to the individual's religious affiliation as reported by the respondent, irrespective of the religion of the household head or the head's spouse or the name of the person. No attempt was made to find out if respondents actually practiced the faith they professed.

#### Marital status

Marital status refers to the respondent's marital status as at Census Night. The question on marital status was asked only of persons 12 years and older. The selection of the age limit of 12 years was based on the average age at menarche and also on the practice in some parts of the country where girls as young as 12 years old could be given in marriage.

#### Literacy

The question on literacy referred to the respondent's ability to read and write in any language. A person was considered literate if he/she could read and write a simple statement with understanding. The question on literacy was asked only of persons 11 years and older.

#### Education

#### School Attendance

Data was collected on school attendance for all persons three (3) years and older. School attendance refers to whether a person has ever attended, was currently attending or has never attended school. In the census, school meant an educational institution where a person received at least four hours of formal education.

Although the lower age limit of formal education is six years for primary one, eligibility for the school attendance question was lowered to three years because pre-school education has become an important phenomenon in the country.

#### Level of Education

Level of education refers to the highest level of formal school that a person ever attended or was attending. This information was obtained for persons 3 years and older.

#### Activity status

Activity status refers to economic or non-economic activity of respondents during the 7 days preceding census night. Information on type of activity was collected on persons 5 years and older. A person was regarded as economically active if he/she:

- a. Worked for pay or profit or family gain for at least 1 hour within the 7 days preceding Census Night. This included persons who were in paid employment or self- employment or contributing family workers.
- b. Did not work, but had jobs to return to.

c. Were unemployed.

The economically not active were persons who did not work and were not seeking for work. They were classified by reasons for not being economically active. Economically not active persons included homemakers, students, retired persons, the disabled and persons who were unable to work due to their age or ill-health.

#### Occupation

This referred to the type of work the person was engaged in at the establishment where he/she worked. This was asked only of persons 5 years and older who worked 7 days before the census night, and those who did not work but had a job to return to as well as those unemployed who had worked before. All persons who worked during the 7 days before the census night were classified by the kind of work they were engaged in. The emphasis was on the work the person did during the reference period and not what he/she was trained to do. For those who did not work but had a job to return to, their occupation was the job they would go back to after the period of absence. Also, for persons who had worked before and were seeking for work and available for work, their occupation was on the last work they did before becoming unemployed. If a person was engaged in more than one occupation, only the main one was considered.

#### Industry

Industry referred to the type of product produced or service rendered at the respondent's work place. Information was collected only on the main product produced or service rendered in the establishment during the reference period.

#### **Employment status**

Employment status refers to the status of a person in the establishment where he/she currently works or previously worked. Eight employment status categories were provided: employee, self-employed without employees, self-employed with employees, casual worker, contributing family worker, apprentice, domestic employee (house help). Persons who could not be classified under any of the above categories were classified as "other".

#### **Employment sector**

This refers to the sector in which a person worked. The employment sectors covered in the census were public, private formal, private informal, semi-public/parastatal, NGOs and international organizations.

#### Disability

Persons with disability were defined as those who were unable to or were restricted in the performance of specific tasks/activities due to loss of function of some part of the body as a result of impairment or malformation. Information was collected on persons with visual/sight impairment, hearing impairment, mental retardation, emotional or behavioural disorders and other physical challenges.

#### Information Communication Technology (ICT)

ICT questions were asked for both individuals and households. Persons having mobile phones refer to respondents 12 years and older who owned mobile phones (irrespective of the number of mobile phones owned by each person). Persons using internet facility refers to those who had access to internet facility at home, internet cafe, on mobile phone or other

mobile device. Internet access is assumed to be not only via computer, but also by mobile phones, PDA, game machine and digital television.

Households having Personal Computers/Laptops refer to households who own desktops/laptop computers. The fixed telephone line refers to a telephone line connecting a customer's terminal equipment (e.g. telephone set, facsimile machine) to the public switch telephone network.

#### Fertility

Two types of fertility data were collected: lifetime fertility and current fertility. Lifetime fertility refers to the total number of live births that females 12 years and older had ever had during their life time. Current fertility refers to the number of live births that females 12-54 years old had in the 12 months preceding the Census Night.

#### Mortality

Mortality refers to all deaths that occurred in the household during the 12 months preceding the Census Night. The report presents information on deaths due to accidents, violence, homicide and suicide. In addition, data were collected on pregnancy-related deaths of females 12-54 years.

#### Agriculture

The census sought information on household members who are engaged in agricultural activities, including the cultivation of crops or tree planting, rearing of livestock or breeding of fish for sale or family consumption. Information was also collected on their farms, types of crops and number and type of livestock.

#### Housing conditions and facilities

The UN recommended definition of a house as "a structurally separate and independent place of abode such that a person or group of persons can isolate themselves from the hazards of climate such as storms and the sun" was adopted. The definition, therefore, covered any type of shelter used as living quarters, such as separate houses, semi-detached houses, flats/apartments, compound houses, huts, tents, kiosks and containers.

Living quarters or dwelling units refer to a specific area or space occupied by a particular household and therefore need not necessarily be the same as the house of which the dwelling unit may be a part.

Information collected on housing conditions included the type of dwelling unit, main construction materials for walls, floor and roof, holding/tenure arrangement, ownership type, type of lighting, source of water supply and toilet facilities. Data was also collected on method of disposal of solid and liquid waste.

#### **1.7** Organization of the Report

The report consists of nine chapters. Chapter one provides basic information about the district. It gives a brief background of the district, describing its physical features, political and administrative structure, social and cultural structure, economy and the methodology and concepts used in the report. Chapter two discusses the population size, composition and age structure. It further discusses the migratory pattern in the district as well as fertility and mortality.

In chapter three, the focus is on household size, composition and headship as well as the marital characteristics and nationality of the inhabitants of the district. The chapter also discusses the religious affiliations and the educational statuses of the members of the district. Chapter four focuses on economic characteristics such as economic activity status, occupation, industries and the employment status and sectors that the people are employed.

Information Communication Technology (ICT) is discussed in chapter five. It analyses mobile phone ownership, internet use and ownership of desktop/laptop computers while chapter six is devoted to Persons living with disabilities (PWDs) and their socio-demographic characteristics. Chapter seven concentrates on the agricultural activities of the households, describing the types of farming activities, livestock rearing and numbers of livestock reared.

In chapter eight, housing conditions such as housing stock, type of dwelling and construction materials, room occupancy, holding and tenancy, lighting and cooking facilities, bathing and toilet facilities, waste disposal and source of water for drinking or for other domestic use in the district are discussed and analyzed in detail. The final chapter, Chapter nine presents the summary of findings and conclusions. It also discusses the policy implications of the findings for the district

# CHAPTER TWO DEMOGRAPHIC CHARACTERISTICS

#### 2.1 Introduction

Demographic characteristics such as population size, composition and age-sex structure are important determinants of the potential labour force and basic social amenities such as schools, recreational centres, health centres, housing etc. needed to raise the standard of living of the people. This chapter presents information on the population size and distribution, age-sex structure, migration, fertility and mortality pertaining to the Bawku West District.

#### 2.2 **Population Size and Distribution**

#### 2.2.1 Population size and sex by locality

Table 2.1 shows the population size by locality of residence and sex in the Bawku West District.

The 2010 Population and Housing Census indicated the total population of the district to be 94,034, with more females (52.0%) than males (48.2%). The population of the district constitutes 9.0 percent of the regional population. The population in the district is concentrated more in rural (90.8%) than urban areas (9.2%). The district's rural population (90.8%) is higher than the regional rural population (79.0%). The sex distribution shows that more females reside in urban (52.9%) than in rural areas (51.9%); while few males reside in urban (47.1%) than in rural areas (48.1%).

	All Localities		Urban		Rural	
Sex	Number	Percent	Number	Percent	Number	Percent
Upper East	1,046,545		219,646		826,899	
Bawku West	94,034	100.0	8,628	100.0	85,406	100.0
Male	45,114	48.0	4062	47.1	41052	48.1
Female	48,920	52.0	4566	52.9	44354	51.9
Percent of regional						
population		9.0		3.9		

#### Table 2.1: Population size, locality of residence and sex

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### Age dependency ratio

Age dependency ratio is the ratio of the dependent population (population less than 15 years and population aged 65 years and older) to the working-age population (15-64 years). Table 2.2 indicates that the total dependency ratio in the district is 108.6, which means that for every 100 people in the working-age population, there are 108 dependents to cater for. Furthermore, the child dependency ratio (94.2) is higher than the old age dependency ratio (14.4).

Age group/ratio	Total
All Ages	94,034
0-14	42,454
15-64	45,078
65+	6,502
Total dependency ratio	108.6
Child dependency ratio	94
Old age dependency ratio	14.4

 Table 2.2: Age dependency ratio

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.3 Age-Sex Structure

Age and sex are the most critical characteristics of any population. Age-sex structure indicates the number of male and female in the 5 years age cohort. Table 2.3 reveals that the male cohort population is slightly higher than that of the female population aged 0-4 years through to 15-19 years and then reverses in favour of females from age 20-24 years onwards. The proportion of the population aged 0-14 years constitutes 45.2 percent while population aged 15-64 years is 47.9 percent and that for those aged 65 years and older, is 6.9 percent.

The relatively high (33.3%) youthful population of 15-39 years in the district has an in-built momentum for rapid population growth as well as economic growth.

Age Group	Both Sexes	Male	Female	Sex ratio
ll Ages	94,034	45,114	48,920	92.2
0 - 4	13,946	7,145	6,801	105.1
5 – 9	15,344	7,854	7,490	104.9
10-14	13,164	7,072	6,092	116.1
15 - 19	10,024	5,282	4,742	111.4
20 - 24	6,442	3,070	3,372	91.0
25 - 29	5,559	2,364	3,195	74.0
30 - 34	4,738	1,956	2,782	70.3
35 - 39	4,555	1,806	2,749	65.7
40 - 44	3,647	1,400	2,247	62.3
45 - 49	3,243	1,379	1,864	74.0
50 - 54	2,968	1,321	1,647	80.2
55 - 59	1,759	789	970	81.3
60 - 64	2,143	874	1,269	68.9
65 - 69	1,399	571	828	69.0
70 - 74	2,049	822	1,227	67.0
75 - 79	1,319	609	710	85.8
80 - 84	830	352	478	73.6
85 - 89	486	233	253	92.1
90 - 94	293	155	138	112.3
95 - 99	126	60	66	90.9

Table 2.3: Population by age and sex and sex ratio

Source: Ghana Statistical Service, 2010 Population and Housing Census

The age structure of the population in the district is in a form of a broad base, made up of a large number of children and a small number of elderly persons at the top. With increasing age, the age-sex structure looks slightly thinner for the males than for females, indicating that the proportion of males reduces faster than that of the females as the age increases. As shown

in Figure 2.1, there is a high proportion of the population aged 0-4 years (14.8%) and 5-9 years (16.3%) which indicates that the population in the district has the prospect to grow for a considerable number of years. Also the broad base nature of the population clearly indicates that, there is a heavy concentration (45.2%) of the population in the younger ages (below 15 years).



Figure 2.1: Age-sex structure of the population

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.4 Fertility, Mortality and Migration

#### 2.4.2 Fertility

Fertility, for the purposes of this report, means the total number of live births that females, 15 years and older, ever had during their lifetime. Measures of fertility are important in determining the size and structure of the population and therefore critical for the management of the population for social and economic development. The commonly used measures of fertility are the Total Fertility Rate (which means the number of children a woman would have by the end of her childbearing years if she were to experience the currently observed age-specific fertility rates) and its component, Age-specific Fertility Rate (which also means the number of children a woman within a specific age group would have for the main purpose of knowing differences in fertility behaviour in each age group). The Crude Birth Rate indicates the number of live births per 1,000 population in a given year.

#### **Current Fertility**

Table 2.4 indicates a total fertility rate of 3.7 children per woman aged 15-49 years which is slightly higher than the regional average (3.4 children per woman). This implies that a woman living in the district would have an average of 3.7 children by the end of her reproductive period, if the age-specific fertility rates were observed. The district's total fertility rate is the third highest in the region. On the other hand, the crude birth rate for the district stands at 23.7, which is also higher than the regional figure of 22.6, and again the district has the third highest crude birth rate in the region. The General Fertility Rate of 106.3 for the district is also higher than the regional figure (97.5).

Table 2.4 further shows that 27,784 females, representing 22.3 percent of district's population, and 243,377 females, representing 23.3 percent of region's population, belong to the reproductive age group (15-49years)

		Number				
		of women	Number of	Total	*General	**Crude
		15-49	births in last	Fertility	Fertility	Birth
District	Population	years	12 months	Rate	Rate	Rate
All Districts	1,046,545	243,377	23,728	3.4	97.5	22.7
Builsa North	56,477	13,133	1,344	3.6	102.3	23.8
Kasena Nankana West	70,667	16,820	1,309	2.8	77.8	18.5
Kasena Nankana East	109,944	25,941	2,539	3.4	97.9	23.1
Bolgatanga Municipal	131,550	34,909	3,089	3	88.5	23.5
Talensi	81,194	17,431	1,820	3.6	104.4	22.4
Bongo	84,545	19,593	1,982	3.6	101.2	23.4
Bawku West	94,034	20,951	2,226	3.7	106.2	23.7
Garu Tempane	130,003	27,784	2,951	3.9	106.2	22.7
Bawku Municipal	98,538	24,496	2,004	2.9	81.8	20.3
Builsa South	36,514	8,438	1,011	4.3	119.8	27.7
Nabdam	33,826	7,355	773	3.6	105.1	22.9
Binduri	61,576	13,367	1,303	3.6	97.5	21.2
Pusiga	57,677	13,159	1,377	3.7	104.6	23.9

#### Table 2.4: Reported total fertility rate and crude rate by district

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### Lifetime Fertility (Number of Children Ever Born)

Table 2.5 presents information on the number of children ever born to the female population 12 years and older and children surviving. The table shows that the district has 32,077 females with children ever born being 110,479 indicating that there are three children to every female (12 years and older). The number of children ever born increases progressively from 15 children (for women aged 12-14 years) to 14,189 children (for women aged 35-39 years) and then starts to decline for women aged 40 years and older. The same pattern is observed for both male children and female children even born and surviving.

Also, children ever born to women aged 65years and above is 27.6 percent which is the highest, whereas children ever born to women aged 12-14 years is the least. In another vein, women aged 20-24 and 25-29 years have 89.0 percent of their children surviving while those aged 60+ years have the least percentage of 66.5 of their children surviving. Women aged 25-29 years have 88.1 percent (the highest) and women aged 12-14 years have 62.5 percent (the lowest) of their surviving children to be females. Similarly women aged 20-24 years have 91.1 percent (the highest) whilst women aged 60+ years have 67.8 percent (the lowest) of their surviving children to be males.

		Children Ever Born		Chile	Children Surviving		
	Number of	Both			Both		
Age	Female	Sexes	Male	Female	Sexes	Male	Female
All Ages	32,077	110,479	55,917	54,562	86,676	43,447	43,229
12-14	3,540	15	8	7	11	5	6
15-19	4,742	730	368	362	632	310	322
20-24	3,372	3,845	2,007	1,838	3,423	1,740	1,683
25-29	3,195	8,343	4,297	4,046	7,426	3,784	3,642
30-34	2,782	11,292	5,699	5,593	9,997	5,011	4,986
35-39	2,749	14,189	7,186	7,003	12,154	6,122	6,032
40-44	2,247	13,247	6,698	6,549	10,853	5,426	5,427
45-49	1,864	11,591	5,867	5,724	9,207	4,672	4,535
50-54	1,647	10,465	5,298	5,167	8,065	4,063	4,002
55-59	970	6,215	3,145	3,070	4,608	2,317	2,291
60+	4,969	30,547	15,344	15,203	20,300	9,997	10,303

 Table 2.5: Female population 12 years and older by age, children ever born, children surviving and sex of child

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.4.3 Mortality

Mortality provides an indication of the health status of the population as well as a measure of the living condition of the people. According to 2010 PHC, mortality relates to deaths that occur in the household during the 12 months preceding the census night.

Table 2.6 presents information on total population of deaths in households and crude death rates, by district and region. The table indicates that, the district recorded 838 deaths that occurred in households during the 12 months preceding the census night, presenting 7.4 per cent of the regional household deaths. The data show that the district recorded a crude death rate (per 1,000) of 8.9 which is lower than the regional figure of 10.8. The district's rate is the lowest in the region.

	Total	Deaths in	*Crude
District	Population	households	death rate
All Disticts	1,046,545	11,339	10.8
Builsa North	56,477	478	8.5
Kasena Nankana West	70,667	566	8
Kasena Nankana East	109,944	1,217	11.1
Bolgatanga Municipal	131,550	2,269	17.2
Talensi	81,194	1,218	15
Bongo	84,545	1,093	12.9
Bawku West	94,034	838	8.9
Garu Tempane	130,003	1,287	9.9
Bawku Municipal	98,538	691	7
Builsa South	36,514	337	9.2
Nabdam	33,826	473	14
Binduri	61,576	510	8.3
Pusiga	57,677	362	6.3

	<b>Table 2.6:</b>	<b>Total Po</b>	pulation,	deaths in	households and	l crude deat	h rate by	district
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Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 2.7 shows that death due to accident/violence/homicide/suicide is only 5.1 percent, while the remaining 94.9 percent is due to other causes. The data shows that the district has a relatively low accident/violence/homicide/suicide deaths compared to other district in the region

	Death due to						
	Total	Accident/ violence/		All other			
Region/District	deaths	homicide /suicide	Percent	causes	Percent		
All districts	11,339	1,720	15.2	9,619	84.8		
Builsa North	478	30	6.3	448	93.7		
Kasena Nankana West	566	47	8.3	519	91.7		
Kasena Nankana East	1,217	86	7.1	1,131	92.9		
Bolgatanga Municipal	2,269	940	41.4	1,329	58.6		
Talensi	1,218	165	13.5	1,053	86.5		
Bongo	1,093	61	5.6	1,032	94.4		
Bawku West	838	43	5.1	795	94.9		
Garu Tempane	1,287	97	7.5	1,190	92.5		
Bawku Municipal	691	65	9.4	626	90.6		
Builsa South	337	14	4.2	323	95.8		
Nabdam	473	79	16.7	394	83.3		
Binduri	510	43	8.4	467	91.6		
Pusiga	362	50	13.8	312	86.2		

#### Table 2.7: Causes of death by district

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### Age-specific mortality rates

Figure 2.2 shows reported age specific death rates by sex. The table shows that the reported age specific death rate declines steadily from the under 5 year group to the 15-19 year group and begins to increase gradually to the 20-24 year group for both sex. The female age specific death rate then continuously increases gradually to the 45-49 year group, then decreases slowly to the 55-59 year group and increases sharply through to the 70+ years. The male specific death rate also increases gradually from the 20-24 year group to the 40-45 year group, then decreases sharply to the 45-49 year group and finally increases sharply through to the 70+ at a faster rate than female.





Source: Ghana Statistical Service, 2010 Population and Housing Census
#### 2.4.1 Migration

Migration refers to change in usual place of residence from one administrative district to another for not less than six months. The importance of measuring migration lies in its impact on population size, structure and distribution. Table 2.8 describes birthplace by duration of residence of migrants in the Bawku West District. From the table, migrants constitute 9,098 of the population in the district. A total of 4,065 of the migrants in the district were born elsewhere in the region, followed by 5,033 born elsewhere in another region while the remaining 709 were born outside Ghana. As presented in the Table 2.8, the majority (35.8%) of migrants born elsewhere in the region have stayed 20+ years while the least percentage of 14.7 have stayed less than 10-19 years. On the other hand, 25.5 percent of the migrants born outside Ghana have stayed 20+ years relative to 11.6 percent who have stayed less than 1 year. In totality, 26.3 percent of migrants living in the district have stayed 1-4 years while 14.7 percent have stayed for 10-19 years. This suggests that migration is a permanent phenomenon for the majority of migrants in the district.

		Duration of residence (%)							
		Less than	1-4	5-9	10-19	20+			
Birthplace	Number	1 year	years	years	years	years			
Total	9,098	16.2	26.3	15.0	14.7	20.7			
Born elsewhere in the region	4,065	13.4	19.9	13.5	17.3	35.8			
Born elsewhere in another region:									
Western	565	24.1	39.3	20.0	9.9	6.7			
Central	49	30.6	42.9	12.2	4.1	10.2			
Greater Accra	270	16.7	23.3	21.5	18.9	19.6			
Volta	50	22.0	12.0	18.0	26.0	22.0			
Eastern	153	34.0	31.4	11.1	12.4	11.1			
Ashanti	3,058	19.7	37.4	17.9	15.1	10.0			
Brong Ahafo	472	21.8	30.5	21.6	16.1	10.0			
Northern	267	16.5	30.7	18.4	15.0	19.5			
Upper East	-								
Upper West	149	22.8	24.2	11.4	13.4	28.2			
Outside Ghana	709	11.6	24.7	18.5	19.7	25.5			

<b>Table 2.8:</b>	Birth place	by duration	of residence of	migrants
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## CHAPTER THREE SOCIAL CHARACTERISTICS

#### 3.1 Introduction

This chapter provides comprehensive and detailed social and cultural characteristics of the Bawku West District. Numerous social and cultural issues of human societies pop up as they seek solutions to better their lives. The 2010 Population and Housing Census collected data on household composition, headship and size of households in the district, marital status; literacy status and education; nationality, religion and economic activity status are also discussed.

#### 3.2 Size, Household Composition and Headship

#### 3.2.1 Household size

Table 3.1 shows that, the average household size for the district is 6.1 as compared to the region which is 5.8. The average household size is higher for rural areas than urban areas (6.3 and 4.8 respectively). The Table further reveals that, the average household per house for the district is 1.3 and this is higher for urban areas compared to rural areas.

#### Table 3.1: Household size by type of locality

	Total				
Categories	country	Region	District	Urban	Rural
Total household population	24,076,327	1,034,704	93,028	8,339	84,689
Number of households	5,467,054	177,629	15,169	1,724	13,445
Average households per					
house	1.6	1.6	1.3	1.4	1.3
Average household size	4.4	5.8	6.1	4.8	6.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### **3.2.2** Household composition

According to the 2010 Population and Housing Census, household consists of a person or group of persons who live together in the same house or compound, share housekeeping arrangements and are united as one family or unit. Members of a household are not necessarily related by blood, since non-relatives may form part of a household. The composition of a typical Ghanaian household mirrors the social structure that permeates the entire country. The composition of a household is so defined, bearing in mind the nature of the relationship that exists amongst members of the household and to the one person they accept and recognise as the head of the household. That head is responsible for the management and upkeep of the house and the members of the household.

Table 3.2 shows household population by composition and sex. There are a total of 93,028 people living in households in the district. Out of this number, 16.3 percent of the population in the households are heads. Children are treasured in the Ghanaian society and they show a person's social status. Table 3.2 support that claim as 49.3 percent of the household population is made of children. The extended family system is still a very important aspect of the family structure in the district. Out of the population in the households, 8.5 percent are other relatives, 5.2 percent grandchildren, 3.0 percent parents/parent in-law and 1.2 percent son/daughter in-law.

Table 3.2 further shows that 44,652 of the household population are males while 48,376 are females. Of the male population, 26.6 percent are heads of household while 6.8 percent of females in the female population act as heads of households. There are more children in the male household (56.4) than female household (42.8).

	Total		Ma	ale	Fem	Female		
Household composition	Number	Percent	Number	Percent	Number	Percent		
Total	93,028	100.0	44,652	100.0	48,376	100.0		
Head	15,169	16.3	11,885	26.6	3,284	6.8		
Spouse (wife/husband)	10,242	11.0	282	0.6	9,960	20.6		
Child (son/Daughter)	45,867	49.3	25,171	56.4	20,696	42.8		
Parent/Parent in-law	2,788	3.0	268	0.6	2,520	5.2		
Son/Daughter in-law	1,084	1.2	67	0.2	1,017	2.1		
Grandchild	4,807	5.2	2,448	5.5	2,359	4.9		
Brother/Sister	3,187	3.4	1,799	4.0	1,388	2.9		
Step child	1,101	1.2	597	1.3	504	1.0		
Adopted/Foster child	374	0.4	175	0.4	199	0.4		
Other relative	7,889	8.5	1,748	3.9	6,141	12.7		
Non-relative	520	0.6	212	0.5	308	0.6		

Table 3.2: Household population by composition and sex

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### **3.2.3 Household Structure**

Household structure is defined as classification of ties of affiliation of persons who constitute households. In other words, it refers to the type of relationship (whether related or unrelated) between household members who were present on census night.

Table 3.3 shows that, 22.3 percent of the households are Nuclear (i.e. Head, spouse(s) and children) while the Extended family (Heads, spouse(s), children, Head's relatives constitute 51.2 percent. The Extended family system is very popular in the district though modernization is gradually increasing the proportion that is nuclear.

	Total		Ma	ale	Female	
Household structure	Number	Percent	Number	Percent	Number	Percent
Total	93,028	100.00	44,652	100.0	48,376	100.0
Nuclear						
Head only	813	0.90	453	1.0	360	0.7
Head and a spouse only	732	0.80	371	0.8	361	0.8
Nuclear (Head, spouse(s) and children)	20,762	22.30	10,907	24.4	9,855	20.4
Single parent Nuclear	6,279	6.80	2,789	6.3	3,490	7.2
Extended						
Extended (Head, spouse(s), children and Head's relatives)	47,607	51.20	22,543	50.5	25,064	51.8
Extended + non relatives	1,538	1.70	694	1.6	844	1.7
Head, spouse(s) and other composition	2,581	2.80	1,192	2.7	1,389	2.9
Single parent Extended	7,934	8.50	3,513	7.9	4,421	9.1
Single parent Extended + non relative	456	0.50	206	0.5	250	0.5
Head and other composition but no spouse	4,326	4.70	1,984	4.4	2,342	4.8

Table 3.3: Household popul	lation by <b>s</b>	structure	and sex	K
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More males than females belong to the nuclear family structure (24.4% and 20.4% respectively). Also in the extended family structure, there are more females than males (51.8% and 50.5% respectively).

#### 3.3 Marital Status

The institution of marriage is highly valued in the Ghanaian society. It determines the perception society has about an individual of marriage age. It is an indicator of social responsibility, trust and achievement. All adults are expected to marry. There are however exceptions with regard to persons afflicted by terminal diseases, serious illness or deformity that make such persons unable to part take in the activities of marriage . Voluntary celibacy is frowned upon in traditional Ghanaian society. It is the wish of most adults to marry at one point in their lives.

This section looks at marital status of persons 12 years or older. The eligibility for this question is "based on the average age of menarche and also the country where girls as young as 12 years old could be given out for marriage" (GSS, 2002).

Out of the total of 59,164 persons aged 12 years and older, 36.0 percent have never married, 0.2 percent are in the informal/consensual/living together category. The proportion of the population who are married constitutes 52.2 percent, while 1.0 percent is reported as separated. Those divorced or widowed constitute 1.5 and 9.2 percent of the population respectively.

#### **3.3.1** Marital status and age

Most adults would wish to get married at one time or the other, and this is more so with females. To ascertain this, the data in Table 3.4 considered five year age group of persons 12 years and older by marital status. The age groups 12-14, 15-19 and 20-24 have proportions that are above 50 percent (95.5%, 86.0% and 50.3% respectively) of the population that have never been married. Over 70 percent of persons within the age groups of 25-29 and older are married. This means that a high proportion of the people in the district marry after they have attained 25 years. This practice is good particularly for checking population growth.

Table 3.4 shows that out of a total male population aged 12-14 years, 95.5 percent have never been married while 4.5 are married. The table further shows that, 9.2 percent of the population are widowed. Traditional practices demand that the man initiates the marriage by preparing and presenting to the bride's family, the bride-wealth. He is also responsible for the maintenance and upkeep of the family. Marriage for men therefore means a careful and thorough preparation.

It is worth noting from Table 3.4 that most men marry (58.5%) from the age groups 25-29 and above. The proportion of never married men reduces progressively from 37.4 percent at age group 25-29 to 1.6 percent at age group 55-59. Even though voluntary celibacy is frowned upon by society it is worth noting that 3.0 percent and 3.8 percent of the male population aged 60-64 years and 65+ years respectively have never been married.

The total population of married women in the district are 32,077. Of which 26.8 percent have never been married while 55.3 percent are married. There are 15.4 percent of the population that are widowed

Table 3.4 shows that of the population aged 12 years and older, 52.2 percent is married while 36.0 percent has never been married. In addition, 11.7 percent of the population reported to

have been married before but at the time of the census was separated (1.0%), widowed (9.2%) and divorced (1.5%). The data further show that a higher proportion of males (46.8%) than females (26.8) reported to have never been married. Again, the proportion of females widowed (15.4%), is higher than that of males (1.9%). But more males reported to have been divorced (1.9%) than females (1.2%).

				Informal/				
Sev/Age-			Never	union/L iving				
group	Number	Total	married	together	Married	Separated	Divorced	Widowed
Both Seves	rumber	Total	married	together	married	Sepurated	Divolecu	Widowed
Total	59 164	100.0	36.0	0.2	52.2	1.0	15	92
12 - 14	7 584	100.0	95.5	0.2	4 5	1.0	0	0
15 - 19	10 024	100.0	86.0	0.1	13.0	04	02	02
20 - 24	6 442	100.0	50.3	0.1	46.6	1.2	1.0	0.2
25 - 29	5 559	100.0	20.5	0.5	73.9	1.2	1.0	14
30 - 34	4,738	100.0	8.2	0.4	84.3	1.9	2.0	3.2
35 - 39	4.555	100.0	3.9	0.2	86.0	1.7	2.5	5.6
40 - 44	3.647	100.0	2.3	0.3	82.9	1.6	2.7	10.2
45 - 49	3.243	100.0	2.3	0.2	80.6	1.4	2.8	12.7
50 - 54	2.968	100.0	1.7	0.2	76.9	1.0	2.5	17.8
55 - 59	1.759	100.0	1.6	0.2	73.6	0.7	2.5	21.3
60 - 64	2.143	100.0	1.8	0.1	65.1	0.6	2.6	29.7
65+	6,502	100.0	2.8	0.1	55.2	0.4	2.0	39.4
Male	,							
Total	27.087	100.0	46.8	0.2	48.5	0.8	1.9	1.9
12 - 14	4.044	100.0	95.5	0	4.5	0	0	0
15 - 19	5.282	100.0	93.3	0.1	6.4	0.2	0	0.1
20 - 24	3.070	100.0	73.7	0.3	24.4	0.5	0.8	0.3
25 - 29	2.364	100.0	37.4	0.5	58.5	1.3	1.9	0.5
30 - 34	1.956	100.0	15.7	0.6	79.3	1.5	2.5	0.4
35 - 39	1,806	100.0	7.4	0.3	85.8	1.4	4	1
40 - 44	1,400	100.0	3.9	0.3	88.9	1.6	3.9	1.4
45 - 49	1,379	100.0	3.8	0.3	87.8	1.8	4.1	2.2
50 - 54	1,321	100.0	3	0.1	88	1	4.1	3.9
55 - 59	789	100.0	2.3	0.3	90.6	0.9	3.5	2.4
60 - 64	874	100.0	3	0.2	85.9	0.6	4	6.3
65+	2,802	100.0	3.8	0.1	82.4	0.7	3	10
Female								
Total	32,077	100.0	26.8	0.2	55.3	1.1	1.2	15.4
12 -14	3,540	100.0	95.5	0.1	4.4	0	0	0
15 - 19	4,742	100.0	77.9	0.3	20.4	0.6	0.4	0.4
20 - 24	3,372	100.0	28.9	0.5	66.8	1.9	1.2	0.6
25 - 29	3,195	100.0	8.1	0.5	85.3	2.3	1.7	2.1
30 - 34	2,782	100.0	2.9	0.3	87.8	2.1	1.7	5.2
35 - 39	2,749	100.0	1.6	0.2	86.1	1.9	1.5	8.7
40 - 44	2,247	100.0	1.3	0.3	79.2	1.6	2	15.7
45 - 49	1,864	100.0	1.2	0.2	75.3	1.1	1.8	20.4
50 - 54	1,647	100.0	0.7	0.2	68	1	1.2	29
55 - 59	970	100.0	1.1	0.1	59.8	0.6	1.6	36.7
60 - 64	1,269	100.0	1	0.1	50.8	0.6	1.6	45.9
65+	3,700	100.0	2.1	0.1	34.7	0.1	1.2	61.8

 Table 3.4: Persons 12 years and older by sex, age-group and marital status

The data also show that a large proportion (95.5%) of the population of both sexes aged 12-14 years has never been married. Only a small proportion (0.5%) of the population of both sexes aged 25-29 years are in informal unions

#### **3.3.2** Marital status and education

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Table 3.5 provides information on marital status and level of education. Majority of the population 12 years and older who had never married had basic education (62.8%). The lowest proportion of them had tertiary education (0.2%). Among those in consensual union/living together 55.6 percent have no education and 81.7 percent of the married also had no education. The proportion is lowest across all the marital characteristics for persons with tertiary education. Variations in marital status for the sexes follow similar pattern.

							Post middle/	
						Vocational/	secondary	
		A11	No		Secon	Technical/	certificate/	
Sex/Marital status	Number	levels	Education	Basic <sup>1</sup>	dary <sup>2</sup>	Commercial	diploma <sup>3</sup>	Tertiary <sup>4</sup>
Both Sexes								
Total	59,164	100.0	62.6	30.7	4.7	0.4	1.3	0.3
Never married	21,270	100.0	25.8	62.8	9.2	0.5	1.4	0.2
Informal/Consensual union /Living together	142	100.0	55.6	23.2	9.2	2.1	7.0	2.8
Married	30,866	100.0	81.7	13.6	2.5	0.4	1.4	0.4
Separated	573	100.0	71.6	22.5	3.3	0.3	2.3	0.0
Divorced	885	100.0	80.0	16.0	2.1	0.6	0.9	0.3
Widowed	5,428	100.0	94.6	4.8	0.3	0.0	0.3	0.0
Male								
Total	27,087	100.0	53.4	36.9	6.6	0.5	2.1	0.6
Never married	12,672	100.0	26.8	60.8	9.9	0.4	1.8	0.3
Informal/Consensual union /Living together	62	100.0	45.2	24.2	11.3	4.8	8.1	6.5
Married	13,141	100.0	76.3	16.1	3.8	0.6	2.4	0.9
Separated	205	100.0	68.8	24.4	2.9	0.0	3.9	0.0
Divorced	503	100.0	81.3	15.5	1.4	0.6	1.0	0.2
Widowed	504	100.0	92.5	5.8	1.2	0.0	0.6	0.0
Female								
Total	32.077	100.0	70.4	25.4	3.1	0.3	0.7	0.1
Never married	8,598	100.0	24.4	65.8	8.1	0.6	0.9	0.1
Informal/Consensual union/Living together	80	100.0	63.8	22.5	7.5	0.0	6.3	0.0
Married	17,725	100.0	85.7	11.8	1.5	0.3	0.6	0.1
Separated	368	100.0	73.1	21.5	3.5	0.5	1.4	0.0
Divorced	382	100.0	78.3	16.8	3.1	0.5	0.8	0.5
Widowed	4,924	100.0	94.9	4.7	0.2	0.0	0.3	0.0

Table 3.5:	Persons 12	vears and	older by	sex. I	marital	and le	evel of	education
1 abic 5.5.		years and	oluci by	beng I	mainai	unu n		cuucution

#### 3.3.3 Marital status and economic activity status

The ability to support a spouse and a family financially or even a perception of the ability to provide for a family and a spouse financially is the most important determining factor in a man's personal decision to get married. Table 3.6 shows marital status by economic status of the population aged 12 years and older. The data generally support the statement that the ability to provide for a spouse and family financially is paramount in the initiation, survival and continuation of a marriage.

Table 3.6 presents information on persons 12 years and older by sex, marital status and economic activity status. It can be seen from the table that 43,335 of persons 12 years and older are employed, 562 are unemployed and 15,267 are economically not active. Of those married, 88.5 percent are employed and 10.6 percent are economically not active. Also, majority of the never married are employed (53.4%). Those in consensual unions have most of them employed (81.0%), but 14.8 percent of them are economically not active.

<b>Table 3.6:</b>	Persons 12 years and older by sex, marital status and economic activi	ity
	status	

	То	tal	Employed		Unemployed		Economically not	
	10 N 1	D	<u>Empi</u>	D	<u> </u>	N 1 D		D
Sex/Marital status	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes								
Total	59,164	100.0	43,335	73.2	562	0.9	15,267	25.8
Never married	21,270	100.0	11,363	53.4	219	1	9,688	45.5
Informal/Consensual union/Living together	142	100.0	115	81	6	4.2	21	14.8
Married	30,866	100.0	27,314	88.5	275	0.9	3,277	10.6
Separated	573	100.0	461	80.5	15	2.6	97	16.9
Divorced	885	100.0	727	82.1	24	2.7	134	15.1
Widowed	5,428	100.0	3,355	61.8	23	0.4	2,050	37.8
Male								
Total	27,087	100.0	20,129	74.3	259	1	6,699	24.7
Never married	12,672	100.0	7,255	57.3	142	1.1	5,275	41.6
Informal/Consensual union/Living together	62	100.0	55	88.7	2	3.2	5	8.1
Married	13,141	100.0	11,926	90.8	100	0.8	1,115	8.5
Separated	205	100.0	174	84.9	5	2.4	26	12.7
Divorced	503	100.0	427	84.9	8	1.6	68	13.5
Widowed	504	100.0	292	57.9	2	0.4	210	41.7
Female								
Total	32,077	100.0	23,206	72.3	303	0.9	8,568	26.7
Never married	8,598	100.0	4,108	47.8	77	0.9	4,413	51.3
Informal/Consensual union/Living together	80	100.0	60	75	4	5	16	20
Married	17,725	100.0	15,388	86.8	175	1	2,162	12.2
Separated	368	100.0	287	78	10	2.7	71	19.3
Divorced	382	100.0	300	78.5	16	4.2	66	17.3

#### 3.4 Nationality

The nationality of the population in the Bawku West District, as shown in Table 3.7, reveals that persons of Ghanaian origin constitute a very large percent of the population (94.0%). Ghanaians with dual citizenship constitutes a very small percent (2.5%). About 2.4 per cent of the population are non-Ghanaians; and Ghanaians by naturalisation constitute a little above one per cent (1.0%). There are differences in terms of sex of nationality of the population of district. The district shares boundaries with the Republic of Burkina Faso and this may account for the large number (1,388) of foreign nationals from the ECOWAS region.

The proportion of male non-Ghanaians (1.22%) is marginally higher than female non-Ghanaian (1.18%). ECOWAS nationals constitute a large proportion of the non-Ghanaian population (1.5%) while other African nationals constitute 0.5 per cent.

	Both	sexes	Ma	ale	Fer	Female	
Nationality	Number	Percent	Number	Percent	Number	Percent	
Total	94,034	100.0	45,114	100.0	48,920	100.0	
Ghanaian by birth	88,422	94.0	42,461	94.1	45,961	94.0	
Dual Nationality	2,389	2.5	1,025	2.3	1,364	2.8	
Ghanaian by naturalisation	963	1.0	479	1.1	484	1.0	
ECOWAS	1,388	1.5	723	1.6	665	1.4	
Africa other than ECOWAS	510	0.5	250	0.6	260	0.5	
Other	362	0.4	176	0.4	186	0.4	

#### T able 3.7: Population by nationality and sex

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 3.5 Religious Affiliation

Table 3.8 shows population by religion and sex. The table reveals that 44 percent of the population professes the African Traditional Religion, followed by Christianity (35.0%) and then Islam (18.0%). Only a small proportion of the population either adhere to other religions (1.0%) or are not affiliated to any religion (2.0%).

Generally, more females (19.0%) than males (16%) are Christians. Also, slightly more females (10.0%) than males (9%) belong to the Islamic religion. About the same percentage of females (22.1%) as males (22.0%), belong to Traditional African Religion. Similarly, about the same number of males (1.0%) as females (0.9%) are not affiliated to any religion.

Table 3.8:	Population	hv	religion	and	sex
1 abic 5.0.	I opulation	vy	rengion	anu	BUA

	Both sexes		Ma	ıle	Fen	Female		
Religion	Number	Percent	Number	Percent	Number	Percent		
Total	94,034	100.0	45,114	100.0	48,920	100.0		
No Religion	1,812	1.9	924	2.0	888	1.8		
Catholic	4,682	5.0	2,151	4.8	2,531	5.2		
Protestant (Anglican Lutheran etc.)	5,863	6.2	2,695	6.0	3,168	6.5		
Pentecostal/Charismatic	21,155	22.5	9,565	21.2	11,590	23.7		
Other Christians	1,396	1.5	639	1.4	757	1.5		
Islam	17,277	18.4	8,350	18.5	8,927	18.2		
Traditionalist	41,321	43.9	20,557	45.6	20,764	42.4		
Other (Specify)	528	0.6	233	0.5	295	0.6		

### **3.6** Literacy and Education

Education serves as the backbone of development in every geographical area. Any nation that has a predominately illiterate human resource base is likely to face developmental challenges. In today's world, there is growing consensus that literacy is at the core to learning and the foundation for lifelong learning. It is fully essential to social and human development in its ability to transform lives. For individuals, families and societies alike, it is an instrument of empowerment.

The 2010 PHC defines literacy as a person's ability to read and write a simple statement with understanding. Literacy therefore is more than the ability to write or distinguish between the various letters of the alphabet and counting numbers. While literacy can be acquired through informal channels, the formal system of education remains the best process for improving access to information and shaping the world view of the individual.

Education on the other hand, is the process of gaining knowledge, learning forms of proper conduct and acquiring technical competency in a specific field. It involves cultivating the mind and instilling values that enable an individual to distinguish between right and wrong. Education, according to the 2010 PHC, however, refers to full time education in an educational institution such as, nursery, kindergarten (pre-school), primary, Junior secondary, Junior High School, middle, Senior Secondary, Senior High School, secondary, vocational, commercial or technical, Teacher Training College, university or similar type of school where a person spends or has spent at least four (4) hours a day receiving general education in which the emphasis is not on trade training.

Figure 3.2 shows that the majority (64%) of the population 11 years and older is literate. A large proportion (97.7%) of the population can read and write in English. In terms of the ability to read and write in the English language only 80.5 percent of the population reported they can, where as 0.1 percent of the population can read and write in at least one Ghanaian language.



Figure 3.2: Population 11 years and older by literacy status

The data on literacy and age in Table 3.9 indicate that the proportion of the population who are literate in English only is higher among the younger ages (11-24 years) compared to the older cohorts. This pattern may reflect the impact of the policy increasing access to education at all levels. On the other hand, literacy in Ghanaian language only is more common among both male and female older cohorts of the population than the younger cohorts.

	-					-		
								English,
								French
	None				Ghanaian	English &	English	and
	(not	<b>T</b> •	<b>T</b> 1	English	language	Ghanaian	and	Ghanaian
Age group	literate)	Literate	Total	only	only	language	French	language
<b>Both Sexes</b>								
Total	37,459	23,915	100.0	80.5	2.4	16.9	0.2	0.1
14-Nov	1,924	7,870	100.0	85.8	2.1	12	0.1	0
15-19	2,857	7,167	100.0	84.4	1.4	14	0.1	0.1
20-24	3,240	3,202	100.0	79	2.1	18.7	0.1	0.1
25-29	3,722	1,837	100.0	70.1	3.8	25.3	0.7	0.2
30-34	3,659	1,079	100.0	69	3.2	27.2	0.6	0.1
35-39	3,860	695	100.0	70.4	6.3	22.7	0.3	0.3
40-44	3,136	511	100.0	68.5	4.5	25.8	1	0.2
45-49	2,873	370	100.0	64.1	5.1	30.8	-	-
50-54	2,648	320	100.0	58.8	7.5	33.1	0.6	-
55-59	1,505	254	100.0	65.4	2.8	31.9	-	-
60-64	1,939	204	100.0	72.5	3.4	23	1	-
65+	6,096	406	100.0	74.1	2	23.2	0.5	0.2
Male								
Total	14,723	13,560	100.0	77.5	2.5	19.7	0.3	0.1
14-Nov	1,107	4,133	100.0	83.3	2.3	14.3	0	0
15-19	1,286	3,996	100.0	83	1.6	15.1	0.2	0.1
20-24	1,129	1,941	100.0	77.5	1.8	20.7	-	0.1
25-29	1,291	1,073	100.0	66.1	3.5	29.3	0.9	0.2
30-34	1,263	693	100.0	62.2	3.2	33.8	0.7	0.1
35-39	1,370	436	100.0	68.1	5.7	25.5	0.2	0.5
40-44	1,102	298	100.0	62.1	6	30.2	1.3	0.3
45-49	1,142	237	100.0	57.4	5.9	36.7	-	-
50-54	1,117	204	100.0	56.9	6.9	35.3	1	-
55-59	606	183	100.0	62.8	3.3	33.9	-	-
60-64	732	142	100.0	69.7	4.2	25.4	0.7	-
65+	2,578	224	100.0	67.9	2.2	28.6	0.9	0.4
Female								
Total	22,736	10,355	100.0	84.4	2.3	13.2	0.1	0.1
14-Nov	817	3,737	100.0	88.5	2	9.3	0.1	0.1
15-19	1,571	3,171	100.0	86.1	1.3	12.5	0	0.1
20-24	2,111	1,261	100.0	81.3	2.5	15.8	0.3	0.1
25-29	2,431	764	100.0	75.8	4.1	19.8	0.3	0.1
30-34	2,396	386	100.0	81.1	3.4	15.3	0.3	-
35-39	2,490	259	100.0	74.1	7.3	18.1	0.4	-
40-44	2,034	213	100.0	77.5	2.3	19.7	0.5	-
45-49	1,731	133	100.0	75.9	3.8	20.3	-	-
50-54	1,531	116	100.0	62.1	8.6	29.3	-	-
55-59	899	71	100.0	71.8	1.4	26.8	-	-
60-64	1,207	62	100.0	79	1.6	17.7	1.6	-
65+	3,518	182	100.0	81.9	1.6	16.5	-	-

 Table 3.9: Population 11 years and older by sex, age and literacy status

#### School attendance

Table 3.10 shows the population aged 3 years and above, by level of education, school attendance and sex. The table reveals that out of the population 3 years and older, 32,652 are currently attending school at different levels while 8,479 have attended school in the past. About two-thirds (59.9%) of the population, currently attending school, are at primary level whereas 50.4 percent of population who have attended school in the past are at the primary level.

There are more female (20.7%) than male (15.0%) among the proportion of population who have attended school in the past for JSS/JHS level and the same among the proportion of the population who are currently in school for primary level.

The proportion of the population (4.8%) who are at educational levels SSS/SHS and higher, is relatively small as the percentage turns to reduce after the JHS level.

		Currently attending school Attend						Attended scho	ended school in the past			
	Both	sexes	Ma	ale	Fen	nale	Both	sexes	Ma	ale	Fen	nale
Level of education	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	32,652	100.0	17,370	100.0	15,282	100.0	8,479	100.0	4,821	100.0	3,658	100.0
Nursery	2,699	8.3	1,325	7.6	1,374	9.0	0	0.0	0	0.0	0	0.0
Kindergarten	4,152	12.7	2,091	12.0	2,061	13.5	0	0.0	0	0.0	0	0.0
Primary	19,549	59.9	10,355	59.6	9,194	60.2	4,270	50.4	2,225	46.2	2,045	55.9
JSS/JHS	4,354	13.3	2,377	13.7	1,977	12.9	1,481	17.5	724	15.0	757	20.7
Middle	0	0.0	0	0.0	0	0.0	629	7.4	453	9.4	176	4.8
SSS/SHS	1,555	4.8	971	5.6	584	3.8	1,060	12.5	692	14.4	368	10.1
Secondary	0	0.0	0	0.0	0	0.0	180	2.1	122	2.5	58	1.6
Vocational/Technical/ Commercial	70	0.2	37	0.2	33	0.2	167	2.0	96	2.0	71	1.9
Post middle/secondary certificate	88	0.3	67	0.4	21	0.1	302	3.6	199	4.1	103	2.8
Tertiary	185	0.6	<u>1</u> 47	0.8	38	0.2	390	4.6	310	6.4	80	2.2

### Table 3.10: Population 3 years and older by level of education, school attendance and sex

## CHAPTER FOUR ECONOMIC CHARACTERISTICS

#### 4.1 Introduction

Data on the economic characteristics of any population is significant for sustainable development. Again, the economic characteristics serve as development indicators to assess the growth of a settlement's economy. It is against this background that the economic characteristics of the population are examined in this chapter. The areas of focus include economic activity status, employment status, industry and occupation of the total population in the district.

#### 4.2 Economic Activity Status

Table 4.1 shows that of the total population of 51,580 aged 15 years and older, 79 percent are economically active while the economically inactive population constitutes 21 percent. Of the economically active population, 99 percent are employed while the unemployed make up one percent. Of those who are unemployed, the majority (51%) have ever worked before. The proportion of females who are economically active (54%) is slightly higher than males (46%). However, females are more likely to be unemployed (54%) than males (46%).

The data also show that students form a large proportion (37%) of the economically inactive population. Of the remaining, the home makers' category constitutes 26 percent. Those who are too old and young constitute 25 percent while the sick, the retired and others, make up 12 percent of the economically inactive population.

	То	Total Male		le	Female	
Activity status	Number	Percent	Number	Percent	Number	Percent
Total	51,580	100.0	23,043	100.0	28,537	100.0
Economically active	40,770	79.0	18,641	80.9	22,129	77.5
Employed	40,215	98.6	18,386	98.6	21,829	98.6
Worked	39,178	97.4	17,868	97.2	21,310	97.6
Did not work but had job to go back						
to	805	2.0	377	2.1	428	2.0
Did voluntary work without pay	232	0.6	141	0.8	91	0.4
Unemployed	555	1.4	255	1.4	300	1.4
Worked before, seeking work and						
available	283	51.0	122	47.8	161	53.7
Seeking work for the first time and						
available	272	49.0	133	52.2	139	46.3
Economically not active	10,810	21.0	4,402	19.1	6,408	22.5
Did home duties (household chore)	2,806	26.0	697	15.8	2,109	32.9
Full time education	3,960	36.6	2,311	52.5	1,649	25.7
Pensioner/Retired	90	0.8	51	1.2	39	0.6
Disabled/Sick	736	6.8	347	7.9	389	6.1
Too old/young	2,749	25.4	791	18.0	1,958	30.6
Other	469	4.3	205	4.7	264	4.1

<b>Table 4.1:</b>	<b>Population</b> 1	5 years and	older by	y activity	status and s	sex

#### 4.2.1 Economic activity status and age

The age-sex specific economic activity status, presented in Table 4.2, shows that generally, employment levels among the various age groups are high, with the age group 40-44 years recording the highest proportion of persons employed (92.9%). As expected, persons in the age group 15-19 years have the least proportion of the employed. It is therefore observed that, the proportion of persons employed increases from age 15-19 years till 40-44 years and thereafter, start to decrease.

Again, unemployment levels are generally low among the different age groups. However, higher proportion of the unemployed is mainly the youth (20-29 years), recording levels of unemployment of about 2.0 percent. For the population economically not active, higher proportions are concentrated within the younger ages of 15-19 years (41.5%) and 20-24 years (22.7%) and also among the older ages of 65+ years (40.2%). Similar patterns are observed for both sexes among the different age groups.

							Economi	cally not
	All St	atus	Empl	oyed	Unemp	oloyed	acti	ive
Age group	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both sexes								
Total	51,580	100.0	40,215	78.0	555	1.1	10,810	21.0
15 - 19	10,024	100.0	5,770	57.6	96	1.0	4,158	41.5
20 - 24	6,442	100.0	4,854	75.3	127	2.0	1,461	22.7
25 - 29	5,559	100.0	4,897	88.1	113	2.0	549	9.9
30 - 34	4,738	100.0	4,358	92.0	64	1.4	316	6.7
35 - 39	4,555	100.0	4,218	92.6	30	0.7	307	6.7
40 - 44	3,647	100.0	3,389	92.9	19	0.5	239	6.6
45 - 49	3,243	100.0	2,996	92.4	21	0.6	226	7.0
50 - 54	2,968	100.0	2,670	90.0	12	0.4	286	9.6
55 - 59	1,759	100.0	1,518	86.3	7	0.4	234	13.3
60 - 64	2,143	100.0	1,670	77.9	51	2.4	422	19.7
65+	6,502	100.0	3,875	59.6	15	0.2	2,612	40.2
Male								
Total	23,043	100.0	18,386	79.8	255	1.1	4,402	19.1
15 - 19	5,282	100.0	3,099	58.7	42	0.8	2,141	40.5
20 - 24	3,070	100.0	2,227	72.5	62	2.0	781	25.4
25 - 29	2,364	100.0	2,096	88.7	50	2.1	218	9.2
30 - 34	1,956	100.0	1,834	93.8	36	1.8	86	4.4
35 - 39	1,806	100.0	1,725	95.5	11	0.6	70	3.9
40 - 44	1,400	100.0	1,333	95.2	8	0.6	59	4.2
45 - 49	1,379	100.0	1,326	96.2	9	0.7	44	3.2
50 - 54	1,321	100.0	1,246	94.3	5	0.4	70	5.3
55 - 59	789	100.0	737	93.4	2	0.3	50	6.3
60 - 64	874	100.0	757	86.6	25	2.9	92	10.5
65+	2,802	100.0	2,006	71.6	5	0.2	791	28.2

 Table 4.2: Activity status of population 15 years and older by age and sex

							Economi	cally not
	All St	atus	Empl	oyed	Unemp	Unemployed		ive
Age group	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Female								
Total	28,537	100.0	21,829	76.5	300	1.1	6,408	22.5
15 - 19	4,742	100.0	2,671	56.3	54	1.1	2,017	42.5
20 - 24	3,372	100.0	2,627	77.9	65	1.9	680	20.2
25 - 29	3,195	100.0	2,801	87.7	63	2.0	331	10.4
30 - 34	2,782	100.0	2,524	90.7	28	1.0	230	8.3
35 - 39	2,749	100.0	2,493	90.7	19	0.7	237	8.6
40 - 44	2,247	100.0	2,056	91.5	11	0.5	180	8.0
45 - 49	1,864	100.0	1,670	89.6	12	0.6	182	9.8
50 - 54	1,647	100.0	1,424	86.5	7	0.4	216	13.1
55 - 59	970	100.0	781	80.5	5	0.5	184	19.0
60 - 64	1,269	100.0	913	71.9	26	2.0	330	26.0
65+	3,700	100.0	1,869	50.5	10	0.3	1,821	49.2

Table 4.2: Activity status of population 15 years and older by age and sex (cont'd)

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 4.3 Occupation

Occupation refers to the type of work a person is engaged in at the establishment where the person works. Table 4.3 reveals that, skilled agricultural forestry and fishery are the dominant (81.0%) occupation in the district. The majority (86.5%) of males find themselves within the skilled agricultural forestry and fishery workers compared to 76.4 percent of females in the same sector.

Also, seven percent is engaged as craft and related trade workers while six percent are service and sales workers. Skilled agricultural, forestry and fishery work, remains the dominant occupation for both females (51%) and males (49%). A much higher proportion of females (83%) than males (17%) are engaged in service and sales work. These are two leading occupational categories that do not require highly skilled expertise and therefore high educational training. The proportion of males in the various occupations is higher than for females, the only exceptions being service and sales workers.

	Both	sexes	Ma	ale	Fen	nale
Occupation	Number	Percent	Number	Percent	Number	Percent
Total	40,215	100.0	18,386	100.0	21,829	100.0
Managers	253	0.6	99	0.5	154	0.7
Professionals	725	1.8	502	2.7	223	1.0
Technicians and associate						
professionals	192	0.5	130	0.7	62	0.3
Clerical support workers	106	0.3	65	0.4	41	0.2
Service and sales workers	2,468	6.1	431	2.3	2,037	9.3
Skilled agricultural forestry						
and fishery workers	32,571	81.0	15,901	86.5	16,670	76.4
Craft and related trades						
workers	2,791	6.9	535	2.9	2,256	10.3
Plant and machine operators						
and assemblers	585	1.5	452	2.5	133	0.6
Elementary occupations	523	1.3	270	1.5	253	1.2
Other occupations	1	0.0	1	0.0	0	0.0

 Table 4.3: Employed population 15 years and older by occupation and sex

#### 4.4 Industry

Industry refers to the type of product produced or services rendered at the respondent's workplace. Agriculture forestry and fishing constitute the largest industry employing 79.7 percent of the workforce aged 15 years and above as depicted in Table 4.4, with 51 percent of females and 49 percent of males. Activities of extraterritorial organisations and bodies and electricity gas stream and air conditioning supply are non-existent in the district. Other major industries include manufacturing (5.8%) and wholesale and retail; repair of motor vehicles and motorcycles (4.8%).

	Both	sexes	Ma	ale	Fen	male	
Industry	Number	Percent	Number	Percent	Number	Percent	
Total	40,215	100.0	18,386	100.0	21,829	100.0	
Agriculture forestry and fishing	32,067	79.7	15,712	85.5	16,355	74.9	
Mining and quarrying	350	0.9	251	1.4	99	0.5	
Manufacturing	2,323	5.8	332	1.8	1,991	9.1	
Electricity gas stream and air conditioning supply	12	0.0	10	0.1	2	0.0	
Water supply; sewerage waste management and remediation activities	23	0.1	17	0.1	6	0.0	
Construction	121	0.3	113	0.6	8	0.0	
Wholesale and retail; repair of motor vehicles and motorcycles	1,921	4.8	511	2.8	1,410	6.5	
Transportation and storage	153	0.4	145	0.8	8	0.0	
Accommodation and food service							
activities	851	2.1	69	0.4	782	3.6	
Information and communication	24	0.1	20	0.1	4	0.0	
Financial and insurance activities	28	0.1	23	0.1	5	0.0	
Real estate activities	0	0.0	0	0.0	0	0.0	
Professional scientific and technical activities	204	0.5	49	0.3	155	0.7	
Administrative and support service activities	66	0.2	47	0.3	19	0.1	
Public administration and defence; compulsory social security	176	0.4	148	0.8	28	0.1	
Education	622	1.5	432	2.3	190	0.9	
Human health and social work activities	295	0.7	176	1.0	119	0.5	
Arts entertainment and recreation	21	0.1	21	0.1	0	0.0	
Other service activities	622	1.5	153	0.8	469	2.1	
Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use	333	0.8	155	0.8	179	0.8	
Activities of extraterritorial organisations and bodies	3	0.0	3	0.0	0	0.0	

	<b>Table 4.4:</b>	Employed	population 15	years and ol	lder by	industry	y and	sex
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#### 4.5 Employment Status

Table 4.5 shows that the majority (70.2 %) of the employed population are self-employed without employee(s). Contributing family workers constitute about 21 percent while employees make up four percent. Apprentices form only one per cent of the employed population.

The data indicate that, relatively large proportion of males (6.1%) compare to females (2.3%), are employees. Also, males are slightly more likely to be self-employed without employee(s) (71.3%) than females (69.7%). In addition, more females (22.9%) than males (18.7%) are engaged as contributing family workers.

	Both sexes		Ma	Male		nale
Employment Status	Number	Percent	Number	Percent	Number	Percent
Total	40,215	100.0	18,386	100.0	21,829	100.0
Employee	1,635	4.1	1,124	6.1	511	2.3
Self-employed without employee(s)	28,317	70.4	13,104	71.3	15,213	69.7
Self-employed with employee(s)	772	1.9	371	2.0	401	1.8
Casual worker	201	0.5	111	0.6	90	0.4
Contributing family worker	8,423	20.9	3,434	18.7	4,989	22.9
Apprentice	547	1.4	90	0.5	457	2.1
Domestic employee(House help)	256	0.6	125	0.7	131	0.6
Other	64	0.2	27	0.1	37	0.2

 Table 4.5: Employed population 15 years and older by employment status and sex

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 4.6 Employment Sector

Table 4.6 shows that the private sector is the largest employer, employing 97 percent of the employed population (private informal 96% and private formal 1%). There are more females (98.3%) than males (95.5%) in the private sector. However, there are more males (4.2%) than females (1.5%) in the public sector.

Table 4.6:	Employed	population 15	vears and older	by employment	t sector and sex
	Linpioyea	population It	years and order	~ j ompioj mon	c beever and ben

	Both sexes		Ma	Male		Female	
Employment Sector	Number	Percent	Number	Percent	Number	Percent	
Total	40,215	100.0	18,386	100.0	21,829	100.0	
Public (Government)	1,087	2.7	766	4.2	321	1.5	
Private Formal	323	0.8	199	1.1	124	0.6	
Private Informal	38,689	96.2	17,352	94.4	21,337	97.7	
Semi-Public/Parastatal	7	0.0	4	0.0	3	0.0	
NGOs (Local and International)	108	0.3	65	0.4	43	0.2	
Other International Organisations	1	0.0	0	0.0	1	0.0	

## **CHAPTER FIVE** INFORMATION COMMUNICATION TECHNOLOGY

#### 5.1 Introduction

Information and Communication Technology (ICT) is one of the major components for socio-economic development in the district. The use of Information and Communication Technology (ICT) has been an important mode of communication for social and economic activities. The formulation and implementation of the government policies and programmes have contributed to expand access of the population to ICT facilities. This chapter presents information on ownership of mobile phones, use of internet, household ownership of fixed telephone lines and desktop or laptop computers.

#### 5.2 **Ownership of Mobile Phones**

Mobile phones have become one of the major communication tools for disseminating information and transacting business in the district and region as a whole.

Table 5.1 depicts the population (12 years and older) that own mobile phones and use internet facility in the district. There are 10,384 persons aged 12 years and older who own mobile phones, constituting 17.6 percent of the population of Bawku West District. The proportion of males owning mobile phone is higher than their female counterparts (24.6% and 11.6% respectively)

	Populat years an	tion 12 id older	Population having mobile phone		Population internet	on using facility
Sex	Number	Percent	Number	Percent	Number	Percent
Total	59,164	100.0	10,384	17.6	552	0.9
Male	27,087	100.0	6,652	24.6	383	1.4
Female	32,077	100.0	3,732	11.6	169	0.5

 Table 5.1: Mobile phone ownership and internet facility usage by sex

Source: Ghana Statistical Service, 2010 Population and Housing Census

As part of the contemporary globalisation phenomenon, internet has become a vital communication facility for people, businesses and organisations in district. Table 5.1 shows that less than one (0.9%) percent of the population 12 years and older in the district has access to or use internet services. Again the proportion males using internet facility is higher that of females and even higher than the district average.

#### 5.3 Household Ownership of Desktop or Laptop Computers

Ownership of desktop and laptop computers is essential for easy access to internet, electronic mail and other services. Table 5.2 reveals that 1.3 percent of households in the district reported to have desktop/laptop computers. Many more male headed households (1.4%) own desktop/laptop computers than female headed households (1.1%).

The low ownership of Desktop/Laptop computers by households in the district might be due to high cost of computers and also the relatively high illiteracy rate (17%). Fortunately, the central government has initiated a programme dubbed 'a laptop per child' to improve the ownership level in the district and facilitate computer usage, particularly among pupils and students.

Sou of	Numb house	per of holds	Househo deskto com	Households having desktop/laptop computers		
Household head	Number	Percent	Number	Percent		
Total	15,169	100.0	203	1.3		
Male	11,885	100.0	167	1.4		
Female	3,284	100.0	36	1.1		

 Table 5.2: Households having desktop/ laptop computer

 by sex of head

## CHAPTER SIX DISABILITY

#### 6.1 Introduction

Generally, persons with disability in Ghana are often regarded as unproductive and incapable of contributing meaningfully to the development of society. They are rather seen as constituting an economic burden on the family and the society at large, which leaves them in vicious cycle of poverty. In Ghana, there are rarely strong disability movements and civil society groups actively working to improve the living conditions for persons living with disability (PLWD). The situation is changing though, as a number of national policies and strategies targeting the needs of persons with disability are implemented either individually in different sectors or as crosscutting national programmes. This chapter aims at updating knowledge on population with disability, type of disability and distribution of disability by type of locality.

#### 6.2 **Population with Disability**

According to the 2010 PHC National Report on Disability (GSS, 2012), Ghana has about two out of five persons in the population with disabilities (38.3%). Similarly, almost the same proportions of males (38.2%) and females (38.5%) have one type of disability or the other.

It should be noted that, data on disability is a multiple response data and therefore total types of disability will not produce population with disability. The results of the 2010 PHC reveal that, there are 3,941 persons with disability in the Bawku West District representing 4.2 percent of the population. About 30.4 percent of the population of the district has more than one type of disabilities. Table 6.1 describes the proportional distribution of the number of times a specific disability was reported by an individual in the district. The data in Table 6.1 indicate that there is almost the same number of females (4.2%) with some form of disability as males (4.2%).

	Both	sexes	xes Male		Fem	nale
Disability Type	Number	Percent	Number	Percent	Number	Percent
All localities						
Total	94,034	100.0	45,114	100.0	48,920	100.0
Without disability	90,093	95.8	43,212	95.8	46,881	95.8
With disability	3,941	4.2	1,902	4.2	2,039	4.2
Sight	1,481	37.6	700	36.8	781	38.3
Hearing	851	21.6	360	18.9	491	24.1
Speech	495	12.6	253	13.3	242	11.9
Physical	772	19.6	381	20.0	391	19.2
Intellect	906	23.0	455	23.9	451	22.1
Emotion	464	11.8	233	12.3	231	11.3
Other	172	4.4	78	4.1	94	4.6
Urban						
Total	8,628	100.0	4,062	100.0	4,566	100.0
Without disability	8,361	96.9	3,940	97.0	4,421	96.8
With disability	267	3.1	122	3.0	145	3.2
Sight	83	31.1	34	27.9	49	33.8
Hearing	40	15.0	12	9.8	28	19.3
Speech	43	16.1	23	18.9	20	13.8
Physical	83	31.1	35	28.7	48	33.1
Intellect	53	19.9	24	19.7	29	20.0
Emotion	53	19.9	25	20.5	28	19.3
Other	17	6.4	10	8.2	7	4.8
Rural						
Total	85,406	100.0	41,052	100.0	44,354	100.0
Without disability	81,732	95.7	39,272	95.7	42,460	95.7
With disability	3,674	4.3	1,780	4.3	1,894	4.3
Sight	1,398	38.1	666	37.4	732	38.6
Hearing	811	22.1	348	19.6	463	24.4
Speech	452	12.3	230	12.9	222	11.7
Physical	689	18.8	346	19.4	343	18.1
Intellect	853	23.2	431	24.2	422	22.3
Emotion	411	11.2	208	11.7	203	10.7
Other	155	4.2	68	3.8	87	4.6

Table 6.1: Population by type of locality and sex

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 6.3 Types of Disability

From Table 6.1, sight disability is the commonest form of disability (37.6%) in the district followed by intellectual disability (23.0%). Also, 21.6 percent of the people living disability has hearing disability, while 19.6 percent have some form of physical disability. Both males and females persons with disabilities have majority of persons living with sight disabilities (36.8% and 38.3% respectively). However, while intellectual disability is the second commonest among males, hearing disability is the second commonest among females. (Table 6.1)

In the urban areas of the district, the top three types of disability are sight (31.1%), physical (31.1%) and Intellectual and emotional disabilities (19.9% each). On the other hand, in the rural areas, majority of the disabled suffer from sight (38.1%), intellectual (23.2%) and hearing (22.1%) disabilities.

#### 6.4 Disability and Economic Activity

Table 6.2 shows persons 15 years and older with disability by economic activity status and sex. Of the district population with disability 15 years and older, 58.1 percent are employed, 0.7 percent are unemployed while 41.2 percent are economically not active. Majority of persons with disabilities (for most type of disabilities) are employed. However, those with Emotional disability (65.2%) are the highest employed persons with disabilities in the district.

	4 11 0		<b>F</b> 1		**		Economi	cally Not
	All S	tatus	Empl	oyed	Unemp	ployed	Act	ive
Sex/Disability type	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes								
Total	51,580	100.0	40,215	78.0	555	1.1	10,810	21.0
Without disability	48,490	100.0	38,420	79.2	533	1.1	9,537	19.7
With disability	3,090	100.0	1,795	58.1	22	0.7	1,273	41.2
Sight	1,308	100.0	631	48.2	7	0.5	670	51.2
Hearing	622	100.0	374	60.1	4	0.6	244	39.2
Speech	309	100.0	192	62.1	3	1.0	114	36.9
Physical	632	100.0	304	48.1	5	0.8	323	51.1
Intellect	610	100.0	390	63.9	6	1.0	214	35.1
Emotion	385	100.0	251	65.2	5	1.3	129	33.5
Other	136	100.0	76	55.9	0	0	60	44.1
Male								
Total	23,043	100.0	18,386	79.8	255	1.1	4,402	19.1
Without disability	21,583	100.0	17,467	80.9	244	1.1	3,872	17.9
With disability	1,460	100.0	919	62.9	11	0.8	530	36.3
Sight	608	100.0	327	53.8	3	0.5	278	45.7
Hearing	238	100.0	164	68.9	3	1.3	71	29.8
Speech	153	100.0	106	69.3	1	0.7	46	30.1
Physical	305	100.0	160	52.5	1	0.3	144	47.2
Intellect	312	100.0	207	66.3	5	1.6	100	32.1
Emotion	194	100.0	126	64.9	3	1.5	65	33.5
Other	66	100.0	39	59.1	0	0	27	40.9
Female								
Total	28 537	100.0	21 829	76 5	300	11	6 408	22.5
Without disability	26,907	100.0	20,953	70.9	289	1.1	5 665	21.0
With disability	1 630	100.0	20,955 876	537	11	0.7	743	45.6
Sight	700	100.0	304	43 A	4	0.7	392	56.0
Hearing	384	100.0	210		1	0.0	173	45 1
Speech	156	100.0	86	55.1	1	13	68	43.6
Physical	327	100.0	144	<i>14</i> 0	2	1.5	170	43.0 54.7
Intellect	200	100.0	192	61 /	4	0.2	117	38.2
Emotion	290 101	100.0	105	65 /	1	0.5	114 64	30.5
	171	100.0	125	52.0	2	1.0	22	33.3 47.1

 Table 6.2: Persons 15 years and older with disability by economic activity status and sex

Source: Ghana Statistical Service, 2010 Population and Housing Census

Also, unemployment among persons with disabilities remains generally low, however, rates of those with emotional disability (1.3%) are the highest unemployed persons with disabilities. Majority of persons with sight disabilities (51.2%) and physical disabilities (51.1%) are among those who are economically not active.

There are little variation among the sexes considering disability and economic activity status, generally it follows similar patterns as is observed for total disability status.

#### 6.5 Disability, Education and Literacy

Educational level is generally low among the population with disability. Table 6.3 shows population 3 years and older by sex, disability type and level of education. The percentage of persons with disabilities (PWDs) who have never attended school is 75.4 percent. However, some persons with disabilities have attained some basic education (18.6%). Only, 2.4 percent of PWDs have attained at least SSS/SHS and higher education. Majority of PWDs with sight impairment (81.6%) have never attended school, while 14.7 percent of them have attained some basic level education. Only 1.9 percent of persons with sight disability have attained SHS and above education.

			Number					Percent		
-					Sec/SHS					Sec/SHS
Sex/Disability			Pre-		and			Pre-		and
type	Total	Never	Prim	Basic	higher	Total	Never	Prim	Basic	higher
Both Sexes										
Total	86,221	45,090	6,851	30,283	3,997	100.0	52.3	7.9	35.1	4.6
No disability	82,383	42,197	6,714	29,568	3,904	100.0	51.2	8.1	35.9	4.7
With a disability	3,838	2,893	137	715	93	100.0	75.4	3.6	18.6	2.4
Sight	1,449	1,182	27	213	27	100.0	81.6	1.9	14.7	1.9
Hearing	839	640	37	153	9	100.0	76.3	4.4	18.2	1.1
Speech	458	339	18	89	12	100.0	74	3.9	19.4	2.6
Physical	749	559	14	142	34	100.0	74.6	1.9	19	4.5
Intellectual	874	628	56	181	9	100.0	71.9	6.4	20.7	1
Emotional	452	337	13	91	11	100.0	74.6	2.9	20.1	2.4
Other	166	131	4	26	5	100.0	78.9	2.4	15.7	3
Male										
Total	41,070	18,879	3,416	16,134	2,641	100.0	46	8.3	39.3	6.4
No disability	39,216	17,574	3,350	15,718	2,574	100.0	44.8	8.5	40.1	6.6
With a disability	1,854	1,305	66	416	67	100.0	70.4	3.6	22.4	3.6
Sight	684	535	13	116	20	100.0	78.2	1.9	17	2.9
Hearing	357	241	17	92	7	100.0	67.5	4.8	25.8	2
Speech	237	166	8	54	9	100.0	70	3.4	22.8	3.8
Physical	370	248	9	91	22	100.0	67	2.4	24.6	5.9
Intellectual	444	307	23	106	8	100.0	69.1	5.2	23.9	1.8
Emotional	229	162	7	52	8	100.0	70.7	3.1	22.7	3.5
Other	76	60	1	11	4	100.0	78.9	1.3	14.5	5.3
Female										
Total	45,151	26,211	3,435	14,149	1,356	100.0	58.1	7.6	31.3	3
No disability	43,167	24,623	3,364	13,850	1,330	100.0	57	7.8	32.1	3.1
With a disability	1,984	1,588	71	299	26	100.0	80	3.6	15.1	1.3
Sight	765	647	14	97	7	100.0	84.6	1.8	12.7	0.9
Hearing	482	399	20	61	2	100.0	82.8	4.1	12.7	0.4
Speech	221	173	10	35	3	100.0	78.3	4.5	15.8	1.4
Physical	379	311	5	51	12	100.0	82.1	1.3	13.5	3.2
Intellectual	430	321	33	75	1	100.0	74.7	7.7	17.4	0.2
Emotional	223	175	6	39	3	100.0	78.5	2.7	17.5	1.3
Other	90	71	3	15	1	100.0	78.9	3.3	16.7	1.1

<b>Table 6.3:</b>	Population	3 years and	older by sex,	disability ty	pe and level of	education
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Source: Ghana Statistical Service, 2010 Population and Housing Census

It significant to mention that, persons with intellectual and hearing impairments are among the lowest with educational attainment up to SSS/SHS and above. Also, the proportion of persons with hearing disabilities is the second highest as far as never been to school is concern.

## CHAPTER SEVEN AGRICULTURE

#### 7.1 Introduction

Agriculture plays a central role in promoting growth and poverty reduction in Ghana. Ghana therefore needs an agricultural revolution based on sustained growth in order to raise Ghanaians from poverty and improve livelihoods significantly. This chapter presents analysis of data on agricultural activities in the Bawku West District, with the main focus on households in agriculture and types of farming activities.

#### 7.2 Households in Agriculture

Households in agriculture refer to households with at least one member engaged in one agricultural activity or another. Table 7.1 presents information on the total number of households engaged in agricultural activities such as crop farming, tree planting, livestock rearing and fish farming. The table indicates that, there are 15,169 households in the district with 14,159 of them in agriculture. Thus, majority of the households (93.3%) are engaged in agricultural activities, only 6.7 are not engaged in any form of agricultural activity.

	Total Urban			Dural		
			UIDall		NU 1	
Agricultural Activity	Number	Percent	Number	Percent	Number	Percent
Total Households	15,169	100.0	1,724	100.0	13445	100.0
Households engages in Agriculture	14,159	93.3	1,180	68.4	12,979	96.5
Households not engaged in Agriculture	1,010	6.7	544	31.6	466	3.5
Crop Farming	13,889	98.1	1,117	94.7	12,772	98.4
Tree Planting	41	0.3	2	0.2	39	0.3
Livestock Rearing	12,187	86.1	756	64.1	11,431	88.1
Fish Farming	15	0.1	3	0.3	12	0.1

 Table 7.1: Households by agricultural activity and locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 7.1 indicates, there are more households in agricultural activities in the rural areas (96.5%) than the urban areas (68.4%).

### 7.3 Type of Farming Activities

Table 7.1 reports on the distribution of the different agricultural activities. The data show that some households undertake more than one activity. Thus the 14,159 households in agriculture are engaged in 26,132 agricultural activities giving an average of 1.8 activities per household.

Like other districts in the region, the majority (93.3%) of people in the district are engaged in agriculture. The district has substantial agricultural resources, which includes large expands of land suitable for agriculture and the Volta Lake which has high potential for fish farming. Table 7.1 shows that, 98.1 percent of agricultural households are engaged in crop farming compared to 86 .1 percent engaged in livestock rearing (. There are few households in the district engaged in tree planting (0.3%) and fish farming (0.1%).

Figure 7.1 shows that the number of households in crop farming, tree growing and livestock rearing is higher in the rural areas than the urban areas. Crop farming remains the largest

(agriculture activity for both urban and rural areas of the districts). This is closely followed by livestock rearing, which is the second highest agricultural activity for both urban and rural areas. However, the number of households in fish farming in the urban areas is larger than the households in rural ones.



Figure 7.1: Household in agricultural activity by locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 7.4 Distribution of livestock rearing

Livestock rearing is the second most important agricultural activity in the district, (both in the rural and urban areas). Table 7.2 reveals that, a total number of 455,687 pieces of livestock are reared in the district. There are 33,682 livestock keepers with an average of 13.5 animals per keeper. In the district, chicken are mostly reared (30.9%) and accounts for 23.2 of animal keepers, with an average 18.1 chickens per keeper, followed by guinea fowl (30.5%) which accounts for 20.1 percent of keepers and an average of 20.5 birds per keeper.

Although livestock rearing is the second engaged agricultural activity, cattle form only 8.6 percent of the animals and accounts for 10.6 percent of keepers. Snail, are the least reared in the district. Goat rearing constitutes 17.3 percent of animal rearing and 26.6 percent of keepers.

	Animals		Kee	pers	Average Animal
Livestock/other animals	Number	Percent	Number	Percent	per Keeper
Total	455,687	100.0	33,682	100.0	13.5
Beehives	259	0.1	41	0.1	6.3
Cattle	39,190	8.6	3,570	10.6	11.0
Chicken	140,987	30.9	7,809	23.2	18.1
Dove	862	0.2	60	0.2	14.4
Duck	3,098	0.7	288	0.9	10.8
Goat	78,777	17.3	8,948	26.6	8.8
Grass-cutter	339	0.1	38	0.1	8.9
Guinea fowl	138,868	30.5	6,772	20.1	20.5
Ostrich	1,435	0.3	64	0.2	22.4
Pig	8,420	1.8	1,254	3.7	6.7
Rabbit	263	0.1	33	0.1	8.0
Sheep	37,989	8.3	4,157	12.3	9.1
Silk worm	22	0.0	4	0.0	5.5
Snail	5	0.0	1	0.0	5.0
Turkey	95	0.0	26	0.1	3.7
Other (specify)	4,735	1.0	602	1.8	7.9
Fish farming	184	0.0	7	0.0	26.3
Inland fishing	130	0.0	3	0.0	43.3
Marine fishing	29	0.0	5	0.0	5.8

 Table 7.2: Distribution of livestock, other animals and keepers

## CHAPTER EIGHT HOUSING CONDITIONS

#### 8.1 Introduction

Housing is a basic necessity of life and performs a vital role in the economic development of any country. However, the delivery of housing in Ghana has not been able to meet demand. This chapter focuses on housing stock and conditions, type of dwelling, holding and tenancy arrangement. It discusses issues of construction materials, room occupancy, access to utilities and household facilities, main sources of water for drinking and for other domestic uses and bathing and toilet facilities that exist in the district.

#### 8.2 Housing Stock

The United Nations defines a house as a structurally separate and independent place of abode such that a person or group of persons can isolate themselves from the hazards of climate such as storms and the sun.

As seen in Table 8.1, there are 11,284 houses in the district of which rural house stock (88.7%) is significantly more than the urban housing stock (11.3%). The number of households in the district is 15,169 with an average of 1.3 household per house, which is slightly fewer than the regional average of 1.6 households. Out of the total households in the district, 11.4 percent live in urban compared to 88.6 percent in rural areas. The average household per house in the urban area is 1.4 which is higher than that of rural areas (1.3).

The population per house in the district is 8.2 which are lower than the regional average of 9.1. Considering the population per house by locality, urban areas have 6.5 persons per house compared 8.5 percent for rural ones. The average household size in the district is 6.1 which, is slightly higher than the regional average of 5.8. In terms of locality, the urban average household size is 4.8 compared to 6.3 for rural area.

	Total				
Categories	country	Region	District	Urban	Rural
Total population	24,658,823	1,046,545	94,034	8,628	85,406
Total household population	24,076,327	1,034,704	93,028	8,339	84,689
Number of houses	3,392,745	114,034	11,284	1,277	10,007
Number of households	5,467,054	177,629	15,169	1,724	13,445
Average households per house	1.6	1.6	1.3	1.4	1.3
Population per house*	7.1	9.1	8.2	6.5	8.5
Average household size	4.4	5.8	6.1	4.8	6.3

Table 8.1:	Stock of houses	and househ	olds by type	of locality
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Source: Ghana Statistical Service, 2010 Population and Housing Census.

#### 8.3 Type of Dwelling, Holding and Tenancy Arrangement

Dwelling is one of the basic necessities for human wellbeing and survival. The type of dwelling and facilities used by households affect their health, productivity, welfare and security. Information was therefore collected on the type of dwelling, holding and tenancy arrangement. These are essential for human settlement planning programmes and policies.

#### 8.3.1 Type of dwelling

Table 8.2 shows that there are 15,169 dwelling units in the Bawka West District. The data also indicate that compound houses form the majority of dwelling units (47.7%), followed by huts/buildings (same compound) (24.7%), and separate houses (20.7%). The least type of dwelling units in the district are improvised home (kiosk/container etc.) and uncompleted building representing less than one percent.

In terms of type of dwelling by sex of household head in the district, more female headed households dwell in compound houses (49.5%) than male headed households (47.2%). However, many more male headed households (24.9%) reside in huts (same compound) than that of females headed households (23.8%). Similarly, many more male headed households (21.2%) reside in separate house type compared to females headed households (21.2%).

In terms of type of dwelling by locality, compound house type is common in both rural and urban areas. However, a high percentage of compound houses are found in urban areas (66.5%) than rural areas (45.3%). Similarly, huts (same compound) are the next common form of dwelling units in the district. Also separate house type which forms the third form of dwelling units recorded a more percentage in the rural areas (22.2%) than the urban areas (8.7%)

	Total		То	Total		Female		
Type of dwelling	country	Region	Number	Percent	headed	headed	Urban	Rural
Total	5,467,054	177,629	15,169	100.0	100.0	100.0	100.0	100.0
Separate house	1,471,391	29,787	3,135	20.7	21.2	18.9	8.7	22.2
Semi-detached house	391,548	6,836	277	1.8	1.8	2.0	2.3	1.8
Flat/Apartment	256,355	1,459	49	0.3	0.3	0.5	1.0	0.2
Compound house (rooms)	2,942,147	103,666	7,239	47.7	47.2	49.5	66.5	45.3
Huts/Buildings (same compound)	170,957	22,735	3,740	24.7	24.9	23.8	17.2	25.6
Huts/Buildings (different compound)	36,410	11,616	639	4.2	4.0	4.8	3.4	4.3
Tent	10,343	300	25	0.2	0.2	0.1	0.1	0.2
Improvised home (kiosk/container etc)	90,934	183	16	0.1	0.1	0.0	0.0	0.1
Living quarters attached to office/shop	20,499	348	40	0.3	0.3	0.2	0.3	0.3
Uncompleted building	66,624	554	8	0.1	0.0	0.1	0.3	0.0
Other	9,846	145	1	0.0	0.0	0.0	0.0	0.0

<b>Table 8.2:</b>	Type of occupied dwelling unit by sex of household head and type
	of locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.3.2 Holding and tenancy arrangement

Table 8.3 shows ownership status of dwelling by sex of household head and type of locality. The data indicate that 91.5 percent of the dwellings are owned by a household member. Also 3.5 percent of dwellings occupied by households are owned by a relative who is not a member of the household, and about the same number of dwelling units (3.5%) are owned by private individuals.

The majority of dwelling units owned by a household member in the district belong to male headed households (92.5%), compared to 87.5 percent of female headed households. There are more female headed households (4.8%) than male headed households (3.1%) living in dwelling units owned by relatives who are not a household member. Similarly, there are more female headed households (5.3%) than male headed households (3.0%) living in dwelling units owned by other private individual.

				District						
	Total		Tot	Total		Female				
Ownership status	Country	Region	Number	Percent	Headed	headed	Urban	Rural		
Total	5,467,054	177,629	15,169	100.0	100.0	100.0	100.0	100.0		
Owned by household member	2,883,236	154,016	13,877	91.5	92.5	87.9	65.3	94.8		
Being purchased (e.g. mortgage)	45,630	721	11	0.1	0.1	0.1	0.1	0.1		
Relative not a household member	851,630	6,035	527	3.5	3.1	4.8	8.8	2.8		
Other private individual	1,439,021	12,181	530	3.5	3.0	5.3	21.5	1.2		
Private employer	83,610	480	14	0.1	0.1	0.1	0.2	0.1		
Other private agency	21,123	267	15	0.1	0.1	0.2	0.2	0.1		
Public/Government ownership	118,804	3,686	177	1.2	1.1	1.5	3.4	0.9		
Other	24,000	243	18	0.1	0.1	0.2	0.5	0.1		

# Table 8.3: Ownership status of dwelling by sex of household head and type of locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

It can be observed from Figure 8.1 that dwelling units owned by a household member represent a large proportion of houses in the rural areas (94.8%) than in the urban areas (65.3%). Figure 8.1 also shows that dwelling units owned by other private individual represent a large proportion of houses in the urban areas (21.5%) than in rural areas (1.2%).



Figure 8.1: Ownership status of dwelling by sex of household head and type of locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.4 Construction Materials

This section discusses the responses to questions on the main construction material used for the outer wall, the roof and the floor of houses in the district. The type of construction material used, the general condition of the dwelling, its location, and durability are indicators of the socio-economic status of the households.

#### 8.4.1 Construction material for the floor

Table 8.4 shows that, mud brick/earth is the main construction materials used for outer walls of houses (92.9%) in the district, followed by blocks/concrete (4.3%). Bamboo and burnt bricks are the least form of constructional materials used for outer walls of houses in the Bawku West District.

In both urban and rural areas, more than three-quarter of the outer walls of dwellings units are made of mud or earth materials. Table 8.4 shows that, mud brick/earth are mostly used construction material for outer walls in the rural areas (94.9%) than in the urban areas (79.0%). Similarly, cement blocks/concrete is another construction material for outer walls, mainly used in the urban areas (18.2%) than the urban areas (2.4%). Burnt bricks are the least used form of constructional materials for outer walls of houses in the urban areas while bamboo are the least used form of constructional materials used for outer walls of houses in the rural areas.

			Type of locality				
	Total		То	tal			
Material for Outer wall	country	Region	Number	Percent	Urban	Rural	
Total	5,817,607	182,845	15,837	100.0	100.0	100.0	
Mud brick/Earth	1,991,540	147,624	14,719	92.9	79.0	94.9	
Wood	200,594	1,606	181	1.1	0.5	1.2	
Metal sheet/Slate/Asbestos	43,708	855	46	0.3	0.6	0.3	
Stone	11,330	372	31	0.2	0.4	0.2	
Burnt bricks	38,237	233	7	0.0	0.0	0.1	
Cement blocks/Concrete	3,342,462	29,321	688	4.3	18.2	2.4	
Land Crete	104,270	1,890	43	0.3	0.2	0.3	
Bamboo	8,206	54	3	0.0	0.1	0.0	
Palm leaf/Thatch (grass)/Raffia	38,054	435	81	0.5	1.0	0.4	
Other	39,206	455	38	0.2	0.1	0.3	

 Table 8.4: Main construction material for outer wall of dwelling unit by type of locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.4.2 Construction material for the floor

Table 8.5 reveals that, cement/concrete (58.3%) and earth/mud (39.8%) are the main construction material for the floors of dwelling units in the district. The use of cement blocks/concrete for the construction of floor is slightly lower in the district (58.3%) than at the regional level (65.8%). However, wood and terrazzo/terrazzo tiles are hardly used as constructional materials for the floor in the district.

Cement/concrete is mostly used as construction material for floors in the urban areas (73.3%) than in the rural areas (56.4%). Similarly, earth/mud is another construction material for the housing floor that is used more in the rural areas (41.8%) than in the urban ones (23.8%).

			Type of locality				
	Total		To	tal			
Materials for the floor	country	Region	Number	Percent	Urban	Rural	
Total	5,467,054	177,629	15,169	100.0	100.0	100.0	
Earth/Mud	872,161	56,272	6,031	39.8	23.8	41.8	
Cement/Concrete	4,255,611	116,911	8,842	58.3	73.3	56.4	
Stone	32,817	1,623	94	0.6	0.3	0.7	
Burnt brick	6,537	89	11	0.1	0.2	0.1	
Wood	52,856	49	1	0.0	0.0	0.0	
Vinyl tiles	57,032	196	8	0.1	0.4	0.0	
Ceramic/Porcelain/Granite/Marble tiles	88,500	1,181	151	1.0	1.8	0.9	
Terrazzo/Terrazzo tiles	85,973	401	2	0.0	0.1	0.0	
Other	15,567	907	29	0.2	0.1	0.2	

Table 8.5:	Main	construction	materials	for floor	of dwelling	unit by type	e of locality
1 abic 0.5.	TATCHT	construction	mater and		or a weining	, unit by type	c of locality

#### 8.4.3 Construction material for roofing

Table 8.6 shows types of roofing material for dwelling units in the district by locality. The table reveals that, metal sheet (61.6%) and thatch/palm leaf raffia (29.9%) are the two main roofing materials for dwelling units in the district. The use of metal sheet is higher at the regional level (67.2%). Slate/asbestos, cement/concrete, roofing tiles and bamboo are hardly used as roofing materials. The combine use of these materials all together constitute less than one percent in the district.

Data on roofing material by locality indicates that metal sheets are used more in urban (87.1%) than in rural areas (58.1%). On the other hand the use of thatch/palm leaf or raffia is more in the rural areas (33.0%) than the urban areas (7.5%).

			Type of locality				
	Total		То	tal			
Materials for the floor	country	Region	Number	Percent	Urban	Rural	
Total	5,817,607	182,845	15,837	100.0	100.0	100.0	
Mud/Mud bricks/Earth	80,644	22,227	936	5.9	1.5	6.5	
Wood	45,547	3,085	207	1.3	2.8	1.1	
Metal sheet	4,152,259	122,942	9,753	61.6	87.1	58.1	
Slate/Asbestos	759,039	646	13	0.1	0.1	0.1	
Cement/Concrete	141,072	879	32	0.2	0.2	0.2	
Roofing tile	31,456	162	47	0.3	0.0	0.3	
Bamboo	71,049	586	31	0.2	0.4	0.2	
Thatch/Palm leaf or Raffia	500,606	30,722	4,732	29.9	7.5	33.0	
Other	35,935	1,596	86	0.5	0.4	0.6	

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.5 Room Occupancy

This section examines the total number of rooms occupied by the households includes living, dining and bed rooms it however excludes bathrooms, toilet and kitchen. Sleeping rooms are the number of rooms used for sleeping. Information on the number of sleeping rooms occupied by the household is an indication of the level of overcrowding. It also reflects the socio economic status of the household.

#### 8.5.1 Household size and room occupancy

Table 8.7 indicates that the household size of four (14.2%) and five (14.2%) constitute the majority of household sizes in the district while the household size with nine (9) members forms the least (3.5%). A total of 45.6 percent of a single household member sleep in one room. Similarly, 57.1 percent of two member households sleep in one room (24.4%) or two rooms (32.7%), while about 53.9 percent of household size of three sleep in either 2 rooms (29.2%) or 3 (24.7%) and four (52.4%) sleep in either 2 or 3 rooms.

Also, 10.5 percent of households with size 4 sleep in one room, while 19.0 percent of households with size 5 sleep in two rooms. As much as 13 percent of households with size 9 sleep in 4 rooms, while 0.1 percent sleep in one room.

	То	tal				Number	of sleepi	ng rooms			
											Nine
House-											rooms
hold			One	Two	Three	Four	Five	Six	Seven	Eight	or
size	Number	Percent	room	rooms	rooms	rooms	rooms	rooms	rooms	rooms	more
Total	15169	100.0	8.5	16.8	19	16.7	11.8	9.2	5.8	4.1	8.2
1	813	100.0	45.6	25.6	12.9	7.4	3.4	3.1	0.6	0.5	0.9
2	1117	100.0	24.4	32.7	19.7	11.5	5.2	2.9	1.6	1.1	1
3	1625	100.0	18.5	29.2	24.7	12	6.5	4.3	1.5	1.2	1.9
4	1846	100.0	10.5	28.2	24.2	16.4	8.6	4.8	3.1	1.9	2.5
5	2002	100.0	4.1	19	27.6	20.6	12	7.5	4.1	2.2	2.8
6	1905	100.0	2	14.3	23.7	21.7	14	9.3	6.5	3.6	4.8
7	1559	100.0	1.3	10.2	19.2	22.5	14.8	12.7	8.1	4.2	6.9
8	1167	100.0	0.6	7.2	14.8	21.6	18.2	13.5	7.3	6.3	10.5
9	838	100.0	0.2	3.5	13	17.3	18.1	16.1	11.2	6.3	14.2
10+	2297	100.0	0.1	2.3	5.3	12.1	14.7	15.6	11.4	10.5	28.1

Table 8.7: Household size and number of sleeping rooms occupied in dwelling unit

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.6 Access to Utilities and Household Facilities

The objective of this section is to provide the district with up-to-date socio-economic data on lighting, source of cooking fuel and cooking space by households for planning various interventions at district levels.

#### 8.6.1 Lighting

Table 8.8 shows the main source of lighting of dwelling units by type of locality in the district. Table 8.8 reveals that, flashlight/torch is the main source of lighting in the district with 43.1 percent of the households using it. This is higher than the regional average of 27.6 percent.

Kerosene lamp (39.8 %) is the second most used type of lighting in the district after electricity (mains).

			Type of locality				
	Total		To	tal			
Main source of light	country	Region	Number	Percent	Urban	Rural	
Total	5,467,054	177,629	15,169	100.0	100.0	100.0	
Electricity (mains)	3,511,065	42,866	2,168	14.3	47.7	10.0	
Electricity (private generator)	36,142	1,009	77	0.5	0.4	0.5	
Kerosene lamp	971,807	80,752	6,041	39.8	22.0	42.1	
Gas lamp	9,378	412	24	0.2	0.3	0.1	
Solar energy	9,194	612	38	0.3	0.1	0.3	
Candle	41,214	293	10	0.1	0.1	0.1	
Flashlight/Torch	858,651	49,068	6,543	43.1	28.6	45.0	
Firewood	13,241	1,191	122	0.8	0.5	0.8	
Crop residue	4,623	830	94	0.6	0.1	0.7	
Other	11,739	596	52	0.3	0.2	0.4	

 Table 8.8: Main source of lighting of dwelling unit by type of locality

Figure 8.2 shows the main source of lighting by locality type. The figure shows that, electricity (mains) is the main source of lighting in urban area (47.7%), as against 10.0 percent for rural areas. Flashlight/torch remains the main source of lighting in rural area (45.0%) but accounts for 28.6 percent of lighting in urban area. On the other hand, the use of kerosene lamp as a source of lighting is mostly used in the rural areas (42.1%) compared to the urban ones (22.0%).



Figure 8.2: Main source of lighting by locality

#### 8.6.2 Source of cooking fuel used by households

Table 8.9 describes the source of cooking fuel and cooking space by the households in the district. It can be observed from the table that, wood (80.2%) is the main source of cooking fuel used by households. This is higher compared to the regional average of 60.4%. Animal residue accounts for 9.7 percent of cooking fuel used while charcoal 6.6 percent.

In terms of locality, wood is the predominant cooking fuel for both rural (83.8%) and urban areas (52.0%). Charcoal is mostly used in the urban areas (30.6%) than the rural areas (3.5%). With regard to saw dust, its use as cooking fuel is relatively low and there is no significant variation between the rural and the urban areas.

#### 8.6.3 Cooking space by households

In terms of cooking space, Table 8.9 shows that, 55.1 percent of households use separate room exclusively as cooking space which is the highest in the district. Also, 19.2 percent of households use an enclosure without roof as space for cooking while 14.4 percent of households use open space in compound for cooking. About 4.2 percent of households cook on their verandas. However, other forms of cooking space accounts for less than five percent.

In terms of locality, households using separate room exclusively as cooking space is more predominant in rural (56.2%) than the urban areas (47.2%). Veranda is also mostly used in urban (19.6%) than in the rural areas (2.2%).

Source: Ghana Statistical Service, 2010 Population and Housing Census

			Type of locality				
Main source of cooking fuel for	Total		То	tal			
household	country	Region	Number	Percent	Urban	Rural	
Main source of cooking fuel for house	nold						
Total	5,467,054	177,629	15,169	100.00	100.00	100.00	
None no cooking	306,118	3,272	192	1.30	4.20	0.90	
Wood	2,197,083	107,310	12,164	80.20	52.00	83.80	
Gas	996,518	8,735	270	1.80	9.80	0.80	
Electricity	29,794	383	37	0.20	0.30	0.20	
Kerosene	29,868	402	13	0.10	0.30	0.10	
Charcoal	1,844,290	27,021	997	6.60	30.60	3.50	
Crop residue	45,292	29,725	1,471	9.70	2.80	10.60	
Saw dust	8,000	93	12	0.10	0.10	0.10	
Animal waste	2,332	124	3	0.00	0.00	0.00	
Other	7,759	564	10	0.10	0.00	0.10	
Cooking space used by household							
Total	5,467,054	177,629	15,169	100.00	100.00	100.00	
No cooking space	386,883	6,822	616	4.10	5.20	3.90	
Separate room for exclusive use of							
household	1,817,018	75,393	8,365	55.10	47.20	56.20	
Separate room shared with other							
household(s)	410,765	4,664	218	1.40	2.80	1.30	
Enclosure without roof	117,614	31,567	2,907	19.20	6.10	20.80	
Structure with roof but without walls	349,832	1,788	170	1.10	0.70	1.20	
Bedroom/Hall/Living room)	74,525	572	66	0.40	1.70	0.30	
Veranda	1,173,946	18,444	630	4.20	19.60	2.20	
Open space in compound	1,115,464	38,038	2,182	14.40	16.60	14.10	
Other	21,007	341	15	0.10	0.10	0.10	

#### Table 8.9: Main source of cooking fuel, and cooking space used by households

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.7 Main Source of Water for Drinking and for Other Domestic Use

#### 8.7.1 Main source of water for drinking

Table 8.10 presents information on the main source of water for drinking and other domestic use by households. The table shows that, bore-hole/pump/tube well (65.2%) is the main source of drinking water in the district, followed by protected well (14.1%). The use of protected bottled water and other forms as source of drinking water is non-existent in the district.

Figure 8.3 presents data on main source of drinking water by locality type. It can be observed from the figure that bore-hole/pump/tube well is mostly used in both urban (68.0%) than rural areas (43.5%). However, the use of pipe-borne water (pipe borne inside dwelling, pipe borne outside dwelling and public tap/standpipe) is predominant in urban than the rural areas.



Figure 8.3: Main source of drinking water by locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.7.2 Main source of water for other domestic use

Similarly, for main source of water for other domestic use as shown in Table 8.10, borehole/pump/tube well is the predominant source (64.5%), followed by protected well (14.4%). On the other hand, rain water (0.1%), tanker supply/vendor provided (0.1%) and others (0.1%) are the least used sources of water for other domestic purposes.

With regards to locality type, water from bore-hole/pump/tube well is the most used source of water for other domestic purposes in both the rural areas (67.3%) and the urban areas (43.0%). However, the proportion of households using pipe-borne in dwelling is considerably higher in the urban areas (19.7%) than the rural areas (0.9%).

	Total	Total				
Source of drinking water	Country	Region	Number	Percent	Urban	Rural
Main source of drinking water for	or household					
Total	5,467,054	177,629	15,169	100.0	100.0	100.0
Pipe-borne inside dwelling	790,493	11,577	481	3.2	20.6	0.9
Pipe-borne outside dwelling	1,039,667	15,063	606	4.0	13.1	2.8
Public tap/Standpipe	712,375	5,179	577	3.8	13.6	2.6
Bore-hole/Pump/Tube well	1,267,688	101,817	9,890	65.2	43.5	68.0
Protected well	321,091	22,805	2,137	14.1	3.8	15.4
Rain water	39,438	223	11	0.1	0.0	0.1
Protected spring	19,345	683	55	0.4	0.6	0.3
Bottled water	20,261	82	7	0.0	0.1	0.0
Sachet water	490,283	694	32	0.2	0.5	0.2
Tanker supply/Vendor provided	58,400	267	4	0.0	0.1	0.0
Unprotected well	112,567	11,083	977	6.4	3.9	6.8
Unprotected spring	12,222	378	31	0.2	0.0	0.2
River/Stream	502,804	4,452	150	1.0	0.1	1.1
Dugout/Pond/Lake/Dam/Canal	76,448	3,175	210	1.4	0.0	1.6
Other	3,972	151	1	0.0	0.0	0.0

 Table 8.10: Main source of water of dwelling unit for drinking and other domestic purposes

	Total	Total Total		tal		
Source of drinking water	Country	Region	Number	Percent	Urban	Rural
Main source of water for other domestic use of household						
Total	5,467,054	177,629	15,169	100.0	100.0	100.0
Pipe-borne inside dwelling	905,566	11,408	463	3.1	19.7	0.9
Pipe-borne outside dwelling	1,089,030	13,957	577	3.8	11.7	2.8
Public tap/Standpipe	704,293	4,541	505	3.3	10.8	2.4
Bore-hole/Pump/Tube well	1,280,465	98,487	9,784	64.5	43.0	67.3
Protected well	465,775	24,798	2,187	14.4	6.4	15.4
Rain water	39,916	330	13	0.1	0.2	0.1
Protected spring	18,854	672	67	0.4	1.0	0.4
Tanker supply/Vendor provided	100,048	301	8	0.1	0.2	0.0
Unprotected well	152,055	11,607	945	6.2	5.0	6.4
Unprotected spring	15,738	650	59	0.4	0.2	0.4
River/Stream	588,590	6,125	284	1.9	1.7	1.9
Dugout/Pond/Lake/Dam/Canal	96,422	4,518	256	1.7	0.1	1.9
Other	10,302	235	21	0.1	0.1	0.1

# Table 8.10: Main source of water of dwelling unit for drinking and other domestic purposes (Cont'd)

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.8 Bathing and Toilet Facilities

#### 8.8.1 Toilet facility used by household

Table 8.11 shows the type of toilet facilities used by households in the district. The table shows that, the majority of households (86.3%) use no facility (bush/beach/field), followed by KVIP (6.6%). The least used toilet facilities by households are bucket/pan (0.1%).

Considering the type of toilet facilities used by households in different localities of the district, a high percentage of households have no facilities (bush/beach/field) (89.1%) in rural localities than in urban localities (64.4%) as shown in Figure 8.4. Similarly many more households use KVIP (18.9%) in urban than in rural areas (5.0%). The proportion of households without access to toilet facility is quite high in both urban and rural areas and likely to pose serious health challenge in the district.

Figure 8.4: Type of toilet facility by locality


#### 8.8.2 Bathing facility used by household

Table 8.11 shows that, majority of households use own bathroom for exclusive use (43.7%), followed by private open cubicle (23.3%). The least used bathing facilities by households are bathroom in another house (0.1%).

It can be observed from Table 8.11 that many more households use own bathroom for exclusive use (45.0%) in rural localities than in urban localities (33.6%). Similarly many more households use shared separate bathroom in the same house (33.4%) in urban area than rural area (13.1%).

			District					
	Total		То	tal				
Toilet facility/Bathing facility	country	Region	Number	Percent	Urban	Rural		
Toilet facility used by household								
Total	5,467,054	177,629	15,169	100.0	100.0	100.0		
No facilities (bush/beach/field)	1,056,382	146,329	13,084	86.3	64.4	89.1		
W.C.	839,611	6,050	152	1.0	6.1	0.3		
Pit latrine	1,040,883	5,266	472	3.1	2.4	3.2		
KVIP	572,824	6,196	997	6.6	18.9	5.0		
Bucket/Pan	40,678	405	9	0.1	0.1	0.1		
Public toilet (WC/KVIP/Pit Pan etc.)	1,893,291	12,828	428	2.8	8.0	2.2		
Other	23,385	555	27	0.2	0.1	0.2		
Bathing facility used by household								
Total	5,467,054	177,629	15,169	100.0	100.0	100.0		
Own bathroom for exclusive use	1,535,392	73,345	6,627	43.7	33.6	45.0		
Shared separate bathroom in the same								
house	1,818,522	33,370	2,331	15.4	33.4	13.1		
Private open cubicle	381,979	26,114	3,537	23.3	11.5	24.8		
Shared open cubicle	1,000,257	21,111	1,127	7.4	10.6	7.0		
Public bath house	140,501	2,391	23	0.2	0.1	0.2		
Bathroom in another house	187,337	479	12	0.1	0.2	0.1		
Open space around house	372,556	19,987	1,442	9.5	10.5	9.4		
River/Pond/Lake/Dam	14,234	437	28	0.2	0.1	0.2		
Other	16,276	395	42	0.3	0.1	0.3		

Table 8.11: Type of toilet facility	and bathing facility used by households by type
of locality	

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.9 Method of Waste Disposal

#### 8.9.1 Solid waste

Table 8.12 shows the main method of solid and liquid waste disposal by households in the district. About 29 percent of households dispose off their solid waste by burning. In urban/rural localities about one third of households (30.0%) either burn their solid waste or use public dump (34.1%) (Open space) for solid waste disposal.

#### 8.8.2 Liquid waste

With regards to liquid waste disposal, 47.5 percent of households in the district dispose their liquid waste onto their compound as shown in Table 8.12. Many more rural households (50.6%) than urban households (23.5%) dispose their liquid waste onto their compounds. Furthermore many urban households (66.3%) than rural households (35.6%) dispose their

liquid waste onto the street/outside. Sewerage systems (0.3%) are the least used liquid waste disposal method in urban localities.

			Type of locality					
	Total		То	tal				
Method of waste disposal	country	Region	Number	Percent	Urban	Rural		
Solid waste								
Total	5,467,054	177,629	15,169	100.0	100.0	100.0		
Collected	785,889	19,758	1,823	12.0	3.9	13.1		
Burned by household	584,820	44,337	4,491	29.6	26.2	30.0		
Public dump (container)	1,299,654	14,057	238	1.6	8.7	0.7		
Public dump (open space)	2,061,403	55,459	2,780	18.3	34.1	16.3		
Dumped indiscriminately	498,868	25,994	1,721	11.3	16.8	10.7		
Buried by household	182,615	12,201	2,717	17.9	5.2	19.5		
Other	53,805	5,823	1,399	9.2	5.2	9.7		
Liquid waste								
Total	5,467,054	177,629	15,169	100.0	100.0	100.0		
Through the sewerage system	183,169	4,062	84	0.6	0.3	0.6		
Through drainage system into a gutter	594,404	7,676	410	2.7	1.6	2.8		
Through drainage into a pit (soak away)	167,555	12,031	1,187	7.8	5.7	8.1		
Thrown onto the street/outside	1,538,550	105,548	5,925	39.1	66.3	35.6		
Thrown into gutter	1,020,096	6,029	280	1.8	1.9	1.8		
Thrown onto compound	1,924,986	41,258	7,212	47.5	23.5	50.6		
Other	38,294	1,025	71	0.5	0.6	0.5		

# Table 8.12: Method of solid and liquid waste disposal by type of locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

# CHAPTER NINE

# SUMMARY, CONCLUSIONS AND POLICY IMPLICATIONS

# 9.1 Introduction

The main objective for conducting the 2010 PHC was to provide the country with up-to-date socio-economic data for planning and evaluating the various government policy intervention programmes at national, regional and district levels. The district specific demographic and socio-economic information from 2010 PHC is therefore to help inform the goals and objectives of policies, targets to be achieved and strategies adopted for achieving such targets.

This report is the first for Bawku West District and is produced with the aim of providing useful data for planners, academics and policy makers.

# 9.2 Summary of Findings

# 9.2.1 Demographic Characteristics

# Population size and distribution

The total population of the district is 94,034 with more females constituting 52.0 percent. The population of the district constitutes 9.0 percent of the regional population. The district is mostly rural (90.8%) and the district's rural population is higher than the regional rural population (79.0%). The sex distribution shows that more females reside in urban areas (52.9%) than rural ones (51.9%) while few males reside in urban areas (47.1%) than rural areas (48.1%).

### Age-sex structure

The economically productive age group (15–64 years) constitutes 47.9 percent of the total population and the economically unproductive (0-14 years, and 65 years and older) forms about 52.1 percent. This means there is roughly a dependent person for every economically active compared to about 2 adults per dependent in more developed countries. The total dependency ratio in the district is 108.6, with child dependency ratio (94.2) being higher than old age (14.4) ratio.

### **Fertility**

The Total Fertility Rate for woman aged 15-49 years is 3.7 in the district and it is slightly higher than the regional average of 3.4 children per woman. The district has the third highest total fertility rate in the region. The Crude Birth Rate for the district stands at 23.7, which is also higher than the regional figure 22.6. Similarly, the General Fertility Rate of the district (106.3) is higher than the regional figure (97.5) but the same as that of Garu-Tempane District.

The data also show that 27,784 females representing 22.3 percent of the district's population and 243,377 females representing 23.3 percent of the population of the region belong to the reproductive age group (15-49years).

The district has 32,077 females with children ever born being 110,479 indicating that there are three children to every female (12 years and older). The number of children ever born

increases progressively from 15 children (for women aged 12-14 years) to 14,189 children (for women aged 35-39 years) and starts to decline for women aged 40 years and older. The same pattern is observed for both male children and female children even born and surviving.

# Mortality

The district recorded 838 deaths that occurred in households 12 months preceding the census night, presenting 7.4 percent of the regional household deaths. The data show that the district's crude death rate of 8.9 is lower than the regional rate of 10.8 and is among the lowest in the region.

In terms of causes of mortality, deaths due to accident/violence/homicide/suicide are only 5.1 percent while the remaining 94.9 percent is due to others causes. The data show that the district has a relatively low accident/violence/homicide/suicide death rate compared to other districts in the region.

# Migration

Migrants constitute 9,098 of the population in the district. A total of 4,065 of the migrants were born elsewhere in the region, followed by 5,033 born elsewhere in another region while the remaining 709 were born outside Ghana. The majority (35.8%) of migrants born elsewhere in the region have stayed 20+ years whilst 14.7 percent have stayed less than 10-19 years. On the other hand, 25.5 percent of the migrants born outside Ghana have stayed 20+ years relative to 11.6 percent who have stayed less than 1 year. In totality, 26.3 percent of migrants living in the district have stayed 1-4 years compare to 14.7 percent who have stayed for 10-19 years

## 9.2.2 Household Size, Structure and Composition

# Marital characteristics

The Bawku West District recorded 59,164 persons 12 years and older of which 52.2 percent is married while 36.0 percent has never been married. In addition, 11.7 per cent has been married before but at the time of the census was separated (1.0%), widowed (9.2%) and divorced (1.5%).

The data also show that a large proportion (95.5%) of the population of both sexes aged 12-14 years has never been married. Only a small proportion (0.5%) of the population of both sexes aged 25-29 years is in an informal marriage relation

### Nationality

Ninety-five (95.0) percent of the population of the district is Ghanaian with only 2.0 percent being non-Ghanaian. The majority of the population is Ghanaian by birth (94%). Persons with dual nationality constitute 3 percent while Ghanaians by naturalisation make up one percent.

### **Religious** Affiliation

The majority of the people in the district (44%) profess the African Traditional Religion, followed by Christianity (35%) and then Islam (18%). Only a small proportion of the population either adhere to other religion (1%) or are not affiliated to any religion (2%).

Generally, more females (19%) than males (16%) reported as Christians. Also, slightly more females (10%) than males (9%) belong to the Islam religion. Again, slightly more females

(22.1%) than males (22%) profess African Traditional Religion. Similarly, slightly more males (0.98%) than females (0.9%) not affiliated to any religion. On the other hand, slightly more females (0.3%) than males (0.2%) belong to other religion.

# Education and literacy

Considering the educational background of people in the district, the majority (64.0 %) of the population 11 years and older, are literate. A large proportion (97.7%) of the population can read and write in English, 80.5 percent can read and write in the English language only while 0.1 percent can read and write in at least one Ghanaian language.

# 9.2.3 Economic Activity Status

A total population of 51,580 aged 15 years and older, representing 79.0 percent constitute the economically active group in the district. Of this group, 99.0 percent are employed while the unemployed make up only one percent. Of the unemployed group, majority (51.0 %) of them have worked before. The proportion of females who are economically active (54.0 %) is slightly higher than the males (46.0 %). Females are more likely to be unemployed (54.0 %) than males (46.0 %) in the Bawku West District.

The data also show that students form a large proportion of the economically inactive population (37.0%). Of the remaining, the home maker's category constitutes 26.0 percent. Those who are too old or young constitute 25.0 percent while the sick, the retired and others constitute 12.0 percent of the economically inactive population. The data also show that 79.0 percent are economically active and of these, most are employed (99.0%). Only one per cent are unemployed. The data also show that females in this age group are more likely to be unemployed (54.0%) than males (46.0%).

### Occupation

Eighty one (81.0%) percent of the employed population aged 15 and older are engaged in skilled agricultural, forestry and fishery workers. 7.0 per cent engaged as craft and related trade workers while 6.0 percent are in services sector .Skilled agricultural, forestry and fishery constitute the dominant occupation for both females (51.0%) and males (49.0%). A much higher proportion of females (83.0%) than males (17.0%), is engaged in service and sales work

### Employment status

In the Bawku West District, 70.4 percent of the workforce is self-employed without employees. Many more males (71.3%) than females (69.7%) are self-employment without employees. Contributing family workers constitute 21 percent while employees make up of 4.0 percent. Apprentices form only one per cent of the employed population.

On employment status by gender, the data show that a relatively large proportion of males (69%) compare to females (31%) is employees. Also, females are slightly more likely to be self-employed (54%) than males (46%). In addition, more females (59%) than males (41%) are engaged as contributing family workers.

## 9.2.4 Information and Communication Technology

#### Ownership of mobile phones

There are 10,384 persons aged 12 years and older that own mobile phones in the Bawku West district. Of the male population, there are considerably many more males (24.6%) who own mobile phones than females (11.6%) among the female population.

#### Use of internet services

Nine out of 1000 (0. 9%) of the population in the district has access to or use internet services. And many more males (1.4%) than females (0.5%) have access to or use internet services in the district.

### Household ownership of fixed telephone lines

In terms of ownership to fixed telephone lines in the district, there are 15,169 households (about 0.2 percent) with fixed telephone lines. Thought ownership of fixed telephone lines is generally low, among the e male headed households (0.1%) of them own a fixed line, while among the female headed households, and 0.3 percent of them own a fixed line. The relatively low ownership of fixed telephone lines could be attributed to the influx of mobile phone at relatively lower cost and convenience offered to users.

### Household ownership of desktop or laptop computer

Slightly over one percent (1.3) of households owns a desktop/laptop computer in the district. Many more male headed households (1.4%) own desktop/laptop computers than female headed households (1.1%).

### 9.2.5 Disability

The results of the 2010 PHC reveal that there are 3,941 persons with disability, representing 4.2 percent of the population in the district. The 3,941people reported 5,141 disabilities yielding an average of 1.3 disabilities per person. That works out to about 30.4 percent with more than one type of disabilities. Almost the same number of females (4.2%) as males (4.2%) reported some form of disability in the district.

Sight disability is the commonest form of disability with a percentage of 29.0 followed by intellect disability of 18.0 percent. These are followed by hearing impairment, physical, speech and emotional disability (9.0%).

### Distribution of disability by type of locality

A total of 93.2 percent of disabled people dwell in rural areas relative to 6.8 percent in urban communities. Sight disability forms the commonest form (29.3 %) of disability in rural areas whereas sight and physical disability are about the same level in urban areas with each recording 22.3 percent.

### Disability and economic activity

Out of the total of 51,580 persons 15 years and older, 6.0 percent (3,090) has disability. In terms of economic activity status, 58.1 percent of the persons with disability are employed compared to 0.7 percent who are unemployed.

In terms of sex, slightly more (62.9%) males than females (53.7%) with disability are employed. Similarly many more of females (45.6%) than males (36.3%) with disability are economically not active.

### Disability, education and literacy

Out of the total of 68,221 persons 3 years and older, 4.5 percent of them live with disability in the district. Thus a total of 3,838 out of 3,941 persons with disability in the district representing 97.4 percent were aged 3 years and older. The sex composition also shows that 4.5 percent of the males are disabled compared to 4.4 percent of the females.

There are 3,893 persons with disability aged 3 years and older in the district. A total 75.5 percent of persons with disability have never attended school in the district. The sex composition shows that 70.4 percent of the males never attended school compared to 80.0 percent of the females.

Also, 18.6 percent of persons with disabilities have basic education. Of those who attained basic level, a good number has sight disability (14.7%) and 20.1 percent have emotional disability.

Again, there is only one male representing 0.2 percent who has attained post graduate education and only a sight disabled female representing 0.3 percent who has attained Bachelor degree in the district.

#### 9.2.6 Agriculture Activity

#### Households in agriculture

There are 15,169 households in the district and 14,159 of them are involved in agriculture. Almost all the households (93.3%) are engaged in agricultural activities. There are more households in agricultural activities in the rural areas (96.5%) than the urban areas (68.4%). The number of households in crop farming, tree growing and livestock rearing is higher in the rural areas than the urban ones. Crop farming remains the highest agriculture activity for both urban and rural areas in the districts. This is closely followed by livestock rearing, which is the second agricultural activity for both urban and rural areas. However, the number of households in fish farming in the urban areas is higher than the households in rural areas.

#### 9.2.7 Housing Conditions

#### Housing stock

There are 11,284 housing stock in the district of which rural housing stock (88.7%) is significantly more than the urban housing stock (11.3%). The number of households in the district is 15,169 making the average household per house 1.3 which is slightly lower than the regional average (1.6).

Out of total households in the district, 11.4 percent live in the urban area whereas 88.6 percent live in rural areas. The average household per house in the urban area is 1.4 which is higher than the average household per house in the rural area (1.3).

The population per house in the district is 8.2 which is lower than the regional figure of 9.1. Considering the population per house by locality, urban areas have 6.5 persons per house compared to 8.5 persons per house for rural settlements. The average household size in the district is 6.1 which are slightly higher than the regional figure of 5.8. In terms of locality, the urban average household size is 4.8 and that of the rural is 6.3.

#### Type of dwelling, holding and tenancy arrangement

Compound house forms the majority of the dwelling units (47.7%), followed by huts/buildings (same compound) (24.7%), and separate houses (20.7%).

In terms of type of dwelling by sex of household head in the district, more female headed households dwell in compound houses (49.5%) than male headed households (47.2%). On the other hand many more male headed households (24.9%) reside in huts (same compound) compared to females headed households (23.8%). Similarly, a high proportion of male headed households (21.2%) reside in separate houses than that of females headed households (21.2%).

Looking at type of dwelling by locality, compound houses are common in both rural and urban areas. However, a high percentage of compound houses are found in urban areas (66.5%) than rural settlements (45.3%). Furthermore, huts (same compound) which are the second most common type of dwelling units in the districts are more the rural areas (25.6%) than the urban settlements (17.2%).

The data indicate that 91.5 percent of the dwellings are owned by a household member. Also 3.5 percent of dwellings occupied by households are owned by a relative who is not a member of the household, and an equal proportion (3.5%) of dwellings occupied by households, are owned by private individuals. A higher proportion of dwelling units owned by a household member in the district (Table 8.3), are male headed households (92.5%), while female headed households own 87.5percent of dwelling units. There are more female headed households (4.8%) than male headed households (3.1%) living in dwelling units owned by relatives who are not a household member. Similarly, There are more female headed households (5.3%) than male headed households (3.0%) living in dwelling units owned by other private individual.

It can be observed that dwelling units owned by a household member represent a large proportion of houses in the rural areas (94.8%) than in the urban areas (65.3%). Also dwelling units owned by others private individual represent a large proportion of houses in the urban areas (21.5%) than in rural areas (1.2%).9.8.3 Construction materials

In the district, mud brick/earth is main construction materials used for outer walls of houses (92.9%), this is followed by blocks/concrete (4.3%). Bamboo and burnt bricks are the least form of constructional materials used for outer walls of houses in the district.

In both urban and rural areas, more than three-quarter of dwellings have mud or earth as the material for the outer wall. Mud brick/earth are predominant construction material for outer walls in the rural areas (94.9%) than in the urban ones (79.0%). Cement blocks/concrete are used as construction material for outer walls more in urban areas (18.2%) than the urban areas (2.4%). Burnt bricks are the least form of constructional materials for outer walls of houses in the urban areas while bamboos are in the rural areas.

Cement/concrete (58.3%) and earth/mud (39.8%) are the main construction material for the floors of dwelling units in the district. The use of cement blocks/concrete (58.3%) for the floor is slightly lower than the regional figure of 65.8 percent. However, wood and terrazzo/terrazzo tiles constructional materials for the floor are least used in the district.

Cement/concrete is mostly used as construction material for the floor in the urban areas (73.3%) than in the rural areas (56.4%). Similarly, earth/mud is another major construction

material for the housing floor in the rural areas (41.8%) than in the urban settlements (23.8%).

The data also show that metal sheet (61.6%) and thatch/palm leaf raffia (29.9%) are the two main roofing material types for dwelling units in the district. The use of metal sheet (61.6%) as the main roofing material in the district is slightly lower than at the regional level (67.2%). Slate/asbestos, cement/concrete, roofing tiles and bamboo are least used as roofing materials for dwelling units, all together they account for less than one percent.

Data on roofing material by locality indicates that both urban (87.1%) and rural areas (58.1%) use metal sheets as their main roofing material, followed by thatch/palm leaf or raffia which is mostly used in the rural areas (33.0%) than the urban areas (7.5%).

#### Room occupancy

The household size of four (14.2%) and five (14.2%) forms the majority of household size in the district while the household size with nine (9) members forms the least (3.5%). A total of 45.6 percent of a single household member sleeps in one room. Similarly, 57.1 percent of 2 members household sleep in one or two rooms, over 50 percent of household size of three (53.9%) and four (52.4%) sleep in either 2 or 3 rooms.

### 9.2.8 Access to Utilities and Household Facilities

#### Lighting

Flashlight/torch is the main source of lighting in the district with 43.1 percent of the households using it. This is higher than the regional figure of 27.6 percent. Kerosene lamp (39.8 %) as source of lighting is the second type of lighting in the district while electricity (mains) is third main source of lighting.

Electricity (mains) is the main source of lighting in urban area (47.7%). Flashlight/torch remains the main source of lighting in rural area (45.0%) and accounts for 28.6 percent of lighting in urban area. On the other hand, the use of kerosene lamp as a source of lighting is mostly used in the rural areas (42.1%) than the urban areas (22.0%).

#### Source of cooking fuel used by households

Wood (80.2%) is the main source of cooking fuel used by households in the district. This is higher compared to the regional figure of 60.4%. Animal residue accounts for 9.7 percent of cooking fuel used while charcoal accounts for 9.7 percent.

In terms of locality, wood is the predominant cooking fuel for both rural (83.8%) and urban areas (52.0%). Charcoal is mostly used in the urban areas (30.6%) than the rural areas (3.5%). With regard to saw dust, its use as cooking fuel is relatively low and there is no significant variation between rural and urban areas.

#### Cooking space used by households

In terms of cooking space, 55.1 percent of households use separate room exclusively as cooking space which is the highest in the District. Also, 19.2 percent of households use an enclosure without roof as space for cooking while 14.4 percent of households use open space in compound for cooking.

Households using separate room exclusively as cooking space are predominant in rural areas (56.2%) than the urban ones (47.2%). Veranda is also mostly used in urban areas (19.6%) than those in the rural areas (2.2%).

### Main source of drinking water and water for other domestic uses

Information on the main source of water for drinking and other domestic use by households shows that, bore-hole/pump/tube well (65.2%) is the main source of drinking water in the district, followed by protected well (14.1%). Few households use protected bottled water and other forms as source of drinking water. Bore-hole/pump/tube well is the most used in both urban areas (68.0%) and the rural areas (43.5%). However, the use of Pipe-borne water (pipe borne inside dwelling, Pipe borne outside dwelling and public tap/Standpipe) is predominant in urban areas than the urban settlements.

Similarly, for main source of water for other domestic use, Bore-hole/pump/tube well is the most used source (64.5%), followed by protected well (14.4%). On the other hand, rain water (0.1%), tanker supply/vendor provided (0.1%) and others (0.1%) are the least used source of water for other domestic purposes.

With regards to locality type, water from bore-hole/pump/tube well is the most used source for other domestic purposes in both rural areas (67.3%) and urban areas (43.0%). However, the proportion of households using Pipe-borne in dwelling is considerably higher in the urban areas (19.7%) than the rural areas (0.9%).

### Bathing and toilet facilities

The majority of households (86.3%) have no facilities (bush/beach/field), followed by KVIP (6.6%). The least used toilet facilities by households are bucket/pan (0.1%).

Many more households have no toilet facilities (bush/beach/field) (89.1%) in rural localities than urban ones (64.4%). Similarly many more of households use KVIP (18.9%) in urban than in rural areas (5.0%). The proportion of households without access to toilet facility is quite high in both urban and rural areas and poses serious health challenge.

The majority of households use have bathroom for exclusive use (43.7%), followed by private open cubicle (23.3%) in the district.

### Method of waste disposal

About one-third of households (29.6%) in the district dispose of their solid waste by burning. In urban localities many more households (30.0%) burn their solid waste whereas most rural households (34.1%) use public dump (open space) for solid waste disposal

With regards to liquid waste disposal, 47.5 percent of households in the district dispose of their liquid waste onto their compound. Many more rural households (50.6%) dispose of their liquid waste onto their compounds compared to their urban counterparts (23.3%). Sewerage systems of disposal are least used overall (0.3%).

# 9.3 Policy Implications

The data collected has provided the basis for a number of policies recommendations needed in improving the socio-economic wellbeing of the people in the district:

The sector workers should be constantly updated on new and appropriate technologies available for productive agriculture.

The government in partnership with private sector organisations should come out with sustainable and time-tested programmes to make implements/tools and other agriculture inputs less expensive and affordable to the sector workers.

Access to markets as well as linkage between agriculture and industry needs to be pursued vigorously. This will ensure that the Sector workers get reasonable returns on their investment.

The district assembly should sponsor some student to study and specialised in brail writing since sight disability is the commonest form of disability with a percentage of 29.0 in the district.

The quality of life of the people in the district largely depends on access to basic household services such as good housing, water, electricity and adequate sanitation facilities. The report indicates that, although the average household per house is low (1.2), the following needs to be improved upon by government in collaboration with the private sector organisations.

Only 14.3 percent have access to Electricity (main) in the district, therefore coverage should be expanded to communities to offer opportunity to the remaining 85.7 percent of the households who do not have access to electricity to enhance their living conditions.

A total of 89.9 percent of households use wood and charcoal as their main source of fuel for cooking. This has implication on the alarming rate at which the district's forests and vegetation are being degraded. It is suggested that while sensitising the people on the effects of deforestation as well as encouraging them to consider other sources of cooking fuel, the government should equally focus on making alternatives such as liquefied petroleum gas and kerosene less expensive and affordable to the people.

Access to potable drinking water is quiet good in the district: bore-hole/pump/tube well (65.2%) followed by protected well (14.1%). However there is the need to drill more bore-hole/pump/tube well to meet the growing population.

An aggressive campaign on dangers and effects of poor environmental sanitation should be embarked upon to sensitise the majority (86.3%) of households who have no toilet facilities as well as the 47.5 percent of households in the district who dispose their liquid waste onto their compound.

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# **APPENDICES**

		Sov			
- -	<b>T</b> ( 1	Sex	House		
Community Name	Total	Male	Female	holds	Houses
Zebilla	8,628	4,062	4,566	1,724	1,277
Binaba	2,174	980	1,194	379	371
Googo	1,980	948	1,032	274	179
Kusanaba	1,712	841	871	314	269
Kpalisako	1,681	836	845	287	139
Galaka	1,409	662	747	205	97
Tonde	1,352	653	699	211	165
Gorogo	1,340	652	688	238	134
Sakom	1,299	637	662	219	164
Tili Natinga	1,273	645	628	222	172
Azuwera	1,192	606	586	172	148
Yarigu	1,189	562	627	194	113
Zongo	1,140	574	566	170	131
Gore	1,108	531	577	143	115
Apodabogo	1,073	528	545	191	119
Ngungbeogo No.1	1,064	516	548	233	167
Aragbida (Adagbirda)	1,034	492	542	139	130
Biringo	1,025	493	532	137	112
Gumbo Nagodi	996	493	503	125	104
Aneigo	989	476	513	146	91

 Table A1: Population by sex, households and houses in the 20 largest communities

Source: Ghana Statistical Service, 2010 Population and Housing Census

	_	AGE GROUP																
	Community	All																
S/No.	Name	ages	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
1	Zebilla	8,628	1,195	1,168	1,085	970	775	683	548	451	352	324	247	154	163	115	175	223
2	Binaba	2,174	281	279	284	282	213	129	118	93	82	90	65	49	48	34	42	85
3	Googo	1,980	292	342	264	216	149	99	87	81	67	54	65	36	43	32	54	99
4	Kusanaba	1,712	250	255	220	196	149	112	88	79	92	53	54	33	27	32	28	44
5	Kpalisako	1,681	269	269	223	201	92	92	79	96	54	68	39	28	41	33	44	53
6	Galaka	1,409	214	258	211	130	80	53	59	62	56	61	39	32	42	26	34	52
7	Tonde	1,352	217	235	205	151	77	59	42	56	50	41	52	29	34	23	33	48
8	Gorogo	1,340	219	226	188	129	55	59	67	50	62	57	46	27	41	24	36	54
9	Sakom	1,299	153	220	211	163	74	60	61	60	42	46	62	25	29	19	29	45
10	Tili Natinga	1,273	168	159	160	149	106	102	69	54	45	47	49	30	36	20	31	48
11	Azuwera	1,192	165	213	186	129	65	54	53	59	31	51	33	25	46	21	20	41
12	Yarigu	1,189	184	189	178	127	66	57	52	60	55	45	42	23	32	17	31	31
13	Zongo	1,140	201	193	152	95	67	81	68	69	44	40	30	19	18	16	13	34
14	Gore	1,108	181	193	164	95	81	84	66	50	33	25	34	21	30	18	14	19
15	Apodabogo	1,073	154	185	136	94	81	76	43	41	49	33	48	27	36	4	32	34
16	Ngungbeogo No.1	1,064	147	130	123	136	116	113	81	55	43	21	31	13	13	11	16	15
17	Aragbida (Adagbirda)	1,034	172	186	116	132	71	63	56	42	31	35	18	18	24	16	12	42
18	Biringo	1,025	177	212	125	94	63	58	54	42	29	33	29	9	29	23	12	36
19	Gumbo Nagodi	996	139	173	134	111	87	70	45	41	28	16	23	19	27	20	23	40
20	Aneigo	989	85	147	152	123	83	93	65	52	41	26	35	10	27	13	19	18

 Table A2: Population by age group in the 20 largest communities

Source: Ghana Statistical Service, 2010 Population and Housing Census

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